

Administrative Procedure

PRC-PRO-WKM-12115 Work Management

Revision 2, Change 0

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Project: CH2M HILL Plateau Remediation Company

Topic: Work Management

Administrative Use



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CHANGE SUMMARY

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Description of Change

Rev 2-0: Changes to answer CRRS actions and implement lessons learned from implementation of the major revision. Changes include:

- CR-2010-3260, 3325, improved language regarding the restrictions on modifying manufactured parts
- 2. CR-2011-1672 #3, Updated responsibilities associated with verifying forms contained in the work package are current at the point of Pre-Work Review, Work Release and 90-day (periodic) review.
- CR-2011-1769 #1, Revised records capture table to refer to the Table of Contents for the work document.
- CR-2011-1900 #12, Added instructions to record LOTO number, if required for the work, in JCS and on the DRS/DAS
- 5. CR-2011-2032 #1,2, Included HPI text, in support of actions required by PRC-MP-MS-40403,
- 6. CR-2011-2312 #5, Updated language to coincide with recent changes to the Pre-Demolition Checklist to ensure owners of wells in a demolition footprint location have opportunity to review and add controls to the work instructions prior to the start of work.
- 7. CR-2011-2428 #2, Updated several points in Appendices D and E to assist the user when to include SME reviewers, specifically including routing radiological packages to Rad Con for post review.
- 8. CR-2011-2645, 2646, Moved the steps on performing a periodic review to a new section. Improved instructions of how to perform the review and how to document it, including the use of the new Periodic Review Date field in JCS.
- 9. CR-2011-2647 #1, 2650 #1, Clarified and strengthened instructions for what work activities must be included on the Daily Release Sheet/Daily Authorization Sheet (DRS/DAS).
- 10. CR-2011-2648 #1, Strengthened language about arrangement of sub-documents within the work package so that the work team can readily locate the Work Release signature.
- 11. CR-2011-2650 #1, Minor adjustments on activities listed on the DRS/DAS to clarify expectation.
- 12. CR-2011-2654 #1, Clarified responsibilities for recording and capturing feedback on the work record, including use of the feedback check box.

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- 13. CR-2011-2669 #1, Defined types of work when it is appropriate to identify in a play script format the actionee who is responsible to perform the work steps.
- 14. CR-2011-2673 #1, Clarify actionees and responsibilities for work request validation, and added expectations for persons other than RAs who may be authorized to validate.
- 15. CR-2011-2677 #1, Added a new appendix with information on using the site form version of the short-form.
- 16. CR-2011-2691 #1, Clarified responsibilities for verification that contents of the work package are the current revision and valid for current conditions at three key process points (pre-work review, work release, 90-day periodic review).
- 17. CR-2011-2723 #1, Clarified expectations for documenting review and approval of work instructions on the short-form work documents, and clarified differences between using the site form hard copy and JCS.
- 18. CR-2011-2732 #1 clarified and strengthened the documentation of the skill-based decision by the Responsible Manager.
- 19. CR-2011-3574 #1, provide clearer expectations for the RA to understand the proposed field work while performing work authorization function.
- 20. CR-2011-3719 #2, Added a step to ensure the RA considers when authorizing work whether an EAL could be reached during the work, and if so, ensure a BED will be on duty during the work.
- 21. Added instructions for work documents not shown on to be POD or DRS/DAS but desired to work immediately (walk-in work).
- 22. Clarified filling in the release approval field for NRR work documents, in order to ensure the periodic review field is updated in JCS.
- 23. Clarified what signatures are certifying at various points in the process, to assist in consistency throughout CHPRC and among the various individuals who perform these functions (e.g., reviews and approval by SMEs and RM, etc.);
- 24. Re-arranged review and approval table so that those ALWAYS required are at the top and the rest follow in alphabetical order.
- 25. Replaced the term Ops Acceptance with Work Acceptance to correlate with a field title change in JCS.
- 26. Updated references, in particular, new Hanford Site Standards and CHPRC Fire Protection Program procedures.
- 27. Provided more time before obtaining a one-over concurrence for work packages that are late in being closed out; allowed flexibility for repetitive use packages to be released for longer than nine days before being suspended.

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1.0 INTRODUCTION

1.1 Purpose

This procedure details the roles, responsibilities, and processes used to implement the CH2M HILL Plateau Remediation Company (CHPRC) work management process to plan and perform work through technical work documents (WD) and routine activities. This procedure is not an implementing document for the requirements of Department of Energy DOE/RW-0333P, Office of Civilian Radioactive Waste Management (OCRWM), Quality Assurance Requirements and Description (QARD).

1.2 Scope

This Level 2 management control procedure describes the work management process for initiating, validating, developing instructions, approving, scheduling, releasing, performing, changing, and closing out work documents within the scope of the CHPRC. Release and authorization of work activities at CHPRC facilities/projects performed by other Hanford Prime Contractors is also included in the scope of this procedure.

Work is defined as an activity performed in the field by or for CHPRC and includes construction, maintenance (periodic and corrective), modification, fabrication, Environmental Restoration (ER), and Deactivation and Decommissioning (D&D or D4). Office work is excluded, from this procedure, as well as normal custodial functions, and vendor deliveries that DO NOT directly support an on-going job in the field.

Work instructions are developed through administrative processes accepted by CHPRC. All work is authorized by a Release Authority before it may begin in the field.

Technical procedures developed per PRC-PRO-MS-589, *CH2M HILL Plateau Remediation Company Procedures*, are also used to perform work within CHPRC.

Work planning and execution requirements for contracted work are developed per PRC-PRO-AC-186, *Statements of Work.* Those requirements will be identified in the appropriate contracting document developed per PRC-PRO-AC-123, *Requesting Materials and Services*.

Directed Services work performed by other Hanford Prime Contractors (OHC) will be developed and controlled in accordance with the Memorandums of Agreement (MOAs), including activities in Hanford Site Services and Interface Requirements Matrix, as described in PRC-GD-MS-10184, *Work for Other Hanford Contractors*.

This procedure DOES NOT universally describe the detailed use of computer software tools or forms associated with the software that are used in conjunction with the work management process. For consistency, some specific instructions are given at some process steps.

1.3 Applicability

This procedure applies to the following persons:

- ALL CHPRC personnel, staff augmentation subcontracted personnel, and persons working as 'Loaned Labor' from any source.
- Onsite CHPRC subcontractors as directed by their subcontract for work planning and execution activities; ALL onsite work release and authorization activities for subcontractors are subject to this procedure.

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 Non-CHPRC DOE Prime Contractor personnel performing work at CHPRC facilities or on behalf of CHPRC to the extent directed by the mutually agreed Memorandum of Agreement. ALL work release and authorization within the established boundaries of CHPRC facilities/ work scope are subject to this procedure.

All on-site work is subject to work release requirements. This document DOES NOT apply to off-site fabrication services and off-site activities contracted through PRC-PRO-AC-123 or PRC-PRO-AC-186. See the PRC Procurement web site for guidance concerning what fabrication work may be performed on-site vs. off-site and for fabrication services process links.

1.4 Implementation

This procedure is effective upon publication. Work documents developed under revisions previous to revision 1-0 (effective June 20, 2011) may not work in the field without work document approval by the respective Responsible Manager.

2.0 RESPONSIBILITIES

The personnel described in this Section have positions that perform the described functions within the work management program and are not intended to reflect human resources positions.

2.1 Building Administrator/Building Manager (BA/BM)

An individual who serves as the point of contact between facility occupants and the maintenance contact for CHPRC non-radiological general purpose facilities and coordinates work activities for those facilities. These may or may not be the same individual.

The following responsibilities in the work management process apply:

- Coordinates and authorizes work in landlord facilities.
- Coordinates lockout/tagout (LOTO) activities with the Controlling Organization.
- Evaluates impacts of work to emergency preparedness response and compatibility of concurrent work.
- The Building Administrator communicates to the Building Manager when field work will result in situations that require written notification to the Manager of Facilities & Property Management (F&PM), specifically, intent to vacate, shutdown, transfer, or change utilization of a facility and install new or replace existing landscaping (i.e., lawns, trees, shrubbery, flower beds) per PRC-PRO-PMT-475, Real Property Asset Management, and PRC-PRO-MN-35415, Real Property Asset Management Maintenance.

2.2 Design Authority/System Engineer (DA)

An engineer qualified and assigned as the Technical Authority (TA) to a Configuration Managed Structure, System, or Component (CM SSC). The System Engineer (SE) is an engineer qualified and assigned as the technical authority of a Vital Safety System (VSS). The assigned SE fulfills the general DA responsibilities plus additional responsibilities applicable to VSS. In this procedure, the term DA will be used to signify both functions.

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The specific engineering roles, responsibilities, and qualification programs for DAs/SEs are defined in PRC-PRO-EN-20051, *Engineering Selection, Qualification, and Training,* and PRC-PRO-EN-1819, *CHPRC Engineering Requirements*.

The following responsibilities in the work management process apply:

- Provides technical input/documents for work packages
- Provides technical support to the planning team
- Provides technical input on establishing/verifying isolation points for systems/ components/ buildings that are to undergo deactivation or demolition and removal
- Participates in scoping and other field walk downs
- Provides input on retest and acceptance criteria
- Identifies impacts or potential impacts to Systems, Structures, or Components (SSCs) that are classified as Safety Class (SC) or Safety Significant (SS)
- Provides Material specifications to Planning and/or Material Coordinators and initiates and inputs specifications into the Electronic Bill of Material (EBOM)
- · Reviews and concur on WDs and changes to them
- Provides input for the Modification Impact Review (MIR) and initiate action

2.3 Engineering Support

An Engineer qualified as a CHPRC Site Engineer and assigned by Engineering Management for a specific task. Engineering support is vital in completing D&D and construction activities such as structural evaluations, mechanical evaluations, electrical evaluations, and cold and dark preparations. These engineers DO NOT require Design Authority nor Systems Engineer qualifications.

- Provides technical input/documents for work packages
- Provides technical support to the planning team
- Provides Material specifications to Planning and/or Material Coordinators and initiates and inputs specifications into the EBOM
- Provides technical input on establishing/verifying isolation points for systems/ components/buildings that are to undergo deactivation or demolition and removal
- Participates in scoping and other field walk downs
- Reviews and concurs on WDs and changes to them

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2.4 Facilities and Property Management (F&PM)

F&PM has overall responsibility for the acquisition, operation, maintenance, modification and disposition of permanent and temporary government owned and leased non-radiological general purpose facilities managed by the CHPRC and acts as primary interface with and provides input to the Mission Support Alliance (MSA) for their overall management of Real Property for the Hanford Site.

- F&PM, with concurrence of CHPRC VPs and their managers, appoints Building Managers, Building Administrators, and coordinates the appointment of Building Wardens, Staging Area Managers, Accountability Aides, and alternates to serve as the primary points of contact for facility-related activities
- F&PM requests and coordinates maintenance, modifications, and repairs of non-radiological general purpose facilities with the MSA
- F&PM coordinates and approves work performed in CHPRC facilities by DOE Energy Savings Performance Contractor(s) (ESPC)
- F&PM coordinates their processes defined in PRC-PRO-PMT-475, Real Property Asset Management, with the responsible facility manager to integrate his or her responsibilities with the Work Management processes

2.5 Field Work Supervisor

An individual who supervises work teams to ensure the safe and compliant performance of work. Field Work Supervisors (FWS) have completed course # 604240 and are assigned by facility, project, or construction management. The *Work Management Training Program Description*, PRC-STD-TQ-40380, specifies the course contents. Some organizations may impose additional training and qualification requirements.

- Participates in identification of the work scope, and supports the planning team in the development process of the hazard analysis and work packages
- For each use of repetitive use work documents, confirms that the proposed work activity falls within the scope defined by the work instructions
- Initiates, prepares and obtains RM concurrence for short-form work documents when appropriate
- Coordinates with planners during development of long-form work documents
- Facilitates the walkdown of demolition sites and complete the *Pre-Demolition Checklist* (A-6004-622)
- Ensures workers are provided sufficient time to become familiar with the contents of the technical work instructions prior to starting the job
- Ensures workers are trained and qualified to perform work. Runs training verification system (Worker Authorization Matrix [WAM] and Hanford Site Worker Eligibility Tool [HSWET]) reports, as appropriate
- Ensures workers are medically qualified and enrolled in any medical monitoring programs required for the work

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- Ensures coordination of prerequisites, work environment, reference documents, tools and materials for performance of the work
- Conducts pre-job briefings
- Ensures workers perform work in accordance with the approved technical work documents
- Ensures that work is performed safely, productively, compliantly, and is protective of the environment
- Ensures the work site conditions align with the controls in the WD
- Enforces strict compliance to Hold Points
- Recognizes and understands the safety basis limits specific to the work activity
- Ensures Quality Assurance (QA) and Quality Control (QC) requirements are addressed and communicated to workers
- Recognizes changing conditions and initiates appropriate actions
- Recognizes that under all circumstances, the FWS is responsible for the fieldwork activity, including casualty situations, until relieved by proper authority (e.g., another FWS or the Emergency Response Organization)
- Ensures WD changes are performed as required by this procedure
- Resolves any issues that have resulted in an employee stopping work
- Supports restoration and testing
- Conducts post-job reviews
- Reviews and concurs long-form work instructions
- Informs the work team when FWS duties are transferred and documents turnover on the work record
- Ensures the work package is complete and accurate upon completion of field work
- Signs completed work packages as Field Work Complete (FWC) and returns them to the Release Authority within four (4) business days of work completion

2.6 Periodic Maintenance/Surveillance Coordinator (PM/S Coord)

The PM/S Coordinator is the individual who is responsible to oversee the Preventive Maintenance and Surveillance (PM/S) database for a given project or facility. The *Work Management Training Program Description*, PRC-STD-TQ-40380, specifies the training requirements. The use of the PM/S database to generate PM/S work packages and track periodic work is described in PRC-PRO-MN-19304, *Periodic Maintenance Process*.

- Generates Periodic Maintenance Work Documents (PM WDs) from the recall system
- Performs a Periodic Review of PM/S work documents that are released, to determine if supporting documents are still current/valid

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Closes periodic maintenance data sheets

- Ensures items identified for feedback or lessons learned in the work record or post-job review on PM/S packages have been submitted or dispositioned for future performance of the activity
- Ensures the most current copy of procedures is included in the Work Package and updates procedures as they change

2.7 Release Authority (RA)

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An individual designated and authorized by management to release and control work performed within project facilities. This person is designated by management, completes a designation card, and must understand the facility or area well enough to be able to verify that the work performed is complete, and preserves the design function of any SSC. The *Work Management Training Program Description*, PRC-STD-TQ-40380, specifies course contents.

- RAs that perform duties as LOTO Controlling Organization must complete Integrated Training Electronic Matrix (ITEM) course # 170727, CHPRC Release Authority Designation Card, and document on Training Completion Record, CHPRC Release Authority Designation Card (A-6005-359)
- RAs that DO NOT perform duties as LOTO Controlling Organization must complete ITEM course # 170728, CHPRC Non-Facility Release Authority, and document on Training Completion Record, CHPRC Non-Facility Release Authority Designation Card (Site Form A-6005-407)

- Verifies proposed work complies with facility operational requirements
- Determines if the proposed work is within the scope of the mission
- Validates work requests
- Coordinates work release with LOTO activities
- Reviews original work instructions and all non-editorial changes
- Evaluates impacts to configuration control, safety basis elements, emergency preparedness response and compatibility of concurrent work
- Releases work documents
- Authorizes work on the Daily Release/Authorization Sheet (DRS/DAS)
- Verifies retest and recovery has adequately proven equipment operability and tested all aspects of the work performed
- Formally accepts equipment/systems after maintenance in operating facilities
- Ensures FWC work packages are signed for Work Acceptance and are routed for closeout within two (2) business days of receiving completed work document from the FWS

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2.8 Responsible Manager (RM)

An individual accountable and responsible for the implementation of work management for a specific body of work from its inception to completion by providing continuity of purpose and understanding throughout the work planning and implementation process. The CHPRC Work Management Responsible Manager must meet the qualification requirements specified in ITEM Course # 600024. The *Work Management Training Program Description*, PRC-STD-TQ-40380, specifies the course contents. Documentation of the requirements is accomplished via the *CHPRC Training Completion Record, CHPRC Responsible Manager Core Qualification Card* (Site Form A-6005-754). In addition, the following Project specific RM qualification courses and cards are required for an RM to perform functions at the Projects:

- CHPRC Responsible Manager D&D Qualification Card, #600090 (A-6005-830)
- CHPRC Responsible Manager EPC Qualification Card, #600091 (A-6005-831)
- CHPRC Responsible Manager PFP Qualification Card, #600092 (A-6005-832)
- CHPRC Responsible Manager SGRP Qualification Card, #600093 (A-6005-833)
- CHPRC Responsible Manager WFMP Qualification Card, #600094 (A-6005-834)

If an RM action is required and the RM assigned to a work document is unavailable, another RM may perform the required actions/approvals if the RM is qualified at the same project, documents any RM actions taken on the work record (if no RM turnover took place), and notifies the RM of any actions as soon as the original RM returns.

The RM position as defined in PRC-PRO-WKM-12115 refers specifically to the Work Management process, and DOES NOT apply to other programs. For clarity, the Work Management RM will be referred to in some cases as RM-WKM to distinguish it from responsible managers in other programs.

- Implements Integrated Safety Management (ISM) Core Functions and Guiding Principles and Environmental Management System (EMS) Core Elements through the work management process
- Assigns a priority designation to work requests that will be pursued
- Confirms that work is/is not radiological work according to the definition in CHPRC-00073, CH2M HILL Plateau Remediation Company Radiological Control Manual, Glossary
- Determines if work activities are skill-based or beyond skill-based with input from the FWS,
 Planner and workers, as needed
- Communicates expectations to the Planning Team
- Performs final arbitration for comment resolution
- Selects reviewers for initial work instructions and changes to work instructions (not technical procedures)

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- Reviews and approves all work packages based on personal review, agreeing that
 instructions provided in the work package adequately define the work scope and contain the
 appropriate environmental and hazard controls for the safe performance of the work, and to
 be protective of the environment
- Reviews and approves all changes to work packages (not technical procedures changed per the process in PRC-PRO-MS-589, or periodic maintenance activities per PRC-PRO-MN-19304)
- Reviews and approves additional or enveloping instructions used to support pre-approved work procedures and/or PM/S instructions
- Supports FWS in resolving issues when performing work
- Grants extensions of the 30 day Work Package Closure requirement

2.9 Scheduler

An individual who develops the Plan-of-the-Week (POW)/Plan-of-the-Day (POD).

The following responsibilities in the work management process apply:

- Develops POW/POD for management review and approval
- Allocates resources to perform project field work
- Facilitates the preparation of the DRS/DAS

2.10 Subject Matter Experts (SMEs)

An individual who by virtue of education, training and/or experience is a recognized authority on a particular subject, topic, and/or system. The SME provides that expertise during the development of the work instructions, the Job Hazard Analysis (JHA) process, review of the Work Package, and performance of field work. Job specific roles, responsibilities, training and qualification for SMEs are identified in the respective discipline procedures.

- Serves as a technical resource for requirements and regulations
- Participates as part of the Work Planning Team to develop work instructions that promote work being performed in a safe and compliant manner
- Concurs with work packages and changes to work packages based on personal review, ensuring that the work described in the work document or change meets technical requirements under their cognizance, contains controls to protect the environment, and contains the appropriate hazard controls for the safe performance of the defined work scope

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2.11 Work Management Program Technical Authority (TA)

An individual with the necessary training and experience who is designated by management as the technical authority for the CHPRC Work Management program.

The following responsibilities in the work management process apply:

- Analyzes lessons learned for programmatic opportunities for improvement
- Develops performance indicators to monitor the health of the work management process
- Authorizes exceptions and provides interpretations to this procedure
- Selects Work Management Representatives (WKMR)

2.12 Work Control Support Staff (WC Support Staff)

Individuals, who assist in routing and assembling work packages during their development, perform closeout activities and post-review of work packages.

- Assists RM/RA in performing initial pre-work review by reviewing supplemental documents to ensure the most current revision has been included in the work package
- Performs a Periodic Review on repetitive use and long-lived work documents (Planner may perform this review in some facilities/projects; PM/S Coord performs this for PM/S WDs.)
- Ensures feedback identified during the planning and performance of the work has been submitted for short-form packages that are not PM/S; routes others to Planner or PM/S Coordinator, as appropriate
- Reviews work packages for completeness during closure
- Ensures the most current copies of procedures are included in the Work Package and updates procedures as they change
- Ensures MIR actions are complete
- Routes to oversight organizations for their post-review, as appropriate
- Transcribes signatures and data from the WD to the Job Control System (JCS)
- Processes WDs for retention
- Assists project/facility groups with reports and training as needed to track work packages to support program functions, such as active work package references on permits

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2.13 Work Management Representative (WKMR)

An individual designated by the Work Management Technical Authority as the SME for work control issues for Statements of Work at a given location. The WKMR provides input during the development of the Statement of Work, so that externally generated work documents contain the requirements necessary to release the work at their work location. The WKMR is included as specified in PRC-PRO-AC-186, *Statements of Work*. Additional consultation with a qualified work planner could be appropriate if the work involves significant interface with existing utilities or facility.

The following responsibilities in the work management process apply:

- Provides guidance for inclusion of work management processes into the SOW, including when work instructions are required and the appropriate level of detail acceptable
- Specifies in the SOW who must approve subcontractor-generated work instructions, if appropriate
- Specifies in the SOW how the RM assignments will be made
- Ensures important elements are included in the SOW to ensure the work can be authorized by the RA when field work is ready to begin

2.14 Work Planner

An individual trained and qualified to generate work instructions and assemble all necessary elements into work packages. The Work Planner has a major responsibility for coordination of work package development to achieve a product that accurately reflects the input of the work planning team and will direct the work team to safety and correctly perform the identified work scope. The Work Planner must complete the work planning qualification program, ITEM course #170723. The Work Management Training Program Description, PRC-STD-TQ-40380, specifies the course contents. Documentation of the requirements is accomplished via the CHPRC Training Completion Record, CHPRC Work Planner Initial Qualification Card (A-6005-183).

Work instructions that are beyond skill-based must be prepared or reviewed and endorsed by a qualified planner.

NOTE: Guidance for the development and preparation of work packages are provided in PRC-GD-WKM-12116, Work Planning Guide.

- Schedules and facilitates field walkdown(s) and hazard analysis with the Work Planning Team
- Serves as a technical resource to the RM in making the skill-based determination
- Gathers baseline documents, supplemental documents, and references
- Determines the WD style to be used (short-form or long-form)
- Develops draft work instructions into discrete steps or sections when appropriate to facilitate critical planning and hazard analysis with input from the Work Planning Team

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- Reviews applicable work history, process knowledge, and lessons learned for incorporation into work scope, hazard identification and work instructions
- Analyzes the sequence of work activities, work area conditions, and equipment required to safely accomplish the defined work scope
- Incorporates beyond skill-based controls into the WD
- Distributes the work package for review and facilitate the resolution of SME conflicts with work instructions and hazard controls
- Assembles the components of the work package
- Screens work instructions against PRC-PRO-WKM-40004, Hazard Review Board (HRB), criteria
- Obtains necessary reviews and approvals of the WD as determined by the RM
- Assists work team in executing the change control process per this procedure
- Ensures the procurement of parts and materials necessary to complete the desired task has been initiated
- Performs a Periodic Review on repetitive use and long-lived work documents (WCC Support Staff may perform this review in some facilities/projects; PM/S Coord performs this for PM/S WDs.)
- Performs work package closure reviews
- Submits feedback identified during the planning and performance of the work

2.15 Work Planning Manager

An individual who is responsible for the training and qualification of Work Planners. The Work Planning Manager must complete the qualification requirements specified in the ITEM course # 100723. The *Work Management Training Program Description*, PRC-STD-TQ-40380, specifies the course contents. Documentation of the requirements is accomplished via the *CHPRC Training Completion Record, Work Planning Manager Qualification Card* (A-6005-352).

- Performs as the Project/Facility Work Control SME
- Assigns Work Planners
- Supports the training, qualification and mentoring of work planners
- Continually assesses the work planning process
- Supports the work management process and the RMs in accomplishing the work scope associated with the project's mission
- Supports of processes that facilitate the work management process, such as work scheduling, planning, work document close-out, records requirements, maintaining databases that support work management (e.g., JCS, training verification systems)
- Collects and distributes relevant lessons learned and feedback to the work planners
- Assigns personnel to run Periodic Review reports for long-lived work packages

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2.16 Work Planning Team

A team composed of the Work Planner, Responsible Manager, craft disciplines, and SMEs assigned to be responsible for all phases of Work Package preparation from scope definition and the JHA through Work Package review and approval. Personnel assigned to the team will have the appropriate functional area expertise to plan the work.

The following responsibilities in the work management process apply:

- Conducts walkdowns of the proposed activity
- Performs the hazard analysis per PRC-PRO-WKM-079, Job Hazard Analysis
- Provides input on work instructions, sequence of work steps, hazard controls, controls
 protective of the environment, and applicable health monitoring controls to safely and
 efficiently performs the work
- Identifies needed resources to perform the work, including support organizations
- Identifies and integrates applicable technical and administrative requirements into the work instructions
- Determines the need for and provides activity-specific details (beyond skill-based) during selection of Hazard controls
- Establishes acceptance/performance criteria to verify completion of work
- Ensures work instructions can be easily understood and effectively used (user friendly) by those who perform the work
- Ensures that appropriate controls have been incorporated in work instructions

2.17 Worker

An individual with job specific training and/or qualification to perform the assigned task.

- Participates in the hazard analysis via walkdowns as part of the Work Planning Team
- Provides input on the skill-based determination when requested
- Participates in identification of the best tools, methods, work practices, and special material requirements for the proposed work
- Participates in all workability reviews and walkdowns to ensure the work scope is understood, existing hazards are identified and appropriately controlled, and work instructions can be performed safely as written
- Participates in Pre-Job Briefing and Post-Job Reviews per PRC-PRO-WKM-14047, Pre-Job Briefings and Post-Job Reviews
- Verifies work site conditions are as expected, based on the Pre-Job Briefing
- Maintains an awareness of changing conditions at the worksite
- Performs work per work instructions utilizing the hazard controls specified
- Performs only authorized work

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- Complies with all requirements of supplemental documents
- Stops work and notifies the FWS if a change of scope is identified, changing conditions or unidentified hazards are encountered, or work practices will compromise safety or the environment
- · Maintains work area housekeeping

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3.0 PROCESS

The CHPRC goal to "DO WORK SAFELY" is realized as management and workers team to plan work to meet mission and environmental objectives, identify and analyze hazards, conduct work within established controls, and continually improve safe work practices. ISMS/EMS provides a systematic and structured approach for integrating Environment, Safety, Health & Quality (ESH&Q) requirements into work planning and execution.

The overall work management process map that demonstrates how the core functions of ISMS and the core elements of EMS are implemented is found in Appendix A, *Work Management Process Diagram*.

Key terms are defined in Appendix B, Glossary.

The work management process directly implements Integrated Environment, Safety and Health Management System (ISMS) Core Functions and EMS Core Elements into the CHPRC Work Management Process.

3.1 Program Requirements

Program requirements are basic elements of work management process that apply to all work governed by this procedure, whether low hazard and routine or high hazard and complex. All employees shall comply with them.

Actionee		Step Action
ALL	1.	APPLY a graded approach to individual work activities to implement safe, environmentally protective, and cost-effective work practices based on risk and complexity in the work planning process by considering the following:
		 skill-based versus beyond skill-based hazards
		 probability and significance of an event occurring
		the nature of the activity
		 facility/equipment status (operational, D4, cold and dark)
		level of detail of work instructions
		activity oversight
		worker skills, training and medical qualification
	2.	FOLLOW all work steps as written, in the proper alpha-numeric sequence, using only the flexibility built into the work document (e.g., bulleted steps that can be performed in any order, a note immediately preceding the work steps or Section stating that "Steps [or Sections] X.X.X through X.X.X may be performed concurrently, performed independently, or repeated," etc.).

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Actionee Step Action 3. PERFORM Continuous Use work instructions following these requirements: ALL

- The work document must be followed as written
- The work document must be located in the work area and in use, or real time communication must be established when the work document cannot be in the hands of the performer
- Only the pertinent Section (e.g., portion of the record copy or working copy) is required to be at the work location (e.g., work in a Contamination Area)
- As applicable to job task performance, all required steps and sections described in the procedure must be completed
- Re-sequencing of work steps or sections is not permitted unless authorized in the work document
- 4. PERFORM Reference Use work instructions following these requirements:
 - The work document must be followed as written
 - The work document must be "available in the work area." Only the pertinent Section (e.g., portion of the record copy or working copy) is required to be at the work location (e.g., work in a Contamination Area)
 - For "reference use" work document procedure applications, "available in the work area" is defined as:
 - o If indoors, then in the building, near the worker
 - If outdoors, then readily available onsite (e.g., construction trailer/office, vehicle, or a similar type area that is known by the worker)
 - The procedure must be open and in use (i.e., consistent with Continuous Use requirements) when a trainee is conducting the activity under supervision of a designated individual or when directed by appropriate supervision
 - As applicable to job task performance, all required steps and sections described in the procedure must be completed
 - Re-sequencing of work steps or sections is not permitted unless authorized by the work document
- 5. IF work cannot be performed as written, THEN STOP work AND NOTIFY supervision. See DOE-0343, Stop Work.
- 6. PERFORM work only to approved work instructions (i.e., work is NOT performed to the Work Record, Automatic Job Hazard Analysis [AJHA], Work Release for Construction/Service Organizations Form [WRCSOF], etc.).

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Actionee		Step Action
ALL	7.	DOCUMENT signatures and initials that signify preparation, approval, and validation of records in one of the following four formats:
		 Accompanied by the typed or printed name of the individual
		Generated electronically in the work control software
		 Inclusion of a CHPRC Signature/Initial/Stamp Verification (A-6003-003) in the work document
		 Per telecom (PTC) (see Appendix D)
	8.	PERFORM work only if trained and qualified, or under the supervision of a trained and qualified individual.
	9.	COMPLY with all existing controls for the work location in addition to those specified within the work document. Sources for existing controls are:
		 General Hazard Analysis (GHA) Employee Job Task Analysis (EJTA) Integrated Training Electronic Matrix (ITEM) Craft Specific Hazard Analysis (CHA) Health and Safety Plan (HASP) Baseline Hazard Assessments (BHA) Exposure Assessments (EA) Criticality Prevention Specifications Technical Safety Requirements (TSR) Work site signs and posting.

3.2 Identify and Request Work

Any employee may request work. All requests to perform work are reviewed by the RA to identify impacts to the facility for equipment/system deficiencies. Emergency Work will be performed per Section 3.12, *Emergency Work*.

PM/S work activities are forecasted (requested) and generated per PRC-PRO-MN-19304; once developed they are packaged, scheduled, and released in accordance with this procedure.

All work performed outside of procedures or Statements of Work will be identified in JCS. Periodic maintenance activities will be identified in JCS regardless of the form of the work instructions. See PRC-PRO-MN-19304.

The work request may be initiated using Site Form A-6005-768, Short-Form Work Request/Work Document, if the work is not repetitive, and meets all criteria for short-form work in Subsection 3.3.1, Short-form Work Instruction Development.

If those criteria are not met, the request must be initiated in JCS. Either short-form or long-form work instructions can be generated from JCS. Long-form may be used for any kind of work, but must be used if the work DOES NOT meet the short-form criteria is Section 3.3.1.

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3.2.1 Request Work

Actionee Action Step Requestor/RA/ 1. If the work requires immediate action to prevent serious personnel injury. Work Control environmental harm, security breaches, or property loss, Staff THEN GO TO Section 3.12, Emergency Work. 2. IF the work activity is to be performed by CHPRC. THEN IDENTIFY the need to perform work and document by completing a Work Request in the Job Control System (JCS), or completing the work request Section of the Short-Form Work Request/Work Document (A-6005-768) Short-form. See Appendix F, Using the Short Form Site Form. 3. <u>IF</u> the work activity is to be performed by another Hanford Prime Contractor as directed services. THEN INITIATE work in accordance with the associated Memorandum of Agreement (MOA) and Service Delivery Documents (SDDs). SEE the Interface Management web page for additional details and listing of MOAs and SDDs. 4. IF work will be performed via a new subcontract, THEN INITIATE the request via PRC-PRO-AC-186. WKMR a. CONSIDER the following Items when reviewing a SOW: Safe work boundaries for all workers and the public Impacts to the configuration control of the project, facility, or area Safety basis elements Emergency preparedness responses Adjacent work activities Requirements for cradle-to-grave management of any waste generated Recovery of the facility or area after the work is completed Work release method at that location

Requestor

5. SUBMIT the JCS Work Request by saving it. A tracking number will be displayed.

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3.2.2 Validate Work Request

Actionee Action Step NOTE: PM and surveillance activities are recalled periodically and processed according to PRC-PRO-MN-19304. The validator for Preventive Maintenance (PM) WDs is the PM Coordinator for the organization, and steps 1-10 DO NOT apply.

- Projects or facilities may issue and maintain memos specifying staff other than RAs who are authorized to validate new work requests.
- RA concurrence is required if someone other than an RA or listed in a memo authorizing validation authority performs the new request validation.
- The skill-based determination is always made by the RM; if concurrence is made PTC, the RM name should be transcribed into JCS for the determination.
- This subsection is written with the RA as actionee: persons listed in the memo may perform the actions of the RA in this subsection ONLY. If the action is one the actionee is uncertain about or not qualified to perform, he or she shall contact the RA for clarification.

Management

- Project/Facility 1. IF the Project/Facility desires to designate individuals other than RAs to validate new work requests, THEN GENERATE a memo that lists them by name or position and
 - authorizes them to perform validation.
 - Non-RAs who are authorized to validate must demonstrate a knowledge of the respective Project's mission and schedule, significance of important systems and equipment
 - Non-RAs who are authorized to validate must be committed to communicate to the RA when new requests represent a potential impact to the facility or equipment that could require immediate compensatory actions, or affects minimum operable equipment

RA

- 2. REVIEW the Work Request.
- 3. ENSURE necessary immediate actions have been taken with consideration for the following impacts to the Project/Facility (non-RA Validator shall notify the on-duty RA if the new request indicates there is impact to the following):
 - Safety
 - Environmental compliance
 - Authorization Basis (AB) compliance
 - Facility configuration control
- 4. DETERMINE if the proposed work is within the scope of the current project mission or a duplicate of existing request. Search JCS and consult with Program Managers, as appropriate to make the determination.
- 5. IF the Work Request is a duplicate or not valid, THEN "REJECT Work Request" AND NOTIFY the Requestor of the reason for the rejection.

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Actionee		Step Action
RA	6.	<u>IF</u> a repetitive use work document exists for the proposed activity, <u>THEN</u> PERFORM the following:
		 CREATE a new partial release entry for the requested activity on the appropriate work package, OR NOTIFY the owner of the work document about the new activity
		 "REJECT Work Request" <u>AND</u> NOTIFY the Requestor of the placing of the activity on the repetitive use work document
		NOTIFY RM of additional scope awaiting scheduling
	7.	ENSURE affected components are entered in JCS, if contained in the JCS component index.
	8.	ENSURE the appropriate Classifier is selected.
	9.	ACCEPT the electronic Work Request as a Work Document and "Validate the Work Request" in JCS.
Non-RA Validator	10.	IF the newly validated request impacts equipment in an operating facility, THEN INCLUDE the current RA in the JCS notification message.
Planner/WK Control not listed in memo (see note at Step 3.2.2.1)	11.	DOCUMENT the RA's concurrence to validate the work package in the work record.
RA/Planner/ Wh Control	< 12.	ENTER the name of the respective RM in JCS on the Planning tab.
RM	13.	REVIEW information on the Origination tab <u>AND</u> PROVIDE any missing information or corrections.
		a. ENSURE the work scope (Symptom, Problem or Condition) is adequately detailed to allow for the development of work instructions and performance of hazard analysis, including the desired end-state.
RM/RA/DA		b. SELECT additional affected components, if appropriate.
RA	14.	REVIEW information on the Screening tab <u>AND</u> PROVIDE any missing information or corrections.
		a. DOCUMENT work location, charge code information, associated work packages, and screening information.
		b. ASSIGN priority using Appendix C – Work Priority List.

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Actionee Step Action

RA

c. DOCUMENT whether the proposed work is corrective maintenance, related to personnel safety, or is radiological work per definition in CHPRC-00073, CH2M HILL Plateau Remediation Company Radiological Control Manual, Glossary.

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15. REVIEW the Planning tab

<u>AND</u> COMPLETE the section labeled Points of Contact, and the section labeled Admin Codes if the project uses them.

NOTE: Major projects that are planned to be performed with construction forces will screen out as Davis-Bacon Act work early in the planning process. Some projects may require considerable work by engineering before having enough information to make this determination.

 SCREEN the work scope per PRC-PRO-IR-070, Plant Forces Work Review (Davis-Bacon Act Compliance), AND DOCUMENT result on the Planning tab.

RM

- 17. <u>IF</u> the plant forces work review (PFWR) indicates the work activity is Davis-Bacon Act applicable and will be performed by construction forces, <u>THEN</u> ROUTE the work scope to project management.
 - Project management will then determine if Engineering Projects and Construction (EPC) or other construction forces will be contracted to develop and perform the proposed work
 - The validated work request may be cancelled, or used to develop work instructions, depending on which project will manage the work

NOTE: Documents generated and approved per another administrative process such as PRC-PRO-MS-589 or PRC-PRO-MN-19304 may be inserted into a Short-Form work document, even though the approved instructions include more than eight actions steps or are beyond Skill-based.

Planner

- 18. <u>IF</u> the work activity requires more than eight action steps (with only one action per step), THEN USE long-form work instruction process and template.
- 19. <u>IF</u> the work activity DOES NOT require detailed work instructions (one to eight steps and meets the short-form use criteria in Step 3.3.1.1), <u>THEN</u> USE of a short-form work document is allowed.

Before each use, ensure this copy is the most current version.

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3.3 Plan Work

PM/S work activities are generated and forecasted (requested) per PRC-PRO-MN-19304. They are packaged, scheduled, and released in accordance with this procedure.

This Section identifies mandatory steps during the development of original work instructions, not PM/S documents. Detailed information and guidance on content and format is available in the PRC-GD-WKM-12116. Early involvement of SMEs from initiation of hazard analysis through work document (WD) approval will promote WDs that can be performed in a safe and efficient manner.

The level of effort involved in determining the scope of work will vary with the attributes (complexity, hazards, etc.) of the proposed work activity. For complex activities, determining the scope of work is an iterative process that continues throughout the WD development process. Work activities that are beyond skill-based per PRC-PRO-WKM-079, or that require more than eight action steps, must be prepared by or reviewed by a qualified Work Planner.

Work instructions developed outside of CHPRC may be enveloped by a CHPRC work document. Technical work instructions developed and approved by an established administrative process may be enveloped by a Short-form work document, even if the approved document includes more than eight action steps. For use of any "enveloped" non-CHPRC developed work instruction/documents, the RM will identify any additional approvals in the Approvals Section of JCS. If the approved document will not be used as written, review and approval of the altered document is required.

Cross project work packages may require review(s) from both the project/facility that prepared the work document and the project/facility where the work will be performed. EPC has outlined this function in document PRC-STD-CN-40381, *Construction Work Management Integration*, because of the added complexities associated with subcontracted work.

3.3.1 Short-form Work Instruction Development

Low risk, low complexity work activities that meet the criteria listed below may be developed per this Section. These work documents are to be performed as Reference Use. Use of the work instruction template is not required for short-form work instructions.

Documents, procedures or data sheets generated and approved per another administrative process such as PRC-PRO-AC-186, PRC-PRO-MS-589, or PRC-PRO-MN-19304, may be enveloped by a Short-Form work document, even though the approved instructions DO NOT meet the short-form criteria stated below. This approach is prudent in order to track these documents in JCS and facilitate scheduling and release/authorization, which is required for all work at CHPRC.

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NOTE: Steps 3.3.1.1 through 3.3.1.8 may be performed in any order.

Actionee		Step	Action
RM/FWS/ Planner	1.	DÉTI	ERMINE whether the work activity meets the following criteria to use t-form work instructions. The work activity must meet <u>ALL</u> the following ia.
RM		a. Is	s the work activity skill-based work per PRC-PRO-WKM-079:
		1) REVIEW the proposed work activity against the skill-based criteria in PRC-PRO-WKM-079.
		2) <u>IF</u> the work is skill-based, <u>THEN</u> DOCUMENT the RM's determination in JCS on the Planning Tab. (may be obtained per telecom from the RM)
		3) <u>IF</u> the work DOES NOT meet the criteria for skill-based, <u>THEN</u> GO TO Section 3.3.2; the work DOES NOT meet the criteria for using a short-form.
RM/FWS/ Planner			can be safely and correctly performed using eight or fewer action steps, ach with only one action per step.
		c. Is	s not a temporary change or facility modification.
		a	OOES NOT require the development of planned instructions involving or ffecting Safety Class or Safety Significant Systems, Structures or components (SSCs).
RM/FWS/ Planner			OOES NOT contain Hold Points or Limiting Condition for Operation (LCO) ntry/exit instructions.
			OOES NOT require or implement Specific Administrative Controls SACs).
		g. D	OOES NOT involve intrusive troubleshooting.
	2.	<u>IF</u> the	e criteria of Step 3.3.1.1 cannot be met,

NOTE: Every effort should be made to ensure the crafts and operators are provided an opportunity to participate in the walkdown and work instruction development process.

3. ASSIGN FWS/FWS Org in JCS. (Fields are labeled PIC/FWS and PIC/FWS Org, respectively.)

THEN GO TO Subsection 3.3.2, Long-form Work Instruction Development.

4. SELECT SME(s) from Appendix D to participate in planning the work activity.

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Planning Team

5. PERFORM a field walk down of the proposed activity if the workers are unfamiliar with the area or if the RM determines it is necessary.

NOTE: For each meeting or walkdown conducted during the planning, it is expected that we annotate all personnel involved on the Work Records. If while planning skill-based work there are issues that cannot be resolved, then re-evaluate the skill-based determination and proceed as appropriate.

FWS/ Planner/RM 6. DOCUMENT names of attendees that participate during planning and walkdowns on the Work Record.

- **NOTE**: A qualified work planner must develop long-form work instruction; short-form instructions may be developed by a planner, RM or FWS.
 - Radiological work screened as "low with specific controls" must have the controls listed on the Rad Hazard Screening Form incorporated into the instructions.
 - 7. DEVELOP work instructions to perform the proposed work activity. Specific items to consider when writing the work instructions include:
 - Hazards to the worker or environment that could be encountered during the work
 - Hazardous energy control boundaries implemented for the work
 - IF the work is radiological work per PRC-PRO-RP-40109, Radiological Work Planning.

THEN DOCUMENT this determination in the JCS Screening tab and incorporate controls for low hazard radiological work identified on the CHPRC Radiological Hazard Screening Form (A-6004-654)

- Required work step sequencing
- The Waste Planning Checklist (A-6004-590) or the equivalent projectspecific waste planning checklist contained in Site Forms
- <u>IF</u> the activity performs maintenance in an operating facility, other than work that meets NRR criteria, THEN INCLUDE a retest to confirm the system, structure or component (SSC) conforms to design specification at the conclusion of the work

NOTE: Instructions for work activities without specific controls should not normally warrant SME concurrence other than R, E, and USQ.

RM8. SELECT SME(s) to review the work document from Appendix D.

SMEs

9. REVIEW AND CONCUR with the short-form work instructions to ensure that the intended activity can be performed safely within the constraints of the reviewer's technical discipline.

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NOTE: Environmental review is performed by the Environmental Compliance Officer (ECO) unless the work is considered routine and the ECO has authorized a two-day trained National Environmental Policy Administration (NEPA) person to complete the step. Refer to the Environmental discipline row in Appendix D when determining if a work activity could qualify for review by someone other than an ECO. Activities involving any of the categories listed in Appendix D are not routine and thus require review by an ECO to ensure implementation of environmental controls.

ECO/NEPA Trained Individual

10. DOCUMENT Environmental Review.

a. ENTER the NEPA or Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) coverage in the Environmental Screening field in JCS on the Planning tab,

AND

b. IF the work is non-routine, THEN DOCUMENT the environmental review (e.g., EAS or AJHA) that addresses the proposed work activity as required by PRC-PRO-EP-15333, Environmental Protection Processes, and relevant CERCLA implementing documents.

FWS/RM/ Planner

11. IF the work requires USQ review per the requirements of Appendix D, THEN SUBMIT the WD to the USQ Screener/Evaluator for implementation of the USQ process per PRC-PRO-NS-062, Unreviewed Safety Question Process.

NOTE: If the PM/S Activity has recorded the results of previous USQ review, then the PM/S Coordinator may document the results on the PM/S work package that carries the data sheet for that activity. Multiple data sheets in one package dictate the most conservative USQ results; any blanks require the USQ Screener/Evaluator to review the work package.

USQ Screener/12. DOCUMENT results of the USQ review. Evaluator

PM/S Coord

- a. ENTER the appropriate information in the USQ Screening field provided in JCS on the Planning Tab.
- b. IF a USQ screening or determination was required, THEN PROVIDE a signed copy to the Planner, unless the document possesses a unique number and can be readily located in an established database by that number.

NOTE: It is not permitted to modify tools obtained through the procurement process, as that invalidates their design and safety features, unless QA participates in writing instructions to test the equipment after it has been modified.

PM/S Coord/

FWS/Planner/ 13. ORDER materials not on hand that are necessary to perform the task per PRC-PRO-AC-123.

Eng

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PM/S Coord

FWS/Planner/ 14. ENSURE the final work package is assembled according to the document style. See PRC-GD-WKM-12116 for details.

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RM

- 15. REVIEW the work instructions to ensure that the work meets the criteria of Step 3.3.1.1, including the skill-based determination.
- 16. ENSURE the work instructions are marked as Reference Use.

NOTE: • Pre-approved work instructions and PM/S work documents generated out of JCS DO NOT require RM approval unless additional instructions/changes are added.

- After the RM approval of the work document, ALL changes must be performed per Section 3.10, Work Package Change Process, or signatures must be stripped and the document reapproved after changes have been made. See Section 3.10 for specific instructions.
 - 17. DOCUMENT approval of the short-form work instructions.

3.3.2 Long-form Work Instruction Development

Actionee Action Step NOTE: The Planning Team will consist of principal Craft Disciplines, Field Work

- Supervisor, appropriate SMEs, and Work Planner as a minimum.
- Every effort should be made to ensure the crafts and operators performing the work are active participants in the walkdown and development process.
- Steps 3.3.2.1 through 3.3.2.13 may be performed in any order or repeated.
- For each meeting or walkdown conducted during the planning, it is expected that we annotate all personnel involved, and capture worker comments that require resolution outside of the meeting. SME comments are resolved during AJHA development and review/concurrence of the completed instructions.

RM/Planner

- 1. ESTABLISH the Planning Team.
 - SELECT representative(s) from the principal Craft Discipline(s) performing the work
 - SELECT SME(s) from Appendix D
 - SELECT technical specialists and vendors as deemed necessary
 - IDENTIFY cross project SME's for work that will be performed by an organization outside the project planning the work instructions
- 2. ADJUST composition of the Planning Team as the work instructions are revised to correspond with identified hazards and hazard controls.
- IF the work is radiological work, DOCUMENT this determination in the JCS Screening tab.
 - THEN REQUEST Radiation Protection conduct a Radiological Hazard Screening per PRC-PRO-RP-40109.

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Actionee			Step Action
DA/TA		4.	<u>IF</u> the proposed activity will be a modification, <u>THEN</u> INITIATE an MIR in JCS or <i>CHPRC Modification Impact Review</i> (Site Form A-6004-963).
NOTE:			pe description must be detailed enough to support the development of and accurate hazard controls for the proposed work activity.
Planner		5.	REFINE the work scope for the proposed activity while performing Step 3.3.2.6 through Step 3.3.2.11 AND REPEAT until the result is mutually agreeable to the Work Planning Team.
		6.	<u>IF</u> comment resolution results in changes to hazards or controls, <u>THEN</u> ENSURE the hazard analysis has been reviewed and revised.
Planning Team/FW	/S	7.	GATHER information in preparation for work instruction development; refer to PRC-GD-WKM-12116 for examples of baseline information.

NOTE: Use the JCS references as a Table of Contents. Info Only items will not be included in the work package. Embed, hyperlink or include hard copies as appropriate.

8. RECORD baseline information used in the development of work instructions on the JCS references tab and mark as info only.

NOTE: The Hazard Analysis Process may be performed concurrently with the development of the work package.

- 9. INITIATE the hazards analysis process per PRC-PRO-WKM-079.
 - <u>IF</u> the work is determined to be skill-based,
 <u>THEN</u> DOCUMENT it in JCS
 <u>AND</u> OBTAIN the RM's signature (per telecom is acceptable)

NOTE: Environmental review is performed by the ECO unless the work is considered routine and the ECO has authorized a two-day trained NEPA person to complete the step. Refer to the Environmental discipline row in Appendix D when determining if a work activity could qualify for review by someone other than an ECO. Activities involving any of the categories listed in Appendix D are not routine and thus require review by an ECO to ensure implementation of environmental controls.

ECO/NEPA 10. DOCUMENT Environmental Review:

Trained Individual

 ENTER the appropriate NEPA or CERCLA coverage in the Environmental Screening field in JCS on the Planning tab

AND

 <u>IF</u> the work is non-routine, <u>THEN</u> DOCUMENT the environmental review (e.g., EAS or AJHA) that addresses the proposed work activity as required by PRC-PRO-EP-15333 and relevant CERCLA implementing documents)

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Actionee	Step	Action

NOTE: •

- If it is not safe to conduct a field walkdown due to safety, environmental or As Low as Reasonably Achievable (ALARA) concerns, then video, pictures, drawings, etc., may be used in lieu of an actual field walk down.
- A graded approach on performance of walkdowns is allowed, with a minimum of one walkdown for planning and hazard analysis and another at the pre-job briefing if the work triggers any of the criteria stated in PRC-PRO-WKM-14047. Additional walkdowns during development of the work instructions are warranted for complex or hazardous work.

Planning Team/FWS

- 11. PERFORM a field walkdown of the proposed activity while considering the following items:
 - EVALUATE <u>AND</u> DISCUSS the scope of the work in enough detail to accurately evaluate full scope of all required work activities
 - DISCUSS the work activity approach, including identification of special tools for work task to be performed
 - VISUALIZE the activities that will take place
 - IDENTIFY issues that could affect radiological risk screening
 - a. IDENTIFY <u>AND</u> DOCUMENT the hazards that require energy control boundaries (LOTO) identified by the Work Planning Team and possible incremental implementation or boundary changes during performance of the work.
 - CONSIDER hazards to the worker or environment that could be encountered during the work
 - CONSIDER the placement of equipment, supplies, step-off pads, safe entry and exit points, etc.
 - CONSIDER the waste that may be generated during the work and all packaging and transportation requirements for final disposition of the waste
 - CONSIDER QA/QC requirements that could be encountered during the work
 - ENGAGE SAFER dialogue (five key Human Performance Improvement questions) considering what could go wrong for contingency planning. See glossary for details
 - KEEP IN MIND the end-state of the planned work
- 12. DOCUMENT names of attendees and comments that require follow-up during planning and walk-downs on the CHPRC Work Planning Roster/Comment Form (A-6005-916),

<u>AND</u> RETAIN them in the work package or in a development file. Use of this form is not required for AJHA meetings where no worker comments requiring follow-up are identified; for AJHA meetings, capture attendees in the involvement screen.

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A ati	. noc	C4	Action .
Actio	nee		lep Action k instructions for activities that were screened as beyond skill-based or use
NOTE.	•		ng-form process will be written or concurred with by a Qualified Work
	•		tions for determining the appropriate level of detail for work instructions is I in PRC-GD-WKM-12116.
	•	the Pla	following steps, the decisions, controls sequence, etc., are determined by nning Team, but the Planner facilitates the discussion and writes the ag work instructions.
Planning Team		pe the <u>htt</u>	REPARE draft work instructions, using the work instruction template to rform the proposed work activity. The authorized template is located on a Work Management website, p://prc.rl.gov/rapidweb/Operations/index.cfm?PageNum=5. Specific items consider when writing the work instructions include:
		a.	STATE scope of the work as precisely as possible, including the methods (tools, specific processes, etc.) of performing the work.
		b.	BREAK the work up into discrete sections, including set-up and recovery, as appropriate, to correlate with hazard analysis and provide clarity and consistency during planning.
		C.	LIMIT prerequisites to activities that must be performed or verified prior to Release of work packages. These would include steps that establish required facility configuration and setup. Supporting or setup work performed by the workers needs to be performed after the work is "released" or needs to be performed by another authorized work document/procedure.
		d.	DESCRIBE the work activity itself, special equipment/tools to be used, and the location where the work will occur.
		e.	IDENTIFY hazards to the worker or environment that could be encountered during the work. INCLUDE instructions or controls that address the hazards at the work area when the field work will occur, such as weather conditions and adjacent work activities.
		f.	SEQUENCE work steps to ensure safe and correct performance of the work.
		g.	<u>IF</u> similar work must be performed on multiple pieces of equipment, <u>THEN</u> CONSIDER how to structure the work package(s) to provide clear instructions and tracking to the field work team.

for the proposed work activity and work location.

h. REVIEW incorporation of existing (full or partial) work instructions into

new WDs to ensure the integration of hazards and controls is appropriate

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Actionee	Ste	ep Action
Planning Team	i.	ENSURE the work instructions include special conditions, configuration, recovery, work environment, etc., that might be imposed by supplemental documents used during the work activity.
	j.	VERIFY acknowledgement of LOTO installation and removal in the work instructions if LOTO boundary change is required during the work activity.
	k.	PROVIDE signatures for Controlling Org and FWS in the correct sequence to ensure their actions have been completed, to direct the work team to the Tagout Authorization Form (TAF) in order to correlate with the special instructions on the TAF.
	l.	INCORPORATE all beyond skill-based hazard controls that have been identified per PRC-PRO-WKM-079, except those for which the planning team provides a logical justification and concurrence as being not applicable.
		DOCUMENT the AJHA number in JCS
	m.	INCORPORATE appropriate lessons learned applicable to the work steps that have been identified during the baseline information review.
	n.	INCORPORATE radiological hazard controls:
		 Controls that have been identified with a bold text on the CHPRC ALARA Management Worksheet (AMW) (A-6004-634)
		 Controls for low hazard radiological work identified on the CHPRC Radiological Hazard Screening Form (RHSF) (A-6004-654)
	Ο.	INCORPORATE environmental protection controls that have been identified by the ECO as required to be implemented by the field work team during the work. Controls are communicated via the AJHA, <i>CHPRC Environmental Activity Screening Form</i> (A-6004-962), and other environmental review document.
	n	INCOPPORATE wasto minimization, packaging, and disposition controls

- p. INCORPORATE waste minimization, packaging, and disposition controls that have been identified as beyond skill-based by the Waste SME on the *Waste Planning Checklist* (A-6004-590, or equivalent project-specific waste planning checklist).
 - CONSULT PRC-GD-WKM-12116 for more details regarding when it is acceptable to refer to the WPC and when controls must be incorporated into the work instructions.
 - 2) Some instructions for must be incorporated into work instructions per PRC-PRO-WM-40223.

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Actionee	Step	Action
Planning	q. INCC	RPORATE NDA constraints and waste packaging instructions that
Team	Refe	d have a bearing on how the material must be or can be counted. r to PRC-RD-EN-10484, Nondestructive Assay Management (NDA)
	Prog	ram.

NOTE: If a signature is required on another type of inspection report, then a check-off space should be used to show completion of that step. That step should identify where the signature can be found. Duplicate signatures should be avoided.

- INCLUDE signoffs for all work steps that require witness, inspection, verification points as required per PRC-PRO-QA-283, Control of Inspections.
- s. If the work activity includes demolition, include a step to verify completion of the *Pre-Demolition Checklist* (A-6004-622).
- t. INCLUDE facility or project specific requirements for conduct of formal Pre-Job Briefings.

NOTE: *Critical step:* A procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to people, the environment, or equipment, or otherwise cause an immediate negative consequence that cannot be reversed or undone.

- u. IDENTIFY all Critical Steps with a warning or caution statement, prior to the step, that briefly summarize why it is a critical step.
- v. IDENTIFY possible contingencies by considering the following items:
 - Error traps. How could a mistake be made at a critical step?
 - Possible consequences. If a mistake is made at the critical step, what is the worst thing that can happen?
 - Possible defenses. What barriers or defenses would prevent, catch, or recover from the error?
 - Review lessons learned. What has happened in the past?
- w. IDENTIFY all Hold Points by using the applicable symbol (HP, QA, S&H, or E), in the left-hand margin of the technical work document to identify the Hold Points.
 - 1) REFER to PRC-PRO-QA-5432, *Hold Point Application in Technical Work Documents*, for Hold point criteria and requirements.
- x. Clearly IDENTIFY entry and exit of LCOs or SACs by marking in the left margin of the step with "LCO Entry" and "LCO Exit," or "SAC entry," and "SAC Exit."

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Actionee		
Planning Team	y.	IDENTIFY steps with Documented Safety Analysis (DSA) requirements (Technical Safety Requirement, Limiting Condition for Operations, Specific Administrative Controls, etc.) by marking in the left margin of step with "DSA." These steps would not involve LCO entry/exit per the step above, but be important to be done in a specific way because of DSA implications.
	Z.	IDENTIFY steps that require oversight personnel to be present by marking in the left margin of the step with "OVERSIGHT."
acc	eptance	EN-286, Testing of Equipment and Systems, provides instructions for testing of new, repaired or modified SSCs to ensure they meet design, performance and quality requirements.
DA/TA	aa.	DEVELOP instructions to restore and retest equipment which has undergone corrective or preventive maintenance in operating facilities.
	bb.	DEVELOP acceptance criteria for equipment that requires retest.
Planner	cc.	INCORPORATE recovery, retest, and acceptance criteria into work instructions.
	dd.	IF a formal post-job review will be required per PRC-PRO-WKM-14047, (e.g., the work is high hazard radiological or will be a first time complex evolution), THEN INCLUDE a signature to document completion of the post-job review.
	<u>TH</u> PR	the work is beyond skill-based, <u>EN</u> PERFORM <i>Hazard Review Board (HRB)</i> screening per C-PRO-WKM-40004, <u>D</u> DOCUMENT YES/NO in JCS.
		ENTIFY the resources required to perform the activity into the resources in JCS.
	and req	VIEW the Training Required report from the AJHA for this work activity duse it to list training requirements that are appropriate (not normally juired for the workers) in the Precautions and Limitations section of the rk instructions.
FWS/Plannel PM/S Coord/ Engineering		DER materials not on hand that are necessary to perform the task per C-PRO-AC-123.

18. ENSURE that the hazard analysis reflects the final work scope.

NOTE: Complex work activities that involve interlock circuits or complex integrated systems may warrant a second technical review ("peer review"), particularly if habitability of work spaces could be at risk during the work activity.

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Actionee		Step Action
RM	19.	DETERMINE if a peer review of the work instructions is necessary, AND IF so, THEN DETERMINE scope of review and assign personnel to perform the review.
	20.	SELECT the SME(s) to review the work document from Appendix D.
Planner	21.	SUBMIT the WD to the selected SME(s) and RA for review.
SMEs & RA & Qualified Planner	22.	REVIEW the final work instructions to ensure that the intended activity can be performed safely within the constraints of the reviewer's technical discipline and contains the beyond skill-based controls from the hazard analysis documents.
	23.	DOCUMENT concurrence with the final work instructions (within the constraints of the reviewer's technical discipline) on the Approval tab in JCS. Planner signature is on the Instruction tab at Resolution By.
Planner	24.	<u>IF</u> the work requires USQ review per the requirements of Appendix D, <u>THEN</u> SUBMIT the WD to the USQ Screener/Evaluator.
USQ Screener/	25.	DOCUMENT results of the USQ review.
Evaluator		 ENTER the appropriate information in the USQ Screening field provided in JCS on the Planning Tab.
		b. <u>IF</u> a USQ screening or determination was required, <u>THEN</u> PROVIDE a signed copy to the Planner, unless the document possesses a unique number and can be readily located in an established database by that number.
Planner/PM/S Coord	26.	ENSURE the final work package is assembled according to the document style. See PRC-GD-WKM-12116, Appendix B, or PRC-PRO-MN-19304 for details of what must be included, what can be excluded, and in what order the documents should be placed within the Document Record Folder (DRF).
RM	27.	ENSURE the Long-form work instructions are designated on the template as either Reference Use or Continuous Use based on the criteria in PRC-PRO-MS-589.
Field Work Team	28.	CONDUCT a workability review of the work document using Site Form A-6005-953. This may include a walkdown of the work area to ensure understanding of the work scope, hazards, and controls have been identified and incorporated into the work package and work can be performed safely as written.
	29.	COLLECT names of participants, notes, and comments during the workability review AND RETAIN them on the workability form.

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Actione	e Step	Action
Planner	determined by the HR	equires review and approval by the HRB as 3 Screening criteria, ork Package to the HRB per PRC-PRO-WKM-40004.
		mpleted CHPRC Hazard Review Board Meeting 004-513) from the HRB Chairperson or Coordinator
Planner/RM	THEN REMOVE the s required adjustments, AND INFORM the affection concurrence of the alternative street in the second seco	nanges to the work instructions, gnatures of the affected SMEs, MAKE the HRB-cted SMEs of the need to obtain their review and ered instructions. An acceptable alternative is to Section 3.10, Work Package Change Process.
Planner	33. INCLUDE HRB Chairp	erson final concurrence documentation.
	34. OBTAIN or TRANSCF Approvals tab.	IBE the HRB Chairpersons concurrence into the JCS
NOTE:		work document, ALL changes must be performed per must be stripped and the document reapproved after
RM	35. DOCUMENT approva topics are satisfactory	of the final work instructions, signifying the following
	Work activity is pro	perly designated as skill-based or beyond skill-based
	 Critical steps, overs 	ight steps, etc. are adequately flagged
	 Work instructions a continuous use or r 	re correctly designated in the footer as either eference use
		t are beyond skill-based have been tailored to the proporated into the work instructions

3.3.3 Repetitive Use Work Document Planning

Any style of work document may be used for repetitive work, except using the site-form short-form.

Actionee	Step	Action
RM	1. EVALI	JATE the benefit of developing a periodic maintenance activity and a
	proced	lure to perform the repetitive work activity.
	IF either process is better suited for this repetitive activity,	
	THEN	LEAVE this procedure and proceed per PRC-PRO-MS-589 if a
	proced	lure is warranted or PRC-PRO-MN-19304 for periodic maintenance.

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Actionee	Step Action
Planning Team	2. DEVELOP work documents for activities intended to be performed multiple times incorporating normal work planning concepts, and written to clearly and safely be used more than once. The following items are to be addressed in addition to the requirements set forth in previous subsections of 3.3.1, Short-form Work Instruction Development, or 3.3.2, Long-form Work Instruction Development.
	 INSERT the work document classifier identifying the work as repetitive (G for short-form repetitive, Y for long-form repetitive)
	 DOCUMENT expected effective dates (time period or calendar year) for the work package in the Work Scope or first line of the resolution/ retest field in JCS (Maximum of one year.)
	 Clearly DEFINE, and if needed, LIMIT the work scope so that an adequate evaluation of any anticipated hazards can be performed and the appropriate hazard controls can be addressed
	 Clearly IDENTIFY the intended work locations
	 Clearly IDENTIFY hazard controls that are location specific
	 Clearly IDENTIFY prerequisites that must be performed for each use of the work document
	 INTEGRATE hazard controls into the sections that may be performed separately/independently
	 Clearly IDENTIFY environmental controls that are project or location specific
	 ENSURE critical steps, LCO entry and exit, SAC requirements, and LOTO boundary changes are fully contained within sections that may be partially released
SMEs	3. For the SME's specific area of responsibility, VERIFY that the scope, identified boundaries, and controls are sufficient for the intended activities and are written to be clearly and safely used more than once and for a time period up to one year.
Planning Manager	 ASSIGN personnel to run and review Periodic Review reports for long- lived work packages.
Planner/PM/ S Coord/WC Support Staff	 REVIEW repetitive use WDs at least every 90 days per Section 3.13, Periodic Reviews of Long-Lived Work Packages.
RM	6. ENSURE repetitive use work documents are released for a maximum of one year.

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3.4 **Schedule Work**

Scheduling and coordination of work activities avoids unnecessary removal of equipment and systems from service and uses manpower effectively.

The scheduling discussed here addresses the daily activities of a given project or facility that are necessary to ensure that the most important work is accomplished with the most cost effective use of personnel and equipment resources. Ideally, all activities that involve critical resources should be scheduled. Activities that affect the availability of the worker pool may also be scheduled, such as planned vacation and training.

3.4.1 Pre-Work Review

The purpose of the pre-work review is to ensure the work package, as planned, and including supporting documents, can still be performed safely and compliantly and that the current facility/work location conditions are still valid for the assumptions used during planning (e.g., known airflow patterns, system operability requirements, facility operational issues for LOTO actions, LCOs and ACs, etc.).

The pre-work review may be performed at the conclusion of the work planning and approval, or it can be delayed until the work package is going to be requested to be placed on the plan of the week.

Actionee		Step	Action
NOTE:	•	when no L PM/S Coo	Coordinator may sign pre-work review, for PM/S work documents, OTO is required. This DOES NOT require written delegation. The rdinator is also indicating that any procedures and supplemental included in the work package are the most current versions on that
	•	nay allow Pre-Work reviews for non-PM/S work documents to be to non-RA qualified personnel. The facility will need to document gates. Other RA approvals/responsibilities per the requirements in dure are not delegable.	
			erformance and signature for the Pre-Work review constitutes review rrence with the work instructions for the operational organization work will occur.
			legate performs the Pre-Work Review, a qualified RA must review and h the work instructions, as designated on the JCS Approval tab.
RA or Delegate		1. PERF	ORM a pre-work review on work packages.
		2. ENSU	JRE QA/QC requirements are addressed.
			D is from an outside organization, I ENSURE the WD is the appropriate style for the work activity being med.

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Actionee	,	Step Action
RA or Delegate	ENSURE documents included in the work package are current and approved for use, such as:	
		Reference procedures
		Engineering documentation
		 Facility Modification Packages (FMPs)/Engineering Change Request (ECRs) have been released into the Document Management and Controls System (DMCS) by Document Control per PRC-PRO-EN-2001, Facility Modification Package Process
		 Permits (Hotwork, Hanford Fire Marshal, Excavation, etc.)
		 Forms contained in the work package are the most current revisions, or have been determined to be equivalent with current revisions
		Hazard analysis documents
		 Safety support documents such as Fall Protection Plans and Rigging Plans
		 USQ screening, determination, or categorical exclusion (CX) application per PRC-PRO-NS-062 (Current facility conditions must be compared with any conditions assumed in the USQ, including effective safety basis, to determine if USQ remains valid.)
		HRB screening, meeting minutes if required
		Environmental review documentation
RA or Delegate/ Planner	5.	<u>IF</u> the work package contains an AJHA that was finalized more than 90 days in the past, <u>THEN</u> RUN the 'Check For Updates – AJHA Tree in Sync' report for the AJHA.
	6.	IF changes to the AJHA require changes to the work instructions, THEN PERFORM a change to the work package per Section 3.10, Work Package Change Process.
	7.	ATTACH the report to the work document and update the Reference Documents list, OR ANNOTATE in the Work Record that the report was run and no changes were required.
RA or Delegate		REQUEST, if required, the Controlling Organization prepare Lockout/ Tagout Authorization Form (A-6004-460) or Eight Criteria Checklist (A-6003-801) per DOE-0336, Hanford Site Lockout/Tagout.
	9.	VERIFY Radiological Work Permit (RWP) is current and no changes are required.
	10	. ENSURE MIR inputs requiring submission before release have been submitted.

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Actionee	Step Action				
RA or Delegate	11. IF the work package was previously suspended per Section 3.9, Suspension/Cancellation of Work,				
	THEN ENSURE the condition causing the suspension has been resolved.				
	12. <u>IF</u> any issues are identified during the pre-work review, <u>THEN</u> PROCESS any change to the work package per Section 3.10, <u>Work Package Change Process</u> .				
	13. DOCUMENT completion of pre-work review on the Approvals tab in JCS, and if the record copy has been printed, the hard copy of the work package.				
	14. <u>IF</u> lockout tagout is required for this work activity, <u>THEN</u> DOCUMENT the lockout/tagout number, or Eight Criteria on the JCS approvals tab.				
	 a. <u>IF</u> the number has not yet been assigned, <u>THEN</u> TYPE in TBD. 				
RA	15. <u>IF</u> desired, <u>THEN</u> EVALUATE work for No Release Required (NRR) per the criteria in Step 3.5.1.3.				
PM/S Coordinator	 ENTER NRR if the PM/S activities in the package have been previously determined to be NRR, 				
Coordinator	AND in the approval field (to activate the Periodic Review field in JCS), ENTER the name of the PM/S Coordinator.				
Work Control	17. UPDATE the following fields on the Status tab in JCS:				
Support/ PM/S Coordinator	a. Work package status				
	b. Work package location				
	c. Periodic Review field (only if the field is not blank)				
	18. STORE the work package in a controlled location.				

3.4.2 Work Activity Scheduling

Actionee	St	tep Action		
Facility/	1.	TABLISH POW and POD meetings to schedule field work.		
Project				
Management 2. The POD shall include all field work including activities performed by re-		The POD shall include all field work under the responsibility of the project, including activities performed by resident organizations (e.g., Operations, Radiological Protection) per approved technical procedures performed outside of work packages.		
		a. Shopwork, janitorial services, and normal vendor deliveries (vending machines, routine material deliveries, etc.) are not required to be shown on the POW/POD, unless they require support from project resources, such as RCTs.		

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Actionee	S	Step	Action
Facility/	3.	DETE	RMINE whether to include worker time commitments for training,
Project		PTB,	planning and AJHA meetings, etc. on the POD, OR whether these
Management			will be reflected only in the scheduling tools utilized by those who m resource allocation.

NOTE:

- Good practice dictates that all field work is known by the Release Authority, even if it is not required to be released. All work should be authorized as demonstrated on the DRS/DAS.
- Vending machine deliveries, routine material deliveries and janitorial services are not required to be authorized by the RA on the DRS/DAS.
- Steps 3.4.2.4 through 3.4.2.13 may be performed in any order and repeated as needed to update the POW/POD to accommodate changes in resource availability, priorities, facility status, and to status the ongoing work in order to generate the next POW/POD.
 - 4. DETERMINE when work activities shall be placed on or removed from the POW/POD (when hard scheduled, when field work complete, when retest is complete, when suspended, etc.).
 - JCS Work Packages with Temporary Changes shall not be closed or suspended until the system is returned to its normal configuration, and must remain on the DRS/DAS and POD until closed, or with project management permission, may be tracked on the Operations Manager turnover sheet
 - 5. The POD shall contain the following information about the work that is tracked:
 - WD number (or appropriate identification for non-JCS documents, such as procedures, routine activities, statements-of-work, etc.)
 - Job title or short job description
 - FWS or Point of Contact for the job (routine work may be assigned to an organization or position rather than a specific person)
 - Craft resources necessary for the job each day (by discipline job description, respective numbers of each type are optional). Some teams of workers may be grouped into one entry on the POD, especially when using brokered resources provided as a group, such as a crane and rigging crew, Vent & Balance, etc.
 - Additional information may be included as desired by the project, such as document work status

NOTE: The Daily Release/Authorization Sheet may be integrated into the POD.

6. ESTABLISH a DRS/DAS to track the release of field work.

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Actionee	Step Action7. The DRS/DAS shall REFLECT all work activities that are required to be	
Facility/ Project Management	authorized for work by the RA.	
Management	8. The DRS/DAS shall CONTAIN the following information:	
	 WD number (or appropriate identification for non-JCS documents, such as non-routine procedures, routine activities, etc.) 	
	Job title or short job description	
	 LOTO info; indicate yes or no if LOTO is required for the work. 	
	 FWS or Point of Contact for the job (routine work may be assigned to an organization or position rather than a specific person) 	
	 Additional information may be included as desired by the project, such as document work status 	
Requestors	9. SUBMIT request to the Scheduler to add activity to the POD.	
Scheduler/	10. DEVELOP draft POW document based on the following factors:	
WCC Support Staff	 Work priority Safety deficiencies, such as fire system restrictions, etc. Material availability PM Due Dates System/component/facility availability Work compatibility Project schedules and milestones Measuring & Testing Equipment (M&TE) availability Support equipment availability Special worker qualifications or training requirements Trained and qualified Worker availability Job scoping and planning activities 	
	11. CONDUCT Pre-POW meeting to determine conflicts, strategies for sequencing, etc. with representatives from key work groups and a management representative.	
	12. DISCUSS potential fill-in/contingency work that can be substituted if a scheduled job cannot work as shown on the POW, or that can be started if a scheduled job completes early.	
Scheduler	13. REVISE the draft POW based upon input from the Pre-POW meeting.	
	 REQUEST extra resources via the Resource Allocation process in MSC-GD-11124, Maintenance Resource Allocation Guide. 	
	15. CONDUCT a POW meeting to finalize the approved work activities for the upcoming week AND OBTAIN management concurrence.	

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Actionee	Step	Action
Scheduler	16. DISTRIBUTE the POW.	
	17. CONDUCT a POD meeting to dis activities AND CONFIRM the next day's w	ork activities.
	18. DISTRIBUTE the POD.	
	19. PREPARE a DRS/DAS based or	the requirements of Step 3.4.2.8.
	20. DELIVER the DRS/DAS to the R	A along with any WDs to be released.
RA	21. RELEASE work per Subsection 3 Facilities.	3.5.1, Work Release at CHPRC Project

3.4.3 Walk-in Work (adding work after the POD and DAS/DRS have been approved)

Actionee	S	Step Action	
RM or FWS	 IF a work document that is not listed on the POD or DRS/DAS is of to work immediately, THEN OBTAIN concurrence from the following: 		
		<u></u>	
		 Scheduling, to ensure resources are available, and if not, which other jobs must be shut down to obtain the necessary resources 	
		 At facilities with an Operations group, the Shift Operations Manager (SOM) or equivalent. 	
	2.	OBTAIN work release and authorization from the RA.	
		a. For NRR work documents, a phone call to the RA is sufficient.	
		 For partial release and full release work documents, TRANSPORT the work document to the RA, AND CONTINUE per 3.5 and 3.6. 	

3.5 Release of Work

The permission to perform work is done in two steps. The first step is the release of the work package and the second step is the authorization, of the "Released Work", to perform the field work. All NRR work must be "authorized for work" by the Release Authority (RA) whenever it is to be worked.

Work Release is verification that the work package is ready to proceed and verifies the work package is adequate and prerequisites completed. Work release is documented by RA "Release" signature on the work document and in JCS.

Work Authorization is the permission (documented on the DRS/DAS) granted by the Release Authority that the "Released" work may proceed for the time period interval specified. The RA verifies the continued adequacy and compatibility with all other currently authorized work activities.

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Procedures developed in accordance with PRC-PRO-MS-589, *CH2M HILL Plateau Remediation Company Procedures*, to be conducted as part of routine work scope for qualified individuals, such as Operations or Radiological protection personnel at a specific location DO NOT, in most cases require work release, but the activities are included in the Daily Release/Daily Authorization as part of the sum of work activities in a given location on a given day. These may be listed as "routines" or similar rather than listing each procedure separately.

Other Hanford Contractors (OHC) work management programs have been approved by DOE through the ISMS Verification process and are, per contractual agreements, satisfactory as far as formatting, hazard analysis and content for the work activities that they perform in PRC facilities. CHPRC RAs must, however, review those documents in light of facility-specific requirements, such as USQ, criticality safety, and LCO, and evaluate the impacts of the proposed work activity at the work location.

Field work in support of project facilities will be released and authorized by a CHPRC Release Authority, including directed services performed by Other Hanford Prime Contractors (OHC). Directed services in support of landlord facilities performed by OHCs will be coordinated through the CHPRC Building Administrator (BA) and Building Manager (BM) for the respective building. See Appendix B – Glossary for the definitions of project facility and landlord facility. BA/BMs are not required to have/use a DAS/DRS when authorizing work.

3.5.1 Work Release at CHPRC Project Facilities

Actionee	tep Action	
RA	<u>IF</u> the WD was prepared externally to CHPRC, <u>THEN</u> VERIFY that the WD is adequate to release work location.	the activity at the
	 a. <u>IF</u> the WD is inadequate, <u>THEN</u> SUBMIT a Work Request or initiate a chasupplemental work instructions per Section 3.2, <i>Work</i>. 	
	ENSURE the activity is listed on the DRS/DAS.	
	DESIGNATE as NRR if the work to be performed moriteria:	neets all the following
	The RA concurs that formal release is not require decision)	ed (and signs for that
	 Will not impact facility or equipment operation ou operating procedures 	tside of normal
	• No retest of the work by Operations is required;	and
	• The work is Skill-Based per PRC-PRO-WKM-079	Э
	IF the work is NRR, THEN PROCEED to Step 3.5.2, OTHERWISE, con	tinue.
	ENSURE the most recent pre-work review is current	t (<90 days old).

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Actio		tep Action
RA	6.	ENSURE required system lineup is configured and ready for work to commence.
	7.	ENSURE current facility conditions allow for safe performance of the activity.
	8.	ENSURE the work activity is compatible with other work activities and that no additional hazards are presented by work that will be co-located that was not accounted for during planning.
	9.	ENSURE compliance with permits that require specific initial conditions prior to starting the work (life safety code, hot work, etc.).
	10	e. ENSURE completion of required environmental documentation (e.g., environmental permits, CERCLA documents).
	11	. ENSURE that procedures, RWPs, Beryllium Work Permits (BWPs), forms, and other documentation that will be used during the work activity are the most current versions.
	12	. EVALUATE impact of cumulative work activity to LCOs.
	13	s. ENSURE the scope of any partial release properly bounds the work to be performed.
	14	. ENSURE work package prerequisites have been completed.
	15	i. <u>IF</u> the work package is not acceptable, <u>THEN</u> RETURN the work package to the FWS/Planner to resolve any issues.
NOTE:	Δ nartial re	elease can be used to release portions (sections/steps) of a work

A partial release can be used to release portions (sections/steps) of a work document or may be used to document each performance of a repetitive use work document.

- 16. IF performing a partial release, THEN DOCUMENT the equipment, Section, steps, or repetitive work task released for work on the Partial Release Sheet (in JCS, or on A-6005-337).
- 17. For repetitive use work documents, ENSURE
 - Scope and work instructions align with current project/facility conditions, and
 - Work document is still valid according to the dates stated
- 18. ENSURE Critical steps, LCO entry and exit, and LOTO boundary changes are fully contained within sections that will be released.

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Actionee	Step	Action
RA	19. ENSL	IRE that the lockout/tagout fields are filled out correctly on the JCS
	Appro	vals tab.

NOTE: Ensure that the current release signature is on top when the package is sent to the field work team. If a partial release is used, the partial release sheet should lay on top of the original release sheet. If the package is subsequently suspended, the suspension sheet would be placed uppermost.

- 20. DOCUMENT Full, Partial Release, or No Release Required (NRR) in JCS, and on the hard copy using one of these three methods:
 - a. Work Document (JCS printout or other Hanford Prime Contractor work document);
 - b. CHPRC Work Release for Construction/Service Organizations (WRCSOF) form (A-6004-967); or
 - c. SGRP Well Drilling Pre-Job Briefing and Work Release (permitted only for SGRP Well Drilling) (Site Form A-6005-420).

A - (' - --

3.5.2 Work Authorization at CHPRC Project Facilities

Actionee	Step	Action
RA		RFORM an evaluation of the specific scope of the activity for "Work thorization."
	a.	ENSURE the activity is listed on the DRS/DAS.
	b.	ENSURE the work document is RELEASED, or has been designated as No Release Required (NRR).
	C.	ENSURE current facility conditions allow for safe performance of the activity by evaluating the scope of work being authorized (e.g., review of applicable steps/sections of the work document, turnover status information, etc.).
	d.	ENSURE the work activity is compatible with other work activities.
	e.	EVALUATE impact of work activity to LCOs.
	f.	Evaluate if the work could cause an event that would reach an Emergency Action Level (EAL), and if so, ensure that a BED will be present (on duty) during the work.
	g.	ENSURE the scope of any partial release properly bounds the work to be performed.

Actionee

NOTE:

Step

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Step	Action
	Addon
AUTHORIZE the performance of required intervals.	of field work on the DRS/DAS at the
 Hazard Category 2 or 3 nucles ≤ 24 hours 	ear facilities authorize work for
 Other facilities/projects may a longer than 45 days 	authorize work for > 24 hours, but not
(Y/N), <u>AND</u> <u>IF</u> a CO TAF is required,	gout is required for the work activity
	 required intervals. Hazard Category 2 or 3 nucles ≤ 24 hours Other facilities/projects may a longer than 45 days 3. DOCUMENT whether lockout/ta (Y/N), AND

NOTE: The Periodic Review Date field in JCS, Status tab, will be filled in automatically when the work package original release date is entered. Subsequent work releases, such as those following suspension, are not latched electronically and must be filled in manually. Take credit for the review done in preparation for rerelease by updating the Periodic Review Date manually.

4. <u>IF</u> the periodic review field on the status tab in JCS contains a date, <u>THEN</u> UPDATE it to the current date to reset the clock for the next periodic review on this work package.

If the Landlord facility is part of the normal scope of the RA for a larger facility.

Action

3.5.3 Release and Authorization of Work at CHPRC-Owned Landlord Facilities

	the RA	4 wil	If release the work and include it on the facility's DAS/DRS, and the rform steps 1 through 3 below.
•	OHC I	work (2 a	no RA for the facility, then the BA/BM is responsible to authorize the and thereby grant permission for the work to proceed per step 1 and 3 are not required for BA/BM). BA/BM is not required to maintain SS.
BA/BM, or R	A 1.		HEN notified by the OHC (other Hanford contractors), EN:
		a.	PERFORM an evaluation of the activity for work coordination.
		b.	ENSURE current facility conditions allow for safe performance of the activity.
		C.	ENSURE the work activity is compatible with other work activities ongoing in the facility.
		d.	NOTIFY affected facility occupants of scheduled activities.

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Actionee	Ste	ep Action
RA	2.	IF the OHC work is being performed by a CHPRC Repetitive Use work document, THEN ENSURE
		a. that the document is valid according to the dates specified, and
		 the work document has been pre-work reviewed within the past 90 days.
	3.	AUTHORIZE the performance of field work on the DRS/DAS at the required intervals.
		 a. DOCUMENT whether Lockout/Tagout is required for the work activity (Y/N), <u>AND</u> <u>IF</u> a CO TAF is required, <u>THEN</u> WRITE the Lockout/Tagout Number from the TAF on the DRS/DAS.
		b. UPDATE the Periodic Review Date field (JCS Status tab).

3.6 Perform Work

The Perform Work function executes authorized work in the field.

When the work team is being supervised by a CHPRC employee and includes workers for whom CHPRC is not the responsible company, the borrowed workers will follow all CHPRC policies and procedures.

Work teams from other DOE prime contractors, or Other Hanford Contractors (OHC), such as MSA, that are performing their normal Directed Services work on CHPRC property but being supervised by their management team (e.g., Refrigeration Services, Fire Systems Maintenance, Hanford Fire Testing, Vent & Balance) will conduct work according to their companies' policies and procedures. These work teams are required to check in with and obtain work authorization from the facility/project where the work will occur. Generally speaking, the OHC provides the FWS for the work, and the CHPRC project/facility provides an escort, if appropriate.

For further details, consult the MOAs and Service Delivery Documents between the other Prime Contractors and CHPRC available on the CHPRC Interface Management website.

3.6.1 FWS Work Preparations

Actionee	Step	Action
FWS	1. REV	IEW work instructions for adequacy and usability.
	used	IFIRM that procedures, permits and other documentation that will be during the work activity are the most current versions prior to lucting the pre-job briefing.

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Action		tep Action
FWS	3.	IF a repetitive use work document is past the listed effective date, THEN RETURN the work document to the RA for closure AND REQUEST a new document for similar work.
	4.	IF work cannot be performed as written, STOP, THEN DOCUMENT the issue and resolution in the work record.
	5.	PROCESS any change to the work package per Section 3.10, Work Package Change Process.
NOTE:		3.1.6 through 3.6.1.11 may be performed concurrently. However the steps performed each day before allowing workers to perform work.
	6.	ENSURE the work activity is authorized on DRS/DAS to work that day.
	7.	CONFIRM workers are trained and qualified to perform the work activity. Tools available are WAM and Enterprise Learning Management system (ELM).
	8.	CONFIRM workers are medically qualified and cleared (no work restrictions for the proposed activity) and assigned to appropriate medical monitoring to perform the work activity. Tools available are HSWET and Access Entry Control System (ACES). The worker's manager should notify the FWS if there are work restrictions.
	9.	<u>IF</u> using a repetitive use work document <u>THEN</u> , prior to each use, VERIFY the scheduled work activity and work environment are adequately bounded by the work package scope and hazard analysis and controls.
FWS	10	. <u>IF</u> the work activity is skill-based, <u>THEN</u> PERFORM a WHA per PRC-PRO-WKM-079.
	11	. CONDUCT a job site walkdown and pre-job briefing per PRC-PRO-WKM-14047.

3.6.2 Conduct of Field Work

Actio	nee	St	tep Action
NOTE:	repea	ted r	2.2 through 3.6.2.28 may be performed concurrently and could be multiple times until the work is complete. The FWS is responsible to mpliance with all steps at all times when performing work.
Workers	/FWS	1.	CHECK in with the appropriate project or facility personnel (RA or designated point of contact) each day prior to beginning work.
		2.	PERFORM authorized work as specified in the work instructions, facility and site policies, and per the contractual requirements for SOWs.
		3.	ENSURE that M&TE used is recorded in JCS within 20 working days of use.

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Actionee	Step Action
Work Team	4. PRACTICE error prevention barriers for all work.
	 Maintain a questioning attitude, thinking about safety before an action is taken
	 Stop when unsure, gain more information about the work situation before proceeding
	 Review the SAFER dialog to identify what to avoid during the job
	 Comply with the precautions and limitations section of the work document
Workers/FWS	 IF work cannot be performed as written or new hazards and controls are identified, <u>THEN</u> DOCUMENT the issue and resolution in the work record.
	 PROCESS any change to the work package per Section 3.10, Work Package Change Process.
	Continually VERIFY conditions at the work site, including hazards and controls, match what was discussed during the pre-job briefing.
	8. HANDLE, STORE, AND CONTROL all materials and parts issued to the work team in accordance with MSC-PRO-27688, Control of Materials Stored in the Field (Endorsed).
	9. MAINTAIN housekeeping at the work site.
	10. NOTIFY supervision and the RA if at any time conditions at the work site DO NOT align with the pre-job briefing or as described in the work instructions.
FWS	11. Always BE AVAILABLE to the work team, typically by cell phone or radio, if not physically present at the work location.
	 BE PRESENT at the work site (available for direct communications) for work steps marked as Critical, DSA, LCO, SAC, Hold Point, or Oversight.
	13. MONITOR work progress and facilitate the needs of the work team.
Planner/PM/S Coord/WC Support Staff	14. <u>IF</u> the work package has been released for 90 days or more, <u>THEN</u> CONDUCT a review per Section 3.13, <i>Periodic Reviews of Long-Lived Work Packages</i> , to ensure supplemental documents are the most current versions.

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Action	ee Ste	p Action
FWS	15.	IF a work package has not been or will not be listed on the DRS/DAS for greater than nine working days, THEN SUSPEND the work package per Subsection 3.9.1, Suspension of Work.
		 a. Exceptions to this step are Repetitive Use work documents identified with a Document Classifier of G or Y, which may remain released if they describe work that occurs at least once a month.
FWS/Wor	rker 16.	RECORD the following in the work record:
	•	Significant activities
	•	Issues that arose during the work
	•	Items requiring follow-up, such as procedure or data sheet changes
	•	Facility equipment that was worked on but not listed in the component field
	•	Points that should be discussed during the post-job review meeting
	X or check formal feed Review. The during the jube transcrib	ack from field work will be informal, identified in the work record with an mark, and transcribed into the electronic work record on post review. It is required to be captured on A-6004-821, Post ALARA, Post-Job one FWS may capture both formal and informal items in the work record one, but should clarify at the close of the job which items are intended to need as informal feedback during post-review. If a checked item is not a r I for formal/informal, it will be assumed to be informal.
FWS		IF information in the work record or WD needs to be captured as formal or informal feedback, THEN CHECK the "Feedback" box on the Work Record, to signify a need to retain the information.
		 a. <u>IF</u> the feedback should be captured during a formal post-job review, <u>THEN</u> WRITE F next to the check.
DA		IF the WD contains an FMP, THEN PERFORM a field verification to verify that the field configuration of the modification is in agreement with the FMP/ECR design AND UPDATE the Control Print File per PRC-PRO-EN-20050, Engineering Configuration Management.
FWS		VERIFY all released work was completed, or take appropriate action to change the work instructions if the work was not or cannot be performed as written.
		ENSURE completed work packages are returned to the Release Authority for work acceptance within four (4) business days of work completion.

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Actionee	Step Action
FWS	21. VERIFY all required data, signatures, and required work document entries are complete and filled in.
	22. DOCUMENT completion of field work on the WD.
	 REVIEW the work record for items that should be discussed during a post-job review per PRC-PRO-WKM-14047.
	 <u>IF</u> a formal post-job review will be conducted, <u>THEN</u> IDENTIFY items in the work record that will be captured on the Post-ALARA/Post-Job Review form as formal feedback to differentiate it from the informal feedback that will be transcribed by the staff during work package post-review. (Mark with F or I for formal or informal)
	24. CONDUCT a post-job review per PRC-PRO-WKM-14047, preferably within two weeks after field work was completed.
	25. RETURN unused materials obtained for the job to the Chemical Storage Lockers, Mask Stations, etc, OR to the Material Coordinator, AND ENSURE adequate information has been provided so that the materials can be properly dispositioned per MSC-PRO-140, <i>Utilizing General Supplies, Spare Parts, and Convenience Storage Inventories</i> , PRC-PRO-EN-129, Controlling Spare Parts Inventory, and PRC-PRO-PMT-133, Personal Property Management.
	26. <u>IF</u> work was NRR, <u>THEN</u> "N/A" the Work Acceptance.
	27. SIGN FWC on the document and in JCS.
	28. ROUTE the work package to the RA for acceptance per Section 3.7, Work Activity Acceptance, within four working days of FWC.

3.6.3 Use of Working Copy Work Document

It may be necessary to make copies of the work package to allow work at multiple locations. A working copy may also be used when there is risk of damage or loss of the record copy of the work package due to work environment. The "Working Copy" is a copy of all or part of the record copy work document.

In some cases, instead of generating a working copy it may be appropriate to use a reader for data to be collected by a member of the group who is outside the contamination area if he or she is able to see the work and is able to communicate with the other workers.

	Actionee	Step	Action
FWS			TERMINE if a working copy of the record copy work document is essary because of the work location or work environment.
		_	NERATE the necessary number of copies of the record copy work ument.

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Actionee	Step	Action
FWS	Clearly	MARK AND NUMBER each working copy (i.e., Working Copy #1).

NOTE:

It is essential that each working copy is documented and accounted for to ensure all work activities are captured on the record copy document and that all changes to the record copy are transferred to the working copies.

- DOCUMENT date of issue and to whom the working copy was issued on the work record, OR GENERATE working copy log if more than three working copies are used.
- 5. TRANSFER documentation of work performed using the working copy to the record copy work document.
- 6. ENSURE all work package changes will be performed per Section 3.10 on the record copy work document, <u>THEN</u> TRANSFER changes to the working copy by pen and ink, replacing the affected pages in the working copy, or destroying the existing working copies and making a new working copy.
- 7. DOCUMENT completion of changes to the working copy in the work record or *Working Copy Log for Work Document* (A-6005-908).
- 8. <u>WHEN</u> work is complete, <u>THEN</u> REVIEW the record copy and working copies to ensure the incorporation/retention of data into the record copy document.
- DOCUMENT destruction of the working copy in the work record or working copy log.

3.7 Work Activity Acceptance

Work packages that will be fully closed will be processed per Section 3.7.1, *Full Work Package Acceptance*. Work packages that will remain open for future use will be processed per Subsection 3.7.2, *Partial Release or Repetitive Use Work Activity Partial Closeout*.

3.7.1 Full Work Package Acceptance

Act	ionee	Step	Action
NOTE:	JCS V	Vork Package	es with Temporary Changes shall not be closed or suspended until
	the sy	stem is returr	ned to its normal configuration, and must remain on the Daily
	Relea	se Sheet and	Plan of the Day until closed.

RA

1. <u>IF</u> the WD implemented a modification,
<u>THEN</u> VERIFY those items marked on the MIR as "Required Before
Retest" have been completed <u>AND</u> the FMP/ECR has been signed by the
DA as complete, for the work being accepted.

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Actionee		Step Action
RA	2.	IF there were changes to the WD, THEN ENSURE the Restoration and Retest instructions in the WD address all work performed.
	3.	ENSURE adequate performance of Restoration and Retest per the work instructions.
<u>THEN</u> DOO NOTIFY RI <u>AND</u> INITI		IF the test results are not acceptable, THEN DOCUMENT the issue in the work record, NOTIFY RM, AND INITIATE a change per Section 3.10 to the work instructions for rework or to the retest instructions to alter the acceptance criteria.
	5.	DOCUMENT Work Acceptance of the end-state of equipment/system/area as specified in the WD in JCS and on the hard copy, or N/A if work was NRR or it is "not applicable" (if not performed by FWS), AND UPDATE work package status in JCS to CMP-POR.
	6.	The RA needs to ENSURE completed work packages are routed for closeout within two (2) business days of work of receiving completed work document. IF there are conditions, administrative actions, or other reasons why this may not be possible, THEN DOCUMENT reason in the work record, hard copy and JCS.
	7.	ROUTE the work package for closeout per Section 3.8, Work Package Closure/Post Work Review within two working days.

3.7.2 Partial Release or Repetitive Use Work Activity Partial Closeout

These steps are to ensure proper closeout activities are performed for any completed sections/performances of either partial release or repetitive use packages where there are remaining steps/sections to be performed at some later time.

Actionee	Step	Action
•		activities that are performed several times each month may the year for which they are valid, with RA concurrence.
FWS	1. DOCUM	ENT field work complete of the partial release.
RA		ENT Operations Acceptance of the partial release, CEED per Step 3.7.1.4 if results are unacceptable.
Work Control Staff/RA/FWS	3. TRANSO	CRIBE signatures from hard copy original releases to JCS.
Stall/RA/FWS	4. TRANSO	CRIBE data/info of M&TE used during the partial release.
PM/S Coord		ork package contains completed data sheets, LOSE them as required.

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Actionee	Step	Action
Work Control	6. STOR	E the work document, typically in a Work Control Hold file.
Staff/RA/FWS		
	7. UPDA	TE the work status and work document location in JCS.

3.8 Work Package Closure/Post Work Review

Closeout activities are to be completed no more than 30 days after the work has been accepted by the RA and coded as CMP-POR in JCS.

Actionee		tep Action	
Planner/PM/ S Coord/WC Support Staff	1.	When the site-form, Short-form Work Request/Work Doc (A-6005-768) was used, ENSURE data has been entered the RMs final review. For the resolution/retest and approacceptable to enter "See Hardcopy."	d into JCS prior to
PM/S Coord	2.	CLOSE data sheets prior to routing package for addition reviews, when possible.	al post-work
	3.	IF data sheet completed satisfactory equals "no," THEN DO NOT advance the PM/S activity's next due da	te.
		a. <u>IF</u> data sheet completed satisfactory equals "no," <u>THEN</u> CONFER with the DA/TA to define appropriate	e path forward.

NOTE: The activities in Step 4 below should be performed by persons who prepared the documents. Long-form work instructions packages should be reviewed by the respective work planner, or another qualified planner if the one who wrote the resolution is not available. PM/S packages should be reviewed by the PM/S Coordinator. All other types of work packages, typically short-form instructions, should be reviewed by the Work Control Support Staff. When all three actionees are listed, the intention is that only one of the three performs the action, based on the type of work document, per this note.

Planner/PM/ S Coord/Work Control Support Staff

- 4. CONDUCT work package closeout activities and post-review.
 - <u>IF</u> any items in the work record were identified in the feedback column as F (formal post-job input), <u>THEN</u> ENSURE that a completed post-job review form is included in the work package
 - TRANSCRIBE into JCS all items for informal feedback or Lessons Learned (LL) identified with an X or check mark in the work record or identified for LL retention
 - <u>IF</u> the work record discussed equipment that is not already shown on the JCS component field for this work document, <u>THEN</u> ADD them. This is required for operating facilities for maintenance history
 - REVIEW PRC-PRO-WKM-14047 Section 3.8.3, to determine if there are any required follow-up actions for post-job reviews and feedback

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Actionee	Step	Action
Planners	•	REVIEW the work instructions and work record against the Rad Con criteria in Appendix E to determine whether the work package must be post-reviewed by Rad Con
	•	IF Rad Con post-review is required per the criteria, THEN ADD R as an approval to the post-review section in JCS, OR ANNOTATE in the work record that RadCon review is or is not required so that the Work Control Support staff will know how to route the packages for post review
Work Control Support Staff/ PM/S Coord	•	REVIEW the work instructions and work record against the Rad Con criteria in Appendix E to determine whether the work package must be post-reviewed by Rad Con
	•	IF you are unable to determine whether the package meets the criteria, THEN CONSULT a Planner, the FW, the RM, or RadCon for assistance
Planner/PM/ S Coord/Work Control Support	•	NOTIFY appropriate actionees of issues needing follow-up actions, such as procedure or data sheet changes, as identified in the Work Record
Staff	•	ENSURE all signatures (refer to Step 3.1.7) within the work package are accompanied by completion of a CHPRC Signature/Initial/Stamp Verification log (A-6003-003), Facility Signature Log, or the signature contains the person's printed name and the date
Work Control	•	PERFORM final checks and prepare packages for record retention
Support Staff	•	RECORD M&TE used in JCS (at a minimum within 20 working days of use
	•	ENSURE changes to the WD have been performed per Section3.10, Work Package Change Process
	•	REVIEW package for completeness, legibility and accuracy per PRC-PRO-IRM-10588, <i>Records Management Processes</i>
	•	ENSURE all supplemental documents and work instructions, change notices, FMPs/ECRs, work record and other elements listed in the Table of Contents or References Section of the WD not marked as "Info Only" are listed and included in the Document Record Folder
	•	RE-ARRANGE the work package contents to the correct sequence, if necessary
	•	<u>IF</u> the work package contains unused forms or data sheets, <u>THEN</u> REMOVE unused forms or data sheets <u>AND</u> UPDATE the References

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Actionee	Step	Action	
	•	ENSURE all required fields in the WD are complete, lined out or marked N/A (e.g., data entry fields, signature fields, or other fields that could give a perception of missing data if left blank)	
	•	IF the WD implemented a modification, THEN ENSURE all required actions are complete as required by the MIR	
	•	ENSURE the signed FMP/ECR Cover Sheet has been submitted to Document Control	
Work Control Support Staff	•	TRANSCRIBE signatures and data from the WD to JCS. Minimum required signatures are those that signify preparation, approval, and/or validation of the work instructions. These include change incorporation dates, suspension codes and Operations concurrence date, original Release approvals, fieldwork complete (FWC), work acceptance and post-review signatures, and the accompanying dates	
	•	IF a PDF copy of the Site Form short-form has been embedded into	
		JCS, THEN you may TRANSCRIBE per the bullet above, OR ENTER "see hardcopy" for the required fields, except that the correct dates must be entered in JCS for Pre-Work Review, Work Release, FWS and Work Acceptance for reporting purposes.	
		SEE Appendix F	
	•	PRINT a hard copy of the JCS "work record" for inclusion into the work document if the JCS work record contains data or information not on the hard copy work record	
	5. IDENT Appen	TFY disciplines required to perform a post work review per dix E.	
	6. ROUT discipl	E the work package for post work review per the identified ines.	
DA/TA/Eng	7. SELEC	CT reliability codes in JCS if desired (recommended for operating es).	
Post Work	8. PERF	ORM post work review per respective program procedures.	
Review SMEs		MENT the post work review in JCS on the Completion tab or in the locument.	
RM		. FACILITATE closure of work documents within 30 days of completion of the Work Acceptance date.	

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Actionee	Step	Action
RM	11. <u>IF</u> work (CMP-F	package closeout will exceed 30 days beyond Work Acceptance POR),
	<u>THEN</u> [record i	DOCUMENT justification for extending the closeout date in the work n JCS,
		GN Post Work Review on the JCS Completion tab, using Approval MEXT.
RM's Manager or Facility Manager	more th	JR with justification for extending the closeout of work packages an 60 days beyond Work Acceptance in JCS signing Post Work on the JCS Completion tab, using Approval Code MGR-EXT.
Work Control Support Staff	13. DOCUM	MENT completion of the post work review in the WD and in JCS.
Capport Otali	14. UPDAT	E in JCS the work package status to RET CMP.

NOTE: The JCS Table of Contents (TOC) lists all forms from JCS in addition to repeating the References section of the Work Document. The Table Of Contents satisfies the alternative to pagination described in this step.

- 15. PRINT a Table of Contents from JCS

 AND PLACE on top of the Work Document in the DRF.
- 16. ENSURE each page within the work package is numbered sequentially (work instructions, supplemental documentation, permits, etc.), or the JCS Table of Contents lists each individual document within the work package and each document is paginated.
- STORE <u>AND</u> ARCHIVE the work packages as stated by Records Inventory and Disposition Schedules (RIDS) for the facility/project per PRC-PRO-IRM-10588.
- 18. UPDATE the JCS Location field with the Records Holding box number, or Integrated Document Management System (IDMS), if the work package will be scanned into IDMS as a record document.

3.9 Suspension/Cancellation of Work

3.9.1 Suspension of Work

JCS Work Packages with Temporary Changes shall not be closed or suspended until the system is returned to its normal configuration, and must remain on the Daily Release Sheet and Plan of the Day until closed.

Actionee	Step	Action
FWS/RA		ERMINE actions necessary to place the equipment/system in a safe guration with SME/DA/TA input.
	copie	LECT all working copies of the work package and store the working es with the record copy or transfer work documentation and destroy working copy, making notification in the work record or working copy

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Actionee	Step Action	
FWS/RA	REVIEW the work package for impacts to facility operations AND TAKE appropriate actions.	
	. <u>IF</u> any changes to LOTO controls are necessary, <u>THEN</u> PROCESS the change per DOE-0336, <i>Hanford Site Lockout/Tagout</i> .	
	 <u>IF</u> additional/supplemental actions are needed to place the a compliance with the Safety Basis for the facility, <u>THEN</u> INITIATE a change to the work package per Section Work Package Change Process. 	
	. CONTACT the USQ Screener/Evaluator to determine if the facility configuration requires further evaluation.	temporary
	 <u>IF</u> actions initiated on the MIR (Modification Impact Review) be stopped or reversed (e.g., procedure changes, spare par training, labeling, etc.), <u>THEN</u> CONTACT the support groups to stop or reverse the 	ts inventory,
	. COMPLETE the work suspension field on the hard copy of t package.	he work
	. UPDATE JCS files with the Work Suspension or appropriate	e status.
	 ENSURE the work area has been left in a neat and orderly of tools and materials stowed appropriately, etc. 	condition,
	FORWARD the work package to the appropriate actionee at JCS with the appropriate Package location and status.	nd update
FWS	2. NOTIFY the RM of package suspension.	
Planner	3. INITIATE a change to the work package per Section 3.10, Work Package Change Process, if appropriate.	
Work Planning Manager or Delegate	 REVIEW JCS database for suspended and inactive (RET-IN packages monthly. 	IA) work
	 PROVIDE results of the review to the respective RMs <u>AND</u> DISCUSS the path forward for packages suspended to six months. 	onger than
	 a. <u>IF</u> a work package has been suspended greater than six <u>THEN</u> CONSIDER changing the JCS status to RET-INA processing the work package for closeout or cancellation 	or

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Actionee	Step	Action
Work Planning Manager or	b.	<u>IF</u> a work package has been inactive (RET-INA) for one year or longer,
Delegate		<u>THEN</u> REVIEW the work package to determine if it is still required <u>AND</u> DOCUMENT performance of the review in the Work Record, or process the work package for closeout or cancellation.
	T⊢	HEN the management team desires to continue the work, HEN ROUTE the package for a pre-work review and scheduling perection 3.4, Schedule Work.

3.9.2 Work Package Cancellation

Consult guidance documents on the Work Management website for additional suggestions in dealing with old packages or incomplete work scope. For PM/S work documents, comply with PRC-PRO-MN-19304, and the actions listed for the RM below may be performed by the TA and PM/S Coordinator.

Actionee	S	tep Action
FWS/RA/WC Support Staff		IF any field work has been performed in the work document, THEN INITIATE a change to delete the remaining work scope per Section 3.10, Work Package Change Process. These packages must be closed out per Section 3.8, Work Package Closure/Post Work Review, and may not be cancelled.
RM	2.	CONCUR with OR IDENTIFY Work Packages for cancellation.
RA	3.	DETERMINE actions necessary to place the equipment/system in a safe configuration with SME/DA/TA input.
	4.	REVIEW the work package for impacts to facility operations AND TAKE appropriate actions.
RA/WC Support Staff	5.	DOCUMENT justification for cancellation in the work record and JCS, (e.g., the work is no longer necessary because project mission has changed; equipment is no longer in service, etc.).
	6.	<u>IF</u> the work activity is a duplicate of another item or was completed as part of another work document, <u>THEN</u> INCLUDE the WD number in JCS with the justification for cancellation.
PM/S Coord	7.	IF the work activity is a PM/S, THEN CANCEL the PM/S activity per PRC-PRO-MN-19304.
RA/WC Support Staff	8.	IF the work package was written to execute an FMP/ECR, THEN:
		a. ROUTE the FMP/ECR to the DA for action per PRC-PRO-EN-2001.

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Actionee	Step	Action
RA/WC Support Staff		ANNOTATE in the work record and status comments that the FMP/ECR has been returned to the DA (by name) and separated from the package.
DA/TA	(e.g	actions initiated on the MIR should be stopped or reversed g., procedure changes, spare parts inventory, training, labeling, etc.), EN CONTACT the support groups to stop or reverse the action.
WC Support Staff/Planner/ FWS		TIFY Material Control personnel of cancellation for disposition of used materials.
RM	11. DO	CUMENT concurrence for cancellation in JCS.
WC Support Staff		TIFY the Requestor or appropriate Project Manager of the ncellation of the work package.
		STROY the hard copy documents <u>D</u> ANNOTATE this fact in JCS status/tracking comments.

3.10 Work Package Change Process

For PM/S work documents, changes to data sheets shall be in accordance with the process requirements defined in PRC-PRO-MN-19304, or per the process in this section.

The processes in this Section provide direction to make changes to approved WDs. Two methods are available to change work instructions: Editorial Change and Non-Editorial Change. Editorial changes will be executed via a Pen and Ink Change. Non-Editorial Changes may be executed via a Pen and Ink Change, or Work Change Notice (WCN).

A change to the work package may be the result of Issues encountered in the field or may be caused when processes, documents or requirements are changed. Changes to supporting document (permits, design documents, pre-approved procedure, data sheets, etc.) are made using the procedures and processes that control the specific document and are then evaluated for impacts to the WD per this Section. Changes to supplemental documents shall be noted in the work record and updated on the references.

Whether a change to the WD is a result of issues encountered in the field during performance of work, or the work instructions must be changed to comply with updated support documents, a technical review by the RA of the WD must occur prior to continuing on with the work activity.

After the original RM approval of the work instructions has been obtained, all changes to the work package must be made in accordance with this section, unless specifically listed as an exception in this section. One exception is that if the work package has not yet been released (for NRR, not yet authorized for field work), all signatures may be removed, the document altered, and then resubmitted for review and approval.

Changes made to administrative sections of the JCS (i.e., classifier codes, charge code information, resource codes and numbers, position or organization names or titles, etc.) prior to printing of the record copy DO NOT need to be documented. Review and approval is not required to change these administrative items, but draw one line through deletions or neatly print additions, date and initial any changes.

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3.10.1 Editorial Change

Actionee	Step Action
FWS or Support Staff	DETERMINE if the proposed change meets the criteria for an editorial change. An editorial change includes only the following:
	a. CORRECT grammatical, typographical, or spelling errors that:
	 DO NOT affect numbers other than page, table, figure title numbers, or obvious and demonstrable typographical errors. (Changes in decimal points, units of measure or nameplate information/data are not editorial changes.)
	 DO NOT affect units of measure
	 DO NOT affect acceptance criteria other than obvious and demonstrable typographical errors
	 Did not translate correctly from the original source document, due to software issues
	 b. CHANGE the format of the document (e.g., rearrange unnumbered lists of items, rescale items, move details to new sheets, pagination, table, or figure title number changes, etc.).
	 ADD, CHANGE, DELETE <u>OR</u> CLARIFY notes or cautions <u>AND</u> DO NOT direct personnel actions.
FWS or	d. An editorial change DOES NOT:
Support Staff	MAKE any technical changes
	 CHANGE the meaning, overall scope, or purpose of the existing document or drawings, or
	 Change a Technical Safety Requirement (TSR) or its bases, or other described operational controls or restrictions
	e. Work instructions remain legible after the change.
	 IF the change DOES NOT meet the criteria for editorial change, <u>THEN</u> GO TO Subsection 3.10.2, Non-Editorial Change.
FWS or	3. DOCUMENT the following in the work record:
Support Staff	Description of changePRINT name, SIGN <u>AND</u> DATE
	 IF the work document required USQ review, <u>THEN</u> CONTACT the USQ Screener/Evaluator for application of the categorical exclusion for editorial changes.

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Actionee	Step Action	
USQ Screener/ Evaluator	 DOCUMENT application of the categorical exclusion in the left margin next to the change or in the work record (i.e., General Categorical Exclusion (GCX) notation along with signature/date of qualified USQ screener). 	1
RM	DOCUMENT approval of the change in the work record (PRINT name SIGN <u>AND</u> DATE).	Э,
FWS or Support Staff	7. DRAW a single line through text to be changed AND INSERT the new text in a legible manner using permanent ink.	
	 INITIAL <u>OR</u> SIGN, for incorporation, <u>AND</u> DATE the change. 	
FWS	 UPDATE all working copies per Subsection 3.6.3, Use of Working Community 	ору

3.10.2 Non-Editorial Change

Actionee	St	ep Action
FWS	1.	IF the work will not continue (i.e., significant delay in field work), THEN SUSPEND the work per Subsection 3.9.1, Suspension of Work.
FWS/Planner	2.	EVALUATE the proposed change to work instructions and supporting documents for impacts to identified hazards and controls, introduction of new hazards, or method of performing work with input from SMEs identified in Appendix D.
	3.	<u>IF</u> a supporting document needs a change, <u>THEN</u> INITIATE the change process for that document per the administrative procedure that generated it.
RM	4.	IF a supporting document was changed, THEN INSERT the document in the work package AND UPDATE the references.
		 a. EVALUATE whether the changes to the supporting document(s) affect the work instructions.
		 b. <u>IF</u> there are no impacts to the work instructions, <u>THEN</u> DOCUMENT in the work record the results of this evaluation.
		 c. <u>IF</u> the supplemental document change does affect the work instructions, <u>THEN</u> CHANGE the work instructions <u>AND</u> DOCUMENT per this section.

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A - (*	_	And an
Actionee		tep Action
RM	Э.	IF hazards or controls are impacted, THEN EVALUATE changes to the hazards analysis per PRC-PRO-WKM-079.
		 a. Changes to hazards and controls after finalization of the AJHA are incorporated by a change to the work package instructions.
		b. The RM has the responsibility to decide if it is necessary to perform a revision to the AJHA.
Planner/RM	6.	<u>IF</u> the change introduces additional hazards or changes controls to existing hazards or changes the work to become beyond skill-based, <u>THEN</u> PERFORM HRB screening per PRC-PRO-WKM-40004.
		Chairpersons approval is required for non-editorial changes to work ents with HRB review.
RM	7.	DETERMINE required reviewers for work package change.
		 SELECT Reviewer(s) from Appendix D SELECT Technical specialists and vendors as deemed necessary
Planner	8.	<u>IF</u> the work required USQ review per the requirements of Appendix D, <u>THEN</u> SUBMIT the WD to the USQ Screener/Evaluator for implementation of the USQ process per PRC-PRO-NS-062.
USQ Screener/ Evaluator	9.	DOCUMENT results of the USQ screen on the work record (for Pen and Ink changes) <u>OR</u> WCN (i.e., GCX notation along with signature/date of qualified USQ individual).
RM	10	. DETERMINE if the proposed change meets the below criteria for pen and ink change:
		 Work instructions remain legible after the change, and Work instructions will not be confusing due to size or type of change.
FWS/Planner	11	. <u>IF</u> the change cannot be performed as a pen and ink change, <u>THEN</u> GO TO Step 3.10.2.19
	12	. DOCUMENT the following in the work record:
		Description of change
		Supplemental documents changed
		AND PRINT name, SIGN AND DATE, or if a signature log is present in the package, INITIAL AND DATE.
SMEs	13	. DOCUMENT reviews/approvals in the work record or WCN; (PRINT name, SIGN AND DATE) for pen and ink changes; or in the WCN for WCN changes.

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Actionee	Step Action
RA	14. REVIEW the changed instructions,
	<u>AND</u> CONSIDER that you are effectively performing a pre-work review on the revised work instructions, and not merely reviewing the new material.
RM	 DOCUMENT approval of the change in the work record (PRINT name, SIGN <u>AND</u> DATE) for pen and ink changes or in the WCN for WCN changes.
Planner	 EVALUATE change for need to update the training or medical monitoring requirements for the workers.
	17. PERFORM the pen and ink change as follows:
	a. INSERT new text at the appropriate location.
	 DRAW a single line through text to be deleted or changed in the work document and insert new text in a legible manner using permanent ink.
	c. INITIAL <u>OR</u> SIGN <u>AND</u> DATE each change.
	d. GO TO Step 3.10.2.21.
Planner	18. <u>IF</u> the change cannot be performed as a pen and ink change, <u>THEN</u> PERFORM the Work Change Notice as follows:
	 a. INCORPORATE any previous pen and ink changes on affected pages into the WCN.
	b. LINE through superseded pages and mark line with "WCN #x."
	c. MARK new pages with "WCN #x" in the page header.
	d. INSERT new pages into WD.
	e. PLACE deleted pages in the Supplemental tab of the work package AND UPDATE the References list.
	 IF signatures/initials have been completed on the superseded pages, <u>THEN</u> DOCUMENT those steps as complete on the replacement pages.
	DOCUMENT incorporation of the change by signing the WCN form for incorporation.
FWS	21. UPDATE all working copies per Subsection 3.6.3, <i>Use of Working Copy Work Document</i> .
	22. CONTINUE work, <u>OR</u> RETURN to the appropriate step in the process to have the work document scheduled.

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3.11 Transfer of RM and FWS Responsibilities

The RM responsibilities should be transferred to another qualified RM whenever the RM will be unavailable to fulfill the RM duties (extended period such as vacation, job transfer, etc.). An RM may fulfill their job duties remotely via telephone or other electronic medium.

The FWS responsibilities must be transferred to another qualified FWS whenever the FWS will not be on the Hanford site or unavailable to fulfill FWS duties.

Actionee	Step Action
Old RM/FWS	CONDUCT turnover with New RM/FWS discussing the following items:
	 The scope of the work package The status of the work package Any outstanding issues to be resolved
RM	 IF the current FWS is not available for any reason, <u>THEN</u> CONDUCT turnover in their absence.
RM's Manager	 IF the current RM is not available for any reason, <u>THEN</u> CONDUCT turnover in their absence.
New RM/FWS	 DOCUMENT acceptance of ALL RM/FWS responsibilities in the work record AND UPDATE the RM/FWS in JCS.

3.12 Emergency Work

Emergency Work is defined as any work that requires immediate action to prevent serious personnel injury, environmental harm, security breaches, or property loss as determined by the responsible Vice President or Facility Manager (in an operating facility). This work will typically be classified as Priority 1 but not all Priority 1 work needs to be Emergency Work. Emergency Work Processes are not a substitute for emergency response such as firefighting, but can support emergency response once the emergency is under control and the area stabilized. This Vice President authority shall not be delegated and it is intended that this provision will rarely be utilized.

	Actionee	Step	Action
RM			NSURE that the Building Emergency Director/Building Warden ED/BW) has been notified of the condition.
		En	EQUEST concurrence from the respective Vice President to use the nergency Work Process contained in this Section and documents the ncurrence on the CHPRC Emergency Work Form (A-6005-752).

NOTE: Applicable SMEs are required to be present at the scene of the emergency to provide guidance for resolving the emergency situation safely and provide necessary inspection, witness, or verification points as required to indicate all work was performed per current site standards.

ASSIGN resources to perform the emergency work: SME, supervision, and craft.

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Actionee		Step Action
FWS	4.	IF time permits, THEN PERFORM an AJHA per PRC-PRO-WKM-079. The AJHA Level One questions may be used to as a tool to help identify hazards and document controls.
	5.	DOCUMENT completion of a Pre-Job Briefing on the <i>CHPRC Emergency Work Form</i> (A-6005-752).
	6.	DOCUMENT all work performed on the CHPRC Emergency Work Form.
	7.	IF post maintenance testing is required, THEN DOCUMENT acceptance criteria and results.
	8.	DOCUMENT completion of a Post-Job Review.
Planner or Work Control Support Staff	9.	GENERATE a document number in JCS <u>AND</u> RECORD on the <i>CHPRC Emergency Work Form</i> , if this was not already done prior to starting the work.
	10	. PROCESS the Work Package for closure by performing these steps:
		 REVIEW the completed form <u>AND</u> ENSURE it is a complete and accurate record. Any data and printed names must be legible, signatures dated, permanent ink utilized, etc.
		 ENSURE the Release Authority Acceptance and the RM final signatures have been completed.
		c. TRANSCRIBE the following into JCS, Title, problem description (A brief summary is acceptable), the names and date of the signatures of the Release Authority who signed for acceptance and the RM who signed the last signature on the form.
		 SCAN the form at attach the scanned image to the work document in JCS.
		e. ASSEMBLE all paperwork used during the work into a DRF.
		f. PROCESS for retention beginning at Step 3.8.8 to the end of that section.

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3.13 Periodic Reviews of Long-Lived Work Packages

The Periodic Review is currently required every 90 days on applicable work documents.

Actionee	Step Action
Planning Manager	ASSIGN individuals to run appropriate reports from the Crystal Reports library at least every 90 days. Reports are available through the JCS Toolbox, or on the Work Management web page, http://prc.rl.gov/rapidweb/operations/index.cfm?pagenum=5 .
	a. The report(s) shall include all repetitive use work packages that have not been closed, regardless of current work status, and non-repetitive work packages that are released and have been released for 90 days or longer (work status beginning with WRK, except SIO or SOP).
	ASSIGN individuals to perform the reviews for each document on the report.
Assigned Individuals (Planner/PM/ S Coord/WC Support Staff)	 REVIEW repetitive use and long-lived active WDs at least every 90 days after the latest review (Pre-work Review, Release or Periodic Review) date to ENSURE supplemental documents are the most current versions and valid for current field conditions.
	4. <u>IF</u> JCS reflects that a pre-work review has been performed within the past
	90 days, <u>THEN</u> ENTER the date of that review in the Periodic Review Date field on the Status tab in JCS.
	5. REVIEW the report for documents that DO NOT appear on the POD.
	 a. <u>IF</u> the work package DOES NOT appear on the POD, <u>THEN</u> DETERMINE if the field work has been completed and needs to be turned in, <u>OR</u> if it needs to be suspended, <u>AND</u> CONTACT the FWS to take appropriate action.
	 IF all supplemental documents (forms, permits, procedures, engineering documentation, etc.) are the most current version and valid for current field conditions, <u>THEN</u> DOCUMENT performance of the review and review date in the electronic work record in JCS.
	 IF any supplemental document is not the most current version, or no longer valid for current field conditions, <u>THEN</u>
	a. INCORPORATE the new document with a pen and ink change.
	 DETERMINE if a change is required to the work instructions per Section 3.10, Work Package Change Process.

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Actionee	S	Step	Action
Assigned Individuals (Planner/PM/ S Coord/WC Support Staff)	8.	IF the work package contains an A. THEN RUN the 'Check for Updates AJHA.	JHA, - AJHA Tree in Sync' report for the
	9.	<u>IF</u> the review reveals that no action <u>THEN</u> GO TO Step 12.	s are required,
	10	. SUMMARIZE the actions required f AND SUBMIT to the respective RM	. •
RM	11	. DETERMINE if a change is required hazard controls into the work instru Work Package Change Process.	
Planner/ PM/S Coord/ WC Support Staff			ew on the hard copy work record or in An acceptable entry could be that no
	13	. ENTER the current date into the Petab in JCS.	eriodic Review Date field on the Status
	14	. REPORT to the Planning Manager have been reviewed.	when all work documents on the report

4.0 FORMS

CHPRC ALARA Management Worksheet (AMW), A-6004-634

CHPRC Emergency Work Form, A-6005-752

CHPRC Environmental Activity Screening Form, A-6004-962

CHPRC Hazard Review Board Meeting Record, A-6004-513

CHPRC Modification Impact Review, A-6004-963,

CHPRC Radiological Hazard Screening Form, A-6004-654

CHPRC Signature/Initial/Stamp Verification, A-6003-003

CHPRC Training Completion Record, CHPRC Responsible Manager Core Qualification Card, A-6005-754

CHPRC Training Completion Record, CHPRC Responsible Manager D&D Qualification Card, A-6005-830

CHPRC Training Completion Record, CHPRC Responsible Manager EPC Qualification Card, A-6005-831

CHPRC Training Completion Record, CHPRC Responsible Manager SGRP Qualification Card, A-6005-833

CHPRC Training Completion Record, CHPRC Responsible Manager PFP Qualification Card, A-6005-832

CHPRC Training Completion Record, CHPRC Responsible Manager WFMP Qualification Card, A-6005-834

CHPRC Work Planning Roster/Comment Form, A-6005-916

CHPRC Work Release for Construction/Service Organizations, A-6004-967

Eight Criteria Checklist, A-6003-801

Lockout/Tagout Authorization Form, A-6004-460

Partial Release Sheet, A-6005-337

Pre-Demolition Checklist, A-6004-622

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S&GRP Well Drilling Pre-Job Briefing and Work Release, A-6005-420

Short-Form Work Request/Work Document, A-6005-768

Training Completion Record - Non-Facility Release Authority Designation Card, A-6005-407

Training Completion Record - Release Authority Designation Card, A-6005-359

Training Completion Record - Work Planner Initial Qualification Card, A-6005-183

Training Completion Record - Work Planning Manager Qualification Card, A-6005-352

Waste Planning Checklist, A-6004-590

Working Copy Log for Work Document, A-6005-908

5.0 RECORD IDENTIFICATION

All work management records are generated, received processed, and maintained in accordance with PRC-PRO-IRM-10588, *Records Management Processes*. OCRWM records are also managed per PRC-PRO-QA-19579, *OCRWM Records Management*.

Records Capture Table

	1	corus capture rable	
Name of Document	Submittal Responsibility	Retention Responsibility	OCRWM Retention Schedule (if OCRWM Related)
Long-form or short-form Work Package - inclusions as listed on the JCS Table of Contents for the respective Work Document. This includes radiological forms, if appropriate.	Responsibility Facility/Project Designated Personnel	Work documents must be retained in accordance with RIDS. OCRWM work packages are transmitted to R&CM-RIM Services Project Hanford for scanning into IDMS and retirement to OCRWM Records Holding. The IDMS electronic record will become Hanford's record and the hard copy will be the OCRWM record. Remaining work documents are sent to IDMS to be scanned into the Record partition. NOTE: IDMS retention is the same for all work	
		documents. As such it is conservative enough to meet the requirements for Work Documents that deal with radiological or environmental work, and is in compliance with the RIDS for those types of records.	

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Name of Document	Submittal Responsibility	Retention Responsibility	OCRWM Retention Schedule (if OCRWM Related)
Documentation of work release when other than the JCS work document: • CHPRC Work Release for Construction/Se rvice Organizations (WRCSOF) Site Form A-6004-967, • SGRP Well Drilling Pre-Job Briefing and Work Release (permitted only for SGRP Well Drilling) Site Form A-6005-420. • CHPRC Partial Release Sheet, Site Form A-6005-337	Facility/Project Designated Personnel	Retained in the work package (first row).	Lifetime
Daily Release Sheets/ Daily Authorization Sheets (DRS/DAS)	Facility/Project Designated Personnel	Per RIDS, sent to IDMS to be scanned into the Record partition.	Lifetime

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6.0 SOURCES

6.1 Requirements

10 CFR 830, Subpart A, General Definitions and Provisions

10 CFR 851, Worker Safety and Health Program

10 CFR 1021, National Environmental Policy Act Implementing Procedures

CRD O 210.2A, DOE Corporate Operating Experience Program

CRD O 226.1A (Supp), Implementation of Department of Energy Oversight Policy

DOE O 414.1D, Quality Assurance

CRD O 430.1B, Change 1, Real Property Asset Management

CRD O 433.1B (Supp), Maintenance Management Program for DOE Nuclear Facilities

CRD O 450.1A (Supp), Environmental Protection Program

CHPRC-00073, CH2M HILL Plateau Remediation Company Radiological Control Manual

ISO 14001:2004, International Standards Organization (E) International Standard, Environmental Management

DOE/RL-96-68, Hanford Analytical Services Quality Assurance Requirements Document

DOE/RW-0333P, Office of Civilian Radioactive Waste Management (OCRWM), *Quality Assurance Requirements and Description* (QARD).

RRD-005 Rev 3, Worker Safety

Memorandum of Agreement for the Performance and Payment of Services between Mission Support Alliance, LLC, and CH2M HILL Plateau Remediation Company

6.2 References

42 USC 9601-9675, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

ASME NQA-1, Quality Assurance Requirements for Nuclear Facility Applications

Davis-Bacon Act, 40 CFR 3141-3144, 3146, and 3147

DOE G 430.1-2, Implementation Guide For Surveillance And Maintenance During Facility Transition And Disposition

DOE G 430.1-3, Deactivation Implementation Guide

DOE G 430.1-4, Decommissioning Implementation Guide

DOE G 430.1-5, Transition Implementation Guide

DOE/EA-1112, Sludge and Solid Residue Stabilization at the Plutonium Finishing Plant

DOE/EIS-0119, Decommissioning of Eight Surplus Production Reactors at the Hanford Site, Richland Washington

DOE-0336, Hanford Site Lockout/Tagout

DOE-0342, Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP)

DOE-0343, Stop Work

DOE-HDBK-1028-2009, Human Performance Improvement Handbook

DOE-RL-92-36, Hanford Site Hoisting and Rigging Manual

DOE/RL-2001-36, Hanford Sitewide Transportation Safety Document

Hanford Fire Department (HFD) Standard Operating Policy 4.3, *Fire System Testing and Maintenance Program Plan* (HFD procedures have been endorsed by the PRC)

MSC-GD-11124, Maintenance Resource Allocation Guide

MSC-PRO-140, Utilizing General Supplies, Spare Parts, and Convenience Storage Inventories

MSC-PRO-27688, Control of Materials Stored in the Field (Endorsed)

MSC-RD-8589, Hanford Fire Marshal Permits

NFPA 70E, Standard for Electrical Safety in the Workplace

PRC-GD-MS-10184, Work for Other Hanford Contractors

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PRC-GD-WKM-12116, Work Planning Guide

PRC-MP-MS-40403, Human Performance Program

PRC-PRO-AC-123, Requesting Materials and Services

PRC-PRO-AC-186, Statements of Work

PRC-PRO-EM-060, Reporting Occurrences and Processing Operations Information

PRC-PRO-EN-129, Controlling Spare Parts Inventory

PRC-PRO-EN-2001, Facility Modification Package Process

PRC-PRO-EN-20050, Engineering Configuration Management

PRC-PRO-EN-20051, Engineering Selection, Qualification, and Training

PRC-PRO-EN-286, Testing of Equipment and Systems

PRC-PRO-EP-15333, Environmental Protection Processes

PRC-PRO-FP-40421, Hot Work

PRC-PRO-FP-40422, Fire Marshal Interface

PRC-PRO-FP-40425, Fire Protection System Inspection, Testing, and Maintenance

PRC-PRO-IR-070, Plant Forces Work Review (Davis-Bacon Act Compliance)

PRC-PRO-IRM-10588, Records Management Processes

PRC-PRO-MN-19304, Periodic Maintenance and Surveillance Process

PRC-PRO-MN-35415, Real Property Asset Management Maintenance

PRC-PRO-MN-490, Calibration Management Program

PRC-PRO-MS-589, CH2M HILL Plateau Remediation Company Procedures

PRC-PRO-NS-062, Unreviewed Safety Question Process

PRC-PRO-PMT-133, Personal Property Management

PRC-PRO-PMT-475, Real Property Asset Management

PRC-PRO-QA-283, Control of Inspections

PRC-PRO-QA-5432, Hold Point Application in Technical Work Documents

PRC-PRO-RP-40021, Radiological Work Permits

PRC-PRO-RP-40109, Radiological Work Planning

PRC-PRO-SH-32621, Closure Facilities Hazards

PRC-PRO-WKM-079, Job Hazard Analysis

PRC-PRO-WKM-14047, Conducting Pre-Job Briefings and Post-Job Reviews

PRC-PRO-WKM-40004, Hazard Review Board

PRC-RD-EN-10484, Nondestructive Assay Management (NDA) Program

PRC-RD-EN-1819, CHPRC Engineering Requirements

PRC-STD-FP-40404, Fire Protection Program

PRC-PRO-SH-40435, Electrical Safety

PRC-STD-CN-40381, Construction Work Management Integration

PRC-STD-MS-40241, CH2M HILL Plateau Remediation Company Procedures Standards

PRC-STD-TQ-40380, Work Management Training Program Description

PUBLIC LAW 100-605, Hanford Reach National Monument, Final Comprehensive Conservation Plan & EIS

7.0 APPENDIXES

Appendix A - Work Management Process Diagram

Appendix B - Glossary

Appendix C - Work Priority List

Appendix D - Identification of the Work Planning Team/Reviewers
Appendix E - Identification of the Post Work Review Disciplines

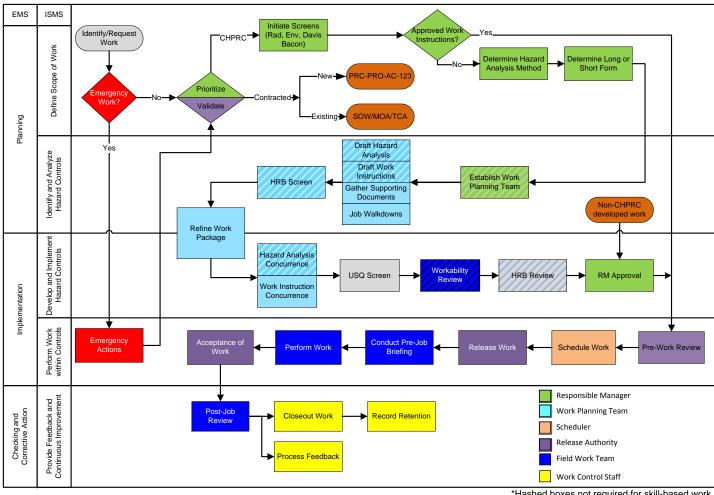
Appendix F - Using the Short-form Site Form - Quick Reference Guide

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Appendix A - Work Management Process Diagram

CHPRC's Work Management Process



*Hashed boxes not required for skill-based work 01/09/2012

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Appendix B - Glossary

Term	Definition			
Acceptance Criteria	Specified limits placed on the performance, results, or other characteristics of an item, process, or service defined in codes, standards, or other requirement documents. (From NQA-1-2008)			
Activity	Activity is a term used interchangeably with the terms "job" and "task." It can be used to describe the scope of an entire work package, or a discrete step within that work package.			
	ISMS is to be implemented at the activity level. It is this concept that is being conveyed by the use of these terms.			
Concurrence	Official endorsement by a discipline of the subject and content of a work document. Review and concurrence is indicated by dated signature(s). Reviewers are selected by the RM based on the criteria listed in Appendix D. Projects and facilities may impose additional review or approval requirements.			
Critical step	A procedure step, series of steps, or action that, if performed improperly, will cause irreversible harm to people, the environment, or equipment, or otherwise cause an immediate negative consequence that cannot be reversed or undone.			
	A critical step is the point where things could go very wrong or the "point of no return" where you cannot undo an action. Examples might include opening a valve (fluid is introduced into a piping system) or breaching a radioactive system (open a system that has potential for release).			
	The concept of the critical task helps focus attention on potential consequences so that:			
	 Appropriate defenses and contingencies can be planned into the work instructions 			
	 The work crew can look for error precursors that could impact the job at that given time and place 			
Development File	e Compiled documentation recording the progression of a work document. The work document development file includes the attendance rosters for walk-downs, planning and hazard analysis meetings, notes and questionate that arose during the development of the work instructions, and resolute those questions and comments. The development files may also be used to store supporting or supplemental documents used in developing the instructions during the field work, such as the AJHA, permits and forms litems in the development file will be joined to the completed work pack prior to it being sent to Records Holding or IDMS for scanning.			

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Term	Definition
Emergency Work	Emergency work (i.e., not Emergency Response) is an activity or activities that are required to support and further mitigate the circumstances of an incident after immediate actions have been taken. Emergency work requires expedited action to stabilize a situation to prevent serious personnel injury, environmental harm, security breaches, or property loss, and typically involves Maintenance, Construction, or Operations. Once the situation is stabilized the emergency work is stopped and a work request is generated to complete the repairs/restoration. This work will typically be classified as Priority 1 but not all Priority 1 work needs to be Emergency Work.
Environmental Management System (EMS)	Part of an organization's management system used to develop and implement its environmental policy and manage its environmental aspects. EMS encompasses the requirements of the CRD for DOE O 450.1A, <i>Environmental Protection Program</i> , to incorporate an EMS into the ISMS. The CHPRC EMS Core Elements are derived from International Standards Organization (ISO) 14001:2004 (E) International Standard, Environmental Management, and align with the ISMS Core Functions. EMS contributes to a systematic and structured approach to integrating environment, safety and health (ES&H) requirements into work planning and execution.
Feedback	The objective of feedback is continual improvement in worker safety. Feedback processes ensure information is captured from our work experience in order to apply the lessons we learned to future work of a similar nature. The information is captured in databases, available at any time in the future.
	A subset of the total feedback from a work activity could be in the form of Follow-Up Actions; actions that should be taken to correct or improve a known issue discovered during the work.
Field Work	Field Work is defined as a work activity performed on site within the scope of the CHPRC excluding administrative office activities, routine janitorial activities or vendor deliveries that DO NOT directly support CHPRC work scope (e.g., vending machines). It does include work performed to technical procedures.
	Field work includes repair, replacement or alteration of physical assets or property including rental and other portable powered equipment performed in CHPRC controlled nuclear and non-nuclear facilities and equipment, shop fabrication, environmental restoration (ER), deactivation and decommissioning (D&D or D4) work, and well drilling, maintenance and sampling.
Field Work Team	A team composed of the FWS, Workers, and SMEs assigned to perform the work activity per the approved work package.

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Term	Definition				
Follow-up Actions	Issues identified during the performance of work that may require some action be taken after work completion. This could include a procedure or data sheet change for greater efficiency or clarity in the future, process improvements, suggested form changes, spare parts inventory adjustments, the need to write a new work request, etc.				
	Follow-up differs from other feedback in that a specific action is expected or needed, whereas general feedback is generally captured in a database that can be searched for assistance in future planning.				
Graded Approach	The purpose of grading is to select the controls and verifications to be applied to various items and activities consistent with their importance to safety, environment, cost, schedule and success of the program. The CHPRC graded approach is integrated into work management by defining WD styles, and utilizing levels of rigor and detail for planned work instructions that are appropriate to the prescribed scope.				
Hazard	A source of danger (i.e., material, energy source, or operation) with the potential to cause illness, injury, or death to personnel or damage to a facility or to the environment (without regard to the likelihood or credibility of accident scenarios or consequence mitigation).				
Hazard Controls	Measures to eliminate, limit, or mitigate hazards to workers, the public, or the environment, including: (1) physical, design, structural, and engineering features; (2) safety structures, systems, and components; (3) safety management programs; (4) technical safety requirements; and (5) other controls necessary to provide adequate protection from hazards.				
	Controls are developed at the company, facility and activity level, based on the hierarchy:				
	Hazard elimination				
	2. Engineering controls				
	3. Administrative controls				
	Personal protective equipment				
Hazard Review Board (HRB)	The HRB process provides a method of selecting work activities for review by a management team to ensure that the appropriate safety measures have been implemented. See PRC-PRO-WKM-40004.				
Integrated Safety Management System (ISMS)	·				

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Term	Definition		
Intrusive Testing and Troubleshooting	Testing or troubleshooting that requires non-standard system operation, opening of system boundaries, lifting multiple electrical leads, or other intrusive (invasive) activities that alter normal system configuration. These activities require a more disciplined approach, using work instructions to ensure system configuration will be properly restored at the completion of troubleshooting and/or repair activities. See PRC-GD-WKM-12116 (Appendix E, <i>Troubleshooting Process Guidance</i>) for further discussion/guidance.		
Job	A term generally used interchangeably with the term "work package" indicating a scope of work that has been defined in a given work document. However, the term is sometimes used interchangeably with "activity", "work activity" or "task." See Activity.		
Job Control System (JCS)	The Computerized Maintenance Management System (CMMS) used to support a work management process. The tool typically tracks work packages, periodic maintenance activities, work scheduling, component data bases and generates reports. CHPRC uses the JCS for this function.		
Landlord Facility	Non-radiological, general purpose facilities including permanent and mob office buildings, restrooms, shower trailers, shops, warehouses, and certaindustrial structures. Permission to perform work in these facilities will be granted by the Building Administrator. The list of Building Administrators available in the <u>Caretaker</u> database. See Project Facility for comparison.		
Long Lived Work Documents	These are work documents that have been Released for a period of greater than 90 days.		
Measuring and Test Equipment (M&TE)	See PRC-PRO-MN-490.		
Modification Impact Review (MIR)	Used as a means of ensuring each modification to a project or facility is carefully reviewed for any changes, training, spare parts, or other changes required resulting from the modification. The MIR provides a mechanism ensure that the processes and programs that interface with the equipment that was modified are in a state or condition to support full use of the equipment when the physical changes have been completed. The JCS form or the MIR, (A-6004-963), is used to document results of the review and track items to closure.		
Modifications	Work scopes that change the design configuration or the physical asset being maintained as defined in PRC-PRO-EN-2001 or PRC-PRO-EN-20050.		
	Changes to non-CM SSC DO NOT require engineering documentation but do affect a variety of processes and therefore an MIR is processed.		
	Uses of like-for-like or equivalent items or temporary changes for performing routine repairs are NOT modifications.		

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Term	Definition			
NEPA Trained Individual	Individual who has met the requirements in PRC-PRO-EP-15333 for conducting NEPA screens on work packages. The project ECO must authorize in writing the scope of work/authority for this designation. NEPA is the National Environmental Policy Act.			
Partial Work Release	A partial release can be used to release portions (sections/steps) of a work document or may be used to document each performance of a repetitive use work document.			
Periodic Maintenance (PM)	Work activities that are performed at regular intervals that are intended to maintain a system or component in the as-designed condition without the need for unplanned Corrective Maintenance. See PRC-PRO-MN-19304.			
Periodic Review	This review of a work package is performed after initial planning to ensure the contents are current and valid. Section 3.13 describes the review; a pre-work review also satisfies the review. A field on the JCS Status tab documents this review. The field is populated when the work package is released for the first time, and must be manually updated when performed thereafter. Reports are available to track documents that need the review. Currently the review is required every 90 days while the work document is released, or in the case of Repetitive Use work documents, every 90 days from the first pre-work review.			
Per Telecom (PTC)	Concurrence obtained through any telecommunications method, including telephone, and e-mail. See also Appendix D.			
Plan of the Day (POD)	The listing of activities that are planned for accomplishment on a given day. The POD may be a subset of the POW.			
Plan of the Week (POW)	The listing of activities and/or work packages that are scheduled to be worked during a given week. The POW becomes the basis for resource allocation and integration of work activities at a given project or facility.			
Post-Job Review	The process of reviewing completed work activities to identify strengths and needed improvements as outlined in PRC-PRO-WKM-14047 and in accordance with PRC-PRO-RP-40109.			
Post Work Review	Is the process of reviewing the completed work document to evaluate if the work was completed in accordance with established requirements and a documentation is complete and legible? Affected disciplines review the document to ensure design was preserved, workers were protected, material history is updated, and the desired end-state was achieved.			
Pre-Job Briefing (PJB)	The pre-job briefing is conducted by the FWS with the team who will be performing the work identified in the WD as required by PRC-PRO-WKM-14047 and the RWP as outlined in PRC-PRO-RP-40021.			
Prerequisites	Prerequisites are those activities that must be performed or verified prior to Release of a work package by the RA. These would include steps that establish required facility configuration and/or setup. Steps in this section DO NOT grant authorization to perform work; they are used to document actions required before field work is Released (e.g., verify TSR requirements, establish facility condition and configuration).			

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Term	Definition			
Priority	alue code that is assigned to a work package to designate the relative ency of the task in relation to other work activities considering safety, lity mission, statutory requirements, etc. See Appendix C.			
Project Facility	Project controlled buildings, structures or areas within defined boundaries or buildings and structures that are unoccupied, deactivated and are awaiting D&D. In CHPRC Project Facilities, work release and authorization will be performed by a CHPRC Release Authority. See Landlord Facility for comparison.			
Radiological Work	See the Glossary in CHPRC-00073.			
Resolution	A term equivalent in JCS with Work Instructions. The field in JCS that contains the work instructions and retest is labeled "Resolution/Retest."			
Restoration	The steps required to return a system or component to its normal operating status after work has been performed. This could involve clearing the LOTO, equipment line-up, exit from an LCO condition, etc. The term "environmental restoration" falls under CERCLA and is not applicable to this context.			
Retest	A retest is an acceptance test performed following field work such as corrective maintenance or preventive maintenance to determine whether the work was successful, if the equipment was restored correctly, and confirms that it is capable of meeting the design, surveillance or operational requirements. Typically, a design or system engineer defines the steps required to be performed that are appropriate for the work that was performed and the design criteria of the SSC.			
Routine	An activity that is performed at least three (3) times per year. The proposed activity to be performed is a repetitive activity/task where the performers have demonstrated proficiency.			
SAFER Dialog	SAFER dialog: identifies what to avoid related to specific human actions during the job:			
	 Summarize the critical steps 			
	 Anticipate errors for each critical step and relevant error precursors 			
	 Foresee probable and worst-case consequences should an error occur during each critical step 			
	 Evaluate controls or contingencies at each critical step to prevent, catch, and recover from errors, and to reduce their consequences; and 			
	 Review previous experience and lessons learned relevant to the specific task and critical steps 			
	See PRC-MP-MS-40403 for more details.			

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Term	Deficition
Term	Definition
Scope	An ISMS core function, defining the scope is critical to be able to correctly and thoroughly identify the hazards associated with the work and select appropriate controls. The scope describes the intention and extent of the work activity and should address the problem description, the defined end-state to be accomplished, and state any planning boundaries or assumptions.
Shop Work	The performance of fabrication, calibration, PM, or repair in the craft shops that support the facility.
Signature Log	A log maintained as a record that clearly relates initials and/or signatures to the individual when the typed or printed name of the individual is not provided.
Statement of Work (SOW)	A Statement of Work (SOW) provides a description of the work to be performed under a given Contract, and includes various items such as a written narrative of background, detailed description of the SOW, schedule requirements, and environmental, safety, and health and quality requirements. See PRC-PRO-AC-186.
Supplemental Work Instructions	Instructions in a WD that are used to sequence or provide additional steps when pre-approved documents will be used, but DO NOT address special conditions, configuration, recovery, etc.
Surveillance	Observation only of parameters for the purpose of confirming operation or condition within specified limits (non-intrusive). This term is often used for operator rounds. For comparison also see Surveillance Testing.
Surveillance Testing	Performance of invasive proceduralized activities designed to inspect structural conditions, or test and confirm that equipment and systems are operating within specified limits. The specified limits are typically related to regulatory requirements such as nuclear safety, fire protection, environmental compliance, etc. For comparison also see Surveillance.
Task	See Activity. The term is used in the AJHA software to break a larger job into smaller steps so that the hazards can be adequately identified and analyzed. The work instructions often identify the sections to correlate with the AJHA task identification.
	ISMS is to be implemented at the activity level. It is this concept that is being conveyed by the use of these terms.
Task Charge Authorization (TCA)	The primary document which defines and controls the performance obligations of the CM as well as identifying the performance obligations and work controls implemented by EPC organization.
Telecom	An abbreviation for Telecommunication. The process of transmitting messages via electronic media (e.g., telephone, email, or other electronic devices).

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Term	Definition				
Temporary Change	A temporary change (sometimes incorrectly called a temporary modification) is a change to a system that:				
	 a. places the system in a non-normal configuration for a specified short term duration, 				
	b. is controlled by a JCS work package,				
	 has the duration of the temporary change specified in the JCS Work Package, 				
	 returns the system back to its original configuration prior to normal operations, 				
	 e. is concurred with by the Operations Manager and Project Chief Engineer or Facility Engineering Manager. 				
Testing	An element of verification for the determination of the capability of an item to meet specified requirements by subjecting the item to a set of physical, chemical, environmental, or operating conditions. (NQA-1 – 2008)				
Training Verification System	Training Verification System refers to the collection of data bases that contribute to the verification that workers have completed the necessary training, are medically qualified, and have been medically cleared to perform the proposed work safety and correctly. At the time of publication of this revision, there is an initiative to combine all these data bases so the FWS can verify these elements with "one stop shopping." That program is tentatively being called CHET, Consolidated Worker Eligibility Tool. Until it is available, a variety of programs remain in use:				
	 ACES – Access Entry Control System (Rad Con website) 				
	 EJTA – Employee Job Task Analysis (SHSQ website) 				
	ELM – Enterprise Learning Management system (Training website)				
	 HSWET – Hanford Site Worker Eligibility Tool (SHSQ website) 				
	 WAM – Worker Authorization Matrix (JCS) 				
	Until CHET is available, the FWS is required to utilize HSWET and ACES as a minimum before each work shift to verify worker eligibility.				
Troubleshooting	The plan and activities used to check various parameters in order to determine the cause of a problem when the exact cause of a problem is not known. Troubleshooting can be invasive (requires a written plan that includes steps, expected outcomes and decision points) or non-invasive (normal diagnostic checks).				
	Troubleshooting is limited to those actions necessary to measure voltage and current and to verify the operability of equipment without repairing or				

replacing components.

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Term	Definition			
	For additional guidance, see PRC-GD-WKM-12116 (Appendix E, Troubleshooting Process Guidance) and Appendix D, the entries labeled Troubleshooting and Electrical Jumper and Wire Installation/Removal for Testing/Troubleshooting.			
Verification Point	Verification: As identified in PRC-PRO-QA-283, a step in an inspection plar procedure or other work document, which requires inspection personnel to review, inspect, test, check, or otherwise determine and document whether or not items, processes, services, or documents conform to specified requirements.			
Verify	Per PRC-STD-MS-40241, this is defined as: To determine whether a condition exists – no action is authorized when a user is verifying a condition.			
Walkdown	This is an activity where one or more individuals walk the job site together to determine conditions at the job site, to identify hazards, or to verify that selected hazard controls are appropriate for the work activity. A walkdown is a hands-off activity that DOES NOT authorize the use or operation of systems, equipment, or Personal Protective Equipment (PPE) beyond general safety PPE. A hands-on walkdown requires the development of a job specific work document.			
	Walkdowns are called out several times during the work planning, hazard analysis, and pre-job processes. For simple jobs, these job site walkdowns may be combined, but should not be combined for complex or high-hazard jobs.			
Work Acceptance	The act of accepting that the work performed in the WD was satisfactory. This is done by the Release Authority.			
Work Authorization	The act of allowing work to proceed in the field for a specified period of time. This is done by the Release Authority			
Work Closeout	The process of completing all activities in a WD after Work Acceptance so the work package may be archived.			
Work Document (WD)	The WD consists of the entire JCS printout that encloses the work instructions. The WD includes information about the work such as the problem description, the component and system numbers locations, approvals, references, resource requirements, etc. See Work Steps, Work Instructions and Work Package for comparison.			
Work Instructions (WI)	The WI specifies the actual work that will be conducted in the field, from statement of scope through restoration and retest. See PRC-GD-WKM-12116. The JCS field that contains the work instructions is labeled "Resolution/Retest." See Resolution, Work Steps, Work Document and Work Package for comparison.			
Work Management Representative (WKMR)	A subject matter expert of the Work Management process, assigned by the CHPRC Work Management Technical Authority. This person serves to assist anyone in regard to the work management process, but in particular works with Buyer's Technical Representative (BTRs) in determining work control specifics to be included in a SOW. See PRC-PRO-AC-186.			

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Term	Definition
Work Package	The WP is the term used to describe the entire bundle of documents that supports and describes a given work activity. The WP contains work instructions, permits and forms, etc. During field work the WP is contained within the Document Record Folder or similar binder that provides a means of keeping WP organized and allows for identifying marks on the outside. Upon completion, the WP becomes a record and is retained per company RIDS. See Work Steps, Work Document and Work Instructions for comparison.
Work Record	The Section of the WD where narrative entries are made. These entries may include documentation of changes, Notice of Discrepancies (NODs), FWS/RM turnover, issues or problems during the work, and any other information pertinent to the work history.
Work Release	The act of authorizing personnel to accomplish the work that is defined in the work instructions. This is done by the Release Authority.
Work Release for Construction/ Service Organization form (WRCSOF)	The CHPRC Work Release for Construction/Service Organizations (A-6004-967) is used as an alternate mechanism to communicate work release. The WRCSOF may be used for construction activities, Statement of Work and between CHPRC projects to clarify the release process.
	The WRCSOF may not be used as a stand-alone work document (i.e., it must be associated with the approved work document).
Work Steps	A subset of the Work Instructions between prerequisites and restoration/retest, typically performed by the work team. See Work Document, Work Instructions, and Work Package for comparison.
Workability Review	A workability review of the work package is conducted by members (some or all) of the field work team. This review allows the field work team the opportunity to walkdown the work activity to understand the work scope and become familiar with the instructions. The workers are to ensure the work instructions are clear, technically correct, and safe to perform as written. The field team uses Site Form A-6005-953 for review of long-form work instructions.
Working Copy	Is a copy of all or part of a record copy WD that is used for performance of work activities at the discretion of FWS? The working copy must be clearly marked as a "Working Copy." A working copy log should be used to track the working copies if more than three are used for a given work package.

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Appendix C - Work Priority List

Projects are responsible for assigning work priority levels. The following should be used to assist in determining appropriate priority levels.

Priority 1. This priority is assigned to work packages that require immediate use of resources to prevent imminent danger to personnel, an environmental release, damage to plant equipment, or restore conditions to those required in the Safety Basis. Once compensatory measures have been taken to mitigate the initial hazards, follow on work will be given a lower priority. The need is urgent enough for project management to justify the immediate diversion of personnel from other assignments and to work overtime to resolve the issue. Examples of Priority 1 work are:

- a. Prevent serious personnel injury or death.
- b. Prevent an inadvertent criticality.
- c. Prevent a release of hazardous substance or radiological material to the environment beyond the reporting values of PRC-PRO-EM-060, *Reporting Occurrences and Processing Operations Information*.
- d. Restore systems back into compliance with Technical Safety Requirements (TSRs), permits or avoid imminent violation of these requirements.
- e. Prevent major equipment damage.
- f. Repair Security Systems where an alternative system cannot be reasonably provided.
- g. Correct serious* Life Safety Code deficiencies and Fire System Emergency Impairments.

Priority 1A. This priority is assigned to work packages that would normally require immediate use of resources as a Priority 1, but cannot move forward because of issues beyond the control of the project or facility. Once the impediment to performing the work has been resolved the priority will be raised to Priority 1 and handled accordingly.

Priority 2. The priority assigned to work packages that maintain personal safety environmental compliance, regulatory compliance, or to ensure the project is able to meet mission milestones. Examples of Priority 2 work are:

- Repair or correct problems impacting reliability of essential equipment/facilities. Prevent release of hazardous substance or radioactive material to uncontrolled areas within the facility above action limits.
- b. Perform TSR Surveillance Procedures.
- c. Take action to prevent noncompliance with a permit or license requirement such as performing an annual High-efficiency particulate air (HEPA) filter leak test.
- d. Perform activities essential to meet program goals, including deactivation and decommissioning activities.

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Appendix C - (Cont.)

- e. Correct a closure facility hazard per PRC-PRO-SH-32621, Closure Facilities Hazards.
- f. Perform Security Systems repairs.
- g. Perform necessary safety, or environmental equipment maintenance and repairs, such as non-serious *Life Safety Code deficiencies and fire system restrictions.
- h. Perform mandatory Periodic Maintenance procedures.
- i. Accomplish essential equipment/facility modifications.
- j. Correct conditions posing low probability, minor impact personnel safety issues.

Priority 3. This priority is assigned to work packages that are necessary but DO NOT jeopardize meeting safety requirements, project schedules, or maintaining plant operation. A condition which may be corrected as manpower and material become available. Examples of Priority 3 work are:

- a. Prevent hazardous or radioactive contamination release to posted controlled areas above action limits.
- b. Correct problems that impact facility or building habitability.
- c. Correct problems associated with non-essential but necessary equipment.
- d. Repair spare parts/equipment.
- e. Perform non-mandatory Periodic Maintenance procedures.
- f. Modify equipment/facilities to improve operability or maintainability.

Priority 4. The priority assigned to routine work packages that are non-essential to meet program goals. A condition which may be corrected as manpower and material become available. Examples of Priority 4 work are:

- a. Correct conditions designated as personnel safety but not Priority 1, 2, or 3.
- b. Perform activities that are generally not directly related to the safety and operation of an area, facility, or plant.
- * Determination of serious or non-serious should be made in consultation with the assigned Fire Protection Engineer or Deputy Fire Marshal.

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Appendix D - Identification of the Work Planning Team/Reviewers

When obtaining concurrence per telecom, document the concurrence or approval by printing the name of the person granting the concurrence, noting date, time, "PTC," and then printing and signing name of person documenting concurrence.

Skill-based work DOES NOT require OS&IH SME reviews of the work instructions unless one of the Competent Person disciplines is involved.

For cross project work activities include SME's from the other project or organization (that will perform the work or are responsible for the work site/area). Consult with the cross-project point of contact representative for a recommendation of their appropriate reviewers.

Pre-approved procedures/instructions that are developed from non-facility processes / organizations need to be reviewed and approved by persons/disciplines as determined by the RM (i.e., HFD, Heating, Ventilation, and Air Conditioning (HVAC), E/U type procedures).

Select reviewers based on the criteria in this table. All original reviewers are not required to concur with changes; selection is based on the impacts of the change. The criteria in this appendix apply to all original work instructions and changes to them.

Some review disciplines are **ALWAYS** required, and have been denoted by the bolded word in the "when required" column. Those disciplines are at the top of the table. The remainder of the table is arranged in alphabetical order according to the left column.

The following reviewers may signify review and concurrence with the work instructions using a field in JCS other than the Approval tab:

- The qualified Work Planner normally signs the Resolution By field. If someone other than a
 qualified planner prepared the work instruction, a qualified planner is required to review the
 instructions and sign on the Approval tab
- The Release Authority review and concurrence is documented during the Pre-Work Review.
 If a RA Delegate performs the Pre-Work Review, then a qualified RA must review and show concurrence on the Approval tab
- Three SMEs may acknowledge their review of the work instructions and concurrence in the
 JCS fields so designated on the Planning Tab. No additional signature is required on the
 Approval tab <u>UNLESS</u> their review indicated specific controls or instructions were to be
 incorporated in the work instructions to ensure the work activities remained within the
 respective requirements
 - Nuclear Safety USQ Screener/Evaluators
 - Transportation & Packaging USQ Screener/Evaluators
 - o Environmental Compliance Officer (ECO) (Environmental Screening field)

Although the RM signs for the skill-based determination on the Planning tab, this determination is made before planning begins, and therefore the RM must approve the instructions on the Approval tab.

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Review Discipline	JCS Code	WHEN REQUIRED
Field Work Supervisor	FWS	Always for changes to work instructions.
		Always for original work instructions.
Hazard Review Board	HRB	Always for work instructions submitted to the HRB.
(HRB) Chairperson		Always for changes to work packages that are subject to review by the HRB.
Qualified Planner	PLNR	Always for use of the long-form work instructions.
		Always for work that is beyond skill-based. If the Qualified Planner has signed in the Resolution By field, he/she is not required to sign in the approval section. If the work instructions were prepared by someone who is not a qualified planner, then a qualified planner must review and concur with the instructions and sign on the JCS Approval Tab.
Release Authority	RA	Always – for long-form work instructions. EXCEPTIONS:
		(RA approval not required for pre-approved work documents and/or PM/S work documents unless they require additional or enveloping instructions.)
		If an RA (not a delegate) performed the pre- work review, then that signature constitutes RA approval of the work instructions from the operational organization.
		Always – for non-editorial changes to work instructions, UNLESS the work document was suspended for development of the change and will go through a pre-work review and formal work release before resuming field work.
Responsible Manager in Work Management	RM-WKM	Always – for all work documents. (RM-WKM approval not required for pre-approved work documents and/or PM/S work documents unless they require additional or enveloping instructions.) Always – for changes to work instructions.

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Review Discipline	JCS Code	WHEN REQUIRED
Building Administrator/	BA/BM	Work that DOES NOT fall under the responsibility of a Release Authority.
Building Manager		Work that will affect safety and security of building occupants in a general purpose building (not a programmatic facility).
		Work that will cause a change in a facility, building or vegetation. (See PRC-PRO-PMT-475 Real Property Asset Management for details.)
Competent Person (Designated Competent Persons are listed on the OS&IH website) http://prc.rl.gov/rapidweb/OSIH/index.cfm?PageNum=10	Various	 Work activity involves any of the following disciplines: Asbestos (Note: for Class I work, a certified Asbestos Project Designer is required to review and concur with the instructions) Cadmium Crane Inspector Concrete Slab Lift Construction Job Site Safety Inspections Demolition Excavation Explosives Fall Protection Hearing Protection
		LaddersLeadScaffoldSteel ErectionWelding
Criticality Safety	CS	Work affecting operations or activities that:
		 Involves storage and handling greater than 15 grams of fissionable material, OR Affects an area containing greater than 15 grams of fissionable materials, OR Involves facility changes or activities that may impact equipment used to process or store fissionable materials, OR Involves facility changes or activities that may impact the criticality alarm system or its coverage.

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Review Discipline	JCS Code	WHEN REQUIRED
Design Authority/ Systems Engineer	DA	Modification, periodic maintenance, or corrective maintenance performed on any Configuration Managed Structure, System or Component (CM SSC).
		When a like-for-like replacement is proposed.
		Modification to processes that impact the design of that process (flow, temperature, pressure, configuration, etc.) on any CM SSC.
		Work instructions will direct operating systems or components be operated in a manner not addressed or contrary to approved operating procedures.
Electric Utilities	EU	Work affecting the electric distribution system greater than 600V.
Emergency Preparedness	Р	Work that affects emergency notification systems, or disrupts egress paths or staging areas.
		Work that will take place in remote locations, off- road, or outside of facility footprints and away from normally occupied buildings.
Engineering	Various	Activities where engineering support (e.g., engineered items, analysis, etc.) is needed for completion of the task.
Environmental Protection (ECO)	E	All work where the work activity involves implementation of environmental controls or requires limitations/concurrence of the work scope, such as work:
		Performed under CERCLA authority
		Requiring an environmental permit or other authorization
		 Involving modifications, repair, or maintenance of a facility or structure that has an environmental permit or license
		Requiring implementation of controls to prevent or minimize release of hazardous substances or regulated materials

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Review Discipline	JCS Code	WHEN REQUIRED
		 Requiring procurement of environmentally preferred products
		Requiring cultural and/or ecological reviews and/or the implementation of controls related to those reviews
		Implementing regulatory requirements associated with environmental regulation, agreement or permit/license (PCB management, Asbestos, UIC, USTs, RCRA Treatment/storage, Liquid discharge, environmental sampling, etc.); or
		Requiring an excavation permit
		Items that may result in generation of liquid effluents, air emissions, generation of regulated waste, or require work on regulated features of a permitted or licensed air emission unit
EPC Cross Project SME reviewers	EPC-IH EPC-QP EPC-S EPC-TA	For EPC cross project work activities where the planned work package is prepared by one project/organization and is performed by or at a different project/organization. Consult the cross project point of contact for recommendation of affected organizations reviewers. RM has final determination.
Fire Protection Engineer or Hanford	F	Work affecting fire protection systems or processes, including those that are credited in the DSA.
Fire Marshal		Work requiring Hanford Fire Marshal permits per MSC-RD-8589, <i>Hanford Fire Marshal Permits</i> .
		All modifications.
		All D&D work, until determined unnecessary for a specific project or building by the FPE.
		Work affecting building occupancy classification, or impacting Life Safety Code characteristics, per PRC-STD-FP-40404, Fire Protection Program.
		Work involving pyrophoric components.
Hoisting and Rigging	HRTA HRE/ OSR	Work involving hoisting and rigging activities defined as "critical lift", by the Hanford Site Hoisting and Rigging Manual (DOE-RL-92-36).

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Review Discipline	JCS Code	WHEN REQUIRED
Nuclear Safety/ Safety Analysis	N	Work affecting safety systems or processes credited in the DSA, including fire protection.
Industrial Hygiene	IH	Work with the potential to contain hazardous energy, hazardous substances, or other occupational/industrial hazards (other than radiological hazards). Work that may result in injury, illness, impairment, or affect the well-being of workers. In most cases, S and IH should both be consulted for beyond skill-based work.
Quality Assurance	Q	Work affecting Safety Class/Safety Significant systems' primary functions.
		Work affecting or per regulatory permits.
		Work where QA Hold Points or inspections are required.
		Work on Type A or higher packaging (Transportation & Packaging) other than routine preventive maintenance.
Radiological Control Organizations	R	Work that meets the definition of radiological work per CHPRC-00073 glossary.
		NOTE : "Low with controls" is considered low hazard radiological work and DOES NOT in itself drive work to beyond skill-based or to require long-form work instructions, but does require R review in accordance with PRC-PRO-RP-40109.
Occupational Safety	S	Work where there is an issue in protecting the safety, health and welfare of the workers when beyond skill-based work will be performed.
		In most cases, S and IH should both be consulted for beyond skill-based work.
Safeguards and Security	SAS	Work related to control and accountability of special nuclear materials (SNM), including measurement, transfer, and inventory.
Sewer Systems	SW	Work affecting the site-wide sewer system.

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Review Discipline	JCS Code	WHEN REQUIRED
Technical Authority	TA	Work scope that impacts the area of responsibility of the assigned TA. (See DA and Engineering Support for comparison.)
USQ Screener/ Evaluator (Nuclear Safety)	USQ	If the USQ Screener/Evaluator has signed on the JCS Planning Tab in the designated field, he/she is not required to also sign on the Approval Tab, UNLESS hazard controls specific to USQ concerns were required to be incorporated into the work instructions. In either case, USQ review and concurrence is required if the work instructions meet any of these bullets:
		Work at hazard category 2 or 3 nuclear facilities
		Work adjacent to a hazard category 2 or 3 nuclear facility
		Work activities in Less than Hazard Category 3 facilities that have been identified in a Final Hazard Categorization evaluation as having the potential to change the form or distribution of material to place the facility into Hazard Category 3
		Work related to Transportation & Packaging that involves > A2 quantities of radioactive material

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Review Discipline	JCS Code	WHEN REQUIRED
USQ Screener/ Evaluator (Transportation Safety)	TP	If the TP USQ Screener/Evaluator has signed on the JCS Planning Tab in the designated field, he/she is not required to also sign on the Approval Tab, UNLESS hazard controls specific to TP USQ concerns were required to be incorporated into the work instructions. In either case, TP USQ review and concurrence is required if the work instructions meet any of these bullets:
		 USQ review for work involving transportation or packaging of hazardous material that will travel on public roads, or transported onsite in accordance with DOE/RL-2001-36, Hanford Sitewide Transportation Safety Document Work involving onsite transportation of hazardous/radioactive materials/waste as authorized by DOE/RL-2001-36
		Work involving transportation to an offsite facility and using road closures in accordance with the TSD
Waste Support Services	W	Work with the potential to generate hazardous, radioactive, or mixed waste, if Waste controls were incorporated into the work instructions.
Transportation, Logistics and Shipping (Shipper)	WS	Work with transportation of hazardous, radioactive, or mixed waste.
Water Purveyor/ Water Compliance	WP WTRCMP L	Work that breaches potable water, affects the operation of back-flow preventers, or performed within the well head protection area.

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Appendix E - Identification of the Post Work Review Disciplines

Review Discipline	JCS Code	WHEN REQUIRED
Design Authority/ Systems Engineer	DA	When preventative maintenance is performed and unusual conditions are discovered or the PM cannot be performed as stated.
		PM/S packages, when component is found and/or left OOT and an evaluation is required (per PRC-PRO-MN-19304).
		PM/S TA post-review is required if identified as necessary by the TA (per PRC-PRO-MN-19304).
		When surveillance discovers non-normal conditions.
		When M&TE calibrations are discovered to be in error.
		Modification work packages for configuration managed SSCs.
Environmental	Е	When the work:
Protection		Involved demolition activities
		Documents a discrete sub-action or completion of a CERCLA response action
PM/S Coordinator	PM	Work package contains PM/S data sheets
Quality Assurance	Q	Work involved the construction, fabrication, modification or installation of Quality Level - 1 or Quality Level - 2 installations, equipment, or components.
Qualified Planner	PLNR	Always for planner developed work packages.

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Review Discipline	JCS Code	WHEN REQUIRED
Radiological Control Organizations	R	NOTE: Refer to the Radiological Hazard Screening Form (RHSF; A-6004-654) for hazard designation. • If the radiological work is Low or Low with Specific Controls Hazard and:
		 a Condition Report was generated during performance of work for one of the following:
		 RWP Void
		Occurrence Report
		■ Stop Work
		 Identification of significant lesson learned
		<u>OR</u>
		 In Progress ALARA Review initiated
		All Medium or High Hazard Radiological Work.

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Appendix F - Using the Short-form Site Form - Quick Reference Guide

The optional Short-form Work Request/Work Document (A-6005-768), may be used to provide a hard copy (paper) method to identify, resolve, approve, and release low risk, low complexity work activities. Use of the short-form site form method follows the short-form work instruction requirements identified in section 3.3.1, *Short-form Work Instruction Development.* The Short-form "site form" work document is not to be used for repetitive use work activities.

FWSs, RMs, and Planners who are familiar (experience within last month) with the criteria for skill-based work and the use of short-form work documents may use this streamlined approach designed for the *Short-Form Work Request/Work Document* (site form A-6005-768). It is understood that the actions will comply with the main body of the procedure, although for brevity, the references have been omitted. For instance, validation occurs per Step 3.2.2, and the expectation is that those steps will be followed when directed from this appendix.

The RM is responsible to make the final determination if use of the site form A-6005-768 is acceptable or if the JCS printed Short-form version is to be used (per section 3.3.1).

When the hard copy paper site form is used, the work must still be requested and validated in JCS to obtain a JCS tracking number. Some information is required to be transcribed from the paper form into JCS upon completion. Instructions in the following sections are for use of the paper "site form" (A-6005-768).

The basic process for the site form Short-form Work Request/Work Document is:

- Identify work by filling in the work request Section
- Submit hardcopy site form for validation
- Validate the request in JCS, input work request information into JCS, and write work document number onto the site form
- Decide if the work request will proceed in site form (A-6005-768) format or in JCS format
- Update JCS "Status Tracking" comments to indicate that the site form is being used
- Update JCS status, package location, and assigned RM into JCS
- Develop work instructions
- Schedule and Release the work