CP3-SM-1101 FRev. 18A	**TITLE**: Work Package Development	Page 1 of 75
DOCUMENT CATEGORY: Administrative	**LEVEL OF USE:** Information Level	
Check all that apply: **TSR/NCS** ☐ **WCO** ☐ **Shared Site** ☐		
FUNCTIONAL AREA: Work Control **SUBJECT MATTER AREA:** Work Control	**SUBJECT MATTER EXPERT**: Christopher Balkey, Operational Programs Manager	
NUCLEAR SAFETY REVIEW DOCUMENTATION: FRNP-25-0367-S	**RESPONSIBLE MANAGER/OWNER:** Christopher Balkey, Operational Programs Manager	
REQUIRED REVIEW DATE (or expiration date for temporary change): 03/11/2028	**EFFECTIVE DATE**: 07/10/2025	

REVISION/CHANGE LOG

Revision/ Change Letter	Description of Changes	Pages Affected	Date of Revision/ Change	Approved By (signature on file)
FR0	Initial Release	All	10/18/2017	Documentation on File
FR1	Intent revision from blue sheeted procedure.	All	12/19/2017	
FR2	Revision to incorporate actions required from CA-001102 and functional directives; PM-18-005, EN-18-001, and EN-18-002. Corrected internal references.	20-24, 42-48	03/21/2018	
FR2A	Non-Intent change to correct reference.	25	05/15/2018	
FR2B	Changes for clarification	20, 24, 30, 47	05/29/2018	
FR3	Changed title. General revision to align with current operations. Removed scheduling and CMMS instructions..	All	08/23/2018	
FR4	Added approved work instructions to 6.1.2 B. Added allowance for general JHA and work instruction usage for Type 2 work when the risk level is low. Clarified JHA approval expectations	All	10/10/2018	
FR4A	Reconcile Appendix A, C, E, F, and G with Reviewers' Titles from organization changes, and add reference to readiness review program.	3, 24-26, 28, 30, 35, 37, 38	02/26/2019	

REVISION/CHANGE LOG (CONTINUED)				
Revision/ Change Letter	**Description of Changes**	**Pages Affected**	**Date of Revision/ Change**	**Approved By (signature on file)**
FR4B	Intent change to add new Steps 4.8.5, 5.9, 5.10, 6.2.4, 6.2.32, 6.3.1, 6.3.29, new Notes above Steps 6.2.4 and 6.3.1, and new Section 6.6 for Work Package revisions, updated Appendices A and D.	8, 10-13, 15-17, 19, 20, 23, 24, 26, 27, 29, 38,	08/22/2019	Documentation on File
FR4C	Intent change to add new Steps 4.4.10, new notes prior to 4.8.6, 5.10, added bullet to 6.1.1. Added new changes to 4.4.9, 5.9, 5.10, 5.14, 6.2.21, 6.2.35, 6.2.36, 6.3.19, 6.3.20, 6.3.21, 6.3.32, 6.2.33. Changed Work Package Instruction to Work Instruction.	4, 5, 7, 8-12, 14-16, 18-21, 23, 24, 28, 31, 33, 34, 41	12/18/2019	
FR4D	Intent change to include updated responsibilities and distinguish between QL-1 and QL-2/3 parts.	5-7, 9, 11, 12, 14, 16, 17, 19, 21, 23, 25, 27-29, 32, 40	03/19/2020	
FR5	Revision to clarify work planning process from work request screen to Work Package development for Type 1, 2, 3, and 4 Work Packages, update to be consistent with CP2-SM-1000 and CP3-HS-2004, and address CA-001926 and CA-002336.	All	08/13/2020	
FR5A	Intent change to delete the Note above Step 5.12, delete a Performer above Step 6.2.3D, add new Step 6.2.3E, and revise a definition.	12, 19, 40	08/25/2020	
FR6	Revision to incorporate DOE comments.	All	10/06/2020	
FR6A	Intent change to add TSR 5.5.4.1 for DSA/TSR implementation.	5, 11	11/16/2020	
FR6B	Intent change to add information regarding Subcontractor work control.	4, 40	03/25/2021	
FR7	Revision to incorporate changes identified during use.	All	06/15/2021	
FR7A	Intent changes for clarification.	13, 16, 19, 20-22, 24, 26, 27, 30, 32, 44-48	09/30/2021	
FR7B	Intent change to add new Step 6.2.5 and revise Appendix C.	20, 21, 46-49	10/18/2021	

REVISION/CHANGE LOG (CONTINUED)				
Revision/ Change Letter	**Description of Changes**	**Pages Affected**	**Date of Revision/ Change**	**Approved By (signature on file)**
FR8	Revision to incorporate CP3-SM-1101-F21 revision, CP3-SM-1101-F11-F22 deletions, and add detail for work package statusing.	All	01/04/2022	Documentation on File
FR8A	Intent change to add new Section 4.14, revise Step 5.10, Note above Step 6.1.2, Step 6.1.2 performer, Steps 6.2.6H, 6.2.7H, 6.2.8G, 6.3.14, Note above Step 6.4.1, Step 6.5.10, and Appendix B.	11, 13-15, 23, 24, 26, 30, 34, 35, 47	01/19/2022	
FR8B	Intent change to add Step 4.14.4, revise Steps 5.9 and 6.1.1B, revise Note above Step 6.1.2, revise Steps 6.1.2A, 6.1.2C, and Table 2, deleted Steps 6.1.2D and 6.1.2E, revise Step 6.1.2F, delete Step 6.1.2F1, add new Steps 6.1.2G4 and 6.1.2G5, add Note above Step 6.3.3, add new Step 6.3.3, revise Note above Step 6.3.4, delete Note above Step 6.3.7, delete Step 6.3.7 and revise Appendix B.	11, 13, 14, 15, 16, 17, 27, 28, 47	01/31/2022	
FR9	Revision to add additional information related to Work Planners and Project Managers, add Note above Step 6.2.11H, and make change to Appendix C to address EA-32 CAP CA-003856.	All	04/20/2022	
FR10	Revision to address CA-003961, incorporate process improvements and editorial updates.	All	07/07/2022	
FR11	Revision to address CA-004143 to provide additional guidance to ensure all groups required to review revisions to WIs are identified; CA-004189 to provide additional guidance when determining whether work will affect a SS SSC, and align engineering work acceptance requirements with CP3-SM-1102; incorporate process improvements.	All	10/18/2022	
FR12	Revision to address CA-004271 to remove references to Type 2 Work Instructions, CA-004280 to provide additional Engineering guidance, and revise Section 6.1.	All	12/13/2022	
FR13	Revision to correct minor issues and incorporate user feedback.	All	05/03/2023	
FR13A	Intent change to revise Step 6.2.6.C.6.a, add new Steps 6.2.6.C.6.e and 6.3.35, add new Note above Step 6.5.3I, revise Steps 6.5.6B, 6.5.14C, 6.5.14E, 6.5.14H, 6.5.14J, 6.5.21, 6.5.22, 6.5.25, 6.5.28, and 6.5.32.	23, 38, 40-44	05/24/2023	

REVISION/CHANGE LOG (CONTINUED)				
Revision/ Change Letter	**Description of Changes**	**Pages Affected**	**Date of Revision/ Change**	**Approved By (signature on file)**
FR14	Revision to divide work order types into separate sections, create sections for HHRB and USQ processes, revise Appendix B, add new Appendices G and H, address CA-004660, incorporate process improvements, and administrative edits.	All	11/28/2023	Documentation on File
FR15	Revision to incorporate process improvements.	All	02/12/2024	
FR16	Revision to address CA-004503, CA-004715, AI-0007584, add process improvements, and correct minor oversights.	All	04/10/2024	
FR17	Revision to remove ambiguity in steps associated with Urgent Repairs to address CA-004993/AI-0008366, add information related to classified subject matter areas, clarify differences of modifications/changes and routine maintenance activities, and revise Appendices B-E, G and H.	All	11/19/2024	Chris Balkey
FR18	Revision to align with changes made to CP3-SM-1102, *Activity Level Work Execution and Closeout*.	All	03/11/2025	Chris Balkey
FR18A	Intent change to delete Steps 5.2, 5.6, and 5.7, delete PBI from Table 2, revise Step 6.2.4, delete Step 6.2.8, revise Steps 6.2.9B5 and 6.2.9B6, revise Step 6.3.3, revise third bullet in Note above Step 6.4.20, revise Steps 6.5.6 and 6.6.6, delete first bullet of Step 6.5.18, delete Steps 6.6.14 through 6.6.17, revise Step 6.7.5, delete Step 6.8.9, revise Step 6.11.9C1, and add Derivative Classifier to Appendix B.	15, 21, 25-27, 29, 33, 39, 41, 44, 45, 47, 48, 52, 64	06/25/2025	Chris Balkey

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1.0 PURPOSE AND SCOPE

1.1 Purpose

This procedure defines the process used by the Paducah Gaseous Diffusion Plant (PGDP) Deactivation and Remediation (D&R) Contractor to plan Activity Level Work (ALW).

1.2 Scope

This procedure applies to all work performed by the PGDP D&R Contractor and associated Subcontractors.

Any Work Instruction (WI) or Work Package (WP) approved prior to the effective date of this procedure is considered "grandfathered" and may be used until either the next revision or the next required review date of that WI or WP.

If the start up or restart of work activities is in a Hazardous Category 2 or 3 nuclear facility, CP2-OP-1119, *Readiness Review Program at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, must be followed prior to start of work.

The requirements of this procedure do **NOT** apply to the following:

- Activities planned and executed according to Subcontractor-owned Work Planning and Control program that meets all requirements of the PGDP D&R Contractor Work Planning and Control program. The Subcontractor Work Planning and Control program must be approved by the Deputy Program Manager prior to use.
- Training activities performed according to CP3-TR-0102, *Conduct of Training.*
- Activities performed by subcontractors, vendors, or third parties at an offsite location.
- Technical Procedures used as work control for Operations Categorized Work that are developed and maintained according to CP3-OP-0002, *Developing and Maintaining Performance Documents.*
- Work performed as a Government Furnished Services or Items (GFSI) by another site prime contractor.
- Excluded work that does **NOT** require an associated Work Order (WO).

2.0 REFERENCES

2.1 Use References

- CP1-NS-3000, *Documented Safety Analysis for the U.S Department of Energy Paducah Site Deactivation Project*
- CP1-PM-0005, *Classification Review Integration Controls for Converter Component Activities and Other Subject Matter Areas*
- CP2-OP-1119, *Readiness Review Program at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP2-QA-1000, *Quality Assurance Program Description for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP3-EN-0227, *Trenching, Excavation and Penetration Permit*

- CP3-FP-2005, *Welding, Burning and Hotwork*
- CP3-HS-2004, *Job Hazard Analysis*
- CP3-HS-2055, *Confined Space*
- CP3-NS-2001, *Unreviewed Safety Question Reviews*
- CP3-OP-0002, *Developing and Maintaining Performance Documents*
- CP3-OP-0024, *Forms Control*
- CP3-OP-0025, *Document Control Process*
- CP3-OP-1103, *High Hazard Review Process*
- CP3-RD-0010, *Records Management Process*
- CP3-RP-1119, *Radiological Work Permit Development and Implementation*
- CP3-SM-0019, *Electrical Safety Guidelines*
- CP3-SM-1102, *Activity Level Work Execution and Closeout*
- CP5-SM-1001, *Excluded Work Activities*
- CP5-SM-1002, *Procurement Planning Process Guidelines*
- CP5-SM-1003, *Work Order Status Assignment, and Custody Protocol Guidelines*
- CP5-SM-1006, *Activity Level Work Control Document Writer's Guide*
- CP5-SM-1007, *Work Package Assembly Guidelines*
- CP5-SM-1008, *Hazard/Control Integration Guide*

2.2 Source References

- ASME NQA-1, *2008/2009a, Quality Assurance Requirements for Nuclear Facility Applications*
- CP1-NS-3001, *Technical Safety Requirements for the Department of Energy Paducah Site Deactivation and Remediation Project*
- CP2-ES-0101, *Environmental Management System for the Deactivation and Remediation Project, Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP2-FP-2000, *Fire Protection Program Description for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP2-HS-1000, *Integrated Safety Management System Description for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP2-HS-2000, *Worker Safety and Health Program for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP2-NS-1000, *Nuclear Criticality Safety Program Description Document at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP2-OP-1100, *Conduct of Operations Program at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*

- CP2-OP-1101, *Paducah Gaseous Diffusion Plant Conduct of Operations Applicability and Implementation Matrix*
- CP2-SM-1000, *Activity Level Work Planning and Control Program for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP3-EN-0203, *Design Change Process*
- CP3-EN-0207, *Facility Change Process*
- CP3-EN-0400, *Quality Level Determination*
- CP3-HS-2010, *Instructions for Lockout/Tagout*
- CP3-SI-0001, *Site Interface Agreement*
- CP5-QA-3003, *Functional Area Manager/Subject Matter Expert Standards & Requirements Matrix*

3.0 COMMITMENTS

- Corrective Action (CA)-001926, *Inadequate Lockout/Tagout Administration*
- CA-002336, Parts SCAQ from DOE Independent Surveillance PADU-19-IS-101541, *Independent Surveillance of the Nuclear Maintenance Management Program*
- CA-004280, *Using Engineering Documents and Guidance in Work Control Development*
- CP1-NS-3001, *Technical Safety Requirements for the Department of Energy Paducah Site Deactivation and Remediation Project*

4.0 RESPONSIBILITIES

4.1 Craft Worker

4.1.1 Participates in the planning process based on assigned classification, position, and experience through meetings such as planning, hazard identification, and walkdowns.

4.1.2 Performs the following to support development of WIs:

- Assists in sequencing of activities and work steps.
- Assists in identification of operating experience that promotes continuous process improvement by offering suggestions in the meetings and reviews.

4.1.3 Maintains a questioning attitude and willingness to participate in planning.

4.1.4 Supports development of hazard identification and controls for WIs.

4.1.5 Reviews WIs to ensure the scope of work and associated steps are clear, work can be performed safely and as written, and necessary parts and/or materials are identified.

4.2 Work Planning and Control Manager

4.2.1 Reviews and approves CP3-SM-1101-F01, *Work Screening Worksheet*, for new WI development.

4.2.2 Acts as final authority in determining the type of work document to be used for each work task based upon the rigor level (complexity or failure mode consequence) of the work activity.

4.2.3 Ensures hazard control integration is performed following the guidelines in CP5-SM-1008, *Hazard/Control Integration Guide*.

4.2.4 Remains cognizant of the status of work under their authority.

4.2.5 Serves as qualification authority for Work Planners.

4.2.6 Manages Work Control Training and Training Position Description updates.

4.2.7 Ensures the proper level of review and approval is identified for different types of WPs and WP changes.

4.3 Planning Team

4.3.1 Participates in hazard analysis and identification of controls, specifying requirements to be met, hold points and inspection criteria from their area of expertise that must be integrated into WPs according to Appendix D, *Reviewer Requirements*.

4.3.2 Evaluates work activities during the development of work controls to identify if there is a Radiological Work Permit (RWP) already available for the work task(s) or if an RWP needs to be developed for the work task(s).

4.3.3 Evaluates work activities during the development of work controls to identify if there is an Industrial Hygiene Work Permit (IHWP) already available for the work task(s) or if an IHWP needs to be developed for the work task(s).

4.3.4 Ensures hazard control integration is performed following the guidelines in CP5-SM-1008, and according to CP3-HS-2004, *Job Hazard Analysis.*

4.3.5 Supports planning in identifying the following:

- Specific tasks, associated steps, and any step sequencing as necessary to accomplish the work.
- Specific parts and/or materials needed, including Quality Level (QL) (QL-2, 3, or 4), Safety Significant (SS) or Structures, Systems and Components (SSC), and any special handling or traceability requirements, documentation, inspection and/or testing required.
- Applicable and affected documents (for example, procedures, drawings, specifications, vendor manuals, training materials, etc.), and the latest versions.
- All SSCs impacted by work activities.

4.3.6 Determines the following:

- Whether the work activity is clearly and adequately bounded and/or limited (for example, physical boundaries such as equipment and/or components to which work activity is limited, specific work environment to which work is confined, conditions under which work can be performed, organizations responsible for the various tasks, etc.).
- Whether the work activity can affect personnel or facility safety, can pose challenges to facility equipment, processes, or operations (for example, resulting in shutdowns, delays, and significant costs or losses), that could result in unacceptable or undesirable consequences.

CA-004280

4.3.7 Ensures Engineering documents, drawings, and applicable guidance are incorporated into WI following the guidelines in CP5-SM-1006, *Activity Level Work Control Document Writer's Guide*.

4.3.8 Evaluates work-site conditions, including use of photographs, as necessary, to ensure appropriate consideration of special or unique planning requirements or circumstances (for example, lookouts and/or watches, permits, constraints or interferences of normal or routine practices or procedures, resources, support needs such as equipment, labor, engineering or operations, etc.)

4.4 Responsible Manager

4.4.1 Ensures the availability of planning team resources, based on work priority.

4.4.2 Approves WPs under their authority prior to release to the field for execution.

4.4.3 Allows sufficient allocation of time in project scheduling to support development of appropriate WP for defined work scope.

4.4.4 Ensures work scopes are properly identified and developed such that work can be executed in a safe, cost-effective, and compliant manner, while meeting project performance objectives and goals.

4.4.5 Assigns an appropriately trained and/or qualified supervisor and execution team to support planning and execution of the work scope.

4.4.6 Supports Work Planners by identifying and eliminating obstacles to planning, in order to keep planning activities on schedule.

4.4.7 Presents or assigns a presenter of WPs to the High Hazard Review Board (HHRB).

4.4.8 Prior to being granted signature approval authority, successfully completes Training Modules assigned to T-F00205, *Responsible Manager for Work Control*.

4.4.9 Verifies Electrical Inspections and Arc Flash determinations are performed according to CP3-SM-0019, *Electrical Safety Guidelines*.

4.5 Front Line Manager and/or Supervisor

4.5.1 Supports the planning process by ensuring the availability of craft resources, as necessary, for participation.

4.5.2 Supports planning in the identification of known materials and parts that must be procured or available for the work during WP development, and if required in the field during work, initiates and tracks procurement of parts and materials following the guidelines in CP5-SM-1002, *Procurement Planning Process Guidelines*.

4.5.3 Supports the development of hazard and control identification documentation and Job Hazard Analysis (JHA) development.

4.5.4 Reviews and provides feedback during development of WI and JHA.

4.5.5 Leads craft walkdowns for WP verification and validation.

4.5.6 As assigned, presents WPs to the HHRB.

4.6 Required Reviewers

4.6.1 Performs reviews of WIs for their area of responsibility and technical expertise.

4.6.2 Performs reviews in the context of work execution to ensure work can be performed as written and provides clear, precise directions easily understood by the performing group.

CA-004503

4.6.3 Ensures critical steps are integrated into WIs as an action step following the requirements for high risk activities, verifying steps are written as simple as practical without ambiguity (for example, “as needed” doesn’t provide specific instructions understood by all users).

4.6.4 Ensures regulatory requirements to be met are identified and integrated into WIs (for example, facility safety basis, environmental, etc.).

4.6.5 Ensures Work Planning and Control (WPC) program requirements to be met are identified and integrated into WIs (for example, critical steps, hold points, inspection criteria, warnings, etc.).

4.6.6 Ensures all SSCs impacted by work activities are identified and evaluated to determine Safety Significance and the QL of the work scope.

4.7 Unreviewed Safety Question Preparer and/or Unreviewed Safety Question Reviewer

4.7.1 Performs review of WIs against the documented safety basis of the facility where the work will be performed to ensure that the work is within the defined safety basis and does **NOT** introduce an Unreviewed Safety Question (USQ).

4.7.2 Ensures changes and revisions made to WIs do **NOT** introduce a USQ.

4.7.3 Documents USQ reviews according to CP3-NS-2001, *Unreviewed Safety Question Reviews.*

4.8 Work Planner

4.8.1 Develops WIs using applicable forms and following the guidelines in CP5-SM-1006.

4.8.2 Leads the planning process in work-site scoping walkdowns, roundtables, hazard analysis and identification of controls, and Planning Team support for WI development.

4.8.3 Sets meeting locations and schedules, and coordinates Subject Matter Expert (SME) involvement.

4.8.4 Develops a WI with a clearly defined work scope, and specific tasks to perform the work safely and comply with site regulations and requirements.

4.8.5 Establishes and retains electronic development folders on (S) drive, *S:\Workgroup Folders\Work Controls*, for planning documentation associated with individual tasks or work scopes, to provide a record of the planning process and WPC program.

4.8.6 Initiates procurement of parts and materials following the guidelines in CP5-SM-1002.

4.8.7 Initiates Hazard Identification Checklist (HIC) Planning Team meeting in order to prepare JHA, according to CP3-HS-2004.

4.8.8 Ensures hazard controls are integrated into WIs following the guidelines in CP5-SM-1008.

4.8.9 Requests preparation of the required permits (such as IHWP, Hot Work Permit, Confined Space Permit, etc.).

4.8.10 Coordinates WI development, reviews and comment resolution, and submits the WI for concurrence by Front Line Manager (FLM), relative SMEs and approval by the Responsible Manager (RM).

4.8.11 Updates Computerized Maintenance Management System (CMMS) status codes following the guidelines in CP5-SM-1003, *Work Order Status, Assignment, and Custody Protocol Guidelines*.

4.8.12 Completes applicable forms according to CP3-OP-0024, *Forms Control*.

4.8.13 Determines if work scope potentially involves a classified subject matter area (for example, converter components).

4.9 Functional Area Manager

4.9.1 Ensures participation of appropriate SMEs in work scope and requirements development to include training and/or qualification.

4.9.2 Ensures current Responsible Manager List is posted on Four Rivers Nuclear Partnership website in “Contact” section.

4.10 Work Package Control Center

4.10.1 Maintains custody of approved WPs until issued for execution.

4.10.2 Updates CMMS status codes as required.

4.10.3 Maintains index and controlled document file of WI numbers, if approved for repetitive use.

4.10.4 Supports printing and assembling WPs for scheduled and emergent work with a Work Order (WO) Status of 40 following the guidelines in CP5-SM-1007, *Work Package Assembly Guidelines*.

4.10.5 Verifies all documents in WPs for latest revision prior to issuance to the field.

4.11 Work Requestor

4.11.1 Enters Work Requests (WRs) in CMMS for maintenance and/or project support tasks.

4.11.2 Provides accurate supporting information for WRs initiated, including applicable charge code or work authorization.

4.12 Work Request Review Team

4.12.1 Reviews and screens WRs for clear and concise work scope information for work tasks to be performed, ensuring associated boundaries are clearly defined.

4.12.2 Determines WO Type, Urgency, and Priority in CMMS.

4.12.3 Approves or denies WRs.

4.13 Preventive Maintenance Coordinator

4.13.1 Generates Preventive Maintenance (PM) WOs in CMMS on a weekly basis.

4.13.2 Supersedes PM WOs to combine like WOs into one WO.

4.13.3 Holds sole responsibility for cancelling PM and Surveillance WOs.

4.14 Project Manager

4.14.1 Reviews and screens WRs, associated with their projects, for clear and concise work scope information for work tasks to be performed, **ensuring** associated boundaries are **clearly defined**.

4.14.2 Determines WO Type, Urgency, and Priority in CMMS.

4.14.3 Approves or denies WRs associated with their project.

4.14.4 Serves as Planning Team Member for work associated with their projects.

4.15 Facility Manager

4.15.1 Reviews work scopes to identify SSCs that will be impacted by work activities.

4.15.2 Serves as Planning Team Member for work associated with their facilities when required.

5.0 GENERAL INFORMATION

5.1 This procedure does **NOT** cover how ALW is scheduled, authorized or released. Scheduling and work assignments are the responsibility of the performing organizations, such as Deactivation, Surveillance & Maintenance, Environmental Services, or Operations. They are typically controlled by either a CMMS, project schedule, or Plan of the Day (POD) and/or Plan of the Week (POW) authorizations.

5.2 Text deleted. Chg A

5.3 Permits are controlled and handled according to the applicable programs and issuing groups. Available permits are included in WPs as attachments and will be followed according to the applicable governing document(s).

NOTE:

The Hierarchy of Hazard Controls for selection is as follows:

1) Eliminate the Hazard
2) Engineered Controls
3) Administrative Controls
4) Personal Protective Equipment

5.4 The first priority in hazard controls for all work scopes is to eliminate environmental and activity hazards, and avoid exposure. For hazards that **CANNOT** be eliminated or processes that may **NOT** be substituted with less hazardous alternatives, engineering and/or administrative controls are identified and integrated to minimize hazard exposure or the consequences of hazard exposure. If engineering and/or administrative controls **CANNOT** be feasibly deployed, Personal Protective Equipment (PPE) may be used to reduce or otherwise mitigate exposure.

TSR 5.5.4.1

5.5 Hazard conditions are assessed and controlled prior to work start. This key element is credited for reducing the likelihood of hazardous material release resulting in personnel exposure.

5.6 Text deleted. Chg A

5.7 Text deleted.

5.8 Engineering guidance associated with Precautions, Limitations, Hazards, Hazard Controls, and/or Acceptance Criteria shall be incorporated into the WI. If written guidance is given, this should be listed in the Source References and maintained in the Work Instruction Electronic Development File.

5.9 During work scope and work instruction development, the need for specialized training and/or qualification requirements for specific hazards and/or tasks (for example, asbestos, blood-borne pathogens, fissile work, welding, etc.) will be taken into consideration.

5.10 During work scope and work instruction development an evaluation and identification of the need for an RWP (existing or needs to be developed) and IHWP (existing or needs to be developed) will be taken into consideration.

5.11 During hazard analysis and identification of controls, potential unintended conflict associated with hazard controls [for example, the effect of PPE ensembles (such as respirators with anti-contamination, etc.) on heat stress exposure] will be evaluated by the Safety & Health (S&H) group to optimize controls for the specific exposure scenario.

5.12 It is important to distinguish between modifications/changes and routine maintenance activities for SSCs. Modifications/changes to SSCs are **NOT** routine maintenance activities and includes altering any of the following:

- Its function(s)
- The method of performing those functions
- Its design configuration

When a modification/change is required, CP3-EN-0203, *Design Change Process*, and/or CP3-EN-0207, *Facility Change Process*, **MAY** require a design change or engineering guidance be developed. If Engineering determines a design change or engineering guidance is **NOT** required based on CP3-EN-0203 and CP3-EN-0207, this does **NOT** mean the work scope is not a modification/change to SSCs. Reusable WIs can be used to implement modifications/changes to SSCs, if Engineering determines no design change or engineering guidance is required **and** the reusable WI work scope covers the required work.

5.13 All WIs implementing modifications/changes require review by Facility Manager (FM), USQ qualified personnel, and System and/or Responsible Engineer.

5.14 Planning is an iterative process that continually revolves back to the beginning until the process of work control development is complete. This iterative process is necessary to allow for input and resolution throughout the development phase of the work controls.

5.15 Required reviews for revisions to WIs include all Required Reviewers identified on CP3-SM-1101-F01, and review by USQ qualified personnel.

5.16 CP3-SI-0001, *Site Interface Agreement*, defines the process used to communicate information regarding ALW that, based on work location or potential impacts, requires coordination with other site contractors.

5.17 WI and WP concurrences and approvals are to be obtained via signature, via telecom, or via email.

- Approvals obtained via email shall be documented on or adjacent to the approval line and/or block or status log as follows: “John Doe [*signature*] for John Smith per email, 1/2/19” and email retained on file.
- Approvals obtained via telecom shall be documented on or adjacent to the approval line and/or block or status log as follows: “John Doe [*signature*] for John Smith per telecom, 1/2/19” and an email from Work Planner to Approver documenting telecom approval retained on file.
- Concurrence emails shall be saved in the WI Development File and do **NOT** require signatures.

5.18 Planning Teams consist of SME Reviewers or their designees. SMEs are Technical Experts and/or experts in various disciplines such as Health, Safety, Quality Control/Assurance, Environmental Services, Radiological Control (RADCON), Industrial Hygiene (IH), Environmental Field Compliance (EFC), Nuclear Safety (NS), Nuclear Criticality Safety (NCS) and Engineering disciplines. This list is **NOT** all-inclusive.

5.19 SMEs are an integral part of the planning process, and participate in the walkdown, development, review, and approval processes. The expertise provided for their respective area is vital for the development of work instructions and supporting documentation (for example, RWP, IHWP, Hot Work Permit, Confined Space Permit, etc.).

5.20 The Work Planner is responsible for scheduling and leading all planning meetings. Planning meeting attendance is documented using CP3-SM-1101-F07, *Planning Team Meeting Agenda and Roster.*

5.21 A checklist is provided to help the Work Planner during WI development. Appendix E, *Type 1 - Work Instruction Development Checklist*, may be used at the Work Planner or supervisor's discretion as a tool during the development or revision of WIs. This checklist is **NOT** required to be retained as records.

5.22 Three different types of WPs may be used, depending on screening criteria (higher level WP may be used if desired). The three types are as follows:

- Type 1 Work Instruction Work Package
- Type 3 Performance Document Work Package
- Type 4 Excluded Work

5.23 When determining the QL of the Work Scope, a thorough understanding of the scope is required to ensure all SSCs are evaluated. This evaluation is necessary to ensure the highest QL is determined based on all impacted SSCs. For example, if replacing a QL-3 component requires power to a QL-2 system to be removed, the Work Scope QL would be QL-2. QL is determined by the highest level piece of equipment being impacted by the work being performed. This methodology also applies to determining if work will affect SS SSCs.

5.24 Discussions with NS to determine applicability of USQ reviews are encouraged and expected if there is any confusion or uncertainty.

5.25 Form use and control shall be in accordance with CP3-OP-0024.

5.26 Prior to being granted the responsibilities and authorities of a Responsible Manager for Work Control, the individual must complete the following:

- Training requirements assigned through T-F00205, *Responsible Manager for Work Control*
- Be approved by the Operational Programs Manager through an interview process
- Be approved by the Chief Operating Officer or designee
- Be added to the Responsible Managers for Work Control list maintained at Four Rivers Nuclear Partnership - Responsible Managers

The role of Responsible Manager for Work Control is limited to the Superintendent level or above to ensure an independent review and approval of Activity Level Work Control Documents (work instructions and technical procedures). They are accountable for understanding and proper execution of the Work Control process, as defined in this procedure and CP3-SM-1102, *Activity Level Work Execution and Closeout*.

5.27 Prior to development of or revision to WIs associated with potentially classified subject matter areas (for example, converter components), a discussion with a Derivative Classifier (DC) shall be performed according to CP1-PM-0005, *Classification Review Integration Controls for Converter Component Activities and Other Subject Matter Areas*.

6.0 INSTRUCTIONS

6.1 Requesting Work and Approving Work Request

Work Requestor

6.1.1 Enter Work Request (WR) in CMMS for maintenance and/or project support tasks by performing the following:

A. Ensure there is **NOT** an existing WO(s) in CMMS for the work scope being requested.

B. Ensure work scope being requested is **NOT** provided as a GFSI by another site contractor.

C. Select the "New" button at the top of the Work Request module in CMMS **and** perform the following:

1. Enter in the **Description Line** a clear, concise description of work being requested, including any of the following that apply:

- Point of contact
- The type(s) of work group(s) necessary to complete the work.
- The purpose of the activity or work being performed.
- The location or major equipment or components.
- The mechanisms and/or approaches for completing the assigned work scope (for example, how to do it).
- Discrete and discernable boundaries for completing the assigned work scope (in other words, information to help prevent "scope creep" such as specific work location and clear work boundaries).
- Ensure WO description is consistent with work scope statement that will be used for the work instruction, and the WO description provides further clarification to identify major equipment and boundaries, to the extent CMMS can support.
- Engineering documents required to perform work scope.
- The SSCs impacted by the work activities.

2. **If** work is **NOT** to be charged to the default account listed in CMMS, **then** include correct charge code or work authorization in the **Description Line**.

3. **If** WO is an Episode Task (EPITSK) associated with an Episode Work Package, **then** enter the Episode Work Order number in the **Description Line** of the EPITSK WO.

4. Select the appropriate Requester Name in the **Requester User ID** field.

5. Select the appropriate Equipment ID in the **Charge To** field.

6. Select "Planning" in the **Assigned** field.

7. Refer to Table 1, *CMMS Work Order Types*, **and** select the correct type of work being requested in the **Type** field.

D. Click the "Add" button to add the WR to the CMMS data base **and** perform the following:

1. **If** known, **then** select the applicable crew that will perform the work in the **Crew** field of the WR.

2. Refer to Table 3, *CMMS Priority Matrix*, **and** select the priority of the work in the **Priority** field of the WR.

3. Refer to Table 2, *CMMS Urgency Codes*, **and** select the urgency of the work in the **Urgency** field of WR.

4. **If** work requires planning completion by a certain date due to Corrective Action, Project Schedule, etc., **then** enter date in **Target Date** field of WR.

5. Save the WR by clicking the "Save*"* button at the top.

Work Request Review Team and/or Project Manager

NOTES:

- The importance of developing a complete, detailed, and accurate work scope of work should **NOT** be underestimated, and sufficient time and resources need to be allocated for this activity to be successful.
- In order for the hazards to be identified correctly and the work to be performed safely, the scope statement should be **discrete and discernible** so that the work activity is accurately **described**, **bounded**, and clearly communicated through the Activity Level Work Control Documents (ALWCDs) to the FLM and craft workers.

6.1.2 Review **and** approve **or** deny the WR as follows:

A. Screen WR(s) according to Appendix F, *Work Request Screening*, **and** approve **or** deny WR, as applicable.

B. Identify Engineering requirements to confirm Work Type and Urgency Codes.

C. Ensure correct WO Type was selected according to Table 1.

Table 1. CMMS Work Order Types

Code	Description
CM	Corrective Maintenance
PM	Preventive Maintenance
SUR	Surveillance
PT	Procedure Task
SUP	Support Services
MOD	Modification to Plant Facility
FAB	Fabrication
DEA	Deactivation Activities
PRO	Project Work Support
INSP	Inspect
TKL	Tickler (Scheduling Purposes Only)

D. Ensure correct WO Urgency was selected according to Table 2.

Table 2. CMMS Urgency Codes

Code	Description
SAFETY	Potential Impact to Safety (See Safety WO definition)
ENV	Potential Impact to Environment
SEC	Potential Impact to Security
WIN	Protect Facilities from Cold Weather Impact
CA	Identified as a Corrective Action Requirement
MM	Minor Maintenance (See Minor Work/Maintenance Activities definition)
NA	Not Emergent – Perform as resources available
MA	Management Priority
FI	Fire Impairment
Text deleted.	Text deleted.
DELAY	Work will not be performed at this time
EVAL	Engineering to Evaluate Preventive Maintenance (PM)
PMR	PM Request (PMR) is Being Processed
EPISOD	Episode Work Order
EPITSK	Episode Task
DEFPM	Deferred PM
DEFPBI	Deferred PBI
REG	Regulatory Requirement
ERP1	Electrical Recovery Priority 1
ERP2	Electrical Recovery Priority 2
ERP3	Electrical Recovery Priority 3
ERP4	Electrical Recovery Priority 4
ERP5	Electrical Recovery Priority 5
ERP6	Electrical Recovery Priority 6
ERP7	Electrical Recovery Priority 7
NCS	Nuclear Criticality Safety
EXCL	Excluded Work

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E. **If** WO is associated with an Episode WP, **then** perform the following:

1. Ensure **Urgency** field is set to EPITSK.

2. Ensure the applicable Episode WP number is identified in **Work Order Description** field.

F. In CMMS WO **Approval/Status** tab, select the following:

1. In **Work Assigned** field, ensure Planning was selected.

2. In **Crew** field, ensure correct crew performing the work was selected.

3. In **Plan** field, select the applicable Work Planner.

4. **If** WO Type is PRO **or** DEA, **then** ensure Project Number is identified in the **Project** field.

5. Ensure correct WO Priority was selected according to Table 3, *CMMS Priority Matrix.*

G. Save WO by clicking the “Save” button at the top.

Table 3. CMMS Priority Matrix

Priority Code	Priority	Description
1	Emergent	Any work that requires immediate action to prevent serious personnel injury, environmental harm, security breaches, loss of mission critical systems or data, or property loss. Emergent 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 work environment is stabilized. This work will be typically classified as the highest priority and it is intended that Emergent Work is rarely used. Emergent Work is approved by Senior Management and this authority should not be delegated.
2	High	Does not meet the definition of Emergent Work, but requires rapid action to address any of the following: • Correct problems deemed critical to sustain the current mission of a facility to include preventing programmatic impact, property loss, or a significant financial impact, where a compensatory measure is not available • Correct a significant personnel safety deficiency or hazard exposure for which there are no appropriate compensatory measures or hazard mitigation that can be economically or effectively deployed, and as determined by the HSS&Q Director or designee • Correct a condition that will result in a permit violation or Environmental Field Compliance violation, or violation of U.S. Department of Energy (DOE) Orders if not corrected immediately • Prevent or mitigate a Document Safety Analysis (DSA) or Technical Safety Requirement (TSR) violation • Preventive Maintenance on a credited Safety System or other regulatory driven PMs • Correct conditions that cause major impacts to security response or mission
3	Moderate	Work that is scheduled into the normal work plan because it does not meet conditions for Emergent or High priority work, but requires responsive action to address any of the following: • Correct problems deemed critical to sustain the current mission of a facility to include preventing programmatic impact, property loss, or a significant financial impact, where a compensatory measure is available • Support regulatory milestones or other enforceable agreement or to prevent a significant negative impact to the programmatic mission • Support regulatory action plans • Correct a safety deficiency that does not require immediate action but is likely to cause an injury to personnel if not prevented by use of compensatory measures such as appropriate PPE, or barriers (such as roping off access to normally occupied work areas and walkways) to the hazard • PM on Facilities or SSCs that are operational and support the current mission (Not deactivated or awaiting for decontamination and decommissioning) • Project work to meet contract mission
4	Low	Work that is scheduled into the normal work plan to meet the long term plans for the site, which includes any of the following: • Deficiencies, repairs, modifications, or preventive maintenance with reasonably acceptable risk to property, programs, or compliance issues • Quality of Life issues
5	Future	Work that requires routine action to implement improvements or correct deficiencies not directly related to sustaining the mission of the facility and is to be deferred or unfunded. These jobs are normally left in the backlog and not worked unless conditions change.

6.2 Screening Work Scopes to Determine Planning Requirements

NOTE:

PM and Surveillance WOs to be superseded shall **NOT** be cancelled until all work scope has been completed and WO under which the work was performed has been closed out. Cancellation will be performed by the PM Coordinator according to CP3-SM-1102, *Activity Level Work Execution and Closeout*.

Work Planner

6.2.1 **If** multiple WOs associated with PMs and/or Surveillances will be consolidated into one WO, **then** perform the following:

A. Transfer work scope contained in WOs to be superseded to the WO that will be worked.

B. In the **Description** field of the WO to be worked, enter "Superseded Work Order Number(s)." (**If** space is unavailable, **then** enter WO numbers in the Notes section).

C. Enter "SUPERSEDED" in the **Description** field of the WO(s) being superseded.

D. Notify FM of intent to consolidate WOs **and** identify the associated WOs affected.

E. Notify PM Coordinator of intent to consolidate WOs **and** identify the associated WOs affected.

PM Coordinator

F. Confirm the following information:

1. Information from Work Planner is understood and correct.

2. Changes have been made as described.

3. All necessary work scope to satisfy **all** PM and/or Surveillance requirements from WOs to be superseded are listed in WO to be used.

4. WOs being superseded are listed in **Description** field of WO being worked.

G. Notify FM of **Description** field of WO being worked.

Work Planner

6.2.2 Using the WO number as folder name, create folder for WP on (S) drive at *S:\Workgroup Folders\Work Controls\Somax,* according to Appendix G, *Work Package Folder Hierarchy*.

6.2.3 **If** work is associated with DEA and PRO type work, **then** perform the following:

A. Request responsible Project Manager provide detailed work scope statement for work activity being performed.

Project Manager

NOTES:

- The importance of developing a complete, detailed, and accurate work scope of work should **NOT** be underestimated, and sufficient time and resources need to be allocated for this activity to be successful.
- In order for the hazards to be identified correctly and the work to be performed safely, the scope statement should be **discrete and discernible** so that the work activity is accurately **described**, **bounded**, and clearly communicated through the ALWCDs to the FLM and craft workers.

B. Provide Work Planner with detailed work scope statement that includes the following, at a minimum:

- The type(s) of work group(s) necessary to complete the work.
- The purpose of the activity or work being performed.
- The location or major equipment or components.
- The major tasks or steps required to complete the task.
- The mechanisms and/or approaches for completing the assigned work scope.
- Discrete and discernible boundaries for completing the assigned work scope.
- Identify all applicable Engineering documents such as drawings, DIVS, FCT, etc.

Work Planner

NOTES:

- The importance of developing a complete, detailed, and accurate work scope of work should **NOT** be underestimated, and sufficient time and resources need to be allocated for this activity to be successful.
- In order for the hazards to be identified correctly and the work to be performed safely, the scope statement should be **discrete and discernible** so that the work activity is accurately **described**, **bounded**, and clearly communicated through the ALWCDs to the FLM and craft workers.
- The scope development at this point is preliminary and does **NOT** preclude changes later in the planning process.
- An abbreviated scope statement may be used in a WO description or on a Work Package CMMS coversheet as long as sufficient detail is documented in the Work Scope Description section of the WIs.
- Additional personnel may need to be contacted in the development of the work scope, such as craft, SMEs, FMs, Project Managers and RMs.

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6.2.4 Develop work scope according to the following:

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A. **If** developing a troubleshooting work scope, **then** refer to CP5-SM-1006, Appendix F.

B. Ensure the work scope includes the following, at a minimum, to establish the foundation for the remaining portions of the work planning process:

- The type(s) of work group(s) necessary to complete the work.

- The purpose of the activity or work being performed.
- The location or major equipment or components.
- The mechanisms and/or approaches for completing the assigned work scope (for example, how to do it).
- Discrete and discernable boundaries for completing the assigned work scope (in other words, information to help prevent "scope creep" such as specific work location and clear work boundaries).
- Ensure WO description is consistent with work scope statement that will be used for the work instruction, and the WO description provides further clarification to identify major equipment and boundaries, to the extent CMMS can support.
- Engineering documents required to perform work scope.

6.2.5 **If** WO Type as listed on the CMMS WO is DEA, FAB, MOD, or PRO, **then** contact Engineering to determine if any Engineering documents are required.

6.2.6 Request FM identify all SSCs impacted by work activities.

FM

6.2.7 Identify all impacted SSCs associated with work scope **and** notify Planner.

Work Planner

6.2.8 Text deleted

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6.2.9 **When** all needed information is available, **then** perform the following:

A. Perform walkdown, as necessary, to ensure work scope is sufficient to begin planning process.

NOTES:

- Work screening according to CP3-SM-1101-F01 is preliminary at this point and does **NOT** preclude changes later in the work control development.
- Any changes to CP3-SM-1101-F01 after Work Planning and Control Manager approval will require a new form be completed and approved.

B. Screen the work scope according to the following **and** document on CP3-SM-1101-F01:

1. Enter name in **Work Planner** block.

2. Enter WO number in **Unique Identifier** block.

3. Enter today's date in the **Date Screened** block.

4. Enter scope of work determined in Step **6.2.4** in the **Scope** block.

5. **If** Work Scope is associated with a potentially classified subject matter area (for example, converter components) **or** there is uncertainty whether it is, **then** perform the following:

a) Conduct an initial screening discussion with a DC to determine if the scope will generate documents within a classified subject matter area according to CP1-PM-0005.

b) Mark "Yes" or "No" for **Classified Subject Matter Area** based on discussion with DC in previous step.

c) Enter DC Reviewer's name in **Derivative Classifier/Name** block.

6. **If** Work Scope is **NOT** associated with a potentially classified subject matter area, **then** perform the following:

a) Mark "No" for **Classified Subject Matter Area**.

b) "N/A" **Derivative Classifier/Name** block.

7. Determine Risk and Complexity of work scope according to Appendix C, *Work Planning Rigor Based on Performance Risk and Complexity*, **and** mark accordingly in **Performance Risk Level** and **Performance Complexity Level** blocks.

NOTES:

- Work scopes shall have only one QL and shall be determined by the highest QL of the SSCs being impacted by the work activity.
- Quality Level Determinations (QLDs) are maintained on S:\Controlled Documents\Engineering Documents\QLD (Quality Level Determinations) and typically applies to the component/system being worked.
- The QL of the work scope is determined by the highest QL of the Structures, Systems, and Components (SSCs) being impacted by the work activity.

8. Determine QL of work to be performed (using the highest QL of SSC[s] impacted by work activity).

a) **If** necessary, **then** contact Engineering **and** request a quality level determination.

b) **If** Engineering provides a QLD number, **then** document in **QLD Number** block **and** enter Engineer's name in **Engineering Requested/Name** block.

c) **If** no QLD is available and Engineering gives QL, **then** document Engineer's name in the **Engineering Requested/Name** block **and** enter "N/A" in the **QLD Number** block.

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d) Document QL in the **Quality Level** block.

e) **If** Engineering was **NOT** contacted for QL, **then** enter "N/A" in the **Engineering Requested/Name** block.

9. Check appropriate "Yes" or "No" Safety Significant box according to CP1-NS-3000, *Documented Safety Analysis for the U.S. Department of Energy Paducah Site Deactivation Project*, Table 4-1, *Summary of Safety Significant Structures, Systems, and Components*. This determination is made based on **all** SSCs impacted by work activities.

10. Enter Responsible Manager's name in **Responsible Manager** block in Part B of CP3-SM-1101-F01.

11. Determine if work scope is an exclusionary task listed in Appendix A of CP5-SM-1001, *Excluded Work Activities*, **and** mark accordingly in Part A of CP3-SM-1101-F01.

NOTE:

When multiple ALWCDs are needed, the highest level Work Control Type used should be selected (example: Type 1 and Type 3 ALWCDs would be Type 1).

12. **If** work scope falls under an exclusionary task, **then** check **Type 4 – Excluded Work** in Part B **and** proceed to Section **6.7**.

13. Determine if work scope can be performed solely to approved Technical procedures.

14. **If** work scope can be performed solely to approved Technical procedures, **then** check **Type 3 – Performance Document** in Part B **and** proceed to Section **6.6**.

15. **If** the work will be performed as an EPITSK, **then** check **Type 1 – WCD** or **Type 3 – WCD** in Part B **and** proceed to Section **6.3**.

16. **If** Type 1 WI requires revision, **then** proceed to Step **6.11.10**.

17. **If** work scope will be performed using an approved Type 1 WI, **then** check **Type 1 – WCD** in Part B **and** proceed to Section **6.5**.

18. **If** work scope requires the development of a new Type 1 WI, **then** check **Type – 1 WCD** in Part B **and** proceed to Section **6.4**.

6.3 EPITSK Work Order Development

NOTES:

- EPITSK and Episode WPs are **NOT** approved to use for work scope deemed as Urgent Repair.
- Section **6.5** contains additional information regarding Urgent Repair work.

Work Planner

6.3.1 Enter "N/A" in the following sections of CP3-SM-1101-F01:

- Required Reviewers section
- Required Planning Team Members section
- Work Planning and Control Manager Approval

6.3.2 Enter Episode Work Package WO number in **Notes** block of CP3-SM-1101-F01.

6.3.3 Enter QL in the **Quality Level** section of the **Approval/Status** tab of the CMMS WO. Chg A

6.3.4 Ensure EPITSK WO QL matches Episode WP QL.

6.3.5 Enter Episode Work Package WO number in **Job Plan** tab of CMMS WO.

6.3.6 Ensure Episode Work Package WO number is listed in WO **Description** field.

6.3.7 Enter JHA number(s) associated with Episode WP in the **Comments** section of the **Completion** tab of the CMMS WO.

6.3.8 **If** handling fissile and/or potentially fissile materials, **then** select the **NCS Related** box under the Safety Equipment on the **Requirements** tab of the CMMS WO.

6.3.9 Identify known parts and materials necessary to perform work according to Section **6.10**.

6.3.10 Verify that the following fields are populated for the WO in CMMS, **are correct**, and **if** necessary, **then** make corrections:

- Work Type (CM, PM, SUR, SUP, MOD, FAB, DEA, PRO, INSP)
- Work Order Number
- Urgency (EPITSK)
- Work Authorization No.
- Crew
- Building
- Work Planner
- Priority (1-Emergent, 2-High, 3-Moderate, 4-Low, 5-Future)
- Safety Significant (Y or N) (as determined by all SSCs impacted by work activities)

- Quality Level
- Equipment
- Work Description

6.3.11 Generate WO from CMMS (or CP3-SM-1101-F19).

6.3.12 Check "No" Safety Significant Structures, Systems, and Components (SSC) box on WO cover page.

6.3.13 Enter "N/A" in the following sections of CP3-SM-1101-F01:

- Work Acceptance by CSE/SE
- Plant Shift Superintendent (PSS)/Nuclear Facility Manager (NFM) Approval to Start Work
- Work Acceptance by PSS/NFM

6.3.14 **If** the work activity to be performed will **NOT** result in a modification, **then** enter "N/A" in Work Acceptance by Responsible Engineer on the WO cover page.

6.3.15 Place CP3-SM-1101-F01 and copy of WO cover page (or CP3-SM-1101-F18) in WP electronic folder, according to Appendix G.

6.3.16 **If** requested by FLM, **then** deliver EPITSK WO to applicable FLM.

6.3.17 Update CMMS WO Status following the guidelines in CP5-SM-1003, *Work Order Status, Assignment, and Custody Protocol Guidelines*.

6.3.18 EPITSK is complete, exit procedure.

6.4 Type 1 Work Instruction Development

Work Planner

NOTES:

- Appendix E, *Work Instruction Development Checklist,* can be used for the development of the WI.
- The WI Development Folder electronically stores documentation used and/or created during the development of the work instruction (for example, email concurrences, draft and/or final copies, lessons learned, etc.).
- When requesting a unique identification number from WPCC, the following guidelines should be used to determine the proper designator:
  - Surveillance and Maintenance use T1-SM-XXXX
  - Business Services use T1-BS-XXXX
  - Environmental Services use T1-ES-XXXX
  - Sub-Contractor Work use T1-SC-XXXX
  - Deactivation use T1-DE-XXXX
  - Operations use T1-OP-XXXX
  - Waste Services use T1-WS-XXXX
- Reusable WIs should only be developed if work scope will be performed multiple times per year.

6.4.1 Create a WI Development Folder on (S) drive at *S:\Workgroup Folders\Work Controls\Work Instructions* according to Appendix H, *Work Instruction Folder Hierarchy*, using one of the following as the name:

A. **If** developing a reusable Type 1, **then** obtain a unique identification number from WPCC representative.

B. **If** developing a one-time use document, **then** use the WO number as the unique identifier, formatted as TI-XXXXXXXX.

6.4.2 **If** work scope is associated with a potentially classified subject matter area, **then** discuss work scope with a DC according to CP1-PM-0005.

6.4.3 **If** work scope screened as High Risk, **then** go to Section **6.9** to determine HHRB requirements **and** document on CP3-SM-1101-F01.

6.4.4 Determine the Required Reviewers for the WI according to Appendix B and Appendix D, **and** document on CP3-SM-1101-F01.

NOTE:

At a minimum, the Planning Team will consist of craft personnel, IH, IS, EFC, and the FLM, but can include any other Required Reviewers, or all of them, when necessary.

6.4.5 Based upon the Required Reviewers, determine the minimum personnel that must be a member of the planning team **and** document on CP3-SM-1101-F01.

6.4.6 Submit CP3-SM-1101-F01 to Work Planning and Control Manager for review and approval.

NOTE:

Planning may continue while awaiting Work Planning and Control Manager's approval or rejection of CP3-SM-1101-F01.

Work Planning and Control Manager

6.4.7 Review **and** approve **or** reject the CP3-SM-1101-F01.

6.4.8 Send approved or rejected CP3-SM-1101-F01 to applicable Work Planner.

Work Planner

6.4.9 **If** Work Planning and Control Manager rejected CP3-SM-1101-F01, **then** perform the following:

A. Make necessary corrections to CP3-SM-1101-F01.

B. Go to Step **6.4.6.**

6.4.10 **If** possible, **then** develop preliminary draft of WI to aid in Planning Team meetings **and** involve any Planning Team members necessary to aid in the development of the draft WI.

Planning Team

NOTES:

- Planning Team members may be excused from the walkdowns and/or tabletop discussions at the discretion of the Work Planning and Control Manager. Excuses are documented on CP3-SM-1101-F07, *Planning Team Meeting Agenda and Roster*.
- When the risks to the Planning Team outweigh the potential benefits of the walkdown, a tabletop review using photographs and drawings with group discussion may be performed in lieu of the walkdown, as approved by the Work Planning and Control Manager.
- Walkdowns(s) and/or tabletop discussion(s) with varying planning team members may be performed to support the Work Instruction development, review, and approval process but does **NOT** meet the definition of Planning Team meeting.
- Representatives of the DOE Paducah Site Office are invited to all planning meetings using "Paducah FRNP Planning Team Invitation" email distribution list.
- Work Steps **6.4.11** through **6.4.25** are done concurrently and throughout the WI development.

6.4.11 Schedule Planning Team meeting(s) inviting all members identified as Required Planning Team Members on CP3-SM-1101-F01 and those listed on the *Paducah FRNP Planning Team Invitation* email distribution list.

6.4.12 Perform Planning Team walkdown(s) and/or tabletop discussion(s) (if approved by Work Planning and Control Manager) with personnel identified as Required Planning Team Members on CP3-SM-1101-F01, to identify the following:

- Major Tasks/Steps required to execute work scope
- SSC(s) Impacted by work scope execution

- Hazards associated with work scope execution
- Parts/Materials required to complete work scope
- Tool/Equipment required to complete work scope
- Permits required
- Lessons Learned associated with work scope execution
- Engineering Requirements to execute work scope

6.4.13 **If** Planning Team meeting is cancelled **or** rescheduled within 24 hours of its original time, **then** send an email to the Work Planning and Control Manager and the Operational Programs Manager stating the meeting was cancelled and reason for cancellation.

6.4.14 Determine requirements for Electrical Inspections and Arc Flash Determinations according to CP3-SM-0019, *Electrical Safety Guidelines*.

6.4.15 Determine required permits and whether an air-gap will be used as hazard controls.

6.4.16 Log attendance of all Planning Team meetings on CP3-SM-1101-F07.

6.4.17 **When** all Planning Team members are comfortable with the WI scope, **then** perform hazard identification according to CP3-HS-2004, *Job Hazard Analysis.*

6.4.18 Place copies of CP3-SM-1101-F01, CP3-HS-2004-F01, and CP3-SM-1101-F07 in the WI Development Folder, according to Appendix H.

6.4.19 Forward copy of completed CP3-SM-1101-F07 to the Work Planning and Control Manager **and** the Operational Programs Manager.

JHA Preparer

NOTES:

- Additional SMEs may be called upon to assist in the identification of hazard controls.
- When practical, the JHA should be drafted and/or reviewed in real time by the Planning Team to ensure that the controls are appropriate for the activity being planned.
- A JHA is a planning tool for identifying hazards and developing controls to mitigate the hazards. The form for documenting this process, CP3-HS-2004-F01, will be used according to CP3-HS-2004 to provide this information. The JHA will be maintained as part of the planning history files by Planning and in ALLIANT ™.

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6.4.20 Determine the controls that will be used to execute the work scope by developing a JHA according to CP3-HS-2004 **and** the following:

A. **If** a JHA or JHAs exists that will address the hazards identified in Step **6.4.17**, **then** with concurrence from IS personnel, they may be utilized.

B. Ensure the following:

1. Controls identified in JHA are incorporated into the work instructions following the guidelines in CP5-SM-1008, *Hazard/Control Integration Guide*.

2. JHA is listed in the Source References.

Work Planner

NOTE:

The Work Planner should coordinate, facilitate, and consult with all identified SMEs to ensure the Lessons Learned information is relevant to the activity being performed.

6.4.21 Mark required permits in **Permits** block of CP3-SM-1101-F18.

6.4.22 Identify applicable "Lessons Learned" from Operating Experience and Lessons Learned database, to incorporate into WI.

6.4.23 Review Standing Orders to determine if any are associated with work scope being planned.

6.4.24 **If** Standing Orders are in place that are associated with the work scope being planned, **then** perform the following:

A. Flow requirements of Standing Order into the WI during development.

B. Include the Standing Order in the Source Reference section.

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6.4.25 Ensure Engineering documents, drawings, and applicable guidance has been incorporated into WI or referenced by the WI following the guidelines in CP5-SM-1006, *Activity Level Work Control Document Writer's Guide*.

6.4.26 Draft WI on CP3-SM-1101-F18 using all of the following:

- Identified lessons learned
- CP5-SM-1006, *Activity Level Work Control Document's Writer's Guide*
- CP3-HS-2004, *Job Hazard Analysis*
- CP5-SM-1008, *Hazard/Control Integration Guide*
- Other supporting documentation (such as FCTs, DIVs, Engineering guidance, etc.)
- Input obtained from the Planning Team.

NOTES:

- If unable to do so in person, reviews, approvals, and concurrences may be conducted via e-mail or via telecom, as described in Step **5.17**.
- Steps **6.4.27** through **6.4.34** may be performed at any time during the planning process.

6.4.27 Distribute WI draft and any available supporting documentation (such as JHA, IHWP, RWP, etc.), and identified lessons learned to the Required Reviewers for review, **and** discuss the methods that will incorporate the lessons learned, hazards, and controls into the WI.

6.4.28 Place copies of the following documents in the WI Development Folder, according to Appendix H:

- Identified Lessons Learned/Operational Experience
- JHA
- Applicable Work Pauses, Functional Directives, and/or Standing Orders
- Any other supporting documentation used in development of WI (such as Engineering documents, technical/vendor manuals)

Reviewer(s)

NOTES:

- Area-specific SME review requirements are identified in Appendix D.
- If unable to do so in person, reviews, approvals, and concurrences may be conducted via e-mail or via telecom, as described in Step **5.17**.

6.4.29 Review the draft based on area of expertise, as well as those related to safety:

A. Ensure comments or questions are clear and objective.

B. **If** no comments, **then** indicate "No Comments" in a reply email.

NOTE:

Comments should be submitted to the Work Planner via email, unless comment resolution is being conducted via roundtable review or in person.

6.4.30 Submit comments to the Work Planner by the required response date.

Work Planner

6.4.31 Resolve all reviewer comments **and** obtain reviewer concurrence.

6.4.32 **If** there is an unresolvable comment, **then** perform the following:

A. Send the comment(s) to the Work Planning and Control Manager.

Work Planning and Control Manager

NOTE:

If resolution cannot be agreed upon between the Work Planning and Control Manager and reviewer, a higher level of management shall resolve the comment.

B. Discuss the comment with the SME to obtain concurrence. Comments relating to the following shall be resolved:

- A conflict with CP2-QA-1000, *Quality Assurance Program Description for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* or Regulatory Requirements.

- A conflict with content associated with an internal or regulatory commitment and compliance.
- Information in the work instruction which is inaccurate.
- Processes or work steps which cannot be performed as written.
- A conflict with other processes.

C. Document the decision to accept **or** reject the comment **and** submit to the Work Planner to retain in the WI's Development Folder according to Appendix H.

Work Planner

6.4.33 **If** an HHRB is required as determined by Step **6.4.3 or** is directed by an applicable Director, **then** perform the following:

A. Check the "Yes" box for *HHRB Required and CP3-OP-1103-F01 is Attached* on Page 1 of CP3-SM-1101-F18 **and** attach CP3-OP-1103-F01, *High Hazard Review Board Form,* to WI.

B. Assemble Draft WP following the guidelines in CP5-SM-1007, *Work Package Assembly Guidelines*.

C. Attach email concurrence of HHRB requirement from RM that was received in Step **6.4.3** to WI.

D. Deliver Draft WP to FLM of Execution Team for pre-work validation.

Execution Team

E. Conduct a pre-work validation of Draft WP and applicable Use References to verify usability and correctness.

F. Document the pre-work validation on CP3-SM-1101-F20, *Work Package Pre-Work Validation*.

G. **If** Draft WP is **NOT** acceptable, **then** work with the Work Planner to resolve any concerns.

Work Planner

NOTES:

- Area-specific SME review responsibilities are identified in Appendix D.
- Qualified Responsible Managers for Work Control are identified in SharePoint under Contact/Responsible Manager List.

H. **If** changes were identified, **then** make necessary changes to WI.

I. **If** changes were made, **then** go to Step **6.4.27**.

J. Submit Draft WP to applicable RM for HHRB review.

K. Save CP3-SM-1101-F20, CP3-OP-1103-F01, and email concurrence of HHRB requirement received in Step **6.4.3** in the WI Development Folder, according to Appendix H.

RM

L. Present, **or** assign delegate to present, Draft WP to HHRB according to CP3-OP-1103, *High Hazard Review Process*.

M. **If** HHRB requires changes, **then** submit package and copy of CP3-OP-1103-F01 to the applicable Work Planner.

Work Planner

N. **If** changes are required, **then** perform the following:

1. Resolve **and** incorporate any comments or changes to the Draft WP as required by the HHRB.

2. Go to Step **6.4.27**.

O. Obtain HHRB Chair or designee approval of Draft WP comment resolution on CP3-OP-1103-F01.

P. Attach copy of completed CP3-OP-1103-F01 to WI.

6.4.34 **If** HHRB is **NOT** required, **then** check the "No" box for *HHRB Required and CP3-OP-1103-F01 is Attached* on Page 1 of CP3-SM-1101-F18.

6.4.35 Go to Section **6.8** for USQ Review of the WI.

6.4.36 **If** USQ Documentation is **NOT** required, as determined by NS personnel, **then** perform the following:

A. Enter "N/A" in **USQ Number** block on CP3-SM-1101-F18.

B. Go to Step **6.4.40**.

NOTE:

Any changes to the WI after this point will require all Required Reviewers to concur with changes and it will require a new USQ Review according to CP3-NS-2001, *Unreviewed Safety Question Reviews*.

Work Planner

6.4.37 **If** the USQ review identifies a need to make changes to the WI, **then** make required changes.

6.4.38 **If** changes were made, **then** go to Step **6.4.27**.

6.4.39 **If** USQ Documentation was obtained, **then** perform the following:

A. Document number in **USQ Number** block on CP3-SM-1101-F18.

B. Save copy of USQ Review in the WI Development Folder, according to Appendix H.

6.4.40 Obtain WI approval signatures from FLM, FM, PSS/NFM, and RM, as applicable.

6.4.41 **If** unable to obtain any WI approval, **then** notify Work Planning and Control Manager for direction.

6.4.42 **If** WI approvals were obtained by email or telecom, **then** document approvals according to Step **5.17**.

6.4.43 Save all comments, concurrence, and approval emails in the WI Development Folder, according to Appendix H.

NOTE:

Approved WIs are locked at this point and changes required after this will require a revision with approval by all Required Reviewers, USQ, and HHRB if required.

6.4.44 Approve WI by signing the **Work Planner** block under the **Author** section of WI.

6.4.45 Save approved WI in the applicable WI Development Folder, according to Appendix H.

6.4.46 **If** WI is reusable (T1-XX-XXXX), **then** submit to WPCC for upload to Controlled Documents.

WPCC

6.4.47 **If** WI is associated with a revision, **then** upload revised WI to Controlled Documents.

6.4.48 **If** WI is new, **then** upload WI to Controlled Documents.

Work Planner

6.4.49 Submit the WI's history package to Records Management according to CP3-RD-0010, *Records Management Process*.

6.4.50 **If** WI is associated with a WP returned from the field for revision, **then** complete actions assigned to Work Planner in Section 6.6 of CP3-SM-1102.

6.4.51 **If** necessary, **then** go to Section **6.5** to develop the WP.

6.5 Type 1 Work Package Development

Work Planner

NOTES:

- Consideration should be given to the development of an Episode Work Package or Technical procedure to perform the work if the work scope will be performed repetitively throughout the duration of the project.
- Episode WPs shall **NOT** be developed for work scopes requiring HHRB reviews.
- WOs associated with Episodes or EPITSKs can be TYPE-1 or TYPE-3.
- Episode WPs shall **NOT** be developed for work on **or** that will affect QL-2 SS SSCs.
- Work Instruction requirements for specific work scopes, activities, or tasks are determined based on the performance risk and complexity level defined in Appendix C. However, tasks with specific regulatory requirements may require a higher level of rigor than indicated in Appendix C.

6.5.1 **If** work scope screened as High Risk, **then** go to Section **6.9** to determine HHRB requirements.

6.5.2 **If** WI is an Approved Reusable Type 1, **then** enter "N/A" in the following sections of CP3-SM-1101-F01:

- Required Reviewers
- Required Planning Team Members
- Work Planning and Control Manager Approval

6.5.3 Review Standing Orders to determine if any are associated with the work scope being planned.

6.5.4 **If** Standing Orders are in place that are associated with work scope being planned, **then** perform the following:

A. Review applicable Standing Orders with the RM to determine if a revision to the WI must be completed to include the Standing Order requirements.

B. **If** the WI already contains the requirements of the Standing Order, **then** go to Step **6.5.5**.

C. **If** the requirements of the Standing Order do **NOT** need to be incorporated into the WI, **then** go to Step **6.5.5.**

D. **If** WI must be revised to include the Standing Order requirements, **then** go to Section **6.6**.

6.5.5 **If** multiple ALWCDs (including Exclusions) will be used to develop one WP, **then** ensure the **Work Description** in CMMS identifies what scope will be performed under each ALWCD attached.

6.5.6 Enter QL in the **Quality Level** section of the **Approval/Status** tab of the CMMS WO.

Chg A

6.5.7 Ensure QL of WI is the same or higher than the WO QL as indicated on the applicable Work Screening Worksheets.

6.5.8 Enter applicable WI number into the CMMS Work Order **Job Plan** tab.

6.5.9 **If** handling fissile and/or potentially fissile materials, **then** select the **NCS Related** box under the Safety Equipment on the **Requirements** tab of the CMMS WO.

6.5.10 Enter JHA number(s) associated with the applicable WI(s) in the **Comments** section of the **Completion** tab of the CMMS WO.

6.5.11 Confirm the Use References and Source References listed in WI are the latest version as determined in Controlled Documents.

6.5.12 **If** any references were changed after the approval date of WI, **then** perform the following:

A. Review applicable reference(s) and WI to determine if changes to references affects the WI.

B. **If** changes to references affects WI, **then** initiate a revision to WI according to Section **6.11**.

C. **If** changes to references do **NOT** affect WI, **then** no action is required.

6.5.13 Identify known parts and materials necessary to perform work according to Section **6.10.**

6.5.14 Generate WO from CMMS (**or** CP3-SM-1101-F19) for approval signatures.

6.5.15 Perform actions listed in Section 2.2 of CP5-SM-1007 to complete WO cover sheet.

6.5.16 **If** work is for urgent repairs (as defined in Appendix A, *Acronyms/Definitions*,) to QL-3 or QL-4 systems **and** the repair will differ from design documentation (such as drawings), **then** perform the following:

A. Request Engineering review Type 1 WI.

B. **If** Engineering has no further guidance, **then** document Engineering concurrence on CP3-SM-1101-F13.

C. **If** further Engineering guidance is required, **then** go to Section **6.4** to develop a one-time-use WI.

6.5.17 **If** an HHRB is required as determined by Step **6.5.1 or** is directed by an applicable Director, **then** perform the following:

A. Assemble Draft WP following the guidelines in CP5-SM-1007, *Work Package Assembly Guidelines*.

B. Attach email concurrence of HHRB requirement from RM that was received in Step **6.5.1** to WI.

NOTE:

Qualified Responsible Managers for Work Control are identified in SharePoint under Contact/Responsible Manager List.

C. Submit Draft WP to applicable RM for HHRB review.

D. Save CP3-OP-1103-F01 and email concurrence of HHRB requirement received in Step **6.5.1** in the WP Electronic Folder according to Appendix G.

RM

E. Present, **or** assign delegate to present, Draft WP to HHRB according to CP3-OP-1103, *High Hazard Review Process*.

F. **If** HHRB requires changes, **then** submit package and copy of CP3-OP-1103-F01 to the applicable Work Planner.

Work Planner

G. **If** changes are required, **then** go to Section **6.11** to revise WI.

6.5.18 **If** work scope meets any of the following criteria, **then** go to Section **6.8** for USQ Review of WP:

- Text deleted.
- WI requires USQ review prior to each use.
- Work will change the design configuration of an SSC even when **NO** Engineering guidance is required (see Step **5.12**).

Chg A

6.5.19 **If** Step **6.5.18** did **NOT** apply **or** if USQ Documentation is **NOT** required, **then** perform the following:

A. Enter "N/A" in USQ Number field on WO.

B. Go to Step **6.5.22**.

6.5.20 **If** the USQ review identifies a need to make changes to the WP, **then** perform the following:

A. Review recommended changes to determine actions to be taken.

B. Correct WP by performing the following action(s), as applicable:

- Replace WI
- Revise WI according to Section **6.11**
- Correct WO entries
- Add **or** remove supporting documents

C. **If** new Type 1 WCD is required, **then** exit this Section **and** go to Section **6.4**.

D. Go to Step **6.5.17**.

6.5.21 **If** USQ Documentation was obtained, **then** perform the following:

A. Document USQ Number on WO.

B. Save copy of USQ Review in the WP Development Folder according to Appendix G.

6.5.22 Send electronic **or** hard copy WP to RM for review.

6.5.23 Update CMMS WO **Work Assigned** field to applicable RM following the guidelines in CP5-SM-1003.

6.5.24 Request required permits.

- Trenching, Excavation, and Penetration (TEP) – CP3-EN-0227, *Trenching, Excavation and Penetration Permit*
- Hotwork – CP3-FP-2005, *Welding, Burning and Hotwork*
- RWP – CP3-RP-1119, *Radiological Work Permit Development and Implementation*
- IHWP – CP3-HS-2004, *Job Hazard Analysis*
- Confined Space Permit (CSP) – CP3-HS-2055, *Confined Space*

RM

6.5.25 Review WP to ensure the following:

- The work scope is properly identified and developed such that work can be executed in a safe, cost-effective, and compliant manner.
- The correct ALWCDs are attached.
- Hazard controls from applicable JHAs have been incorporated into WI.
- As applicable, Electrical Inspections and Arc Flash Determination are made according to CP3-SM-0019.

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- Engineering documents (such as FCTs, DIVS, Drawings, etc.) have been incorporated into WI.
- Engineering guidance affecting Precautions, Limitations, Prerequisites, Hazards, Hazard Controls, and/or Acceptance Criteria has been incorporated into WI.

6.5.26 **If** rejected, **then** notify Work Planner of rejection and necessary changes required for approval.

6.5.27 **If** approved, **then** notify Work Planner of approval via email or signature on WO.

Work Planner

6.5.28 **If** rejected by RM, **then** make necessary changes **and** go to Step **6.5.17**.

6.5.29 **If** RM approved WP by email, **then** document RM approval according to Step **5.17**.

6.5.30 **If** applicable, **then** place copy of email approval from RM in WP electronic folder, according to Appendix G.

6.5.31 Approve WP by signing, "Planning Approval to Start Work" line on WO.

6.5.32 Complete as necessary **and** place CP3-SM-1101-F01 and applicable WP documentation listed in Appendix G in the WP electronic folder.

6.5.33 **If** WP will be delivered to FLM for priority work, **then** perform the following:

A. Assemble WP following guidelines in CP5-SM-1007.

B. Deliver WP to the FLM.

6.5.34 Update CMMS WO Status following the guidelines in CP5-SM-1003.

6.5.35 **If** WP is associated with a WP returned from the field for revision, **then** complete actions assigned to Work Planner in Section 6.6 of CP3-SM-1102.

6.5.36 Planning is complete for WP, exit procedure.

6.6 Type 3 Work Package Development

Work Planner

NOTES:

- Type 3 WPs are **NOT** approved to use for work scope deemed as an Urgent Repair.
- Section **6.5** contains additional information regarding Urgent Repair work.
- Consideration should be given to the development of an Episode Work Package or Technical procedure to perform the work if the work scope will be performed repetitively throughout the duration of the project.
- Episode WPs shall **NOT** be developed for work scopes requiring HHRB reviews.
- ALWCDs associated with Episodes or EPITSK WOs can be TYPE-1 or TYPE-3.
- Episode WPs shall **NOT** be developed for work on **or** that will affect QL-2 SS SSCs.

6.6.1 **If** the work scope was screened as high risk, **then** do **NOT** develop as a Type 3 WP.

6.6.2 Enter "N/A" in the following sections of CP3-SM-1101-F01:

- Required Reviewers
- Required Planning Team Members
- Work Planning and Control Manager Approval

6.6.3 Review Standing Orders to determine if any are associated with the Technical procedure(s) being used to develop the WP.

6.6.4 **If** Standing Orders are in place that are associated with the Technical procedure(s) being used, **then** perform the following:

A. Review applicable Standing Orders with the RM to determine if the requirements of the Standing Order must be included in the WP.

B. **If** the technical procedure already contains the requirements of the Standing Order, **then** go to Step **6.6.5**.

C. **If** the requirements of the Standing Order do **NOT** need to be incorporated into the WP, **then** go to Step **6.6.5**.

D. **If** requirements of the Standing Order must be included in the WP, **then** perform **one** of the following:

- **If** a reusable WI exists that contains the requirements of the Standing Order, **then** go to Section **6.5.**
- **If** a WI must be developed to include the Standing Order requirements, **then** go to Section **6.4**.

6.6.5 Enter Procedure Number in **Notes** block of CP3-SM-1101-F01.

6.6.6 Enter QL in the **Quality Level** section of the **Approval/Status** tab of the CMMS WO. Chg A

6.6.7 Enter Procedure number(s) in the **Job Plan** tab of the CMMS WO.

6.6.8 Update **Work Description** field of the CMMS WO with the approved Technical procedure(s).

6.6.9 **If** handling fissile and/or potentially fissile materials, **then** select the **NCS Related** box under the Safety Equipment on the **Requirements** tab of the CMMS WO.

6.6.10 Enter JHA number(s) associated with the applicable procedure(s) in the **Comments** section of the **Completion** tab of the CMMS WO.

6.6.11 Identify known parts and materials necessary to perform work according to Section **6.10**.

6.6.12 Generate WO from CMMS (**or** CP3-SM-1101-F19, *Work Package Cover Sheet*,) for approval signatures.

6.6.13 Perform actions listed in Section 2.2 of CP5-SM-1007 to complete WO cover sheet.

6.6.14 Text deleted.

6.6.15 Text deleted.

A. Text deleted. Chg A

B. Text deleted.

6.6.16 Text deleted.

A. Text deleted.

B. Text deleted.

- Text deleted.
- Text deleted.
- Text deleted.

C. Text deleted.

6.6.17 Text deleted.

A. Text deleted.

B. Text deleted.

6.6.18 Send electronic or hard copy WP to RM for review.

6.6.19 Update CMMS WO **Work Assigned** field to applicable RM following the guidelines in CP5-SM-1003.

6.6.20 Request required permits:

- Trenching, Excavation, and Penetration (TEP) – CP3-EN-0227, *Trenching, Excavation and Penetration Permit*
- Hotwork – CP3-FP-2005, *Welding, Burning and Hotwork*
- RWP – CP3-RP-1119, *Radiological Work Permit Development and Implementation*
- IHWP – CP3-HS-2004, *Job Hazard Analysis*
- CSP – CP3-HS-2055, *Confined Space*

RM

6.6.21 Review WP to ensure the following:

- The work scope is properly identified and developed such that work can be executed in a safe, cost-effective, and compliant manner.
- The correct ALWCDs are attached.
- Hazard controls from applicable JHAs have been included into WI.
- As applicable, Electrical Inspections and Arc Flash Determination are made according to CP3-SM-0019.

6.6.22 **If** rejected, **then** notify Work Planner of rejection **and** necessary changes required for approval.

6.6.23 **If** approved, **then** notify Work Planner of approval via email or signature on WP.

Chg A

Work Planner

6.6.24 **If** rejected by RM, **then** perform the following:

A. Make necessary changes.

B. Go to Step **6.5.17**.

6.6.25 **If** RM approved WP by email, **then** document RM approval on the WO Cover Sheet according to Step **5.17**.

6.6.26 **If** applicable, **then** place copy of email approval from RM in WP electronic folder, according to Appendix G.

6.6.27 Approve WP by signing "Planning Approval to Start Work" line on WO.

6.6.28 Place CP3-SM-1101-F01 and applicable WP documentation listed in Appendix G in the WP electronic folder.

6.6.29 **If** WP will be delivered to FLM for priority work, **then** perform the following:

A. Assemble WP following guidelines in CP5-SM-1007.

B. Deliver WP to the FLM.

6.6.30 Update CMMS WO Status following the guidelines in CP5-SM-1003.

6.6.31 **If** WP is associated with a WP returned from the field for revision, **then** complete actions assigned to Work Planner in Section 6.6 of CP3-SM-1102.

6.6.32 Type 3 planning is complete, exit procedure.

6.7 Type 4 Work Package Development

NOTES:

- Type 4 WPs are **NOT** approved to use for work scope deemed as an Urgent Repair.
- Section **6.5** contains additional information regarding Urgent Repair work.

Work Planner

6.7.1 Enter "N/A" in the following sections of CP3-SM-1101-F01:

- Required Reviewers section
- Required Planning Team Members section
- Work Planning and Control Manager Approval

6.7.2 Document Exclusion Number (such as EXC-003) in **Notes** block of CP3-SM-1101-F01.

6.7.3 Document Exclusion number in **Work Description** field of the CMMS WO.

6.7.4 Enter "EXCL" in **Urgency** field of the CMMS WO.

6.7.5 Enter QL in the **Quality Level** section of the **Approval/Status** tab of the CMMS WO. Chg A

6.7.6 Enter Exclusion number(s) (such as EXC-003) in the **Job Plan** tab of the CMMS WO.

6.7.7 Enter JHA number(s) associated with the applicable Exclusion in **Comments** of the **Completion** tab of the CMMS WO.

6.7.8 Identify known parts and materials necessary to perform work according to Section **6.10**.

6.7.9 Place CP3-SM-1101-F01 and applicable WP documentation listed in Appendix G in the WP electronic folder.

6.7.10 **If** WP will be delivered to FLM for priority work, **then** perform the following:

A. Assemble WP following guidelines in CP5-SM-1007.

B. Deliver WP to the FLM.

6.7.11 Update CMMS WO Status following the guidelines in CP5-SM-1003.

6.7.12 **If** WP is associated with a WP returned from the field for revision, **then** complete actions assigned to Work Planner in Section 6.6 of CP3-SM-1102.

6.7.13 Type 4 planning is complete, exit procedure.

6.8 USQ Review

Work Planner

6.8.1 Submit WP or WI to the USQ Preparer or USQ Review.

6.8.2 Update CMMS WO Status for WP reviews according to the following:

A. Update WO **Status** to 30.

B. Update WO **Work Assigned** field to USQ.

USQ Preparer and/or USQ Reviewer

6.8.3 Review WP or WI based on the applicable safety basis documents and controls.

6.8.4 Determine whether WP or WI activity requires USQ documentation.

6.8.5 **If** WP or WI requires USQ documentation, **then** prepare **and** obtain approval of appropriate document according to CP3-NS-2001.

Work Planner

6.8.6 **If** WP is a Type 3, **then** go to Step **6.6.15**.

6.8.7 **If** WP is a Type 1, **then** go to Step **6.5.19**.

6.8.8 **If** developing a Type 1 WI, **then** go to Step **6.4.36**.

6.8.9 Text deleted. Chg A

6.9 High Hazard Review Board

Work Planner

6.9.1 Request applicable RM determine HHRB requirements for work scope being planned, according to CP3-OP-1103.

6.9.2 **If** HHRB is required, **then** perform the following:

A. Check **HHRB is required** in Part B of CP3-SM-1101-F01, *Work Screening Worksheet*.

B. Obtain email concurrence from RM providing HHRB guidance.

C. Save copy of email concurrence from RM providing HHRB guidance as follows:

- For WP development according to Section **6.5**, save in the WP electronic folder.
- For WI development according to Section **6.4**, save in the WI development folder.

6.9.3 Enter RM's name in the **Responsible Manager** block of CP3-SM-1101-F01.

6.9.4 **If** WP is Type 1 Reusable, **then** go to Step **6.5.2**.

6.9.5 **If** developing a Type 1 WI, **then** go to Step **6.4.4**.

6.9.6 **If** revising a WI, **then** go to Step **6.11.10**.

6.10 Parts and Materials

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NOTES:

- The QL is based on the SSC to be replaced in the field, and **NOT** the WP QL. The actual replacement part may be a different QL than the WP QL.
- Engineering Bill of Materials (BOMs) for MODs and Projects must be entered in CP3-SM-1101-F21. This can be accomplished by referencing the BOM and attaching it to the WP or WI as necessary.

Work Planner

6.10.1 **If** necessary, **then** request support from Planning Team members for material(s) and/or part(s).

6.10.2 Identify **and** document known materials and parts that must be procured or available for the work on CP3-SM-1101-F21, *Work Order Materials/Parts Worksheet.*

A. Include any special handling requirements, environment, or conditions required throughout receipt to installation.

B. **If** required by programmatic requirements, **then** ensure Engineering determines inspection and testing criteria for QL-2 and QL-3 SSC work.

6.10.3 Ensure the QLD for the material(s)/part(s) being replaced is obtained from Controlled Documents, or if uncertain, contact Engineering for guidance.

6.10.4 **If** QL-2 parts or safety significant package, **then** ensure WI includes specific drawing, instruction, sketch, and/or work scope clearly communicating what parts are to be used at various locations. (**If** assistance is required, **then** contact Engineering.)

6.10.5 **If** error precursors exist that could result in parts being incorrectly installed or swapped, **then** ensure WI includes specific drawing, instruction, sketch, or work scope clearly communicating what parts are to be used at various locations. (**If** assistance is required, **then** contact Engineering.)

6.10.6 Initiate procurement of materials following the guidelines in CP5-SM-1002, *Procurement Planning Process Guidelines*.

6.11 Work Package/Work Instruction Revision

Work Planner

6.11.1 **If** revision is associated with a WP in the field, **then** perform the following:

A. Obtain WP from the FLM.

B. Obtain details of identified issues requiring revision from the FLM and craft personnel.

C. Ensure CMMS WO **Status** was updated to 20.

D. Update CMMS WO **Work Assignment** field to "Planning."

NOTE:

The addition of another ALWCD to a WP will constitute a scope change and will require a full revision of the WP.

E. Create revision folder in WP folder on (S) drive at *S:\Workgroup Folders\Work Controls\Somax* according to Appendix G.

6.11.2 Revise work scope as necessary to address identified issues with WP/WI.

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6.11.3 **If** engineering guidance and/or documents are required, **then** contact Engineering.

6.11.4 **If** work is associated with a potentially classified subject matter area, **then** discuss work scope with a DC according to CP1-PM-0005.

6.11.5 Request FM Identify all SSCs impacted by work activities.

FM

6.11.6 Identify all impacted SSCs associated with work scope **and** notify Planner.

Work Planner

6.11.7 **When** all needed information is available, **then** perform the following:

A. Perform walkdown to ensure work scope is sufficient to begin planning process.

B. Screen the work scope according to the following **and** document on CP3-SM-1101-F01.

1. Enter name in **Work Planner** block.

2. Enter WO number, with revision #, in **Unique Identifier** block.

3. Enter today's date in the **Date Screened** block.

4. Enter scope of work determined in Step **6.11.2** in the **Scope** block.

5. Determine Risk and Complexity of work scope according to Appendix C, *Work Planning Rigor Based on Performance Risk and Complexity*, **and** mark accordingly in **Performance Risk Level** and **Performance Complexity Level** blocks.

6. Determine QL of work to be performed (using the highest QL of SSC[s] being affected by performance of the work) according to the following:

a) **If** necessary, **then** contact Engineering **and** request a quality level determination.

b) **If** Engineering provides a QLD number, **then** document in **QLD Number** block **and** enter Engineer's name in the **Engineering Requested/Name** block.

c) **If** no QLD is available and Engineering gives QL, **then** document Engineer's name in the **Engineering Requested/Nam**e block **and** enter "N/A" in the **QLD Number** block.

d) Document QL in the **Quality Level** block.

e) **If** Engineering was **NOT** contacted for QL, **then** enter "N/A" in the **Engineering Requested/Name** block.

7. Check appropriate "Yes" or "No" **Safety Significant** box according to CP1-NS-3000, Table 4-1. This determination is based on **all** components/systems affected by performance of the work.

8. Enter RM's name in **Responsible Manager** block in Part B.

NOTE:

When multiple ALWCDs are needed, the highest level Work Control Type used should be selected (example: Type 1 and Type 3 ALWCDs would be Type 1).

9. Determine if work scope is an exclusionary task listed in Appendix A of CP5-SM-1001 **and** mark accordingly in Part A.

10. **If** work scope falls under an exclusionary task, **then** check **Type 4 – Excluded Work** in Part B.

11. Determine if work scope can be performed solely to approved Technical procedures **and** mark accordingly in Part A.

12. **If** work scope can be performed solely to approved Technical procedures, **then** check **Type 3 – Performance Document** in Part B.

13. **If** work scope will be performed as an EPITSK, **then** check **Type 1 – WCD** or **Type 3 – Performance Document** in Part B, based on applicable Episode WP.

14. **If** work scope will be performed with either of the following, **then** check **Type 1 – WCD** in Part B:

- An approved **Type 1 – WCD**
- A revised **Type 1 – WCD**

6.11.8 **If** WP revision changes the WO type, **then** perform the following:

A. **If** work scope can be performed to an approved Type 1 WI, **then** proceed to Section **6.5**.

B. **If** work scope can be performed solely to an approved Technical procedure(s), **then** proceed to Section **6.6**.

C. **If** work scope falls under an exclusionary task, **then** proceed to Section **6.7**.

6.11.9 **If** WP revision requires additional ALWCDs (including Exclusions), **then** perform the following:

A. Enter "N/A" in the following sections of CP3-SM-1101-F01:

- Required Reviewers
- Required Planning Team Members
- Work Planning and Control Manager Approval

B. Revise The CMMS WO **Work Description** to include the additional ALWCDs and the scope of work that will be performed by each one.

C. **If** additional work scope changes the QL, **then** perform the following

1. Enter QL in the **Quality Level** section of the **Approval/Status** tab of the CMMS WO. Chg A

2. **If** Type 1 WI is being used, **then** ensure QL of WI is the same or higher than the WO QL.

D. Enter additional ALWCDs into the CMMS WO **Job Plan** tab.

E. **If** additional work scope requires handling fissile and/or potentially fissile materials, **then** select the **NCS Related** box under the **Safety Equipment** on the **Requirements** tab of the CMMS WO.

F. **If** additional ALWCDs reference additional JHAs, **then** enter JHA number(s) associated with the ALWCDs in the **Comments** section of the **Completion** tab of the CMMS WO.

G. **If** additional ALWCD is Approved Reusable WI, **then** perform the following:

1. **If** work scope screened as High Risk, **then** go to Section **6.9** to determine HHRB.

2. Go to Step **6.5.11**.

H. **If** additional ALWCD is an approved Technical procedure, **then** go to Step **6.6.11**.

I. **If** additional ALWCD is an approved Exclusion, **then** go to Step **6.7.9**.

6.11.10 **If** WI revision is required, **then** perform the following:

A. Identify all active WPs (WPs with a Status of 40, 50, 55, and 60) utilizing the WI being revised.

B. Review the proposed WI changes with the FLM and RM to determine if the WPs identified in Step **6.11.10A** should be pulled back to Planning.

C. **If** the WI revision will cause any of the WPs identified in Step **6.11.10A** to be pulled back to Planning, **then** perform the following:

1. Notify FLMs associated with affected WPs Statused 60 to pause work **and** return affected WPs to the Work Planner.

2. Update CMMS WO Status of affected WPs to a Status 20.

3. Update CMMS WO **Work Assignment** of WPs to "Planning."

4. Make an entry in the CMMS WO **Note** field listing actions taken.

5. **If** WI is reusable, **then** contact WPCC **and** request WI be removed from Controlled Documents and placed on HOLD.

WPCC

6. In *S:\Controlled Documents\Work Control*, replace WI being revised with placeholder stating "WI is on HOLD for revision".

Work Planner

D. **If** the WI revision will **NOT** affect WPs identified in Step **6.11.10A**, **then** use current version of WP until WI revision has been completed and made effective.

E. Create revision folder for the WI being revised, in WI folder on (S) drive at *S:\Workgroup Folders\Work Controls\Work Instructions* according to Appendix H.

F. Proceed to Step **6.4.3** to develop revision to the WI.

7.0 RECORDS

7.1 Records Generated

The following records may be generated by this procedure:

- CP3-SM-1101-F01, *Work Screening Worksheet*
- CP3-SM-1101-F07, *Planning Team Meeting Agenda and Roster*
- CP3-SM-1101-F13, *Work Package Status Log*
- CP3-SM-1101-F18, *Type 1 - Work Instruction*
- CP3-SM-1101-F19, *Work Package Cover Sheet*
- CP3-SM-1101-F20, *Work Package Pre-Work Validation*
- CP3-SM-1101-F21, *Work Order Materials/Parts Worksheet*

Forms are to be completed according to CP3-OP-0024, *Forms Control*.

7.2 Records Disposition

The records are to be maintained according to CP3-RD-0010, *Records Management Process*.

Appendix A – Acronyms/Definitions

ACRONYMS

ALARA – As Low As Reasonably Achievable

ALW – Activity Level Work

ALWCD – Activity Level Work Control Document

BOM – Bill of Material

CA – Corrective Action

CMMS – Computerized Maintenance Management System

CSP – Confined Space Permit

D&R – Deactivation and Remediation

DC – Derivative Classifier

DIVS – Design Installation and Verification Specifications

DOE – U.S. Department of Energy

DSA – Documented Safety Analysis

EEWP – Energized Electrical Work Permit

EFC – Environmental Field Compliance

EPITSK – Episode Task

FCT – Facility Change Traveler

FLM – Front Line Manager

FM – Facility Manager

GFSI – Government Furnished Services or Items

HC – Hazard Category

HHRB – High Hazard Review Board

HIC – Hazard Identification Checklist

IH – Industrial Hygiene

IHWP – Industrial Hygiene Work Permit

Appendix A – Acronyms/Definitions (Continued)

ISMS – Integrated Safety Management System

JHA – Job Hazard Analysis

LCO – Limiting Conditions for Operation

MC&A – Material Control and Accountability

NCS – Nuclear Criticality Safety

NFM – Nuclear Facility Manager

NNSS – Nevada National Security Site

NS – Nuclear Safety

PGDP – Paducah Gaseous Diffusion Plant

PM – Preventive Maintenance

POD – Plan of the Day

POW – Plan of the Week

PPE – Personal Protective Equipment

QA – Quality Assurance

QL – Quality Level

QLD – Quality Level Determination

RADCON – Radiological Control

RCRA – Resource Conservation and Recovery Act

RM – Responsible Manager

RWP – Radiological Work Permit

S&H – Safety and Health

SOTW – Skill of the Worker

SME – Subject Matter Expert

SS – Safety Significant

SSC – Structures, Systems, and Components

TEP – Trenching, Excavation, and Penetration

Appendix A – Acronyms/Definitions (Continued)

TSCA – Toxic Substances Control Act

TSR – Technical Safety Requirement

USQ – Unreviewed Safety Question

WCO – Waste Certification Official

WI – Work Instruction

WO – Work Order

WP – Work Package

WR – Work Request

WPC – Work Planning and Control

WPCC – Work Package Control Center

DEFINITIONS

Activity Level Work (ALW) – Any task, process, or work step performed where hazards are present; are introduced by the work; or are introduced by the work environment (regardless of who is performing the work or the organization with which they are affiliated). The hazards involved could be potentially adverse to worker health and safety, the public, the environment, or safeguards or security.

Activity Level Work Control Document (ALWCD) – A document that records, at a minimum, the scope of an activity, the Responsible Manager (RM), location, a list of activities or tasks, and the hazards and controls associated with the activity. This is the work document that is used in the field to execute activity-level work. This may include Technical procedures, work packages, test plans, and work instructions for use by contractor personnel to perform activities.

At Risk – Work scope to build, repair, replace, or fabricate systems, structures, or components and procurement of parts/materials without the required Engineering documentation. At risk activities will be approved by senior management before proceeding with planning/procurement activities.

Complexity – A qualitative evaluation of a task or process based on capabilities, competencies and experience of the performers, defined performance expectations, potential consequence of deviation in method or sequence of performance, and proximity to other operations.

Critical Steps – A work step or series of work steps that, if performed improperly, will cause irreversible harm to plant equipment or personnel, or will significantly affect facility operations.

Design Change – As defined in ASME NQA-1, 2008 (with Addenda through 2009), a design change is any revision or alteration of the *technical requirements* defined by approved and issued design output documents, and approved and issued changes thereto.

Appendix A – Acronyms/Definitions (Continued)

Emergent Work – Any work that requires immediate action to prevent serious personnel injury, environmental harm, security breaches, loss of mission critical systems or data, or property loss. Emergent 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 work environment is stabilized. This work will be typically classified as the highest priority and it is intended that Emergent Work is rarely used. Emergent Work is approved by Senior Management and this authority should not be delegated. This designation does **NOT** allow for circumvention of the requirements of the Work Control Program and this procedure.

Environmental Field Compliance (EFC) – The PGDP D&R Contractor functional area that is responsible for defining applicable environmental regulations and standards, and to define requirements for implementation of the Environmental Management System and controls during the work planning process. This includes the establishment of applicable environmental compliance performance measures.

Episode Work Package – For tasks that may be performed repetitively Work Instructions or procedures, routinely required for work activities may be incorporated into an Episode Work Package. These Work Packages are developed by the Work Planner and used to eliminate the need for redundant planning of repetitive tasks or work scopes. An Episode Task Work Order is utilized to document work start authorization and close out for each specific episode. Episode Work Packages are reviewed at least each calendar year for continued use. Episode Work Packages are developed for work orders coded in the CMMS as EPISOD under the Urgency Field.

Excluded Work – Work that is excluded from the requirements of the Work Planning and Control Work Package Planning Process (with the exception of CMMS WO Cover sheet – For tracking and scheduling purposes only). Specific exclusions are defined in CP5-SM-1001, *Excluded Work Activities.*

Execution Team or Work Execution Team – All personnel identified by the Supervisor who will perform the work activities specified in Work Packages. For pre-work walkdowns of Work Packages, the "Execution Team" performing walkdown activities must include representative of the craft work force classifications performing the work, functional project support personnel who will support the work (RADCON, Health & Safety, etc.) and work activity Supervisor.

Facility Manager (FM) – An individual possessing the required education, training, experience, and qualifications who has been authorized by PGDP D&R Contractor Management to oversee all activities performed in a facility(s) and who verifies consistent performance in a safe manner and within the safety basis of the facility. Facility Managers are directly accountable for the safe execution of activities within their facilities.

Front Line Manager (FLM) or Supervisor – An employee assigned the responsibility of ensuring the workers have a clear understanding of a defined work scope and work requirements in accordance with the approved work control documents. This individual is the primary medium of communication between the Planning Team and the Execution Team.

Graded Approach – The process of ensuring that the level of analysis, documentation, and actions used to comply with a requirement are commensurate with: (1) the relative importance to safety, safeguards, and security; (2) the magnitude of any hazard involved; (3) the lifecycle stage of a facility; (4) the programmatic mission of a facility; (5) the particular characteristics of a facility; (6) the relative importance of radiological and non-radiological hazards; and (7) any other relevant factor.

Appendix A – Acronyms/Definitions (Continued)

Hazard – Any source of danger (such as material, energy source, or operation) with the potential to cause illness, injury, or death to a person (workers or the public), or damage to a facility, or to the environment (without regard to the likelihood or credibility of accident scenarios or consequence mitigation). Evaluation and analysis of hazard for work can be divided into two primary components, general JHA, which defines hazards and controls based on the work location and environment, and activity-specific JHA, which defines hazards and controls based on the work steps that must be performed to complete the task.

Hazard Controls – Specifically tailored or identified controls that are established, or verified to be in place, to eliminate, or mitigate a hazard associated with ALW. Hazard controls may be passive or active and may include engineering or administrative controls, or, if necessary, the use of personal protective equipment

Hazardous Waste Operations and Emergency Response – Work activities meeting the definition of "Hazardous Waste Operations" in accordance with 29 CFR 1910.120 or 29 CFR 1926.65.

High Hazard Review Board (HHRB) – A board that provides independent management review of hazardous work through the evaluation of relevant Work Packages and interviews with personnel overseeing the work.

High Risk Work – ALW that is graded HIGH risk, using the grading system defined in Appendix C.

Hold Points – Work instruction steps in the Work Package at which the worker must wait for another person to do something or for some other event to occur to ensure protection of workers, facilities or the environment. Examples include radiological protection surveys, quality assurance inspections and industrial hygiene samples.

Job Hazard Analysis (JHA) – A documented analysis for specific activity-level work; identifies health and safety hazards specific to a process, work step or work environment and/or location and defines controls to eliminate or mitigate hazards to protect personnel and the environment.

JHA Preparer – An individual assigned by supervision who is trained in the use of the Job Hazard Analysis web-based software, and who creates (prepares) a JHA. The software term applied to this individual is "Author."

Low Risk Work – ALW that is graded LOW risk using the grading system defined by Appendix C.

Minor Work/Maintenance Activities – Routine work activities that are simple, low complexity, low risk (as defined in CP3-SM-1101 Appendix C), low consequence, do not affect nuclear safety, do not increase the probability of upset conditions, are performed frequently, and are performed without instruction or direction. These work activities do not involve or affect QL-2 and QL-3 structures, systems, or components.

Moderate Risk Work – ALW that is graded MODERATE risk using the grading system defined in Appendix C.

Modification – A modification is a PGDP D&R Contractor term linked to the ASME NQA-1, 2008/2009a, definition of design change. A modification is any change in function, configuration, or operating limits of SSCs, including equipment, such as cranes. These changes can be revisions, improvements, corrections, upgrades, adjustments, or alterations of hardware, geometry, manufacture, configuration, installation or controls for a plant SSC as described in the design, safety, operational, or maintenance documents. All modifications are planned, controlled, and accomplished according to the requirements and limitations of applicable procedures, codes, standards, specifications, regulations, and safety basis. Changes to SSCs may require nuclear or non-nuclear controls.

Appendix A – Acronyms/Definitions (Continued)

Nuclear Safety (NS) – The PGDP D&R Contractor functional group that is responsible for establishing and maintaining Safety Basis requirements for each facility and for verifying that planned work or work documents will not violate Safety Basis requirements.

Operable/Operability – A system, subsystem, train, component, or device shall be operable when it is capable of performing its specified function(s); and when all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication, or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its specified function(s) also are capable of performing their related support function(s). The operability of a system, subsystem, component, or device shall be verified by performing surveillance requirements at the identified frequency.

Planning Team – The group of individuals, as determined by the level of risk, who incorporate all PGDP D&R Contractor contract, programmatic and procedural requirements, quality standards, and operational efficiencies derived from the training and experience of the workforce, along with the principles and functions of ISMS, which are then incorporated into the work controls required to complete that work scope.

Planning Team Meetings – Meetings held at the job site or tabletop (as approved by the Work Planning and Control Manger) including, at a minimum, the Work Planner, craft personnel, IH, IS, EFC, and the FLM. These meetings are led by the Work Planner to walk down work areas, develop work scope, identify methods of performance, identify hazards, and all other information necessary to effectively develop the work scope and work instruction. In planning a work scope, multiple meetings may be held that cover different aspects of developing the work instructions.

Plan of the Day (POD) – The authorized work activities for a specific work day or shift including any emergent work activities. Plan of the day is managed and determined by the Work Scheduler.

Plan of the Week (POW) – Schedule of planned work activities to be performed in the execution work week.

Preventive Maintenance (PM) – Activities performed to maintain equipment within designed operating conditions or extends its life. Preventive maintenance includes Periodic and Predictive maintenance. Preventive Maintenance may be time-based or in response to Condition Monitoring and/or Predictive Maintenance.

Priority – The level of urgency assigned to screening, scheduling, planning, and completing work scopes or tasks based on the critical nature of the affected structures, systems, or components and the potential for impact to safe operations.

Procedure – A performance document that provides a defined and user-friendly process, including all necessary work steps, with sufficient detail to allow the user to safely and compliantly achieve an anticipated end-state or other pre-established goal or result.

Quality Assurance – The PGDP D&R Contractor functional area that is responsible for incorporating the Quality Assurance requirements specified in applicable standards and procedures into the work planning process, including the establishment of applicable quality objectives and performance measures.

Quality Level (QL) – The level of rigor and controls to be imposed on items and activities based on the proposed use of an item, or the consequences of failure of an item or activity to achieving an outcome. Quality Levels (QL-1 through QL-4) are defined in CP3-EN-0400, *Quality Level Determination*.

Appendix A – Acronyms/Definitions (Continued)

Responsible Manager (RM) – A manager who is assigned and granted the responsibilities and accountability for the appropriate control of fieldwork based on individual experience and demonstrated performance commensurate with the role and responsibilities. This function is responsible for the adequate planning and readiness of activities performed by their personnel. They are accountable to the Work Planning and Control Manager for understanding and proper execution of the WPC process.

Reviewers – The group of individuals, as determined by the level of risk, who ensure all PGDP D&R Contractor contract, programmatic and procedural requirements, quality standards, and operational efficiencies derived from the training and experience of the workforce, along with the principles and functions of Integrated Safety Management System (ISMS), are incorporated into the work control required to complete that work scope.

Revision – A change to a Work Package (Type 1) that requires full review by the Planning Team.

Safety Significant Structures, Systems, and Components – SSCs which are not designated as safety class SSCs but whose preventive or mitigating function is a major contributor to defense in depth and/or worker safety as determined from safety analyses.

Safety Work Order – Work orders that address immediate or imminent threat to health, life, fire safety, or security of site personnel or the public, and cannot be readily mitigated in real time. Mitigation methods include, but are not limited to, removing equipment from service, posting barricades and signs, and/or controlling access to applicable areas.

Screening – The process of reviewing a work scope to determine the planning requirements including planning participation requirements, level of rigor, and corrective maintenance urgency.

Skill of the Worker (SOTW) – Skills identified, assigned, and administered according to CP3-TR-0104, *Training Positions, Qualification, and Certifications*, based upon accepted industry practices, training and qualification, familiarity with tools and equipment, processes, and methods to perform a given task without the need for enhanced planning, detailed direction, or direct supervision. These skills are assigned to the worker through the Training Position Description (TPD) process defined in CP3-TR-0104. The tasks performed by SOTW are routine, low risk, and low complexity activities identified in CP5-SM-1001, *Excluded Work Activities*. Worker qualifications needed for task performance are verified to be assigned and up-to-date prior to task performance.

Structures, Systems, and Components (SSC) – Physical items designed, built, or installed to support the operation of the facility. A structure is an element or a collection of elements to provide support or enclosure such as a building, freestanding tank, basin, dike, or stack. A system is a collection of components assembled to perform a function such as piping; cable trays; conduits; or heating, ventilation, and air conditioning. A component is an item of equipment such as a pump, valve, or relay or an element of a larger array such as a length of pipe, elbow, or reducer.

Subcontracted Work – ALW that is managed and/or performed by another company for PGDP D&R Contractor under a defined subcontract.

Subject Matter Expert – A person assigned to a system, program, project, discipline, equipment, or other topic, who has comprehensive knowledge and relevant expertise based on qualification, training, experience, or education. His or her responsibilities include serving as the authority for development and/or interpretation of performance documents within his or her subject matter area.

Appendix A – Acronyms/Definitions (Continued)

Task or Process – A sequence of work steps that have identifiable starting conditions and, if correctly performed, will achieve a specified endpoint result. Processes are the "building blocks" for completing activities.

Type 1 - Work Instruction (WI) – WIs are planned using detailed work instructions and accompanying hazard analysis and mitigating controls for work to be performed safely and correctly.

- Planning teams include SMEs and representative membership from the workforce expected to supervise and perform the work.
- Reviewers are determined based on the work scope per the reviewer determination matrix.
- WIs intended to be for high performance risk SHALL require review to determine if approval from the High Hazard Review Board (HHRB) is required according to CP3-OP-1103, *High Hazard Review Process*.

Type 3 - Performance Document Work Package – Work packages for work activities graded as low to moderate risk and performed entirely by approved Technical procedures. The assigned Work Planner or Work Package Control Center (WPCC) will assemble all required documents with input and/or feedback from the appropriate craft.

Type 4 - Excluded Work – Activities graded as low complexity and low hazard and are within the definition of Skill of the Worker (SOTW) are excluded from the WPC processes. These are low-risk activities involving minimal potential for exposure to hazardous contaminants and health and safety hazards. Exclusions are listed in CP5-SM-1001, *Excluded Work Activities*. Work Requests for Excluded work are entered for tracking and scheduling purposes only, Exclusions that do not require tracking and scheduling may be performed without work orders.

Urgent Repair – Changes to a QL-3 or QL-4 component or system made during a repair that require completion in a time sensitive manner (i.e., leaks, environmental impact, hazard impacting immediate safety concern, etc.). This designation only applies to Type 1 ALWCDs approved by Engineering prior to start work and does **NOT** allow for circumvention of the requirements of the Work Control Program, including CP3-SM-1101 and CP3-SM-1102.

Validation – The act of reviewing a Work Instruction to determine usability and correctness. This review evaluates whether the Work Instruction provides sufficient and understandable direction to the worker and is compatible with the equipment or system being maintained. This generally entails a walkdown or table top review.

Waste Operations – The PGDP D&R Contractor functional area responsible for incorporating applicable waste operations and hazardous materials transportation requirements into work control documents. Specific Waste Operations functions may include establishing waste identification, characterization, packaging, manifesting, transportation, and disposition requirements based on the wastes being generated by the work scope.

Work Order (WO) – A unique number assigned to all work tasks entered into the CMMS. This number identifies the work task and is used to track tasks from initiation to closeout within the CMMS.

Work Package (WP) – The assembled work or task instructions and ancillary documentation to perform ALW. This includes Type 1, 3, or 4 Work Packages.

Work Request (WR) – The initiating process in CMMS for identifying a work activity which needs to be screened, planned, prioritized and scheduled to work.

Appendix A – Acronyms/Definitions (Continued)

Work Scope – A defined project or group of work activities that must be performed to meet a defined end state or the sum total of all information needed for a clear understanding to achieve a defined end state.

Work Status Code – A code identified in the CMMS that equates to the current status of a specific WO in the CMMS.

Appendix B – Reviewer Determination Matrix

Chg A

Use the matrix below to determine the minimum requirements for work planning team review in the development of Work Instructions. More than one criterion may apply to a work task.

Review Criteria	Reviewers																			
	Craft	Responsible Manager	Front Line Mgr./Supervisor	Industrial Hygiene	Industrial Safety	Environmental Field Compliance	Protective Force	Responsible Engineer (Project)	System Engineer	Facility Manager or Designee	PSS/NFM*	Radiological Controls	Waste Operations	Waste Certification Official	Nuclear Criticality Safety	Nuclear Safety	MC&A	Quality	Characterization	Project Manager	Derivative Classifier
All Type 1: Work Instructions involving the isolation, breaching, or downsizing of Process Gas systems.	X	X	X	X	X	X	X	X				X			X	X	X	X			
Work Tasks on systems or processes that are QL-1, QL-2 or QL-3	X	X	X	X	X	X	X		X			X			X	X		X			
Work Tasks in Nuclear Facilities	X	X	X	X	X	X	X					X			X	X	X		X		
Facility Change Travelers and/or Modifications	X	X	X	X	X	X	X	X		X		X			X	X			X		
Work on or work impacting a Safety Significant SSC	X	X	X	X	X	X	X		X	X	X	X			X	X		X	X		
Work Tasks that involve potential exposure to radiological contaminants	X	X	X	X	X	X	X			X		X									
Work Tasks that include the disposition of Hazardous (RCRA or TSCA), Radioactive, or Mixed (Hazardous/Radioactive) Waste	X	X	X	X	X	X	X					X	X				X	X	X		
Work Tasks that include packaging and/or transportation of Hazardous Materials	X	X	X	X	X	X	X					X	X				X	X	X		
Work Tasks that include packaging, transport, or disposition of waste under NNSS certification requirements.	X	X	X	X	X	X	X					X	X	X			X		X		
Work Tasks that require interface with, or approval of, regulatory agencies.	X	X	X	X	X	X	X					X							X		
Work Tasks that includes handling or management of fissile material.	X	X	X	X	X	X	X			X		X			X	X	X		X		
Work Tasks that require NCS controls be established during work execution.	X	X	X	X	X	X	X			X		X			X	X					
Work Tasks that Involve Accountable Nuclear Material	X	X	X	X	X	X	X			X		X			X	X	X		X		
Work Tasks in Areas of Security Interest or that could result in compromise of classified information if not properly controlled.	X	X	X	X	X	X	X			X		X									X
Work on Fire Protection Systems and any system containing flammable fluids.	X	X	X	X	X	X	X		X			X				X					
All work activities in a SWMU	X	X	X	X	X	X	X					X									
PRO & DEAC Type Work Orders	X	X	X	X	X	X	X	X				X					X	X[1]		X	
Work on MC&A-related equipment or systems (e.g. MC&A Scales)	X	X	X	X	X	X	X					X					X				

"X" designates a participant or reviewer. * PSS/NFM may review work instructions that affect multiple facilities for the FM. X[1] Not required for QA Review on QL-4 work. May be optional.
See Appendix D for reviewer responsibilities.

Appendix C – Work Planning Rigor Based on Performance Risk and Complexity

WORK PACKAGE TYPE DETERMINATION				
RISK	High	(Type 1) As Directed By CP3-OP-1103	(Type 1) As Directed By CP3-OP-1103	(Type 1) As Directed By CP3-OP-1103
	Moderate	(Type 1) (Type 3)	(Type 1) (Type 3)	(Type 1) (Type 3)
	Low	(Type 1) (Type 3) (Type 4)	(Type 1) (Type 3)	(Type 1) (Type 3)
		Low	Moderate	High
		COMPLEXITY		

COMPLEXITY

For evaluating Complexity as a component of Performance Risk, the following grading system is used:

If the answer to **ANY** of the following questions is "**YES"** the activity is **High Complexity**.

A. Are some of the work activities beyond the established competencies, functional training, or experience of the workforce?

B. Will the work scope require involving multiple integrated work activities to be performed at the same time in different facilities or work locations?

C. Is the activity a facility or system modification that requires a design change as defined in Appendix A?

D. Will the job programmatically require 90% or more supervisory oversight?

E. Will the performance of the work steps require technical support at the job site during performance? This does not include standard support staff such as HSS&Q, Operations, QC, etc.?

If the answer to **ALL** of the above questions is "**NO" and** the answer to **ANY** of the following questions is "**YES"** the activity is **Moderate Complexity**.

F. Is the activity a facility or system modification that requires an engineering modification?

G. Does the work scope require sequencing multiple work crews and/or activities?

Appendix C – Work Planning Rigor Based on Performance Risk and Complexity (Continued)

H. Will the job programmatically require at least 50% supervisory oversight?

I. Do the work activities implement the requirements of a Nuclear Criticality Safety Evaluation in accordance with CP3-NS-1031, *Nuclear Criticality Safety Program*?

J. Do the work activities potentially affect the performance, configuration, or operability of a Safety Significant SSC, as defined by the Documented Safety Analysis (DSA)?

If the answer to **ALL** of the above questions is "**NO"** the activity is **Low Complexity**.

RISK

For evaluating risk to workers and/or the environment as a component of performance risk, the following grading system is used.

If the answer to **ANY** of the following questions is "**YES**" the activity is **High Risk**.

A. Will the work be performed in uncharacterized work locations or on uncharacterized systems where exposure potential to radiological or chemical hazards is not well understood or cannot be bounded based on available data or process knowledge?

B. For characterized work locations or systems, are any of the following applicable?

1) The work environment is Immediately Dangerous to Life or Health.

2) In the event of the failure of a single mitigating hazard control, the worker will be exposed to chemical or radiological hazards or contaminants above allowable exposure limits before the worker can exit the work location.

3) In the event of the failure of any single hazard control, the worker will sustain serious or fatal injury from physical hazards before the worker has the opportunity to take action or respond.

4) Potential for environmental impact is high based on the contaminants present and the work contemplated.

C. Will a Qualified Worker, such as Electrical Maintenance, be working on or near (within the Restricted Approach Boundary) energized systems above 600 volts?

D. Will an Unqualified Worker, such as Maintenance Mechanics or Operators, be working on or near (within the Limited Approach Boundary) energized systems above 600 volts?

E. Will the work require an Energized Electrical Work Permit (EEWP) as directed by CP3-SM-0052, *Energized Electrical Work Permit*, (such as battery room maintenance)?

F. Will the work involve any critical steps?

G. Is the work associated with demolition of tanks that contain or contained volatile materials?

Appendix C – Work Planning Rigor Based on Performance Risk and Complexity (Continued)

If the answer to **ALL** of the above questions is "**NO**" **and** the answer to **ANY** of the following questions is "**YES**" the activity is **Moderate Risk**.

NOTE:

- Moderate Risk tasks generally include work in areas requiring job-specific Radiological Work Permits (RWPs) or other administrative controls to limit access due to the presence of chemicals or radiological contamination.
- Any work activities requiring respiratory protection are at least Moderate Risk.

H. Will the work scope require greater than Level D Personal Protective Equipment (PPE)?

Level D - A work uniform affording minimal protection; used for nuisance contamination only. The following constitute Level D equipment, and may be used as appropriate:

- Coveralls
- Gloves*
- Boots/Shoes, chemical-resistant steel toe and shank
- Boots, outer, chemical-resistant (disposable)*
- Safety glasses or chemical splash goggles*
- Hard hat
- Escape mask*
- Face shield*

*Optional, as applicable

I. Is the work associated with demolition of exterior tanks **NOT** confined within the walls of a permanent building and/or structure?

J. Is the work associated with demolition of the exterior walls of a building and/or structure?

K. Is the task relying on only one level of protection from physical hazard that could cause serious or fatal injury to the worker?

L. Will a Qualified Worker, such as Electrical Maintenance, be working on or near (within the Restricted Approach Boundary) energized systems from 51 volts to 600 volts, beyond testing, troubleshooting, voltage measuring, etc.?

M. Will an Unqualified Worker, such as Maintenance Mechanics or Operators, be working on or near (within the Limited Approach Boundary) energized systems from 51 volts to 600 volts?

N. Will a Qualified Worker, such as Electrical Maintenance, be working on or near (within the Limited Approach Boundary) energized systems above 600 volts?

O. Does the work involve radiological or chemical hazards or contaminants that could potentially expose the worker to levels above the allowable exposure limits in the event of the failure of a single mitigating hazard control?

P. Work that will be performed At Risk, as defined in Appendix A, *Acronyms/Definitions*.

If the answer to **ALL** of the above questions is "**NO**" the activity is **Low Risk**.

Appendix D – Reviewer Requirements

NOTE:

All Reviewers should review Work Instruction in the context that it will be performed as written. The objective of the Work Package is to provide instructions so that the worker should have no fear of violation when executed as written.

Craft Worker:

- Scope of work is clear.
- Hazards understood, and JHA controls are adequate for work to be performed safely.
- Necessary parts/materials are identified.
- Work can be performed as written.

Characterization:

- Ensure adequate process knowledge exists to identify the characteristics associated with the item or system being dealt with properly.
- Determine when samples will be collected and/or radiological surveys will be performed to identify the characteristics associated with the item or system being dealt with properly.

Contract Technical Representative:

- For all subcontract activities, review the J-5 document and the SOW to ensure all quality requirements are included in the WI.
- Ensure all requirements of CP3-SP-0018, *Subcontractor Oversight*, are met during the work planning process.

Environmental Field Compliance:

- Review Work Instructions to ensure that the work is compliant with all regulatory requirements.
- Appropriate regulatory interfaces and reporting requirements are identified.
- Prerequisites needed to perform the work are identified in the Work Package.

Facility Manager:

- Review Work Instructions to ensure that the work can be performed within the facility safety basis.
- Actions required to maintain the safety envelope are understood.
- Necessary Limiting Conditions for Operation (LCO) are identified.
- Prerequisites needed to perform the work are identified in the Work Package.
- Review Work Instructions to ensure that any startup or restart of a HC-2 or HC-3 nuclear facility, operation, or activity has achieved readiness, in accordance with CP2-OP-1119, *Readiness Review Program at the Paducah Gaseous Diffusion Plant, Paducah Kentucky*.

Appendix D – Reviewer Requirements (Continued)

Front Line Manager and/or Supervisor:

- Scope of work is clear and adequately bounded.
- Hazards understood, and JHA controls are adequate for work to be performed safely.
- Required permits are identified.
- Necessary parts/materials are identified.
- Work can be performed as written.
- Hold Points, Critical Steps, Cautions, and Warnings are included when required.
- Use and Source References are listed and used as required.
- Changes and/or modifications are planned as required.
- WO information is correct.

Industrial Safety and/or Industrial Hygiene:

- Scope of work is clear.
- Hazards understood, and controls are adequate for work to be performed safely.
- Required permits are identified and available or planned for or referenced.
- Determine when Industrial Hygiene monitoring is required.
- Verify Hold Points for critical steps are included.

MC&A:

- Review Work Instructions to ensure that accountable nuclear material is properly handled.
- Accountable nuclear material is properly transferred.
- Accountable nuclear material is properly disposed of.

Nuclear Criticality Safety:

- Review Work Instructions to ensure the proper handling of fissile material.
- NCS controls and commitments are properly identified.
- Review work scopes to be performed in a Fissile Control Area (FCA).
- Review Work Instructions to ensure that the work can be performed within the intent (such as configuration, process, etc.) of the NCS evaluation.

Nuclear Facility Manager:

- Review Work Instructions to ensure that the work that affects the operability of a Safety Significant SSC to ensure that appropriate compensatory measures are or will be in place at the time of execution.

Nuclear Safety:

- Review Work Instructions to ensure performance of surveillance requirements meet the intent of the facility TSR.
- Ensure work that may result in a configuration change does **NOT** conflict with facility DSA.
- Review to ensure safety significant, LCO, and/or facility impacts are understood.
- Review activities for impact on the safety basis, for USQ screening and/or determination.

Appendix D – Reviewer Requirements (Continued)

Protective Force:

- Review job scope to ensure issues associated with classified information or classified material is addressed and controlled.
- Review job scope to ensure areas with security interests are addressed.

Quality:

- Review Work Instructions to ensure quality hold points are properly identified.
- Review Work Instructions to ensure compliance with CP2-QA-1000, Quality Assurance Program Description for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky.
- For QL-2/QL-3 subcontract activities, review the J-5 document and the SOW to ensure quality requirements are included in the WI.

Radiological Control:

- Review Work Instructions to ensure that the work is performed in a manner consistent with As Low As Reasonably Achievable (ALARA).
- Required permits are identified and available or planned for and referenced.
- Determine when RADCON monitoring and/or surveying, is required.

Responsible Manager:

- Scope of work is clear and adequately bounded.
- Hazards understood, and JHA controls are adequate for work to be performed safely.
- Required permits are identified.
- Necessary parts/materials are identified.
- Work can be performed as written.
- Hold Points, Critical Steps, Cautions, and Warnings are included when required.
- Ensures Timely Orders, Work Pauses, and Functional Directives guidelines have been
- incorporated into WI.
- Use and Source References are listed and used as required.
- Changes and/or modifications are planned as required.
- Ensures work instruction is developed according to all procedural requirements.

Appendix D – Reviewer Requirements (Continued)

Responsible Engineer (Project)/System Engineer:

- The work scope is properly identified and developed such that work can be executed in a safe and compliant manner.
- Review to ensure configuration management is applied on a graded approach.
- Ensure Quality Assurance (QA) Hold Points are identified and incorporated into appropriate steps.
- Ensure adequacy of PMT steps and acceptance criteria, as applicable.
- Relevant drawings are included.
- Changes and/or modifications are properly planned.
- Ensure parts identified are correct.
- For Modification Work – Responsible Engineer (RE) to sign WP concurrence.
- For Modification to Safety Significant system – RE and Cognizant System Engineer (CSE)/System Engineer (SE) to sign for WP concurrence.
- For work on any system with assigned SE – SE to review and sign for WP concurrence prior to work; closeout signature not required but may be included by special request.
- For work on any Safety Significant system – CSE/SE to review and sign for WP concurrence, and Work Acceptance closeout for Corrective Maintenance.
- Ensure technical content of instructions are consistent with appropriate contract and industry engineering standards.

Waste Certification Official:

- Review Work Instructions to ensure that the work is compliant with Nevada National Security Site (NNSS) certification requirements.

Waste Operations:

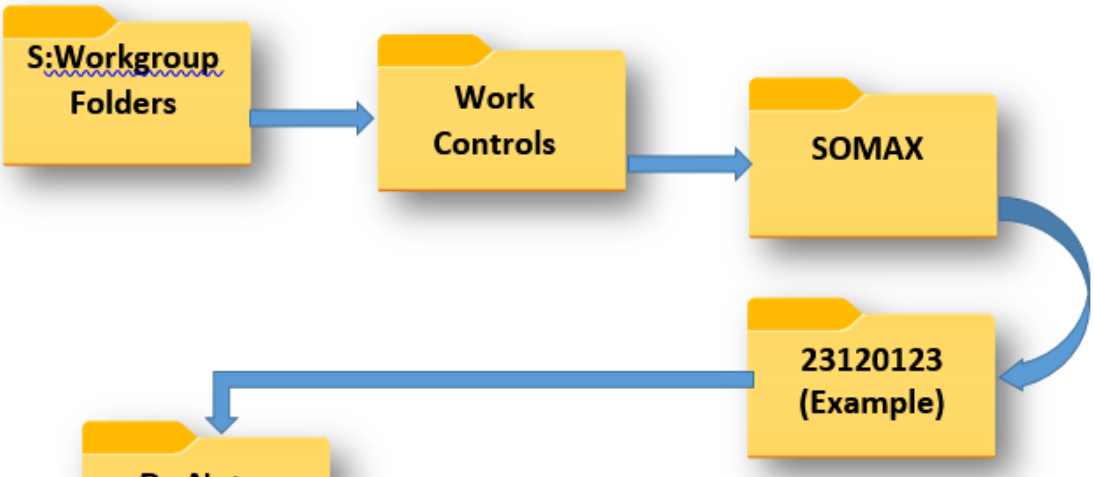
- Review for appropriate Environmental Field Compliance regarding waste and transportation.
- Ensure work that involves hazardous and/or radioactive and/or mixed waste includes appropriate steps to assure compliance.
- Ensure level of detail in instructions involving waste generation, handling, packaging, and/or movement is adequate.

Appendix E – Type 1 - Work Instruction Development Checklist

Work Package Number:		Revision Number:	
Work Planner:		Responsible Manager:	
Reviewers identified? ☐ YES			
☐ Industrial Safety	☐ Radiological Controls	☐ Nuclear Safety	☐ Quality
☐ Resp. Engineer (Project)	☐ Waste Operations	☐ Responsible Manager	☐ Characterization
☐ System Engineer	☐ Waste Certification Official	☐ Project Manager	☐ Front Line Manager/Supervisor
☐ Facility Manager	☐ Environmental Field Comp.	☐ Protective Force	☐ Craft
☐ PSS/NFM	☐ Nuclear Criticality Safety	☐ MC&A	☐ Industrial Hygiene
Planning Team identified? ☐ YES			
☐ Industrial Safety	☐ Radiological Controls	☐ Nuclear Safety	☐ Quality
☐ Resp. Engineer (Project)	☐ Waste Operations	☐ Responsible Manager	☐ Characterization
☐ System Engineer	☐ Waste Certification Official	☐ Project Manager	☐ Front Line Manager/Supervisor
☐ Facility Manager	☐ Environmental Field Comp.	☐ Protective Force	☐ Craft
☐ PSS/NFM	☐ Nuclear Criticality Safety	☐ MC&A	☐ Industrial Hygiene
Representatives of the DOE Paducah Site Office are invited to attend any planning meetings. (Explanation if NO:_____)			☐ Yes ☐ No (If No, Explain)
HIC completed?			☐ Yes
JHA completed?			☐ Yes ☐ No (If No, Explain)
Lessons Learned identified and incorporated?			☐ Yes
Hazard Controls incorporated?			☐ Yes
Draft complete?			☐ Yes
Comments resolved/addressed? ☐ Yes			
☐ Industrial Safety	☐ Nuclear Criticality Safety	☐ Industrial Hygiene	
☐ Responsible Engineer (Project)	☐ Nuclear Safety	☐ Project Manager	
☐ System Engineer	☐ Protective Force	☐ Other: _____	
☐ Facility Manager	☐ MC&A		
☐ PSS/NFM	☐ Quality		
☐ Radiological Controls	☐ Characterization		
☐ Waste Operations	☐ Front Line Manager/Supervisor		
☐ Waste Certification Official	☐ Craft		
☐ Environmental Field Compliance	☐ Responsible Manager		
Execution Team validation complete?			☐Yes ☐N/A
USQ complete?			☐Yes ☐N/A
HHRB Complete? (If required by CP5-SM-1103)			☐Yes ☐N/A
Work Package approved?			☐Yes
History package submitted to records?			☐Yes

Appendix F – Work Request Screening

Appendix G – Work Package Folder Hierarchy



Refer to CP5-SM-1007	TYPE		
	1	3	4
Work Order or CP3-SM-1101-F19	✓	✓	✓
CP3-SM-1101-F13	✓	✓	
CP3-SM-1101-F17	✓	✓	
CP3-SM-1101-F18	✓		
CP3-SM-1101-F21	✓	✓	✓
CP3-OP-0316-F02	✓	✓	✓
CP3-SM-0316-F03 *	✓		
Use References *	✓	✓	
Approved Perf. Docs *	✓	✓	
CP3-OP-1103-F01 *	✓		

As Applicable

Appendix H – Work Instruction Folder Hierarchy