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Integrated Work Management: PIC *COURSE 31884*



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Introduction

Course Overview

The person-in-charge (PIC) plays a key role in the integrated work management (IWM) process at Los Alamos National Laboratory (LANL, or the Laboratory) because the PIC is assigned responsibility and authority by the responsible line manager (RLM) for the overall validation, coordination, release, execution, and closeout of a work activity in accordance with IWM. This course, *Integrated Work Management: PIC* (Course 31884), describes the PIC's IWM roles and responsibilities. This course also discusses IWM requirements that the PIC must meet.

For a general overview of the IWM process, see self-study Course 31881, *Integrated Work Management: Overview*. For instruction on the preparer's role, see self-study Course 31883, *Integrated Work Management: Preparer*.

Course Objectives

At the end of this course, you will recognize the PIC's roles and responsibilities and the requirements associated with

- Completing the IWM process
- Performing a validation walk-down of the integrated work document (IWD)
- Conducting a pre-job briefing with the workers
- Formally releasing work
- Performing the work
- Performing periodic readiness checks
- Conducting a post-job review with the workers

Program Owner

This course was developed under the direction and technical oversight of the Associate Director for Nuclear and High-Hazard Operations (ADNHHO), who is the functional program owner for this training.

Target Audience

This course is recommended for all PICs of moderate- and high-hazard/complex IWDs. For additional training recommendations, see the Training Table in the IWM Toolbox at

http://int.lanl.gov/safety/integrated_work_management/toolbox/index.shtml.

IWM Requirements Document

The primary LANL document that establishes and describes IWM requirements is procedure (P)300, *Integrated Work Management*. SD312, *LANL Management Models*, defines the general management models that are in place to ensure effective and efficient mission execution, facility management, and implementation of requirements at LANL.

About This Self-Study Course

Integrated Work Management: PIC (Course 31884) consists of an introduction, an overview of the PIC's role, and a quiz. To receive credit in UTrain for completing this course, you must score 80% or better on the 10-question quiz. Directions for initiating the quiz are appended to the end of this training manual.

Note: *In this course, the term “IWD” refers to any integrated work document or equivalent work control document (WCD). The term “preparer” also refers to the term “planner” in some organizations.*

Acronyms

| | |
|--------|---|
| ADNHHO | Associate Director for Nuclear and High-Hazard Operations |
| ESH&Q | Environment, Safety, Health, and Quality |
| FOD | Facility Operations Director |
| IWD | Integrated Work Document |
| IWM | Integrated Work Management |
| LANL | Los Alamos National Laboratory |
| P | Procedure |
| PIC | Person in Charge |
| RLM | Responsible Line Manager |
| SIWD | Standing IWD |
| SME | Subject Matter Expert |
| SWCD | Standing WCD |
| WCD | Work Control Document |

Overview of the PIC's Role in IWM

IWM Process

The IWM process can be divided into nine steps as follows:

1. Define the work
2. Analyze the hazards
3. Develop controls
4. Prepare the IWD
5. Perform a validation walk-down of the IWD
6. Conduct a pre-job briefing and release of work
7. Perform the work activity in accordance with the IWD
8. Conduct periodic readiness checks
9. Conduct a post-job review

Steps 1–4 are preparer responsibilities. However, the PIC might also be the preparer. If you are both the PIC and the preparer, you must also take Course 31883, *Integrated Work Management: Preparer*, which covers steps 1–4 of the IWM process. The PIC plays a leading role in steps 5–9, which are the focus of this course.

PIC Responsibilities

Work Supervisor/Person in Charge (PIC)



The PIC is the person assigned responsibility and authority by the RLM for overall validation, coordination, release, execution, and closeout of a work activity in accordance with IWM.

The Work Supervisor/PIC:

- Is responsible for facilitating the release of work in accordance with facility-specific protocol (e.g., Plan of the Day or Plan of the Week)
- Is responsible for supervising the performance of work in accordance with approved documents and has the authority to control and manage activities and work based on organizational assignments. The PIC is expected to reiterate the first three steps of integrated safety management by verifying that the

scope of the task is well defined, the hazards have been identified and reviewed with the work team, and the controls in place adequately address the identified hazards

- Is accountable to a line manager
- Ensures subject matter expert (SME) engagement as required

Coordination of Activities with Multiple Workers/Locations

Coordination of activities involving multiple workers, workers from multiple line organizations, or workers at multiple locations poses additional challenges to the work control process. In some cases, the activity may be divided into multiple IWDs, thereby reducing the complexity of the individual IWDs. In such situations, it is important that interfaces between individual IWDs be well defined and do not introduce gaps in the work control process or create uncertainty in expected conditions or roles.

In cases where multiple line organizations must be involved within the scope of a single IWD (either because workers are from multiple organizations or because the activity will occur in shared space), P300 requires that responsibilities be defined clearly for each RLM before the work begins. For this purpose, one RLM and one PIC must have overall responsibility for ensuring that the work is defined adequately, the hazards are analyzed and mitigated, and the team and work site are ready (see P300, Section 3.1.1, *Define the Work*, for a more detailed discussion).

Validation Walk-Down



Before any work is released, a “validation walk-down” of the IWD (or equivalent WCD) must be performed to review tasks and steps for workability and to ensure that the hazards and controls are described effectively. The walk-down should be performed at the work site when possible and as close in time as feasible to the actual start of the work. This validation walk-down of the IWD must involve the PIC, workers (or qualified worker representatives of those who will participate in the work), and SMEs for high-hazard/complex work or when determined appropriate by the RLM and/or PIC.

Documentation of the validation walk-down is required on Form 2103, *IWD Part 3, Validation and Work Release*. For high-hazard/complex work, the validation walk-down must also involve appropriate SMEs, and subsequent walk-downs will be determined by the RLM or PIC based on the hazards and complexity of the activities. Any issues identified during the validation walk-down must be resolved before the work is started.

Conduct a Pre-Job Briefing and Release of Work

Pre-Job Brief

For moderate- and high-hazard/complex activities, the PIC must perform a pre-job brief with the workers immediately before beginning work or when resuming work and where conditions or process parameters have or may have changed. At a minimum, the questions listed in Part 3 of the IWD must be covered. The PIC is encouraged to perform a pre-job briefing for low-hazard work. The PIC must then formally release the work by performing the following steps:

- Verify that the RLM and facility operations director (FOD)/representative have signed the WCD
- Conduct a validation walk-down
- Confirm that the required controls are in place and functioning and that the initial conditions are as expected
- Confirm that each assigned worker has the required competencies and authorization to perform the activity
- Ensure coordination with any operations manager or other FOD-designated interface POC when required by the FOD
- Sign the WCD work release section

If permits are required for the work activity, applicable portions of each permit must be included in the pre-job brief.

Depending on the scope of the planned activity, nature of the hazards, associated work controls, and/or population of workers, the pre-job brief may be conducted for different phases of work to ensure that clear instruction is provided to affected workers. If this approach is taken as determined by the PIC, it is important to capture the date and signature of the workers for each pre-job brief in Part 3 of the IWD or in the equivalent WCD, which validates worker agreement and confirms worker authorization, qualifications, and fitness to perform the work.

Work Approval, Authorization, and Release

A work activity must be approved, authorized, and released before the activity begins. When work planning is completed, the RLM approves the work activity by reviewing and signing the IWD Part 1 (Form 2100) or equivalent WCD and documenting his or her confidence that the IWD/WCD was properly prepared, the hazard grading determination is appropriate, a PIC is assigned, and the work will be performed in accordance with the IWD/WCD. The FOD's signature indicates that the work is appropriate to be conducted in the facility, the work is within the DSA, and work performed in accordance with the IWD/WCD will meet applicable environmental, safety, and security requirements and DOE Orders and regulations.

Worker Authorization



The RLM is responsible for the work activity and must authorize workers, including workers from other organizations, to perform work activities.

The RLM is directly responsible for the work activity and is responsible for determining whether each worker (including those deployed by other RLMs) is competent and authorized, meets facility access requirements, and is competent to perform the work. This determination may be delegated by the RLM.

Each worker is responsible for keeping required training current and for ensuring authorization and fitness to perform the work. The PIC's signature on Part 3 of the IWD or on an equivalent WCD verifies that the assigned workers are authorized and fit to perform the work.

Perform Work Safely, Securely, and in an Environmentally Responsible Manner

After formal release, the work may be performed. Work must be executed in strict accordance with the tasks/steps, controls, and preventive measures established in the IWD/WCD. If changes occur, work must be paused or stopped, reevaluated, and not restarted until any issues are resolved in accordance with P101-18, *Procedure for Pause/Stop Work*.

Overview of the PIC's Role in IWM

The PIC is responsible for facilitating release of the work in accordance with facility-specific protocols (e.g., Plan of the Day or Plan of the Week). The PIC documents the release of work by signing Part 3 of the IWD (Form 2103) or equivalent WCD.

Work Execution

Workers must perform the work in strict accordance with the approved WCD. If unexpected conditions arise, work must be paused or stopped and then reevaluated. If the conditions indicate a hazard that is not effectively mitigated by the existing controls, the work must not be restarted until adequate controls have been established, as defined in P101-18, *Procedure for Pause/Stop Work*. For cross-organizational work, a single RLM must be designated for work execution.

The PIC must observe work execution to the extent required to ensure that it is performed in accordance with the WCD. The PIC must be readily available to workers to resolve issues and to answer questions. The PIC must remain at the immediate work site for all high-hazard/complex work activities. It is understood that some complex activities could involve more than one location. In those circumstances, the PIC will determine the optimum location and establish communications as necessary so that the PIC is readily available to all affected workers. For all other activities, the PIC should spend enough time at the job site to ensure that the work activity is carried out in accordance with the specifications of the WCD.

The RLM may designate alternate PICs to oversee a work activity if the primary PIC is unavailable or if work extends across work shifts. However, no more than one PIC or RLM may ever exist for an activity at any given time. The alternate PIC must sign the WCD the first time the alternate acts as PIC to acknowledge the responsibilities. When assuming these responsibilities, the alternate PIC must confer with the previous PIC to obtain all required information associated with the handoff and ensure that the workers have been notified of the change in PIC. If the original PIC returns to the worksite to resume PIC responsibilities, the PIC will conduct another turnover with the alternate PIC to ensure continuity of control. Shift turnover must follow conduct of operations requirements.

Perform Readiness Checks



The PIC and each involved worker are encouraged to perform frequent checks to confirm that conditions remain within planned parameters while work is in progress. Readiness checks at the start of the workday, the next shift, and the next task are considerations. These checks should determine whether the needed personnel, tools, and materials are available and whether any changes in the operating conditions or work environment have occurred. The option to pause work to resolve questions is always available.

The PIC may address minor changes with revisions to the IWD or equivalent WCD on the job site with worker input by lining out and/or adding text, initialing and dating the revision, and notifying all affected workers of the changes.

Minor revisions are not to be used where the change would increase the safety risk to personnel; create a difference to a source document requirement; require a variance to continue work; alter the purpose or the scope of the procedure; eliminate any required reviews or approvals; impact the safety basis of the facility or exceed established facility-operating limits; or alter the operating, technical, design, process, regulatory, or quality control requirements of a procedure.

Managing Work Control Documents

All LANL WCDs are expected to be reviewed every 3 years unless determined otherwise by the RLM or FOD. WCDs for work activities in multiple FOD jurisdictions require those respective FOD or FOD representative approvals, as applicable.

If specific work activity procedures, such as Detailed Operating Procedures, Standard Operating Procedures, and Work Instructions, that are considered equivalents or part of the IWD expire before the WCD expiration date, then the WCD is potentially no longer valid. If a revision of a referenced document does not impact an IWD/WCD, then the IWD/WCD remains valid.

Post-Job Review

The RLM, PIC, and workers are expected to monitor in-progress activities and to capture needed improvements as part of the Lessons Learned Program. Moderate- and high-hazard/complex activities require a post-job review soon after completion to close out the job. If the work activity is ongoing and is covered by a standing IWD (SIWD) or other standing WCDs (SWCDs) such that work will not be completed in the near future, then lessons learned should be collected throughout the duration of the work and improvements implemented as needed to ensure safety, security, and environmental compliance. The post-job review and collection of lessons learned should involve a discussion among workers and the PIC to capture the positive aspects of the activities, including human performance improvement concepts; to identify inefficiencies, problems during the activity, procedural deficiencies, coordination issues, unanticipated conditions, and near misses; and to develop recommendations for improvement. The post-job review should also verify that the activity is complete, be noted as required by the FOD, and ensure that follow-through actions (e.g., cleanup, recycle, waste disposal, equipment removal, and secure storage) are completed.

The PIC is expected to document the post-job review and ensure that lessons learned of value to future activities are communicated to affected workers and the RLM for feedback into the Lessons Learned and Operating Experience Archive in accordance with PD323, *LANL Operating Experience Program*. For ongoing work activities, feedback and lessons learned should be obtained during the normal course of the work.

Periodic Reviews

IWDs and other equivalent WCDs should be reviewed periodically to ensure that the WCDs, work activities, and work practices are aligned and to ensure the integrated implementation of the Integrated Safety Management System and IWM programs, as well as the adequacy of IWDs and hazard identification. Periodic reviews should be established by the RLM or FOD as deemed necessary. Review periods may vary in frequency from monthly to a maximum of 3 years.

Additional IWM Information



The IWM website and Toolbox are resources for links to relevant requirements, job aids, and examples supporting IWM implementation. In addition, the Toolbox provides

- IWD examples (see the “IWDs” tab under “Tools”)
- Links to guides for procedure writers (see the “Guides” tab under “Tools”)
- Templates for IWM forms (see the “Forms” tab under “Tools”)
- Contact information for key IWM program personnel, FODs, and Environment, Safety, Health, and Quality (ESH&Q) managers.

The Toolbox is located at

http://int.lanl.gov/safety/integrated_work_management/toolbox/index.shtml

Additional materials and suggestions that would benefit IWM implementation are always welcome. Contact the IWM SME through the IWM website at

http://int.lanl.gov/safety/integrated_work_management/index.shtml