

Appendix I - Program Assessment CRADs

**Criteria Review and Approach Document (CRAD)
for Performing Assessments of the
Activity Level Work Planning and Control Program**

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1. Process and Documentation

Objective WPC2-1

The Organization has developed and approved an effective work planning and control (WPC) process to enable safe and effective performance of work.

Criteria

1. The work planning and control manual/procedure(s) for (1) initiating, analyzing, planning, developing, and approving activity level work control documents and (2) authorizing, releasing, performing and completing level work activities are effectively developed with a clear logic driven basis. These manuals/procedures are approved and implemented.
2. The work planning and control process effectively ensures different work management programs/processes used by different organizations at the site are designed for coordination with other site organizations, as appropriate.
3. The work planning and control process establishes the level of review and approval for different types of work activities. The work type category and resultant documentation chosen is based upon the degree of risk determined by the frequency and complexity of the work activity and the hazards of the work and the environment.
4. The work planning and control process effectively provides for identification, prioritization, and approval of work.
5. The work planning and control process effectively provides for scheduling of work, planning of work, and approval of the resultant work document. Provisions require that workers are involved in job planning. Requirements for walkdowns and team approaches utilizing planners, work supervisors, workers, and appropriate subject matter experts to participate in the development of the work control document are defined. Provisions require screening of the requested work against the existing safety envelope and/or permits.
6. The work planning and control process effectively provides for assuring readiness for and performing work. Requirements for the use of effective pre-job briefings, post-job briefings, and the Stop Work process are defined. Provisions are included for turnover requirements when line management and/or first line supervisor responsibilities are transferred.
7. The work planning and control process effectively ensures first line supervisors and workers are required to follow work control document instructions as written. Provisions are established such that if they cannot perform the work as written, or if unexpected conditions arise, workers and supervisors take conservative actions to stop the work and follow the approved change control process to modify the work instructions. The bias is set on proving work activities are safe before proceeding, rather than proving them unsafe before halting.
8. The work planning and control process effectively provides for Work Control Document (WCD) review and closeout.

9. The work planning and control process includes provisions for active worker involvement in identification, planning and improvement of work and work practices and incorporation of lessons learned into active and in-development work control documents and/or the work planning and control procedure.

Approach

Record Review:

- Review and evaluate organizational work planning and control procedures for the implementation of all WPC1-1 Criteria.

Interviews:

Interview personnel responsible for implementing the work planning and control process to assess their understanding of the procedures and the underlying principles and requirements associated with this Objective. Personnel to interview include:

- Line management (e.g., responsible managers, project managers, facility managers, work control managers, etc.)
- Planners

Observations:

None

Objective WPC1-2

The Organization has developed and approved an effective work planning and control process that adequately establishes and integrates hazard identification and analysis and control selection with the work planning and control process.

Criteria

1. The work planning and control process describes the hazard identification and analysis process and its interface with the work planning and control process.
2. The work planning and control process effectively ensures appropriate personnel are involved in the hazard identification and analysis.
3. The work planning and control process provides for the identification of job/task specific hazards and their associated controls. (Generic hazards that are already addressed by other programs dilute the effectiveness of the hazard analysis).
4. The work planning and control process effectively ensures controls for each separate hazard are identified individually (i.e., the format of the hazard analysis provides the crosswalk of all controls to their respective hazards; a column of hazards and a column of controls is unsatisfactory).
5. The work planning and control process effectively ensures hazards and controls from other safety program analyses (Documented Safety Analysis, As Low As Reasonably Achievable Job Review, Radiation Work Permit, Industrial Hygiene Exposure Assessment, etc.) have been considered and integrated into the hazard analysis, if appropriate.
6. The work planning and control process effectively ensures “what if” scenarios are considered during the hazard identification and analysis process (e.g. walkdowns, roundtable, etc).
7. The work planning and control process effectively ensures the chosen method of implementing the hazard control from the hazard identification and analysis into the work documents is appropriate. The stated hazard control in the hazard analysis may have several ways to implement the control into the work document, but the intent of the control is maintained.
8. The work planning and control process effectively ensures that hazard control selection is based upon the following hierarchy: (1) hazard elimination or reduction, (2) engineered controls, (3) administrative controls, (4) personal protective equipment.
9. The work planning and control process effectively ensures the control or level of control established for a hazard is maintained throughout the activity or until the hazard has been eliminated or reduced (controls can be graded to level of hazard reduction).
10. The work planning and control process effectively ensures evaluation of the possibility of creating additional hazards due to selected controls (i.e., excessive PPE causing heat exhaustion) and the potential for negative synergistic effects of selected controls.

Approach

Record Review:

- Review organizational work planning and control and hazard analysis procedures for the implementation of all WPC1-2 Criteria.:

Interviews:

Interview personnel responsible for implementing the work planning and control and hazard identification and analysis process to assess their understanding of the procedures and the underlying principles and requirements associated with this Objective. Personnel to interview include:

- Line management (e.g., responsible managers, project managers, facility managers, work control managers, etc.)
- Planners
- Subject matter experts (e.g., safety professionals, system engineers, etc.)

Observations:

- None

Objective WPC1- 3

The Organization has developed and approved an effective work planning and control process that enables safe and efficient completion of work activities by providing adequate and executable work documents:

Criteria

1. The work planning and control process effectively ensures the work scope and associated boundaries are clearly defined in work documents.
2. The work planning and control process effectively ensures work control documents are required to be written in a clear, concise, and worker friendly manner with properly sequenced work steps for tasks/activities.
3. The work planning and control process effectively ensures work control documents incorporate technical and administrative requirements adequately (e.g., safety basis, regulatory, consensus codes, etc.)
4. The work planning and control process effectively ensures hazard controls identified in the Job Hazards Analysis (JHA) and other permits/analysis (e.g. Documented Safety Analysis, As Low As Reasonably Achievable Job Review, Radiation Work Permit, Industrial Hygiene Exposure Assessments, etc.) are incorporated into work control documents. Generic references to work permits, procedures, vendor manuals, etc. are not used unless the work instruction specifies how the next work step is to be performed in accordance with the stated document(i.e., in its entirety or a specified part of the referenced document.)
5. The work planning and control process effectively ensures work document development procedures/processes require the following provisions:
 - a. Warning (potential personnel hazards,) Caution (potential equipment or environmental damage,) and Note (supplemental information) statements for task specific hazards/controls are delineated immediately before the work control document step where the hazard is encountered and are highlighted (e.g. bolded, boxed, etc.) to emphasize their importance.
 - b. Warnings, Cautions, and Notes statements do not direct actions.
 - c. Hazards and controls associated with the entire activity are included in a Precautions and Limitations section.
 - d. Hold Points and controls significant to safety are integrated into the work instructions.
 - e. Adequate criteria regarding the use of “Not Applicable”
 - f. Adequate documentation regarding work status (i.e., work status log) including the nature of and response to unexpected conditions
 - g. Adequate criteria regarding equipment restoration, Return to Service and Post Maintenance Testing so that there is confidence that design and safety functions will be adequately performed.

Approach

Record Review:

- Review organizational work planning and control procedures for the implementation of all WPC1-3 Criteria.

Interviews:

Interview personnel responsible for implementing the work planning and control process to assess their understanding of the procedures and the underlying principles and requirements associated with this Objective. Personnel to interview include:

- Line management (e.g., responsible managers, project managers, facility managers, work control managers, etc.)
- Planners

Observations:

- None

2. Management and Organization, R2A2 and Training and Qualification

Objective WPC1-4

The Organization has established an effective management and organizational framework for (1) initiating, analyzing, planning, developing, and approving activity level work control documents and (2) authorizing, releasing, and safely performing activity level work.

Criteria

1. The work planning and control process establishes line management responsibility for effective planning and safe performance of activity level work with clear unambiguous lines and levels of authority; clear roles, responsibilities, authorities, and accountabilities (R2A2); and effective integration and coordination of organizational interfaces
2. The work planning and control process requires other service providers (subcontractors, vendors, and tenants) to perform their work exclusively in accordance with the Organization's work planning and control implementing procedures
3. The work planning and control process effectively ensures Senior Management Review Boards are established and designated for advisory review of selected work packages. Selection criteria for Senior Management Review Boards are delineated.
4. The work planning and control process effectively ensures Operations work control authorities are designated to review, authorize, and release all work control documents prior to commencement of work. The responsibilities and work release criteria are defined.
5. The work planning and control process has established work planning/control requirements for all personnel performing, planning, and authorizing work at their site, including sub-contractors.
6. The work planning and control process effectively identifies training and qualification requirements for first line supervisors, workers, subject matter experts, work control managers and planners and personnel who authorize and release activity level work. The work planning and control process effectively ensures records that document the successful completion of the training and qualification of first line supervisors, workers, subject matter experts, work control managers and planners and personnel who authorize and release activity level work are retained and auditable.

Approach

Record Review:

Review organizational work planning and control procedures for the implementation of all WPC1-4 Criteria

Interviews:

Interview personnel responsible for implementing the work planning and control process to assess their understanding of the procedures and the underlying principles and requirements associated with this Objective. Personnel to interview include:

- Line management (e.g., responsible managers, project managers, facility managers, training manager, work control managers, etc.)

Observations:

- None

3. Feedback and Improvement

Objective WPC1-5

The Organization has an effective feedback and improvement process that fosters learning from both internal and external operating experience and continuous improvement for activity level work.

Criteria

1. The work planning and control process includes provisions for obtaining feedback during the execution of work planning and control activities and incorporating associated improvement opportunities into active and in-development work control documents and/or the work planning and control manual/procedure(s).
2. The contractor assurance system includes provisions for timely and effective management and independent assessment of the work planning and control process, and of specific activity implementation of the process on a periodic basis by line and functional area. These include:
 - a. Scheduled periodic reviews of active and in-development work control documents that are of sufficient scope, detail, and quantity that the Organization can ascertain the status of their work planning and control process.
 - b. Periodic surveillance by line managers, which include the observations of job walkdowns and JHA walkdowns/meetings, pre-evolution briefings, and work, performed to work documents.
 - c. Periodic review by line managers of in-development and approved work control documents.
3. The work planning and control process effectively ensures tracking and trending the results of assessment and oversight activities performed on their work planning and control process against a set of performance measures and takes appropriate actions.
4. The work planning and control process effectively ensures identifying, categorizing, prioritizing, tracking, correcting, and closing deficiencies identified during activity-level work activities and assessment of those.
5. The work planning and control process effectively ensures learning from both internal and external operating experience sources.

Approach

Record Review:

- Review organizational work planning and control and feedback/lessons learned procedures for the implementation of all WPC1-5 Criteria.

Interviews:

Interview personnel responsible for implementing the work planning and control process to assess their understanding of the procedures and the underlying principles and requirements associated with this Objective. Personnel to interview include:

- Line management (e.g., responsible managers, project managers, facility managers, work control managers, etc.)
- Planners
- Subject matter experts (e.g., safety professionals, systems engineers, etc.)

Observations:

- None