

ENGINEERING AND FIRE PROTECTION

OBJECTIVE

EN.1 - Equipment (systems and components) required for activity performance has been identified, meets the design criteria for the activity, and a system is in place to maintain control over the design.

EN.1.1. Requirements from vendor technical manuals and data have been incorporated into activity documents.

EN. 1.2 Spare parts inventory for activity and support equipment is adequate for activity performance.

EN. 1.3 A program is in place to confirm and periodically reconfirm the condition and operability of safety SSCs. This includes examinations of records of tests and calibration of these systems.

REVIEW APPROACH:

Document Reviews:

- Review activity documents to ensure that vendor data and information from vendor technical manuals has been incorporated into facility and activity documents.
- Review listings of required spare parts for each system to determine adequacy.
- Review documents to determine whether a program is in place to confirm and periodically reconfirm the condition and operability of safety SSCs. This includes examinations of records of tests and calibration of these systems.
- Review modification work packages for completion and closure per management procedure requirements and for impact on facility configuration description.
- Review repairs and modifications to the facility, tools, and equipment related to the activity to ensure that they have been reflected in drawings and documents available to operators and maintenance personnel.
- Review the documentation related to the activity (such as administrative procedures, organizational charts, position descriptions, and the subcontract specification) which establish the roles, responsibilities, interfaces, and staffing levels for engineering personnel with regard to safety system maintenance and required engineering support.

Interviews:

- Interview selected personnel to determine whether spare parts inventory for the facility, activity and support equipment is adequate.

Shift Performance:

Walk down facility equipment to see if the material condition of all safety, process and utility systems and support equipment will support safe operations.

OBJECTIVE

EN.2 - Equipment (systems and components) required for activity performance has been identified, meets the design criteria for the activity, and a system is in place to maintain control over the design.

EN.2.1 - Configuration control has been maintained on modifications to equipment.

EN. 2.2 - A system to maintain control over the design of safety SSCs is established and implemented at RWMC.

REVIEW APPROACH:

Document Reviews:

- Review the listing of safety systems and components to ensure consistency with safety basis. Review records for temporary modifications and verify required analysis is conducted and any required actions are implemented during the period the temporary modification is in place.
- Review modification work packages for completion and closure per management procedure requirements and for impact on facility configuration description.
- Verify the correlation between the current safety basis and existing facility systems and procedures by reviewing the Implementation, Planning, and Verification Records
- (IPVRs) established to support the activity for content and completeness.
- Review any temporary modifications on equipment used for planned activities.

Interviews:

- Interview personnel associated with the configuration management program (including facility engineering, operations supervision, and maintenance foremen) to assess their understanding of program requirements and responsibilities.

Shift Performance:

None

Objective

EN.3 - Administrative and engineering controls to prevent and mitigate hazards associated with commencing the AR Project II activities are tailored to the work being performed and the associated hazards to meet the following criteria:

EN.3.1 - A comprehensive fire protection program including combustible controls, identification of hazards, and fire fighting plans have been implemented.

Review Approach:

Document Reviews:

- Review the Fire Hazards Analysis (FHA) for the facility to ensure that the results of the FHA are properly incorporated into the safety basis and for incorporation of the activities fire hazards assessment and implementation of controls, as applicable.
- Review combustible control inspection forms. Ensure combustible inspections are scheduled and current.
- Review fire fighting plans to ensure that they reflect the changes in the facilities under review.
- Review the documentation related to the activity (e.g., administrative procedures, organizational charts, position descriptions, or internal memorandums) which establish the roles, responsibilities, interfaces, and staffing levels for fire protection and response personnel with regard to facility support.

Interviews:

- Interview activity operations personnel to assess adequacy of fire protection program support services.

Shift Performance:

- Tour the facility with personnel responsible for combustible inspections to determine their knowledge of requirements and facility compliance with the controls.
- Accompany operations and fire protection personnel in the conduct of combustible control inspections.