

	Number: EA CRAD 31-31 Revision: 1 Effective Date: March 19, 2019
Receipt Inspection and Control of Items Criteria and Review Approach Document		
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1.0 PURPOSE

The mission of the U.S. Department of Energy (DOE) Office of Environment, Safety and Health Assessments (EA-30) is to assess the effectiveness of safety and emergency management systems and practices used by line and contractor organizations and to provide clear, concise, rigorous, and independent evaluation reports of performance in protecting workers, the public, and the environment from the hazards associated with DOE activities.

In addition to the general independent oversight requirements and responsibilities specified in DOE Order 227.1A, *Independent Oversight Program*, this criteria and review approach document (CRAD), in part, fulfills the responsibility assigned to EA in DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy*, to conduct independent assessments of high consequence activities.

The CRADs are available to DOE line and contractor assessment personnel to aid them in developing effective DOE oversight, contractor self-assessment, and corrective action processes.

The current revision of EA's CRADs are available at <http://www.energy.gov/ea/criteria-and-review-approach-documents>.

2.0 APPLICABILITY

The following CRAD is approved for use by the Office of Nuclear Safety and Environmental Assessments

3.0 FEEDBACK

Comments and suggestions for improvements on this CRAD can be directed to the Director, Office of Environment, Safety and Health Assessments.

4.0 CRITERIA AND REVIEW APPROACH

The review of Receipt Inspection and Control of Items will evaluate the effectiveness of programs and processes for defining acceptance and storage requirements for items. The review will also evaluate the effectiveness of processes for maintaining the functionality and reliability of the items. The following functional areas are designed as standalone sections to be used in any combination based on the need of the specific assessment.

OBJECTIVES

RI.1: Procurement process documentation is technically adequate and implements the requirements of the documented safety analysis such that adequate protection from facility hazards is provided to the public, the workers, and the environment. (10 CFR 830.122 and DOE Order 414.1D)

Criteria:

1. Procurement activities that may affect the safety of DOE nuclear facilities are conducted in accordance with a DOE-approved quality assurance program meeting the quality assurance criteria specified in 10 Code of Federal Regulations (CFR) 830.122. (10 CFR 830.121 and 10 CFR 830.122)
2. Appropriate consensus standards, such as ASME NQA-1, *Quality Assurance Requirements for Nuclear Facility Applications*, and other applicable quality or management system requirements are clearly identified, integrated, and implemented for nuclear-related work activities. (10 CFR 830.121 and DOE Order 414.1D, *Quality Assurance*)
3. Requirements are established for procurement and verification of items and services. (10 CFR 830.122(g), Criterion 7)
4. Processes are established and implemented to ensure that approved suppliers continue to provide acceptable items and services. (10 CFR 830.122(g), Criterion 7)

- Are procurement processes defined within the site/facility quality assurance program and are provisions included for supplier qualification, receipt inspection, and document management?
- Did the Cognizant System Engineer (CSE) prepare/approve a formal equivalency determination for commercial procurement of a safety component?
- Are components and services procured for the system obtained in accordance with the site/facility quality assurance program?
- Are critical or important acceptance parameters and other requirements, such as inspection/test equipment or qualified inspection/test personnel, specified in design documentation?

RI.2: Receipt Inspection practices and processes are implemented in a manner that ensures purchased items will conform to required standards and perform as specified. (10 CFR 830.122(h), Criterion 8)

Criteria:

1. Receipt Inspection and acceptance of procured items is performed by trained, qualified personnel. (10 CFR 830.122(b), Criterion 2)
2. Suspect and counterfeit materials are identified and controlled. (DOE Order 414.1D, Admin Chg 1, Attachment 3)
 - Are representatives from all appropriate engineering organizations involved in development of procurement specifications; inspection and testing; and maintenance, replacement, or modification of equipment.
 - Are personnel performing inspections appropriately qualified?
 - Do personnel performing inspections understand operational features, safety requirements, and performance criteria for the system?
 - Has a program been established and implemented for control of suspect/counterfeit materials in accordance with DOE Order 414.1D, Admin Chg 1?
 - Does the suspect/counterfeit item control program include procurement controls and verification activities that are commensurate with the importance of the item to safe and reliable operation as specified in purchase documents?
 - Are tracking and/or trending processes implemented to monitor supplier performance and ensure that suppliers have demonstrated their capability to deliver acceptable items in a timely manner?

RI.3: Items are stored and maintained in a manner that ensures they will conform to required standards and perform as specified. (10 CFR 830.122(e), Criterion 5)

Criteria:

1. Items are identified and controlled and stored to ensure their proper use. (10 CFR 830.122(e), Criterion 5)
2. Stored items are maintained to prevent their damage, loss, or deterioration. (10 CFR 830.122(e), Criterion 5)
 - Have storage conditions been specified in procurement documents?

- Are items stored in accordance with conditions specified in procurement documents?
- Are requirements for maintenance while in storage specified?
- Is an inventory of critical spare parts maintained?
- Are required maintenance operations being performed as specified while items are stored?
- Are the supply chains for critical parts monitored to ensure part quality and availability for procurement?

REVIEW APPROACH

Record Review:

- Procurement processes and records for system components and services.
- Procedure and process for performing inspections of the system, including interviews with personnel performing the inspections.
- Procurement specifications for selected items.
- Receipt inspection records for selected items.
- Inspector training for the receipt inspection, focusing on the technical completeness and accuracy of the training manual and lessons plans.
- Training and requalification records of Cognizant System Engineers (CSEs).
- Surveillance and assessment reports prepared by safety system oversight (SSO) personnel.
- Corrective actions, which were initiated by engineering, configuration management, maintenance, surveillance and testing, and operations organizations as a result of normal daily activities and based on CSE reviews.
- Trend analysis and performance indicator reports.
- Assignment of significance level (priority) to deficiencies by facility management.
- Documented Safety Analysis
- Technical Safety Requirements

Interviews:

- Facility Cognizant System Engineer(s)
- Personnel who conduct Receipt Inspections
- Design Engineers
- Engineering Management.

Observations:

- Walk down of storage areas with appropriate facility personnel (e.g., CSEs, procurement personnel).
- Observation of receipt inspection activities.
- Observation of required maintenance on stored items.