

Project Quality Assurance

CONTRACTOR REQUIREMENTS DOCUMENT DOE ORDER 413.3A, *Program and Project Management for the Acquisition of Capital Assets*

- ◆ 11. A quality assurance program must be developed and implemented for the contract scope of work when the contractor's requirements include DOE O 414.1C, *Quality Assurance* or 10 CFR 830 Subpart A, *Quality Assurance Requirements* (as applicable).

Project Quality Assurance

◆ CD1

- ◆ Determine that the Quality Assurance Program is acceptable and continues to apply. The Quality Assurance Program must fully address all applicable Quality Assurance Criteria as defined in 10 CFR 830 Subpart A and DOE O 414.1C.

◆ CD2

- ◆ Determine that the Quality Assurance Program is acceptable and continues to apply. The Quality Assurance Program must fully address all applicable Quality Assurance Criteria as defined in 10 CFR 830 Subpart A and DOE O 414.1C.



Project Quality Assurance

◆ CD3

- ◆ Update the Quality Assurance Program for construction, field design changes, and procurement activities.

◆ CD4

- ◆ Issue an updated Quality Assurance Plan to address testing, identified deficiencies, and startup, transition, and operation activities.

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CONTRACTOR REQUIREMENTS DOCUMENT DOE O 414.1C, QUALITY ASSURANCE

◆ OBJECTIVES.

- ❖ A. To ensure that DOE, including NNSA, products and services meet or exceed customers' expectations.
- ❖ B. To achieve QA for all work based upon the following principles.

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- ❖ (1) That quality is assured and maintained through a single, integrated, effective QA program (i.e., management system).
- ❖ (2) That management support for planning, organization, resources, direction, and control is essential to QA.
- ❖ (3) That performance and quality improvement require thorough rigorous assessment and corrective action.
- ❖ (4) That workers are responsible for achieving and maintaining quality.
- ❖ (5) That environmental, safety, and health risks and impacts associated with work processes are minimized while maximizing reliability and performance of work products.

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- ◆ C. To establish quality process requirements to be implemented under a QAP for the control of suspect/counterfeit items (S/CIs) and control of safety software.

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- ◆ Quality Assurance Program Development and Implementation. A contractor must assign and identify a senior management position responsible for the development, implementation, assessment, and improvement of a QAP that does the following.
 - ❖ Implements QA criteria as defined in paragraph 3 of this CRD
 - ❖ Uses the appropriate national or international consensus standard where practicable and consistent with contractual or regulatory requirements

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- ❖ Applies additional standards, where practicable and consistent with contractual or regulatory requirements and as necessary to address unique/specific work activities
- ❖ Integrates, where practicable and consistent with contract or regulatory requirements, quality management system requirements as defined in this CRD



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10 QUALITY ASSURANCE CRITERIA.

The QAP must address the following management, performance, and assessment criteria.



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◆ Management/Criterion 1—Program.

- ❖ (1) Establish an organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing work.
- ❖ (2) Establish management processes, including planning, scheduling, and providing resources for work.



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◆ Management/Criterion 2—Personnel Training and Qualification.

- ◆ (1) Train and qualify personnel to be capable of performing assigned work.
- ◆ (2) Provide continuing training to personnel to maintain job proficiency.

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◆ Management/Criterion 3—Quality Improvement.

- ❖ (1) Establish and implement processes to detect and prevent quality problems.
- ❖ (2) Identify, control and correct items, services, and processes that do not meet established requirements.
- ❖ (3) Identify the causes of problems, and include prevention of recurrence as a part of corrective action planning.
- ❖ (4) Review item characteristics, process implementation, and other quality-related information to identify items, services, and processes needing improvement.

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◆ Management/Criterion 4—Documents and Records.

- ◆ (1) Prepare, review, approve, issue, use, and revise documents to prescribe processes, specify requirements, or establish design.
- ◆ (2) Specify, prepare, review, approve, and maintain records.

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◆ Performance/Criterion 5—Work Processes.

- ❖ (1) Perform work consistent with technical standards, administrative controls, and hazard controls adopted to meet regulatory or contract requirements using approved instructions, procedures, etc.
- ❖ (2) Identify and control items to ensure proper use.
- ❖ (3) Maintain items to prevent damage, loss, or deterioration.
- ❖ (4) Calibrate and maintain equipment used for process monitoring or data collection.

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◆ Performance/Criterion 6—Design.

- ❖ (1) Design items and processes using sound engineering/scientific principles and appropriate standards.
- ❖ (2) Incorporate applicable requirements and design bases in design work and design changes.
- ❖ (3) Identify and control design interfaces.
- ❖ (4) Verify/validate the adequacy of design products using individuals or groups other than those who performed the work.
- ❖ (5) Verify/validate work before approval and implementation of the design.

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◆ Performance/Criterion 7—Procurement.

- ❖ (1) Procure items and services that meet established requirements and perform as specified.
- ❖ (2) Evaluate and select prospective suppliers on the basis of specified criteria.
- ❖ (3) Establish and implement processes to ensure that approved suppliers continue to provide acceptable items and services.

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◆ Performance/Criterion 8—Inspection and Acceptance Testing.

- ◆ (1) Inspect and test specified items, services, and processes using established acceptance and performance criteria.
- ◆ (2) Calibrate and maintain equipment used for inspections and tests.

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◆ Assessment/Criterion 9—Management Assessment.

- ◆ Ensure that managers assess their management processes and identify and correct problems that hinder the organization from achieving its objectives.

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◆ Assessment/Criterion 10—Independent Assessment.

- ◆ (1) Plan and conduct independent assessments to measure item and service quality, to measure the adequacy of work performance and to promote improvement.
- ◆ (2) Establish sufficient authority and freedom from line management for independent assessment teams.
- ◆ (3) Ensure that persons conducting independent assessments are technically qualified and knowledgeable in the areas to be assessed.

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◆ Status of Program Implementation

- ◆ Director's Policy out for Review
- ◆ Lab QAP being written
- ◆ Implementation plan for Divisions and Sections under investigation
- ◆ Graded approach document being written

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QUESTIONS?



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