

Part 9

Model Construction Contract Quality Assurance Requirements

Revision 3

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NOTE: Current Revision is Shaded

| REVISION: | DATE: | DESCRIPTION OF CHANGE: |
|-----------|----------|---|
| 0 | 12/03/93 | Initial Issue |
| 1 | 01/29/98 | General Revision |
| 2 | 11/22/99 | General Revision |
| 3 | 03/19/01 | Revised to clarify inspections, surveillances and test requirements in section 5.3. |
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SOLICITATION NO. F-----

CONTRACT NO. FSC-----

PART 9
QUALITY ASSURANCE REQUIREMENTS

PREFACE

This Quality Assurance model is issued to guide the creation of Contract Part 9. Wording may be added, deleted or revised to meet the needs of each separate Contract.

The Following Matrix identifies the graded requirements from RM-0012 and where the requirements are located in the IFB/RFP, This Matrix will be removed prior to issuing the IFB/RFP, it is only intended to be used as a tool in assembling the Contract Document.

PREFACE

| QAP (RM-0012) Requirement | IFB Location |
|---|--|
| <p>Criterion # 1 Program - S/C Requirement</p> <p>1.2.2 The organization chart provided by the subcontractor ... indicates levels of authority and interfaces for managing, performing and assessing the adequacy of work.</p> | <p>IFB, Part 9, Section B.1, Organization</p> |
| <p>Criterion # 2 - Personnel Training and Qualification</p> <p>2.3.1 The subcontractor shall ensure all project personnel receive required site training. In addition, the subcontractor shall assure that necessary training is documented and a copy of the training records is kept in the subcontractor's field office.</p> <p>2.3.6 Project personnel are required to attend training as scheduled and shall refrain from operating equipment or performing work until proper training has been completed.</p> <p>2.3.7 Personnel performing work that requires special skills or abilities or legally required training shall be qualified and certified, if required, prior to performing that work. The certification program is to include demonstrated proficiency.</p> | <p>IFB, Part 8, Section D, Site Access, Training, and Medical Scheduling</p> <p>IFB, Part 8, Section D1.0, General Training Requirements, and Section E2.0, Access Requirements</p> <p>IFB, Part 9, Section B.2, Personnel Training and Qualification</p> |
| <p>Criterion # 3 - Quality Improvement</p> <p>3.3.3 FDF and subcontractor employees shall identify and report any condition adverse to quality to management.</p> <p>Criterion # 4 - Documents and Records</p> <p>4.3.1 The subcontractor shall maintain a system to control the issuance, use, revision and storage of project documentation.</p> | <p>IFB, Part 9, Section B.3, Quality Improvements</p> <p>IFB, Part 9, Section B.4, Documents and Records</p> |
| <p>QAP Requirement</p> | <p>IFB Location</p> |

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| <p>Criterion # 5 - Work Processes</p> <p>5.2.1 The subcontractor shall assure that procedures or work instructions to accomplish tasks necessary to execute the work are developed and approved prior to use. Procedure, traveler packages or work plans shall be implemented for all phases of work.</p> <p>5.6.4. Subcontractor employees shall:</p> <p>Perform work to approved requirements.</p> <p>Perform work in a sequence consistent with prerequisite activities.</p> <p>Perform work with the proper tools and equipment.</p> | <p>Part 7, ACR-001, Contractor Submittal Requirements and ASR-002, Safe Work Plan Format</p> <p>Part 7, ACR-002, Safe Work Plan Format</p> |
| <p>Criterion # 6 - Design</p> <p>6.2.1 A program for the design of items and processes shall be established and implemented using sound engineering/scientific principles and appropriate standards (if design is required).</p> | <p>IFB, Part 9, Section B 4.5, Design Control</p> |
| <p>Criterion # 7 - Procurement</p> <p>7.3.4 Prospective suppliers/contractors are to be evaluated by FDF QA to ensure only qualified contractors are selected.</p> <p>Any equipment purchase requisitions that may contain high strength bolts and/or circuit breakers shall be reviewed by FDF QA.</p> <p>7.3.3 Contractor and suppliers shall meet quality requirements for work performed or for items and services provided by their subcontractors and suppliers.</p> | <p>IFB, Part 1, Section 17, Pre-Award Survey. As determined by the Project Team.</p> <p>IFB, Part 4, SC-28, (for D&D projects) or SC-31 (for Construction projects) Suspect/ Counterfeit parts</p> <p>IFB, Part 3, Section A.29, Quality Assurance Program</p> |
| <p>QAP Requirement</p> | <p>IFB Location</p> |

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|---|---|
| <p>Criterion # 8 - Inspection and Testing</p> <p>8.3 Subcontractor employees shall:</p> <p>Check items supplied to their work process to ascertain that items are correct and suitable for use.</p> <p>Implement procedures for inspection and acceptance activities to ensure that items and services meet established requirements.</p> <p>Ensure that measuring and test equipment used is calibrated, maintained and conforms to established specifications.</p> | <p>IFB, Part 7, ACR-002, Work Plan Format and IFB Part 9, Section 5, Inspection and Testing</p> <p>IFB, Part 8, Section B2.10, Competent Person Inspection and IFB Part 9, Section 5, work process.</p> <p>IFB, Part 7, Site Project Specifications and IFB Part 9, Section 5, work process.</p> |
| <p>Criterion # 9 - Management Assessment Criterion # 10 - Independent Assessment</p> | <p>Not a requirement for subcontractors.</p> |

CONTRACT NUMBER FSC _ _ _ _
PART 9 - QUALITY ASSURANCE REQUIREMENTS
CONTRACT TITLE

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PART 9
QUALITY ASSURANCE REQUIREMENTS
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A. GENERAL REQUIREMENTS:

The General Provisions, Part 3 Section A.27, Quality Assurance Program requires the Contractor to comply with Fluor Fernald Quality Assurance Program. Through the submittal of a Quality Assurance Plan for concurrence by Fluor Fernald and by complying with requirements of this contract the Contractor will comply with Fluor Fernald's Quality Assurance Program. Within 30 calendar days after Notice to Proceed, the Contractor shall submit a Quality Assurance Plan (QAP) for Fluor Fernald evaluation and concurrence, to the following program requirements of Fluor Fernald Document RM-0012.

The Contractor shall provide a Quality Assurance/Quality Control (QA/QC) representative responsible for monitoring the quality of project work, including records and documentation, providing quality documentation, planning and directing all Contractor project inspections to applicable codes and standards, and providing interface with the Fluor Fernald on quality issues.

(Author shall choose one of following):

The QA/QC representative shall not have field line responsibilities and be dedicated full time assigned to this project. The representative shall provide interface for quality related stop work actions initiated either by Fluor Fernald or the contractor(s).

or

The QA/QC representative shall not have field line responsibilities and may be a member of the contractors project management (i.e. the contractors project manager or health and safety officer assigned to this project). The representative shall provide interface for quality related stop work actions initiated either by Fluor Fernald or the contractor(s).

Qualifications of QA/QC personnel performing inspection on the project are required to be submitted prior to work being performed. Personnel performing special process non-destructive examination (NDE) are required to be qualified to SNT-TC-1A or the special process identified.

B. CONTRACTOR QUALITY PLAN REQUIREMENTS:

In addition to requirements listed elsewhere in the contract, the following requirements shall be a basis of the evaluation criteria of the contractor Quality Assurance Plan .

1.0 Organization

1.1 The contractor shall provide an organization chart that identifies and describes responsibilities, levels of authority, and interfaces for those managing, performing, and assessing the adequacy of work.

2.0 Training and Qualifications

2.1 Personnel performing work that require special; skills or abilities or legally required training shall be qualified and certified, if required, prior to performing that work. The certification program is to include demonstrated proficiency.

3.0 Quality Improvements

- 3.1 The contractor shall identify verification requirements and a schedule of oversight for key vendors or procurements identified in the Procurement Plan submitted for this contract.
- 3.2 The contractor shall provide program requirements for the identification, reporting and tracking of project nonconformances. Nonconformances require the notification of Fluor Fernald for review and concurrence of proposed corrective actions prior to commencing corrective action.
- 3.3 The contractor shall assign the responsibility and authority to the QA/QC representative to stop unsatisfactory work and control further process, delivery, installation or use of nonconforming items such that planning and schedule considerations do not override safety, quality, or environmental considerations.
- 3.4 Evaluate and measure process and performance to identify potential problems areas, identify trends in productivity and quality, apply lessons learned, and develop actions that can be taken to improve performance.

4.0 Documents and Records

- 4.1 The contractor shall include program requirements for the purpose of identifying and controlling project records. The plan should identify QA/QC program documents, describe how and by whom Contractor documents and records are reviewed, approved, issued, used, revised and stored.
- 4.2 The Contractor shall describe how controlled documents issued by Fluor Fernald are controlled by the Contractor when reproduced and issued to lower tier Contractors such that only current, controlled revisions are in the field and used for work.
- 4.3 The Contractor shall describe how Controlled documents reproduced by the Contractor shall have a Contractor control number designated on the document in red. The Contractor shall maintain a log of their control numbers showing to whom they were issued.
- 4.4 The Contractor shall only perform work from approved documents. No work shall be performed from documents other than those marked "ECDC/Controlled."
- 4.5 When contractor design is provided, the design control process shall identify Engineering Program verification requirements for the process using design inputs/outputs, processes, changes, verifications, interfaces, records and organization interfaces. Provide assurance that revisions to the final design (including As-Built Drawings,"Use-As-Is" and "Repair" dispositions of nonconformances) are subjected to the design control process and original review/approval process. Describe how and by whom As-Built Drawings are maintained.
- 4.6 The Contractor shall routinely review documents used in the work area to assure that current, controlled documents are in use, that Design Change Notice (DCNs) are properly noted on the affected documents, and that work is performed to all applicable design documents.
- 4.7 Superseded and canceled controlled documents shall either be destroyed or, if required for reference, marked "VOID" and removed from the field or work area. "VOID" drawings shall only be maintained in the Contractor's field office.
- 4.8 Approved Design Change Notices (DCN) containing the "ECDC/Controlled" stamp shall be annotated by the Contractor on the affected documents.

5.0 Work Processes

- 5.1 The contractor shall identify the project verification requirements for construction including work in process inspections and construction acceptance testing for work performed including sub-tier contractors work.
- 5.2 The contractor shall identify verification requirements for review of contractor management of operations. Operations verification may include system operability testing, startup requirements, maintenance, special processes, procedure development, sampling and analysis, and work in process activities, as applicable to this work scope.
- 5.3 The contractor shall provide program requirements for the project surveillances, inspections and tests. The contractor shall schedule surveillances, inspections (receipt, in-process, final, etc.) and tests required to ascertain that items are correct and acceptable for use. A detailed schedule of QC inspections, surveillances and tests are required to be developed and updated by the contractors QA/QC Representative. These inspections, surveillances and test shall include but not limited to documentation reviews, work processes, and a semi-annual assessment of the ES&H program. Surveillances, inspections, or tests performed by Fluor Fernald QC do not replace Contractor required inspections.
- 5.4 The contractor shall identify a program to control the calibration, maintenance, accountability and use of equipment used for acceptance of items during inspection and testing.