



## USACE-NAVFAC Maintenance Plan Sample

20 selected pages (out of 125)

**Part 1: Contract-Specific Quality Plan**

**Part 2: Quality Manual**

**Part 3: Submittal Forms**

Contact:  
First Time Quality  
410-451-8006

# **CONTRACT-SPECIFIC QUALITY PLAN**

## **TABLE OF CONTENTS**

The Contract Quality Control Plan contents correspond with USACE / NAVFAC / AFCESA / NASA UFGS-01 45 00.00 20 (November 2011) Construction Quality Control (QC) Plan requirements.

<b>Background Information.....</b>	<b>6</b>
Customer .....	6
Contract Name .....	6
Contract Number.....	6
Contract Location .....	6
Contract Description.....	6
Contract Scope .....	6
<b>A. QC Organization.....</b>	<b>7</b>
<b>B. Names and Qualifications.....</b>	<b>8</b>
<b>C. Duties, Responsibilities, and Authority of QC Personnel .....</b>	<b>10</b>
Quality Responsibilities .....	10
<b>D. Outside Organizations .....</b>	<b>14</b>
Qualification of Subcontractors and Suppliers .....	14
Purchase Order Approval .....	14
<b>E. Appointment Letters.....</b>	<b>16</b>
<b>F. Submittals Procedures and Submittal Register .....</b>	<b>21</b>
<b>G. Testing Laboratory Information.....</b>	<b>22</b>
<b>H. Quality Testing Plan and Log.....</b>	<b>23</b>
Preparation of Inspection and Test Plan .....	23
<b>I. Procedures Completion of Rework Items .....</b>	<b>25</b>
Nonconformance Controls .....	25
Nonconformance Corrective Actions .....	26
Nonconformance Preventive Actions.....	27
<b>J. Documentation Procedures.....</b>	<b>29</b>
<b>K. List of Definable Features .....</b>	<b>31</b>
<b>L. Procedures for Performing the Three Phases of Control.....</b>	<b>34</b>
Phase 1: Preparatory Phase.....	34
Phase 2: Initial Phase.....	35
Phase 3: Follow-up Phase.....	36
<b>M. Personnel Matrix.....</b>	<b>41</b>
<b>N. Procedures for Completion Inspection.....</b>	<b>42</b>
Punch-Out QC Inspection .....	42
Pre-Final Customer Inspection .....	42

**Questions? Call First Time Quality 410-451-8006**

Final Acceptance Customer Inspection .....	43
<b>O. Training Procedures and Training Log .....</b>	<b>46</b>
Contract Quality Training .....	46
<b>P. Organization and Personnel Certifications .....</b>	<b>49</b>
Company Qualifications.....	49
Personnel Certifications .....	49
<b>Q. Design Control .....</b>	<b>52</b>
<b>R. Quality Assurance Surveillance .....</b>	<b>53</b>
<b>S. Additional Quality Control Requirements.....</b>	<b>56</b>

Selected Pages

## **I. PROCEDURES COMPLETION OF REWORK ITEMS**

Should a nonconformance be identified by an inspection, a systematic method will be used to control the item, correct it, and ensure that contract quality is not adversely impacted by the event.

Nonconformances and their resolution are recorded on a Nonconformance Report form. A Nonconformance Report form exhibit is included in this subsection.

### **NONCONFORMANCE CONTROLS**

Should a nonconformance be identified by an inspection there is a systematic method to control the item, correct it, and ensure that contract quality is not adversely impacted by the event.

A nonconformance is any item that does not meet contract specifications or [CompanyName] Quality System requirements.

#### **MARKING OF NONCONFORMANCES AND OBSERVATIONS**

When the Quality Manager, Superintendent, inspector, or customer identifies a nonconformance or an observation, the item is quickly and clearly marked by tape, tag, or other easily observable signal to prevent inadvertent cover-up.

#### **CONTROL THE CONTINUATION OF WORK**

After the item is marked, the Superintendent determines if work can continue in the affected area:

**CONTINUE WORK:** When continuing work does not adversely affect quality or hide the defect, work may continue in the affected area while the disposition of the item is resolved. The Superintendent may place limitations on the continuation of work.

**STOP WORK ORDER:** When continuing work can adversely affect quality or hide the defect, work must stop in the affected area until the disposition of the item resolved. The Superintendent identifies the limits of the affected area. The Superintendent quickly and clearly identifies the boundaries of the stop work area.

#### **RECORDING OF NONCONFORMANCES**

If nonconformances or observed items exist by the feature of work completion inspection, the Superintendent or inspector records the nonconformances on a nonconformance report.

The Superintendent sends the nonconformance report to the Quality Manager.

#### **QUALITY MANAGER DISPOSITION OF NONCONFORMANCE REPORTS**

**[CompanyName]  
Quality Controlled Work Task List**

Version 20140828

Contract ID	Contract Name	Preparer	Date
[ProjectNumber]	[ProjectName]		

	Task Order	Weekly	Monthly	Quarterly	Semi-Annually	Annually
				Quarterly	Semi-Annually	
					Semi-Annually	
				Quarterly		
						Annually
			Monthly	Quarterly	Semi-Annually	Annually
		Weekly	Monthly	Quarterly	Semi-Annually	Annually
		Weekly	Monthly	Quarterly	Semi-Annually	Annually
					Semi-Annually	Annually
					Semi-Annually	Annually
					Semi-Annually	Annually
					Semi-Annually	Annually

## **L. PROCEDURES FOR PERFORMING THE THREE PHASES OF CONTROL**

Three phases of control and a feature of work completion inspection will be performed for each defined feature of work.

The controls and the forms that will be used to record control activities are included on table L-1.

Table L-1

Control	Form
Phase 1: Preparatory Phase	Preparatory Phase Checklist
Phase 2: Initial Phase	Initial Phase Checklist
Phase 3: Follow-up Phase	Contractor Quality Control Report
Feature of Work Completion Inspection	Feature of Work Inspection Form

Three Phases of Control and FOW Completion Inspection forms exhibits are included as an exhibit in this subsection.

### **PHASE 1: PREPARATORY PHASE**

#### **PREPARATORY FEATURE OF WORK QUALITY CONTROL PLANNING**

In preparation for the start of an upcoming feature of work, the Superintendent reviews an integrated and coordinated set of documents that collectively define quality requirements for the feature of work including:

- Objectives and acceptance criteria of the feature of work
- Quality standards that apply to the feature of work
- Work instructions, process steps, and product installation instructions that apply to the feature of work
- Shop drawings
- Submittals
- Tools and equipment necessary to perform the work
- License, certification, or other qualification requirements of personnel assigned to work
- Required records of the process and resulting product
- The subcontractor contracted to perform the work, if applicable
- Customer contract requirements
- Required quality inspections and tests
- Method for clearly marking nonconformances to prevent inadvertent use
- Location of quality system records and documents

**[CompanyName]  
Feature of Work Work Order Form**

Version 20140828

Request Date :	Fixed Price :
Company Name:	Location:
Address:	Contract Number: [ProjectNumber]
City State Zip Code:	Contact Person:
Telephone Number:	Email Address:
Fax Number:	Contact Phone Number:
<b>Description of Work and Explanation for Repairs and Parts</b>	
Service Dates:	
Labor Hours:	
Description/Explanation:	
Compliance Verification	<input type="checkbox"/> Compliance with initial job-ready requirements <input type="checkbox"/> Compliance with material inspection and tests <input type="checkbox"/> Compliance with work in process first article inspection requirements <input type="checkbox"/> Compliance with work in process inspection requirements <input type="checkbox"/> Compliance with feature of work completion inspection requirements <input type="checkbox"/> Compliance with inspection and test plan
<b>Verification of Feature of Work Completion (sign and date)</b>	
Supervisor Sign and date*:	Feature of work verified complete to specifications (sign and date): 
* On behalf of the contractor, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.	
<b>Completion of Work Order: To be Signed Off by Customer</b>	
Customer Signature: (Sign and Date)	

# **QUALITY MANUAL**

## **TABLE OF CONTENTS**

<b>1. Quality System Management and Responsibilities .....</b>	<b>6</b>
1.1. Overview.....	6
1.2. [CompanyName] Quality Policy.....	6
1.3. Quality Duties, Responsibilities, and Authority .....	6
1.4. Quality System Performance Measures .....	9
1.5. Customer Satisfaction Performance Measures .....	9
1.6. Exceptions.....	9
<b>2. Contract Quality Control Plan .....</b>	<b>10</b>
2.1. Overview.....	10
2.2. [CompanyName] Contract License and Qualification Requirements.....	10
2.3. Contract Personnel and Qualifications .....	11
2.4. Contract Quality Control Plan.....	12
2.5. Identification of Quality Controlled Features of Work .....	12
2.6. Contract Quality Inspection and Test Plan .....	12
2.7. Contract Quality Communications Plan.....	12
2.8. Contract Quality Training Plan.....	12
2.9. Customer Training On Operation and Maintenance.....	13
2.10. Contract Records and Documentation Plan .....	13
2.11. Contract Audit Plan.....	13
<b>3. Contract Specifications .....</b>	<b>14</b>
3.1. Overview.....	14
3.2. Contract Technical Specifications.....	14
3.3. Contract Drawings .....	14
3.4. Contract Submittals.....	14
3.5. Customer Submittal Approval .....	16
3.6. Contract Warranty.....	17
3.7. Contract Review and Approval .....	17
<b>4. Design Review and Control .....</b>	<b>18</b>
4.1. Overview.....	18
4.2. Design Input Review .....	18
4.3. Contract Design Quality Control Plan .....	18
4.4. Design Progress Reviews .....	19
4.5. Design Output Verification and Approval.....	19
<b>5. Contract-Specific Quality Standards .....</b>	<b>20</b>
5.1. Overview.....	20
5.2. Regulatory Codes.....	20

# Questions? Call First Time Quality 410-451-8006

5.3. Industry Quality Standards .....	20
5.4. Material Specifications .....	20
5.5. Equipment Specifications .....	21
5.6. Work Process Specifications .....	21
5.7. Controlled Material Identification and Traceability .....	21
5.8. Measuring Device Control and Calibration.....	22
5.9. [CompanyName] Quality Standards .....	22
5.10. Application of Multiple Sources of Specifications .....	22
<b>6. Contract Purchasing.....</b>	<b>24</b>
6.1. Overview.....	24
6.2. Qualification of Outside Organizations and Company Departments .....	24
6.3. Quality Responsibilities of Key Subcontractor and Supplier Personnel .....	25
6.4. Requirements for Subcontractor QC Plan .....	26
6.5. Subcontractor and Supplier Quality Policy .....	26
6.6. Contract Subcontractor and Supplier List.....	27
6.7. Purchase Order Requirements .....	27
6.8. Contract Purchase Order Approvals .....	27
<b>7. Process Controls .....</b>	<b>28</b>
7.1. Overview.....	28
7.2. Contract Startup and Quality Control Coordination Meeting .....	28
7.3. Preparatory Contract Quality Control Plan Planning.....	28
7.4. Weekly Quality Planning and Coordination Meetings.....	29
7.5. Process Control Standards.....	29
7.6. Daily Quality Control Report.....	31
7.7. Monthly Quality Control Report.....	31
<b>8. Inspections and Tests.....</b>	<b>32</b>
8.1. Overview.....	32
8.2. Required Feature of Work Quality Inspections and Tests .....	32
8.3. Material Inspections and Tests.....	32
8.4. Work in Process Inspections.....	33
8.5. Feature of Work Completion Inspections.....	33
8.6. Inspection of Special Processes .....	34
8.7. Independent Measurement and Tests .....	34
8.8. Commissioning Functional Acceptance Tests.....	34
8.9. Hold Points for Customer Inspection.....	34
8.10. Quality Inspection and Test Specifications .....	34
8.11. Inspection and Test Acceptance Criteria .....	35
8.12. Inspection and Test Status.....	35
8.13. Independent Quality Assurance Inspections .....	35
8.14. Inspection and Test Records.....	35
8.15. Contract Completion and Closeout Inspection.....	36
<b>9. Nonconformances and Corrective Actions.....</b>	<b>38</b>

**Questions? Call First Time Quality 410-451-8006**

9.1. Overview.....	38
9.2. Nonconformances .....	38
9.3. Corrective Actions .....	39
<b>10. Preventive Actions.....</b>	<b>41</b>
10.1. Overview.....	41
10.2. Identify Preventive Actions for Improvement.....	41
10.3. Train Preventive Actions for Improvement.....	41
<b>11. Quality System Audits.....</b>	<b>43</b>
11.1. Overview.....	43
11.2. Contract Quality System Audit .....	43
11.3. Company-wide Quality System Audit.....	43
<b>12. Record and Document Controls.....</b>	<b>45</b>
12.1. Overview.....	45
12.2. Quality System Documents .....	45
12.3. Document Controls.....	45
12.4. Record Controls .....	46
<b>13. Appendix .....</b>	<b>48</b>
13.1. Definitions of Terms .....	48

## **7. PROCESS CONTROLS**

### *HOW WORK IS CARRIED OUT*

#### **7.1. OVERVIEW**

The maintenance process plan defines how contract work is to be done and approved for the overall contract. The maintenance process plan is communicated to all key personnel, subcontractors and suppliers in a startup meeting. As the contract proceeds, feature of work plans provide additional details of how each individual feature of work is carried out. Features of work planning meetings are used to communicate expectations of the feature of work plan to key personnel responsible for carrying out the feature of work.

#### **7.2. CONTRACT STARTUP AND QUALITY CONTROL COORDINATION MEETING**

Prior to the commencement of work, the Contract Manager holds a meeting to discuss and coordinate how contract work will be performed and controlled. Key personnel from [CompanyName], subcontractors and suppliers meet to review expectations for contract quality results as well as quality assurance and quality control policies and procedures including:

- Key requirements of the contract
- The Contract Quality Control Plan
- Required quality inspections and tests
- The contract submittal schedule
- Quality policies and heightened awareness of critical quality requirements
- Contract organization chart and job responsibilities
- Methods of communication and contact information
- Location of contract documents and records

#### **7.3. PREPARATORY CONTRACT QUALITY CONTROL PLAN PLANNING**

##### **7.3.1. FEATURE OF WORK REQUIREMENTS REVIEW**

In preparation for the start of an upcoming feature of work, the Superintendent reviews an integrated and coordinated set of documents that collectively define quality requirements for the feature of work including:

- Objectives and acceptance criteria of the feature of work
- Quality standards that apply to the feature of work
- Work instructions, process steps, and product installation instructions that apply to the feature of work
- Shop drawings
- Submittals
- Tools and equipment necessary to perform the work
- License, certification, or other qualification requirements of personnel assigned to work
- Required records of the process and resulting product
- The subcontractor contracted to perform the work, if applicable
- Customer contract requirements
- Required quality inspections and tests

## **Questions? Call First Time Quality 410-451-8006**

- Method for clearly marking nonconformances to prevent inadvertent use
- Location of quality system records and documents
- Personnel training

### **7.3.2. PREPARATORY SITE INSPECTION**

The Superintendent also performs a quality inspection of the work area and:

- Assesses completion of required prior work
- Verifies field measurements
- Assures availability and receiving quality inspection status of required materials
- Identifies any nonconformances to the requirements for the feature of work to begin
- Identifies potential problems

### **7.3.3. FEATURE OF WORK PREPARATORY QUALITY PLANNING MEETINGS**

Prior to the start of a feature of work, the Superintendent conducts a meeting with key company, subcontractor personnel responsible for carrying out, supervising, or inspecting the work, and interested customer representatives.

During the meeting, the Superintendent communicates the feature of work quality requirements and reinforces heightened awareness for critical requirements. Topics for a feature of work quality plan meeting include:

**Questions? Call First Time Quality 410-451-8006**

**List of Included Forms**

**Military Forms:**

- Preparatory Phase Checklist
- Initial Phase Checklist Form
- Contractor Quality Control Report

**Standard Forms:**

- Contract Organization Chart
- Quality Manager Appointment Letter
- Alternate Quality Manager Appointment Letter
- Contract Manager Appointment Letter
- Superintendent Appointment Letter
- Personnel Certifications and Licenses
- Contract Personnel Resumes
- Contract Subcontractor and Supplier List
- Training Plan
- Training Log
- Quality Inspection and Test Plan
- Quality Controlled Work Task List
- Nonconformance Report
- Punch List
- Contract Completion Inspection Form
- Contract Quality System Audit Form
- Quality Controlled Feature of Work
- Feature of Work Work Order Form
- Feature of Work Inspection Form
- Contract Licenses and Qualifications

**[CompanyName]**  
**Contract Subcontractor and Supplier List**

Version 20140828

Contract ID	Contract Name			Preparer/ Date
[ProjectNumber]	[ProjectName]			

Features of Work	Subcontractor and Supplier Name	Description of Services	Quality Control Method (Not Applicable/ Subcontractor and Supplier QC/ [CompanyName] QC)	Remarks

**[CompanyName]**  
**Contract License and Qualifications**

Version 20140828

Contract ID	Contract Name	Approval	Approved By
[ProjectNumber]	[ProjectName]	<input type="checkbox"/> Yes <input type="checkbox"/> Conditional <input type="checkbox"/> No	
<b>Review Topics</b>	<b>Contract quality-related credential requirements</b>		
	Licenses required:	License and expiration dates:	
	Certification required:	Certifications and expiration dates:	
	Training required:	Training completed and expiration date:	
	Type and length of experience required:	Certifications and expiration dates:	
	Personnel license, certification, and training required:	List each person's credentials on the Subcontractor and Supplier Certifications and Licenses form.	
<b>Qualifications</b>			
<b>QUALIFICATION NOTES:</b>			



**For More Information:  
Contact: FirstTimeQuality**

**410-451-8006**

**www.FirstTimeQuality.com**

**EdC@FirstTimeQuality.com**

**For More Information, contact: CaldeiraQuality, LLC • First TimeQuality<sup>SM</sup>.  
410-451-8006 • www.getFirstTimeQuality.com • EdC@FirstTimeQuality.com**