



USACE-NAVFAC Sample QA/QC Plan

20 selected pages (out of)

Part 1: Project-Specific Quality Plan

Part 2: Quality Manual

Part 3: Submittal Forms

Contact:

First Time Quality

410-451-8006

PROJECT-SPECIFIC QUALITY PLAN

TABLE OF CONTENTS

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

Background Information	6
Project Name	6
Project Number	6
Project Location	6
Project Description	6
Project Scope	6
A. QC Organization	7
B. Names and Qualifications	8
C. Duties, Responsibilities, and Authority of QC Personnel	10
Quality Responsibilities	10
D. Outside Organizations	13
Qualification of Subcontractors and Suppliers	13
Purchase Order Approval	13
Qualification of Testing Laboratories	14
E. Appointment Letters	16
F. Submittals Procedures and Submittal Register	20
G. Testing Laboratory Information	21
Qualification of Testing Laboratories	21
H. Quality Testing Plan and Log	23
Preparation of Inspection and Test Plan	23
I. Procedures Completion of Rework Items	25
Nonconformance Controls	25
Nonconformance Corrective Actions	26
Nonconformance Preventive Actions	26
J. Documentation Procedures	29
K. List of Definable Features	31
L. Procedures for Performing the Three Phases of Control	33
Phase 1: Preparatory Phase	33
Phase 2: Initial Phase	34
Phase 3: Follow-up Phase	35
M. Personnel Matrix	42
N. Procedures for Completion Inspection	43

Punch-Out QC Inspection	43
Pre-Final Customer Inspection	43
Final Acceptance Customer Inspection	43
O. Training Procedures and Training Log.....	47
Project Quality Training	47
P. Organization and Personnel Certifications	50
Company Qualifications.....	50
Personnel Certifications	50
Q. Design Controls	53
Design Reviews	53
Design Review Plan.....	54
R. Additional Quality Control Requirements	57

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 project 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 project quality is not adversely impacted by the event.

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

MARKING OF NONCONFORMANCES AND OBSERVATIONS

When the QC Manager, Superintendent, inspector, or customer identifies a nonconformance or an observation, the item is quickly and clearly marked by paint, 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 marks 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 QC Manager.

QC MANAGER DISPOSITION OF NONCONFORMANCE REPORTS

When the QC Manager receives a Nonconformance Report, he or she makes an assessment of the affect the reported nonconformance has on form, fit, and function. The QC Manager may assign a disposition of either:

REPLACE: The nonconformance can be brought into conformance with the original specification requirements by replacing the nonconforming product or material with a conforming product or material.

REPAIR: The nonconformance can be brought into conformance with the original requirements through re-machining, reassembly, reprocessing, reinstallation, or completion of the required operations.

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

Phase 1 is the Preparatory Phase that plans quality for an upcoming feature of work. It includes a requirements review, site inspection, and a preparatory meeting. Records of the preparatory phase of control are recorded on the Preparatory Phase Checklist included as exhibits in this subsection.

Procedures that will be used on this project to conduct the Phase I preparatory phase of control are as follows.

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

[CompanyName] Nonconformance Report <small>Version April 7, 2012</small>		
Nonconformance Report Control ID	Project ID	Project Name
	[ProjectNumber]	[ProjectName]
Preparer Signature/ Submit Date	QC Manager Signature / Disposition Date	
Description of the requirement or specification		
Description of the nonconformance, location, affected area, and marking		
Disposition	<input type="checkbox"/> Replace <input type="checkbox"/> Repair <input type="checkbox"/> Rework <input type="checkbox"/> Use As-is	
	Approval of disposition required by customer representative? Yes <input type="checkbox"/> No <input type="checkbox"/>	
	Customer approval signature /date: _____	
Corrective Actions	<input type="checkbox"/> Corrective actions completed Name/Date: _____ Customer acceptance of corrective actions required? Yes <input type="checkbox"/> No <input type="checkbox"/> Name/Date: _____	
Preventive Actions	<input type="checkbox"/> Preventive actions completed Name/Date: _____	

Selected Pages

Q. DESIGN CONTROLS

Design controls are in place to assure the quality of designs for this project.

A design plan is used to document the design control process. The Design Plan is included as an exhibit in this subsection.

The first control point will be of the review of design inputs. The Design Manager will assure that all necessary information is available to perform the required design work. The Design Manager will also assure that expectations for design outputs are well defined.

Intermediate reviews will be carried out as indicated on the design control plan. The last review is the design output review.

A record of all reviews will be recorded on the Design Review form. A Design Review form exhibit is included in this subsection.

The Owner has appointed [DesignManagerName] as the Design Manager. [DesignManagerName] will control the design process with specific quality responsibilities, duties, and the authority to carry them out.

DESIGN REVIEWS

DESIGN INPUT REQUIREMENTS REVIEW

The Quality Manager ensures that the information in design inputs clearly defines customer expectations and that the necessary details are provided to set requirements for design.

The Quality Manager obtains design specifications from the customer and conducts a customer design input review to ensure that:

- Customer design input requirements and specifications are complete
- Design process review milestones are specified when necessary
- Customer design output requirements and specifications are complete for review milestones as well as the completed design
- Customer design requirements and specifications are compatible with the relevant regulations, [CompanyName] quality standards, and Quality System requirements
- [CompanyName] has the capability to deliver the completed design in the time allotted

The Quality Manager identifies supplemental design specifications that supplement customer specifications when they are needed to ensure a quality design.

Before design work begins, the Quality Manager makes sure that all design requirements are clearly understood, all discrepancies are resolved, and all requirements are agreed upon. Once these requirements are met, the Quality Manager approves the design input.



[CompanyName] Project Design Review Plan <small>Version 20131016</small>					
Project ID	Project Name	Preparer	Date		
[ProjectNumber]	[ProjectName]				
Design Appointments					
Design Manager					
Designer(s)					
Design QC Reviewer					
Design Review Milestones					
	Ref#	Work Task	Output required for review	Scheduled date/milestone	Review participants
Design Input Review					
Work in Process Review:					
Work in Process Review:					
Final Design Review:					

Selected Pages

QUALITY MANUAL

TABLE OF CONTENTS

1. Quality System Management and Responsibilities	11
1.1. Overview.....	11
1.2. [CompanyName] Quality Policy.....	11
1.3. Quality Duties, Responsibilities, and Authority.....	11
1.4. Quality System Performance Measures.....	14
1.5. Customer Satisfaction Performance Measures.....	14
1.6. Exceptions.....	14
2. Project Quality Assurance/Quality Control Plan	15
2.1. Overview.....	15
2.2. [CompanyName] Project License and Qualification Requirements.....	15
2.3. Project Personnel and Qualifications.....	16
2.4. Project Quality Assurance/Quality Control Plan.....	17
2.5. Identification of Quality Controlled Features of Work.....	17
2.6. Project Quality Inspection and Test Plan.....	17
2.7. Project Quality Communications Plan.....	17
2.8. Project Quality Training Plan.....	17
2.9. Customer Training On Operation And Maintenance.....	18
2.10. Project Records and Documentation Plan.....	18
2.11. Project Audit Plan.....	18
3. Contract Specifications	19
3.1. Overview.....	19
3.2. Contract Technical Specifications.....	19
3.3. Contract Drawings.....	19
3.4. Contract Submittals.....	19
3.5. Customer Submittal Approval.....	21
3.6. Contract Warranty.....	21
3.7. Contract Review and Approval.....	22
4. Design Control	23
4.1. Overview.....	23
4.2. Design Input Review.....	23
4.3. Project Design Quality Assurance/Quality Control Plan.....	23
4.4. Design Progress Reviews.....	24
4.5. Design Output Verification and Approval.....	24
5. Project-Specific Quality Standards	25
5.1. Overview.....	25
5.2. Regulatory Codes.....	25

5.3. Industry Quality Standards	25
5.4. Material and Equipment Specifications.....	25
5.5. Work Process Specifications.....	26
5.6. Controlled Material Identification and Traceability	26
5.7. Measuring Device Control and Calibration.....	27
5.8. [CompanyName] Quality Standards	27
5.9. Application of Multiple Sources of Specifications	27
6. Project Purchasing	28
6.1. Overview.....	28
6.2. Qualification of Suppliers, Subcontractors, and Departments	28
6.3. Quality Responsibilities of Key Subcontractor Personnel.....	29
6.4. Requirements for Subcontractor QC Plan	30
6.5. Subcontractor Quality Policy	30
6.6. Project Subcontractor and Supplier List	31
6.7. Purchase Order Requirements	31
6.8. Project Purchase Order Approvals.....	31
7. Process Controls.....	33
7.1. Overview.....	33
7.2. Project Startup and Quality Control Coordination Meeting.....	33
7.3. Preparatory Project Quality Assurance/Quality Control Plan Planning.....	33
7.4. Weekly Quality Planning and Coordination Meetings.....	34
7.5. Process Control Standards.....	34
7.6. Daily Quality Control Report.....	36
7.7. Monthly Quality Control Report.....	36
8. Inspections and Tests	37
8.1. Overview.....	37
8.2. Required Feature of Work Quality Inspections and Tests	37
8.3. Additional Inspection Requirements for Process Tasks.....	38
8.4. Inspection of Special Processes	39
8.5. Independent Measurement and Tests	39
8.6. Commissioning Functional Acceptance Tests.....	39
8.7. Hold Points for Customer Inspection.....	39
8.8. Quality Inspection and Test Specifications	39
8.9. Inspection And Test Acceptance Criteria.....	39
8.10. Inspection and Test Status.....	40
8.11. Independent Quality Assurance Inspections	40
8.12. Inspection and Test Records.....	40
8.13. Project Completion and Closeout Inspection	41
9. Nonconformances and Corrective Actions	43
9.1. Overview.....	43
9.2. Nonconformances	43
9.3. Corrective Actions	44

10. Preventive Actions	45
10.1. Overview.....	45
10.2. Identify Preventive Actions for Improvement	45
10.3. Train Preventive Actions for Improvement	45
11. Quality System Audits	47
11.1. Overview.....	47
11.2. Project Quality System Audit.....	47
11.3. Company-wide Quality System Audit	47
12. Record and Document Controls.....	48
12.1. Overview.....	48
12.2. Quality System Documents	48
12.3. Document Controls.....	48
12.4. Record Controls	49
13. Appendix.....	51
13.1. Definitions of Terms	51

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Selected Pages

CROSS REFERENCES

The [CompanyName] Quality System complies with US Army Corps of Engineers Quality Control Requirements "USACE/NAVFAC/AFCEA/NASA Quality Control Requirements UFGS-01 45 00.00 20 (November 2011)".

USACE Requirements Section	Quality Manual Section
1.5 QC Organization	2.3.1 Project Organization Chart
1.6 Quality Control Plan	2 Project Quality Assurance/Quality Control Plan
1.7 QC Plan Meetings	2 Project Quality Assurance/Quality Control Plan
1.8 Coordination and Mutual Understanding Meeting	7.2 Project Startup and Quality Control Coordination Meeting
1.9 QC Meetings	7.4 Weekly Quality Planning and Coordination Meetings
1.10 Design Review and Documentation	3.7 Contract Review and Approval 4.2 Design Input Review
1.11 Three Phases of Control	7.3 Preparatory Project Quality Assurance/Quality Control Plan 8.2.2.2 Initial Work in process Inspection 8.2.2.3 Follow-up Work in Process Inspections
1.12 Submittal Review and Approval	3.4 Contract Submittals
1.13 Testing	6.2.1.1.1 Independent Laboratory Credential Requirements 8.12 Inspection and Test Records
1.14 QC Certifications	Daily Quality Control Report 7.6 Daily Quality Control Report 8.13 Project Completion and Closeout Inspection
1.15 Completion Inspections	8.13 Project Completion and Closeout Inspection
1.16 Training	2.9 Customer Training On Operation And Maintenance
1.17 Documentation	12 Record and Document Controls
1.18 Notification of Noncompliance	9 Nonconformances and Corrective Actions

7. PROCESS CONTROLS

HOW WORK IS CARRIED OUT

7.1. OVERVIEW

The construction process plan defines how project work is to be done and approved for the overall project. The construction process plan is communicated to all key personnel, subcontractors and suppliers in a startup meeting. As the project 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. PROJECT STARTUP AND QUALITY CONTROL COORDINATION MEETING

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

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

7.3. PREPARATORY PROJECT QUALITY ASSURANCE/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

- 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

Selected Pages

Questions? Call First Time Quality 410-451-8006

List of Included Forms

Military Forms:

- Preparatory Phase Checklist
- Initial Phase Checklist Form
- Contractor Production Report
- Contractor Quality Control Report
- Testing Plan and Log

Standard Forms:

- Point Of Contact List
- Project Organization Chart
- Project Quality Communications Plan
- Quality Manager Appointment Letter
- Project Manager Appointment Letter
- Superintendent Appointment Letter
- Personnel Certifications and Licenses
- Project Personnel Resumes
- Project Subcontractor and Supplier List
- Training Plan
- Training Log
- Regulatory Codes and Industry Standards
- Project Regulatory Building Codes
- Controlled Materials Form
- Metals Material Receiving Inspection Report
- Material Inspection and Receiving Report
- Inspection and Testing Standards
- Quality Inspection and Test Plan
- Test Equipment Calibration Plan and Log
- Quality Controlled Work Task List
- Daily Production Report
- Work Task Inspection Form
- Nonconformance Report
- Punch List
- Project Completion Inspection Form
- System Document Control Form
- Project Records Control Form
- Project Quality System Audit Form

[CompanyName] Laboratory Qualification Form

Version April 7, 2012

Company Name:	Scope of Work (specification sections):
---------------	---

Project ID	Project Name	Approval	Approved By
[ProjectNumber]	[ProjectName]	<input type="checkbox"/> Yes <input type="checkbox"/> Conditional <input type="checkbox"/> No	

Review Topics	Project-Related Job Credentials	
	Licenses required:	License and expiration dates:
	Certification required: <input type="checkbox"/> NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7. <input type="checkbox"/> NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program. <input type="checkbox"/> The American Association of State Highway and Transportation Officials (AASHTO) <input type="checkbox"/> International Accreditation Services, Inc. (IAS) <input type="checkbox"/> U. S. Army Corps of Engineers Materials Testing Center (MTC) <input type="checkbox"/> American Association for Laboratory Accreditation (A2LA) program	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.
	Qualifications	
	<input type="checkbox"/> Senior person designated as QC Manager <input type="checkbox"/> Demonstrated skills and knowledge <input type="checkbox"/> Demonstrated experience	<input type="checkbox"/> Production capacity <input type="checkbox"/> Staffing availability
	QUALIFICATION NOTES:	

Provisional Approval: Action plan for improvement

Follow-up results and date

[CompanyName]
Material Inspection and Receiving Report

Version April 7, 2012

Contract ID	Contract Name	Purchase Order No.	Supplier			Bill of Lading No.	Date	
[ProjectNumber]	[ProjectName]							
Item No.	Stock/Part No.	Description	Quantity Received	Condition	Marking	Accept	Conditional Use	Reject
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Receiving Quality Control

ACCEPTANCE

Listed items have been accepted by me or under my supervision

- Conform to contract specifications EXCEPT as noted herein or on supporting documents.
- Received in apparent good condition EXCEPT as noted

Signature of authorized person and date: _____

EXCEPTIONS:



**For More Information:
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