



NAVFAC

Naval Facilities Engineering Systems Command

NAVFAC SOUTHEAST

Measure Twice, Cut Once When it comes to CQM

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Principles of CQM ?

Processes, systems, and activities implemented to ensure construction projects meet the required quality standards as set forth by contract.

Aims to prevent errors, omissions, and non-compliance and ensures the final product meets the expectations of the Government

Construction Quality Management is a combined effort of the Contractor Quality Control personnel and the Governments Quality Assurance personnel working as a team to assure work is performed in accordance with the quality standards established in the plans and specifications, on time, within a defined budget and in a safe working environment.

Benefits of CQM ?

For Contractors:

- Cost savings equating to increase profit
- Compliance with regulations (OSHA and Environmental)
- Enhance Reputation
- Outstanding performance evaluations

For the Government:

- Contract expectations are achieved.
- Taxpayers get their money's worth
- Enhance time management

Communications

- Post-Award / Pre-Construction Conference.
- Mutual Understanding and Coordination Meeting.
 - Essential to discussion pre-construction submittals (APP, EPP, QCP)
- Quality Control Meetings.
- Preparatory and Initial Meetings for each Definable Feature Of Work (DFOW).
- Other coordination meetings as required to perform testing, commissioning, training.
- Red Zone & Commissioning Meetings
- Pre-Final and Final Acceptance Inspections

Quality Control Plan

1. Table of **Contents**
2. Contractor's QC **organizational structure**
3. Identify QC personnel **qualifications**
4. **Responsibilities** for Quality Control personnel
5. Outside Organizations
6. **Authorization** Letters
7. **Submittal** schedule & processes
8. Testing (Laboratory)/ **Testing Plan & Log**
9. **Deficiency** tracking procedures
10. Quality Control **documentation**
11. List of **Definable Features of Work**
12. **Three Phase** of Control procedures (Next Slide)
13. **Completion/Contract Closeout** procedures
14. Training Procedures & Training Logs
15. Organization & Personnel Certifications Log

QC
PLAN

References:

- Section 01 45 00 QUALITY CONTROL (USACE & NAVFAC)
 - Check your individual contract

Quality Control Plan

3-Phase

Preparatory Phase

- Before a DFW
- starts – **Agree on**
- **Quality Standard**
- (specs/processes, etc.)
- **Safety**

Initial Phase

- Just when the DFW
- started – **Agree on the Standard of Workmanship**
- **Safety**

Follow-up Phase

- Daily based work
- inspection –
- **Check agreed standards are being met**
- **Safety**

Control vs. Inspection



Purple line represents time, and the increased cost and effort for corrective actions.

Quality Control Procedures Testing

QC Testing

- By Contractor
- Determine procedures & materials... to produce the product as required by contract and standards agreed.

QA Testing

- By Government ▪
- Verify the tests and procedures... ▪ are adequate to check the product is IAW contract and standards agreed

- Identify all required testing – Testing Plan in QCP
- Understand reporting requirements
- Lab & personnel acceptable/ certificates/ qualifications
- Calibration certificates
- Establish procedures for documenting corrective steps



CQM AND SAFETY



Quality Control Procedures Closeout Completion

Red Zone Meeting

Establish turnover procedures with all stakeholders.
Can involve inspections and multiple meetings.
Hosted by COR/ Site Superintendent

Commissioning

Test & balancing equipment.
Is usually period rather than meeting.
Hosted by Commissioning Manager

Turnover

DD1354/ Completion Cert.
One meeting - Start Warranty
Hosted by COR

Warranty

Warranty Management.
On demand/regular / 4-/9-month insp.
Hosted by the COR

Key Indicators System is achieving it's goals

- Daily Reports are accurate and submitted on time
- Preps and Initials are being held
- Project is on schedule
- Deficiency tracking system is properly implemented and updated
- RFI's are being properly questioned and answered
- Submittals are provided and responded to timely
- Submittals are being accepted/approved on initial submission to the Government
- Modifications are timely (Sometimes a funding issue)
- No non-compliance notices from the Government
- No Safety incidents

In Closing

Construction Quality Control is a collaborative and systematic approach that involves the participation of personnel from various departments, trades, and disciplines at every stage of construction from Design to Government acceptance to ensure the quality of the construction projects meet the desired goals and a high quality project is delivered to the end user to support the war fighter.

Questions