



QC Organization Responsibilities



By:

Ahmad Zia Amin

QAB-Afghanistan Engineer District

Qalaa House, US Army Corps of Engineers-USACE

Afghan Engineering District-AED



OBJECTIVES

1. QC Introduction
2. QC Responsibilities
3. QCM Authority
4. QC Org Responsibilities
5. Requirements for QC





1. INTRODUCTION

As QC personnel, be properly familiar with all provisions of contract documents such as:

- ❑ Submittals;
- ❑ Plans & Specifications;
- ❑ Revisions, changes & amendments;
- ❑ Your management policies;
- ❑ General Requirements of QC as will be stated in next slides;

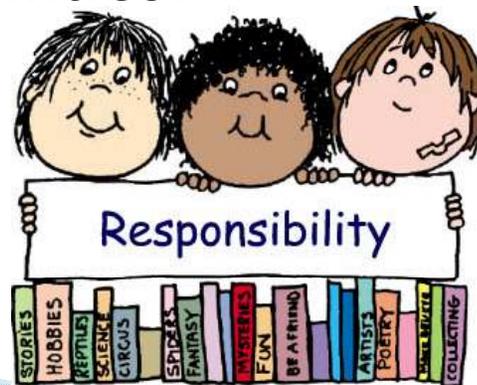




2. RESPONSIBILITIES

Quality Control Managers need to answer & obtain precise answers to the following questions:

- Do I understand the importance of my responsibility for the highest quality construction?
- Do I have technical knowledge, tact & good judgment to effectively perform my quality control duties?
- Do I fully understand the extend of my responsibilities?





2. RESPONSIBILITIES

ASK YOUR SELF:

1. Have I accepted all of my responsibilities?
2. Have I overlooked any of my potentialities?
3. Will I use my authority tactfully?
4. Do I understand my management's expectations with respect to my responsibilities?
5. Am I aware of my responsibility to record in my daily report all verbal instructions given & received;



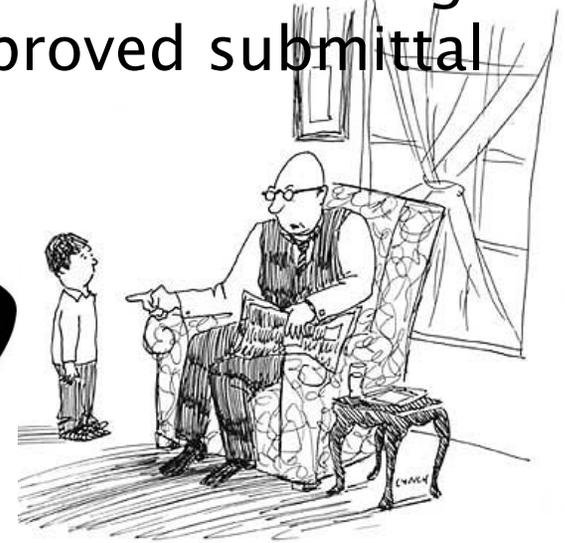


3. AUTHORITY

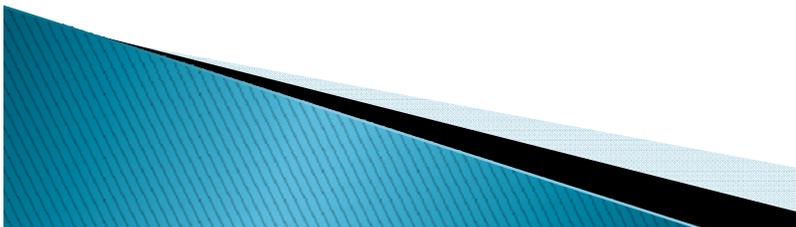
1. Make sure you know the extent of your authority, as this constantly involves the requirements that work shall be done in accordance with contract plans & specification.

At times of implementing this authority may require advice & assistance.

2. Check your management policies with respect to your authority to stop contractor operations for such things as safety violation occurrence & unapproved submittal usage on job site.



"Never delegate authority; delegate liability."





4. QC Organization Requirements

- ▶ QC Manager
- ▶ Alternate QC Manager
 - On-site in the absence of the QC Manager
- ▶ Design Quality Manager (D-B contract)
- ▶ QC Inspectors
 - electrical, mechanical, civil, structural, architectural, materials
- ▶ Submittals clerk





QC Manager Qualifications

- ▶ Employed by the prime contractor
- ▶ Graduate of engineering, architecture, or construction management
- ▶ Minimum of 10 years relevant experience
- ▶ Completed CQM course





QC Inspector Qualifications

▶ Civil, mechanical, electrical, and structural:

- Relevant degree in engineering or construction management and 2 years of related experience OR
- A person with 10 years of related experience

▶ Architectural:

- Architecture degree and 2 years of related experience OR
- A person with 10 years of related experience





Submittal Clerk Qualifications

- ▶ At least 1 year of experience on an AED project
- ▶ Knowledge of QCS software





QC Manager Responsibilities

- ▶ On-site at all times during construction
- ▶ Must NOT have duties as superintendant
- ▶ Has authority to stop work





QC Manager Responsibilities

- ▶ Reviews contract, plans and specifications
 - clears up any discrepancies with RFI's
- ▶ Select materials and equipment to ensure adequacy and connectivity
- ▶ Ensure work conforms to plans and specifications





QC Manager Responsibilities

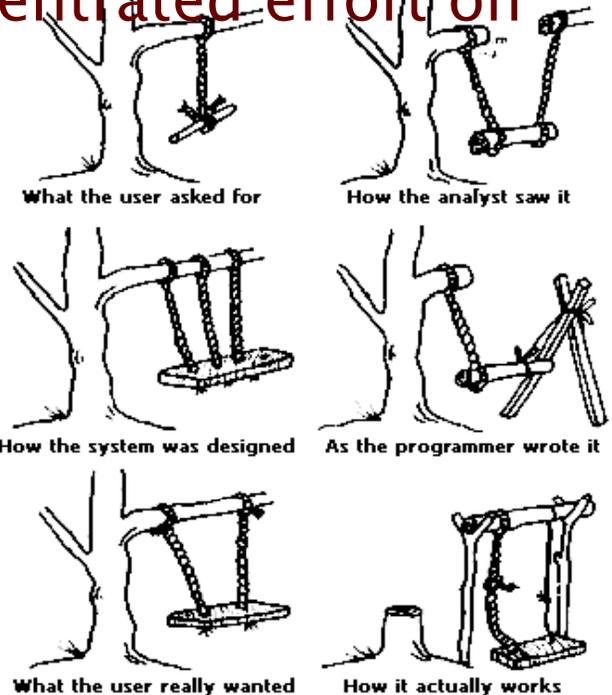
- ▶ Overall management of effective QC
 - Reviews, approves submittals
 - Three phases of inspection
 - QC tests
 - Tracking deficiencies
 - Daily QC reports
 - Implementation of QCS!





5. QA/QC Requirements

- a) Quality Control is the contractor's requirement, while Quality Assurance is a function of USACE;
 - b) QA role is to ensure that quality control requirements of contract have been met;
 - c) CQC requires, contractor fulfils the program & use its management provisions daily to C the Q of work;
 - d) Effective QC requires serious & concentrated effort on supervisory & inspection personnel;
- ▶ **Quality Assurance:** A set of activities designed to ensure that the development and/or maintenance process is adequate to ensure a system will meet its objectives.
 - ▶ **Quality Control:** A set of activities designed to evaluate a developed work product.



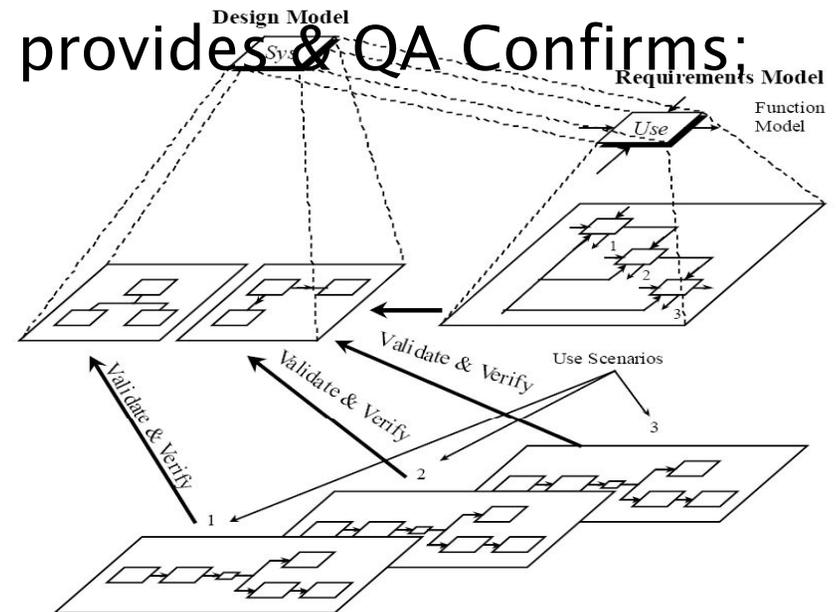
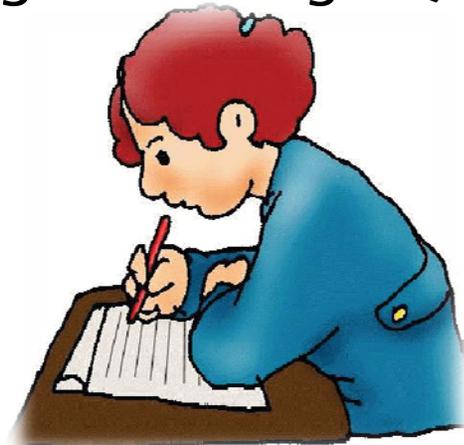


5. QC Requirements

e) Contract Requirements provide the tools for fulfillment of goals, as follow:

1) Before start of construction:

- ✓ Pre-Construction Conference;
- ✓ Mutual Understanding Conference (MUC);
- ✓ Submittal acceptance – QCP-APP-Project Schedule-Submittal Register- Mob Plan;
- ✓ CQC planning & staffing –QC provides & QA Confirms;



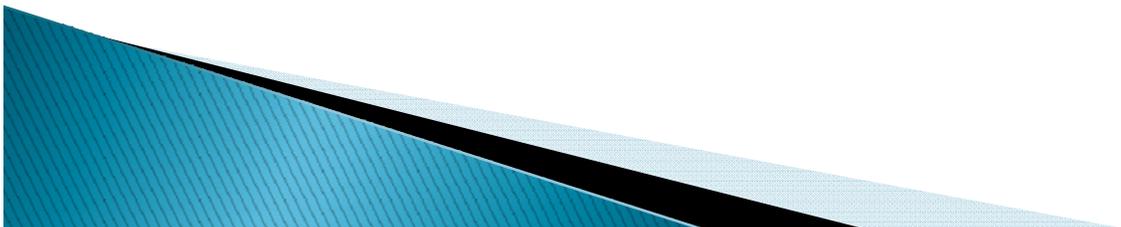


5. QC Requirements



2) After start of construction:
Conduction of Three-Phase of Control;

- Preparatory Phase Inspection
- Initial Phase Inspection
- Follow-up Phase Inspection





5. QC Requirements

3) After construction completion:
Conduction Final Inspections;

- Pre-Final Inspection
- Final Inspection



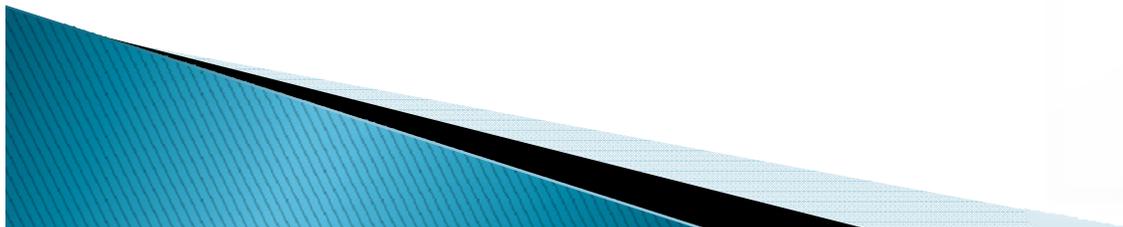


5. QC Requirements

2) After construction completion:

Participation;

- Red-Zone Meeting
- Pre-Warranty Conference
- Conduction of 4-Month and 9 Month Warranty Inspections





5. QC Requirements

f) “cut & cover” Works

- The work cannot be inspected later;
- Concretes rebar size, number, location of reinforcing steel cannot be changed;
- Most of under ground utilities;





5. QC Requirements

g) Arise of disadvantage

- ❑ When QCM unlikely & readily take actions, will result delay & expense to the Contractor;
 - Concrete maximum slump 2''
 - IF Roofing bituminous is over heated?

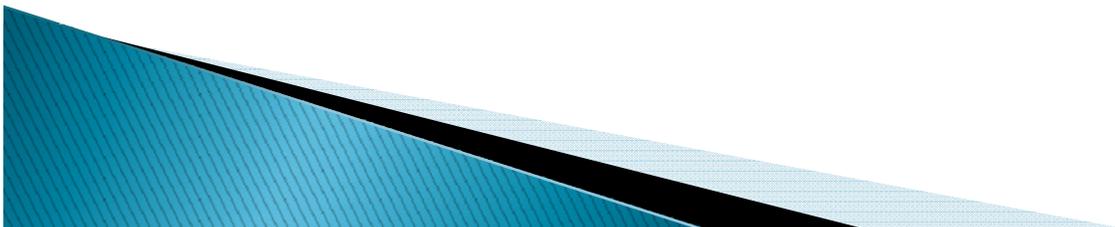
These deficiencies will became a latent defects long time after contractor cost been enforced;





5.QC Requirements

- h) The latent defects may occur & COE Representatives has vital role in assuring that these similar situation do not occur, KTR is responsible for compliance;
- i) As QCM closely monitor the CQC program, 3-phase inspection, & effectively control all operations;
 - ❖ If CQC personnel are not capable, then KTR may decide another person instead.





Discussion

