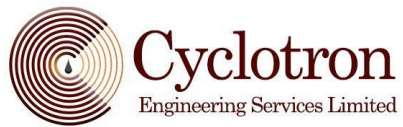


# QA/QC Policy Statement



**Cyclotron**  
Engineering Services Limited

Turbomachinery | Asset Integrity | Maintenance



## Cyclotron Engineering Services Limited

Administrative and Technical Publication

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## **Core Competencies**

- | Turbomachinery Operations & Maintenance |
- | Asset Integrity Management |
- | Equipment Installation and Commissioning |
- | Procurement and Delivery | Training and Certification |

This document seeks to provide an insight into the plans and policies behind the decision of **Cyclotron Engineering Services Limited** approach to general Quality Assurance and Control (QA/QC) challenges as well as a guideline to direct its stakeholders (employees, contractors and clients in the day-to-day operational decision making.

Over the past, **Cyclotron Engineering Services Limited** has taken a number of bold steps towards this objective, with most encouraging results. We have recently completed a corporate change process to enhance our capabilities and ensure service delivery to our clients and employees in our three core areas of concern, namely HSE, Quality and Cost. While each of our Divisions provides distinct products and expertise, they all share our corporate commitment to client satisfaction.

We shall also continue to package and deliver our services in ways that simplify the communication and transaction processes between us, but still offer **Cyclotron Engineering** signature depth of technical services.

To that end, we are hopeful you shall always find it more advisable to do business

with us. Thank you.



**Joe Ekanem**, CEng, CMRP, FIMechE

Managing Director

**Cyclotron Engineering Services Limited**

## 1.0 Quality Assurance and Quality Control

**Cyclotron Engineering Services Limited** conducts its business in a manner that is ethically and socially responsible to protect the health and safety of people as well as to safeguard the environment and properties. We deploy effective risk management to help us operate reliably, efficiently and safely. The company's goal is to show readiness and demonstrate our capability within the key areas we are established, and functioning. The company systematically integrates the management of process safety, personal safety, health and environment into every aspect of its business activities and in areas or communities within our operational control. Additionally, compliance assurance with all applicable safety, health and environmental laws or regulations is an integral part of the company's culture.

It is the policy of **Cyclotron Engineering Services Limited** to provide reliable and defect-free quality products and services to its clients. **Cyclotron** is also committed to a value-added, continuous-improvement process that promotes the achievement of excellence at workplace while maintaining the safety of all personnel, the public and the environment.

This Policy documents **Cyclotron Engineering** leadership and management commitment to the development and implementation of the **Cyclotron**-quality program. It is **Cyclotron Engineering's** plan to establish quality assurance guidelines and processes to ensure that risks and environmental impacts are minimized, and that safety, reliability and performance are maximized through the application of effective management control systems. These control systems will commensurate with the risks posed by the projects, operations or the services provided.

All **Cyclotron** staffs are responsible for compliance with the requirements established by our QA/QC processes and manual. The responsibility and authority for the attainment of quality also reside with each staff member. It is the responsibility of all **Cyclotron's** staff, through the concept of employee empowerment, to provide work practices, goals, and staff interactions that promote an environment where communication is open, barriers to performance are identified and corrected and a safer and more productive workplace exists.

**Cyclotron** staffs have the obligation and organizational freedom to identify and report to management any current or potential deficiency that may have a detrimental impact on quality, safety, cost or schedule so that appropriate corrective action may be initiated. Contractors who furnish materials and services and who are working within the scope of the quality program must reflect 3G programs and practices.

**Cyclotron** Quality program and procedures are also designed to promote quality products that meet client expectations in a cost-effective and efficient manner. This is accomplished by tailoring individual Project Quality Plan and using the work processes that are in place to eliminate inefficiencies and unnecessary documentation. 3G Quality engineers and specialists are trained in developing Quality Plans that accomplish the programmatic requirements without excessive

steps and duplication.

**Cyclotron** is committed to the highest international service and product delivery safety standards in executing activities.

**Cyclotron** is currently chasing it's ISO 9001-2008 certification.

## 1.1 Objectives

The implementation of the QA/QC policy is essential for the **Cyclotron Engineering** to fulfil her unswerving commitment to reach the industry best quality standards. The objectives of this policy are as follows:

- Ensure top management must establish a quality policy that is appropriate to the purpose and context of the organization and critically, it must support its strategic direction.
- Provide a framework for the setting and review of quality objectives, include commitments to satisfy any applicable requirements and to continually improve the quality management system.
- Ensure quality policy is also appropriate to the context of the organization, not just its purpose.
- Assure the review and possible update of the organization's quality policy if there is any change in the context of the organization or the relevant requirements of the applicable interested parties.
- The policy provides and demonstrates Cyclotron Engineering's commitment to continually improve the QMS

## 1.2 Responsibility

- Employees are responsible for demonstrating compliance with all company policies, procedures, practices and laws that apply to their assigned duties and responsibilities. Employees are responsible for carrying out work operations safely and are to seek guidance from the Manager/Supervisor/Site Manager if he/she is unsure of the legal or regulatory implications of his/her actions. Every employee has the authority to STOP any work or product that fails to meet the company's standards.
- **Cyclotron Engineering Services Limited** management is responsible for complying with this policy within their respective functions and authority limits. They are to communicate this policy to employees, establish programs needed to ensure that it is implemented and see to it that the policy is kept up to date.

The policy must include a commitment to continually improve the QMS

## 1.3 Work Verification:

Your quality assurance plan must not only detail who is responsible for carrying out a particular task, but it also must specify who is responsible for checking the work. In small businesses, it is permissible for the person doing the work to also check it, but he has to carry out the verification as a separate task, according to separate procedures. In larger organizations, employees in the same department can check

each other's work. But the quality assurance plan often specifies that, for critical tasks, work verification must be carried out by someone especially qualified and may be part of a distinct quality assurance department.

### *1.3.1 Material Purchasing and Receiving*

Another requirement of quality assurance is that the material used for production must meet the specifications for manufacturing a product of the desired quality. The quality assurance plan should specify the characteristics of the purchased materials. The plan assigns the task of verifying incoming material and details the inspection that is required. Material that doesn't meet the requirements is returned.

### *1.3.2 Assuring Supplier Qualifications*

While inspectors can verify the adequacy of basic materials, the testing of complicated pieces of equipment upon receipt is often not possible. Instead, your quality control plan has to specify the standards that prospective suppliers must meet before they can bid on a contract. For example, you might specify an external standard such as ISO 9000, or require that your organization performs an audit on each potential supplier to ensure that procedures considered critical for the success of the quality plan are in place. In either case, the quality control plan should have a list of qualified suppliers.

### *1.3.2 Quality Feedback Assurance*

While a quality assurance plan tries to ensure that the procedures in place result in a quality product, companies derive full benefits from such an initiative via the feedback mechanism. Your quality assurance plan implements feedback through investigation of customer complaints and the correction of non-compliance issues. Specify that the person responsible for quality assurance receives copies of all customer complaints, then checks to see if they are the result of non-compliance with the quality assurance plan.

Internally, if a person responsible for a task notices that a process is not in accordance with the applicable procedures, he has to issue a non-compliance report. The non-compliance reports are the feedback used to track quality issues back to their origin.

### *1.3.3 A Process for Corrective Action*

The corrective action plan is the key to solving quality problems and specifies how to deal with them. Your quality assurance plan must specify that the person responsible for quality assurance verifies how the non-compliance originated when he receives a non-compliance report or creates one himself. Since the quality assurance plan documents responsibility for all tasks and actions, it is possible to identify the persons responsible for the non-compliance.

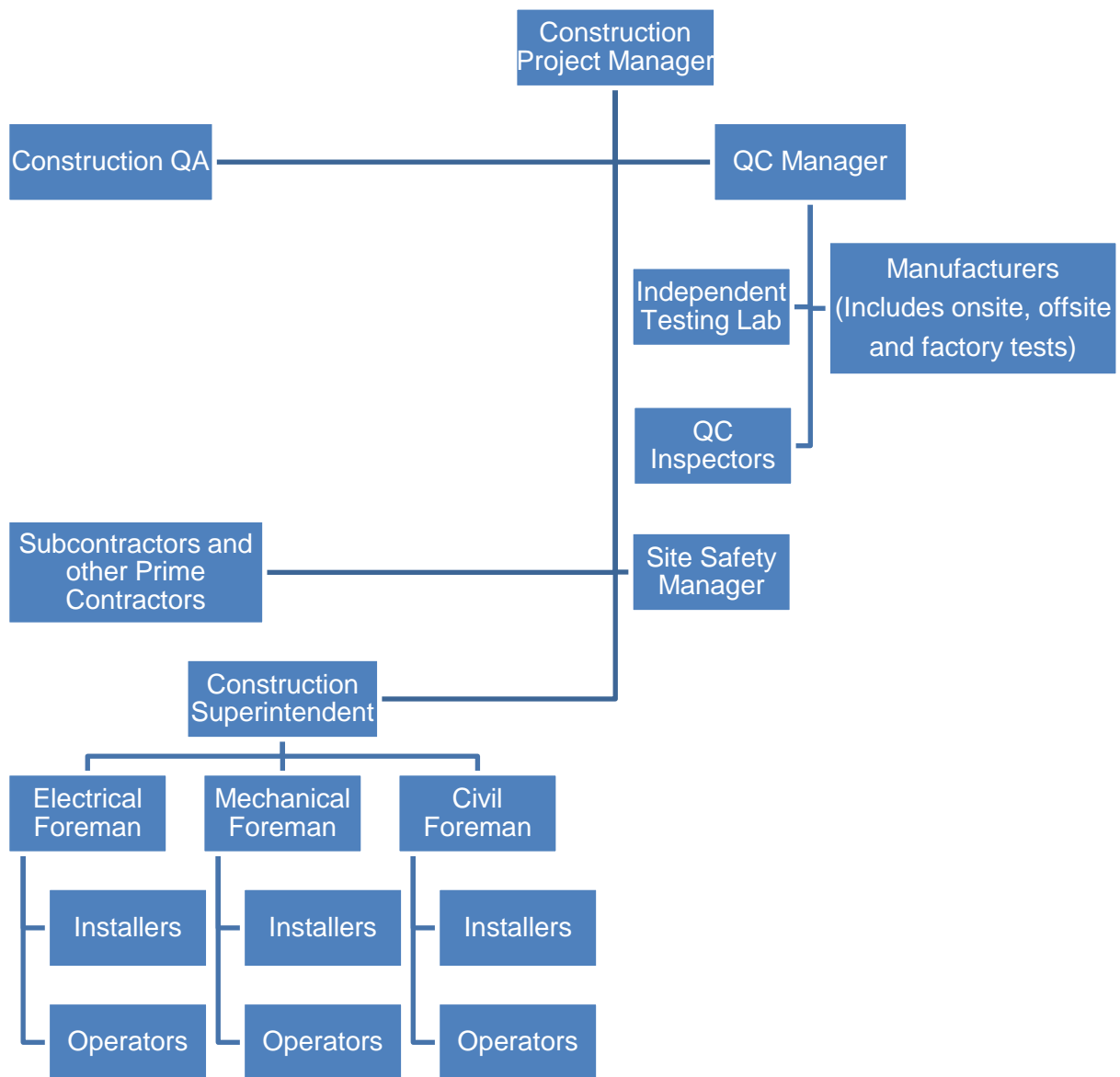
In the quality assurance plan, you must specify that a group try to find a solution that will prevent the non-compliance from recurring. The group should include a representative from quality assurance, the person who did the work and the person who checked it. The fact that the person responsible for quality assurance reports to



upper management ensures that the group has access to the required resources.

### 1.4 Organizational Chart

This is a minimum organizational chart. This varies with the intended project and would be modified as part of the final package as may be jointly agreed with Client prior to commencement of work or contract award (whichever comes first).



### 1.5 Resumes and Certifications Documentation

Detailed Resumes and Certifications are as provided within the work execution program.

- Quality Control Manager
  - Confirm on resume at least 5 years of related experience in quality control inspection on construction projects.
- Quality Control Specialists
  - Confirm on resume at least 2 years of related experience under the direction of a Project Manager, Construction Superintendent or Quality Control Manager.
- Construction Superintendent
  - Confirm on resume either a degreed graduate of engineering, architecture or construction management with 5 years of related experience or 10 years of relevant experience.
- Project Manager
  - Confirm on resume either a degreed graduate of engineering, architecture or construction management with 5 years of related experience or 10 years of relevant experience.
- Site Safety Manager
  - Confirm on resume at least 5 years of related experience.
- Foreman
  - Confirm on resume at least 5 years of related experience.
- Installers/Laborers
  - Confirm on resume at least 2 years of related experience working under the direction of a Project Manager or Construction Superintendent. Provide copy of current license and/or certification to drive/operate the type of vehicle/equipment which they drive/operate either on-site or off-site.
- Manufacturers
  - Provide documentation of having a minimum of 5 years' experience in manufacture and successful start-up of the specified equipment/design demonstrated by submitting at list of 5 similar projects completed within the last 5 years including project names, addresses, contact names, addresses and telephone numbers of owners and any other type of information specified or requested by the client.
- Independent Testing Agencies
  - Provide documentation of having a minimum of 5 years experience performing the specified independent testing required by the Contract Documents for review and approval by the CITY. Submit at list of 5 similar projects completed within the last 5 years including project names, addresses, contact names, addresses and telephone numbers of owners and any other type of information specified or requested by the client.

## 1.6 Quality Control Manager Responsibility Form

The Quality Control (QC) Manager, is responsible for overseeing the overall implementation of the Quality Control Plan and coordinates all project testing, inspections and reporting matters directly with the Project Manager. The QC Manager has the authority to intercede directly and stop unsatisfactory work and control further processing, delivery or installation of non-conforming material.

- Duties:
  - 
  - Preparation, approval and implementation of the CQC Plan
  - Verification of materials as per project plans and specifications
  - Development of means and methods to store and protect materials
  - Maintain documentation of inspection status of materials
  - Maintain documentation for material and administrative approvals
  - Ensure that all materials and construction are in accordance with the requirements for the completeness, accuracy and constructability in accordance with applicable building codes
  - Carry out and participate in weekly progress and QC meetings
  - Maintain documentation of inspection of work executed by subcontractors

## Stop Work Authorization Letter

Project Name: \_\_\_\_\_

Project Number: \_\_\_\_\_

From: Company Representative \_\_\_\_\_

To: QC Manager \_\_\_\_\_

This Letter of Authorization outlines your responsibility as our site Quality Control Manager for the project referenced above. As the site Quality Control Manager, you report directly to the Project Manager. You review the specifications, addendums and plans in their entirety and implement the Quality Control Program. The Quality Control Program encompasses three phases of inspection: Preparatory Meetings and Initial and Follow-Up Inspections. All inspections and testing are recorded in the Contractor Quality Control Report (CQCR) and submitted to the Project Manager. Test reports are submitted no later than three (3) working days after the test was performed. You and/or your staff are responsible for reviewing specifications, submittals, as-builts, plans and shop drawings for compliance to the contractual requirements.

Additionally, this applies to all subcontractor documents. You and/or your staff conduct daily inspections to ensure that the workmanship and materials used in the construction of the project are in compliance with the plans, drawings and specifications.

**You are authorized to stop work that does not comply with the plans and specifications.** You and/or your staff witness all tests required by the specifications and coordinate such tests with MSDGC. You and your staff must document all non-conforming conditions, items and/or workmanship noted and constantly monitor and alert Safety personnel to safety violations. If, at any time, you require assistance with the implementation of the Quality Control Program, contact the Project Manager.

\_\_\_\_\_  
Company Representative

### Acknowledgements

\_\_\_\_\_  
Subcontractor "A"

\_\_\_\_\_  
Subcontractor "B"

\_\_\_\_\_  
Subcontractor "C"

## Three Phases of Inspection

### 1.7 Preparatory Meetings

Preparatory Meetings are performed prior to the beginning of any major Definable Feature of Work. A meeting is held for each crew performing such feature or when members of the crew change. Preparatory Meetings are conducted by the Quality Control Manager and/or designee after a complete review of all applicable plans, specifications, shop drawings and related submittals. A Preparatory Phase Meeting Checklist is completed for each Definable Feature of Work and distributed at the meetings. At the Preparatory Meeting, the Superintendent and Foreman (involved in this phase of construction) coordinate with Quality Assurance, Quality Control and Safety personnel and introduce their plan for accomplishing the work. MSDGC is notified at least 48 hours in advance of the Preparatory Meeting. The following items are discussed at each meeting:

1. Review of applicable specifications.
2. Review of applicable plans and shop drawings.
3. Review of related submittals and a check that all related submittals, shop drawings and materials have been tested (if applicable), submitted and approved.
4. Review of the detailed sequence of the execution of the work.
5. Discuss required testing and frequency.
6. Review provisions to ensure controlled inspection and testing.
7. Examination of the work area to ensure that all required preliminary work has been completed and is in compliance with the plans and/or specifications.
8. Examination of the related material, review of the Receiving Material Inspection Reports (p 29) and verification that the items received are in compliance with the contract and are properly stored.
9. Review of the Site Safety Plan to ensure that all safety precautions are met and the required safety equipment has been purchased and is available.
10. Review the document and the workmanship expected for the Definable Feature of Work.
11. Meeting Minutes are recorded and sent to Client Document Control within 48 hours of the conclusion of the meeting.

### Initial Inspections

Initial Inspections are performed at the beginning of any Definable Feature of Work and must be repeated at any time new workmen or new crews are assigned to the work or if the required standard of work is not being met. An Initial Phase Checklist (p 28) is completed for each Definable Feature of Work and distributed at the initial inspection. MSDGC is notified at least 48 hours in advance of the Initial Inspection. The same personnel who attended the Preparatory Meeting also attend the Initial Inspection. These include the Superintendent and Foreman, Safety Personnel and the Quality Control Staff. The following is accomplished during these meetings:

1. Review the minutes of the Preparatory Meeting and verify that the work complies with the design documents (ie, submittals, specifications and/or shop drawings).

2. Resolve all differences.
3. Verify adequacy of inspection and testing.
4. Establish a level of workmanship and verify that it meets the requirements.
5. Provide documentation of the previous inspection of the work area.
6. Re-examine the work area for compliance.
7. Meeting Minutes are recorded and sent to MSDGC Document Control within 48 hours of the conclusion of the meeting.

### **Follow-Up Inspections**

Follow-Up Inspections are performed daily to ensure that the control established during Preparatory Meeting and Initial Inspection continues to provide a product that conforms to the contractual requirements.

1. Construction daily activities are inspected by Quality Control in accordance with Quality Control Procedures and the Quality Control Report (CQCR) is completed.
2. Installation and testing activities which do not comply with the requirements are documented on a Non-Conformance Report (NCR).
3. Modifications, repairs and/or replacement of materials and/or parts performed subsequent to Final Inspection require replacement of materials and/or parts installed. Re-inspection and re-testing are required to verify acceptability. Inspection and testing documents are submitted to MSDGC Document Control and are filed and maintained in accordance with Quality Control Testing and Verifications .

**Signature of acknowledgement indicate that the Three Phases of the Quality Control Inspection Program are understood and will be followed.**

---

QC Manager

---

Date

## Quality Control Testing and Verifications

### PURPOSE

To ensure that tests of the Contractor's and Subcontractor's work is adequately planned and that the necessary testing procedures are available to perform the tests in a satisfactory manner. This procedure establishes the methods to be used when performing the tests listed in the specifications. Test reports are submitted to MSDGC Document Control and are filed and logged with other project documentation.

### TESTING (Onsite, Factory/Offsite)

A list of tests required to verify that control measures are adequate are delineated in the specifications and/or determined upon the completion of the design. The list includes the test name, specification paragraph, feature of work to be tested, the test frequency and the organization's name that will perform the test. **The QC Manager provides written notice to MSDGC of the proposed test 3 days in advance (5 working days for factory or other offsite tests). The QC Manager witnesses the test with the appropriate organization representatives present and/or with the individual(s) qualified to perform the designated test(s).**

### FAILED TEST

Failing tests are cleared by one of the following methods:

1. Retest – Retest if there is any doubt that the first test was not adequate.
2. Rework – Re-inspect and re-test.
3. Failed Material – Remove, replace, re-inspect and re-test.

### PROCEDURES

1. The Quality Control Manager reviews the testing requirements to ensure that the planned test is in accordance with the design documents: ie, plans, specifications, shop drawings and/or other documents.
2. Instruments used for testing are calibrated in accordance with established calibration procedures. Specialists experienced in such work perform the calibration.
3. Technicians performing tests provide copies of calibration certificates and their field notes and reports to the Quality Control Manager.
4. The Quality Control Manager witnesses all required tests detailed in the design documents (plans, specifications, shop drawings, etc).
5. MSDGC's witnessing of tests does not relieve the Contractor and Subcontractor of their obligation to comply with the requirements of the Contract Documents.
6. MSDGC is notified 3 days in advance of all scheduled tests (5 working days for Factory/offsite tests).
7. Test reports, when completed, are attached to the Contractor's Quality Control Report and submitted to MSDGC.



## Tests and Records

### PURPOSE

This section establishes a system for the control of documentation and records which provide objective evidence of the quality of items and activities performed in accordance with the programmatic requirements. The Quality Control Manager is responsible for the control, review, verifications and maintenance of the documentation delineated in the specifications.

### REPORTING AND DISTRIBUTION OF REPORTS

1. After reviewing reports (including Subcontractor reports) the Quality Control Manager submits documentation to MSDGC Document Control.
2. All inspections and testing are summarized and recorded in a Contractor's Quality Control Report (CQCR). A copy of the CQCR is sent to MSD Document Control and to the Project Manager. "Original" reports are retained by the Quality Control Manager. Field notes, inspection forms and test reports are filed and available for review by MSDGC.
3. The Contractor's Quality Control Report includes the following:
  - a. Contractor and Subcontractor areas of responsibility.
  - b. Working, idle and downtime hours for equipment.
  - c. Work accomplished each day, indicating the location, activity and by whom.
  - d. Laboratory test reports, including the test results (passing or failing), location of tests and specification references.
  - e. Deficiencies and corrective actions.
  - f. Material received onsite.
  - g. Safety violations and corrective action implemented.
  - h. Conflicts encountered in the plans and/or specifications.

### RECORDS STORAGE AND RETENTION

1. Project records are stored in areas that protect them from damage, deterioration and/or loss at the site Field Office during the construction period. Records are accessible to MSDGC personnel.
2. Project records are stored for a period of time as determined by the contractual documents. Records, designated for storage, are not to be destroyed or otherwise disposed of within that period of time. Control and final disposition of Subcontractor and Supplier records, both onsite and offsite, are to be in accordance with the contractual documents.



Testing Agency Schedule		
Project Name:	Date:	Project Number:
Agency	Discipline	Estimated Date of Test

## **Submittals**

### **SUBMITTALS**

All submittals shall be reviewed, certified and managed by the Quality Control Manager. Copies of the manufacturer's data (material, equipment, etc.), including catalogue cut-sheets showing dimensions, performance characteristics, capacities, wiring diagrams, schedules, operation and maintenance manuals and any other relevant information are reviewed by the Quality Control Manager. The Quality Control Manager is an authorized submittal reviewer and testing lab report reviewer. One (1) copy of the submittal remains with the Contractor and one (1) copy is retained by MSD's Document Control.

### **Filing of Submittals**

Submittals (material, design, data, samples, shop drawings, etc) are filed according to the specification section and paragraph number in a secure place for reference and coordination. Color and mock-up samples are maintained in a secure place at the job site for comparison with the finished product. A tag or sticker identifying the submittal number and the date of approval is attached to the sample. When a color or mock-up sample is not approved, it is labeled as "Rejected" and removed from the job site (if requested). The record is maintained along with a photograph of the disapproved item [with a copy submitted to MSDGC Document Control](#).

### **SUBMITTAL REGISTER**

The Submittal Register is maintained by the Project Manager. Revised copies of the Submittal Register are provided to MSDGC Document Control on a monthly basis.

### **QUALITY CONTROL MANAGER REVIEW AND APPROVAL**

Prior to submittal, all items are checked and approved by the Quality Control Manager. If found to be in strict conformance with the contract requirements, each item is stamped, signed and dated by the Quality Control Manager. Copies of review comments indicating action(s) taken are included within each submittal.

**QUALITY CONTROL MANAGER GUIDELINES FOR PREPARING AND REVIEWING SUBMITTALS:**

1. Be familiar with the submittal procedures.
2. Review all of the information attached to the submittal.
3. Ensure that all of the pages associated with the enclosures are attached to the submittal.
4. Thoroughly review the applicable design documents.
5. Ensure the attachments are legible.
6. Direct all questions to the Project Manager.
7. Submit a detailed written report pertaining to the review of the submittal in a timely manner to the Project Manager.
8. Ensure that the sample received and/or material received complies with the submittal.
9. Notify the Project Manager if material is installed without a submittal; then request a submittal.
10. Maintain and file submittals so they are readily retrievable.

**STAMPS**

Stamps are used by the Contractor to certify the submittal meets contract requirements and are similar to the following:

Contractor (Firm Name):

\_\_\_\_\_

Project Name:

\_\_\_\_\_

Project Number: \_\_\_\_\_

I certify that this submittal is accurate, is in strict conformance with all contract requirements, has been thoroughly coordinated and cross-checked against all other applicable disciplines to prevent the omission of vital information, that all conflicts have been resolved, that repetition has been avoided, and that it is complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer.

Printed Name of the Quality Control Manager:

\_\_\_\_\_

Signature of the Quality Control Manager:

\_\_\_\_\_

Date: \_\_\_\_\_

## Tracking Deficiencies

### NON-CONFORMING ITEMS

1. Non-conforming items are those conditions that deviate from the requirements detailed in the specifications, plans and /or shop drawings. The Quality Control Manager is responsible for the control and documentation of non-conforming items.
2. The Quality Control Manager prevents non-conforming items from being installed.
3. Minor non-conforming items, which are corrected in the same day, are documented in the Contractor's "Weekly Report."
4. All other non-conformances are documented on a Non-Conformance Report prepared by the Quality Control Manager, sequentially numbered and dated and include the following information, as appropriate:
  - a. Description of the non-conformance including relevant details of the occurrence.
  - b. Identification of material, component or system by part number, plan, shop drawing and/or specification number and intended installation location.
  - c. Source of material or item (name of supplier, owner or subcontractor).
  - d. Current status or item in shop, warehouse, lay-down yard or structure.
  - e. Individual and organization which detected the non-conformance.
  - f. Recommendation for corrective action including sketches, test data and/or repair procedures necessary to substantiate the recommendation.
  - g. Cause of the non-conformance and steps taken to prevent reoccurrence indicating action(s) taken, positions or titles of persons contacted, letters written and/or procedural changes proposed.
5. The Quality Control Manager signs and forwards the Non-Conformance Report to MSDGC Document Control.
6. Each Non-Conformance Report is recorded on the Non-Conformance Report Log by the Quality Control Manager.
7. Actions to be taken are entered on the Non-Conformance Report Log. The Engineer of Record initiates the disposition(s) necessary to clear the item.
8. Verification of "Corrective Action" (eg, completion of repair) by Quality Control after the work in question has been re-inspected and re-tested. Entries are made in the Non-Conformance Report (NCR) log documenting the Final Disposition of each NCR.
9. Non-Conformance Reports, logs and documents are filed and maintained. Reports and Records are submitted to MSDGC Document Control.

### INITIAL PUNCH LIST

The QC Report reports Punch List items (deficiencies) throughout the life of the project and demonstrates that the QC Staff is correcting the deficiency(ies) in a timely manner. An Initial Punch List is developed as a result of initial inspections and then maintained throughout the life of the project. The Punch List is consistently updated and submitted to the Project Manager for corrective actions. Corrections are accomplished within the time stated. The QC Manager performs Follow-Up Inspections to ensure the deficiencies have been corrected before notifying MSDGC of a Pre-Final Inspection.

## **PRE-FINAL INSPECTION**

After the completion of the Initial Punch List Inspection, the Quality Control Manager and MSDGC Representative conduct a Pre-Final Inspection and develop a joint “Punch List” of noted deficiencies. The Punch List is formally documented along with the estimated date by which the deficiencies will be corrected. The Quality Control Manager conducts Follow-Up Inspections to ensure that all deficiencies have been corrected before requesting a Final Inspection by MSDGC.

## **FINAL INSPECTION**

Upon completion of the items listed in the Pre-Final Inspection “Punch List,” the QC Manager notifies MSDGC 14 days prior to the Final Inspection (or as agreed to) with the assurance that all items listed in the Pre-Final Inspection and all other remaining work has been completed and will be acceptable by the date of the Final Inspection.

<b>CONTRACTOR'S QUALITY CONTROL REPORT (CQCR)</b> <b>WEEKLY LOG OF CONSTRUCTION</b>	Report Number: Page <u>1</u> of <u>2</u>
	Date:
Project Name:	Project Number:
Contractor:	Weather:
1 – Were there any delays in work progress? Response:	
2 – Verbal instructions given by MSDGC: Response:	
3 – Did anything develop that may lead to a change order/claim? Response:	
4 – Activities in <b>process</b> : Response:	
5 – General comments: Response:	
6 – Safety Inspection/Safety Meetings: Response:	
7 – Prep/Initial Dates (Preparatory and initial dates held and advance notice) Response:	

<b>CONTRACTOR'S QUALITY CONTROL REPORT (CQCR) WEEKLY LOG OF CONSTRUCTION</b>		Report Number: Page <u>2</u> of <u>2</u>
		Date:
Project Name:		Project Number:
Activity Start/Finish:		
QC Requirements:		
QA/QC Punch List:		
Contractors/Visitors on Site:		
Equipment Hours (Total Operating Hours to Date):		
Accident Reporting (Describe Accident):		
Contractor Certification	On behalf of the contractor, I certify that this report is complete and correct and all equipment and material used and work performed during this reporting period are in compliance with the contract, plans and specifications, to the best of my knowledge, except as noted above.	

<b>Non-Conformance Report</b>			
<Project Name>			<Project Number>
Structural <input type="checkbox"/>	Mechanical <input type="checkbox"/>	Electrical <input type="checkbox"/>	Civil <input type="checkbox"/>
Date:	Location:	Spec. Section:	Spec. Paragraph: _
Non-Conforming Condition:			
Reported By (Quality Control Representative):			Date:
Disposition:			
Dispositioned By (Project Engineer):			Date:
Re-Inspected By (Quality Control Representative):			Date:
Accepted By (Quality Control Manager):			Date:



<b>Construction Punch List</b>			
<b>Project Name:</b>			<b>Project Number:</b>
<b>Structural</b> <input type="checkbox"/>	<b>Mechanical</b> <input type="checkbox"/>	<b>Electrical</b> <input type="checkbox"/>	<b>Civil</b> <input type="checkbox"/>
<b>Inspected By:</b>		<b>Date:</b>	<b>Page:</b> ___ of ___
Item No.	Description	Completed by Construction (Sign/Date)	Accepted by Quality Control (Sign/Date)

<b>Weekly QA/QC Definable Feature Meeting Minutes</b>			
<b>Project Name:</b>			<b>Project Number:</b>
<b>Date:</b>	<b>Time:</b>	<b>Location:</b>	<b>Page:</b> ___ of ___

**Attendees**

<b>MSDGC</b>	<b>Contractor</b>	<b>Subcontractors</b>	<b>Other</b>
--------------	-------------------	-----------------------	--------------

No.	Description of Item Discussed	Action Date	Action By

<b>Preparatory Meeting Checklist (to support each DFW)</b>			
Project Name:		Project Number:	
DFOW:			
Date:	Sheet:	Spec. Section:	Page: <u>1</u> of <u>3</u>

<b>PERSONNEL PRESENT</b>	MSDGC Representative Notified? YES <input type="checkbox"/> NO <input type="checkbox"/>		_____ Hours in Advance
	<b>Name</b>	<b>Position</b>	<b>Company/Government</b>
<b>SUBMITTALS</b>	Review submittals and/or submittal register. Have all submittals been approved? YES <input type="checkbox"/> NO <input type="checkbox"/>		
	If no, what items have not been submitted?		
	Are all materials on hand? YES <input type="checkbox"/> NO <input type="checkbox"/>		
	If no, what items are missing?		
<b>MATERIAL STORAGE</b>	Check approved submittals against delivered material. (This should be done as material arrives)		
	Comments:		
<b>MATERIAL STORAGE</b>	Are materials stored properly? YES <input type="checkbox"/> NO <input type="checkbox"/>		
	If no, what action is taken?		

<b>Preparatory Meeting Checklist (to support each DFOW)</b>			
Project Name:		Project Number:	
DFOW:			
Date:	Sheet:	Spec. Section:	Page: <u>2</u> of <u>3</u>

<b>SPECIFICATIONS</b>	Review each paragraph of specifications.
	Discuss procedure for accomplishing the work.
	Clarify any differences.
<b>PRELIMINARY WORK &amp; PERMITS</b>	Ensure preliminary work is correct and permits area on file.
	If no, what action is taken?
<b>TESTING</b>	Identify test to be performed, frequency and by whom.
	When required?
	Review testing plan.
	Have test facilities been approved?

<b>Preparatory Meeting Checklist (to support each DFOW)</b>			
Project Name:			Project Number:
DFOW			
Date:	Sheet:	Spec. Section:	Page: <u>3</u> of <u>3</u>

<b>SAFETY</b>	Site Safety Plan Approved? YES <input type="checkbox"/> NO <input type="checkbox"/>	
	Review Site Safety Plan:	
<b>MEETING COMMENTS</b>	Comments during meeting:	
<b>WORKSHEETS</b>	Worksheets:	
<b>OTHER ITEMS OR REMARKS</b>	Other items or remarks:	
Reported By:  (Quality Control Inspector)	Reviewed By:  (Quality Control Manager)	Reviewed By:  (MSD QA Representative)

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<b>Initial Inspection Checklist</b>			
<b>Project Name:</b>		<b>Project Number:</b>	
<b>DFOW:</b>			
<b>Date:</b>	<b>Sheet:</b>	<b>Spec. Section:</b>	<b>Page: ___ of ___</b>

No.	Item	Yes	No	N/A
1	Was the production foreman present?			
2	Material			
a)	Were materials inspected for compliance?			
b)	Were corrective actions taken for defective material?			
c)	Were corrective actions appropriate?			
d)	Were any deviations accepted?			
3	Installation Requirements			
a)	Did work comply with specifications or plans?			
b)	Was workmanship satisfactory?			
c)	Were corrective actions appropriate?			
d)	Were any deviations accepted?			
4	Tests			
a)	Were tests being performed?			
b)	Was testing frequency satisfactory?			
c)	Were test samples or locations appropriate?			
d)	Was testing quality coordinated with Mechanical/Electrical technicians?			
5	Inspections			
a)	Was inspection done by the QC Inspector in the Prep. meeting?			
b)	Was the inspection frequency as established in the Prep. Meeting?			
c)	Were critical inspections satisfactory?			
d)	Was the inspection satisfactory?			
6	Safety			
a)	Was the safety officer present?			
b)	Were the safety requirements followed?			
c)	Were the safety requirements modified?			

Remarks (explanations required for "No" responses and if deviations were accepted):

Reported By:  (Quality Control Inspector)	Reviewed By:  (Quality Control Manager)	Reviewed By:  (Quality Assurance Representative)
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## Receiving Material Inspection Report

<b>Initial Inspection Checklist</b>			
Project Name:			Project Number:
DFOW:			
Date:	Sheet:	Spec. Section:	Page: ___ of ___
Project Name:			Project Number:
DFOW:			
Date Received:	Order Number:	Date Inspected:	Inspected By:

Ref No.	Item Description	Quantity	Partial or Full?	Okay or Damaged?	Special Storage?

<b>Initial Inspection Checklist</b>			
<b>Project Name:</b>		<b>Project Number:</b>	
<b>DFOW:</b>			
<b>Date:</b>	<b>Sheet:</b>	<b>Spec. Section:</b>	<b>Page: ___ of ___</b>
Remarks (explanations required for partial and damaged material):			



## QC Worksheets

Check worksheets that apply based on those listed in bid package and attach:

- Cable Test Data Form
- Calibration Sheet
- Circuit Breaker Schedule
- Control Circuit Piping Leak Test Form
- Controller Calibration Test Data Form
- Cut-in Schedule Form
- Dry Transformer Test Data Form
- Equipment Record Form 1
- Equipment Record Form 2
- Equipment Test Report Form
- Individual Loop Test Data Form
- Installed Motor Test Data Form
- Loop Commissioning Test Data Form
- Loop Wiring and Insulation Resistance Test Data Form
- Manufacturer's Installation Certification
- Manufacturer's Instruction Certification Form
- Misc. Instrument Calibration Test Data Form
- Motor Control Center Test Form
- Motor Data Form
- Operation and Maintenance Transmittal Form
- Request for Contractor Proposal
- Submittal Transmittal Form
- Substitution Request Form
- Unit Responsibility Certification Form
- Wire and Cable Resistance Test Data Form
- Work Directive Change Instructions and Form

## Our Offices

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<b>Port Harcourt;</b>	Plot 146, Trans-Amadi Industrial Layout Opposite Michelin, Port Harcourt, Rivers State
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<b>Email:</b>	<a href="mailto:info@cyclotroneng.com">info@cyclotroneng.com</a>
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