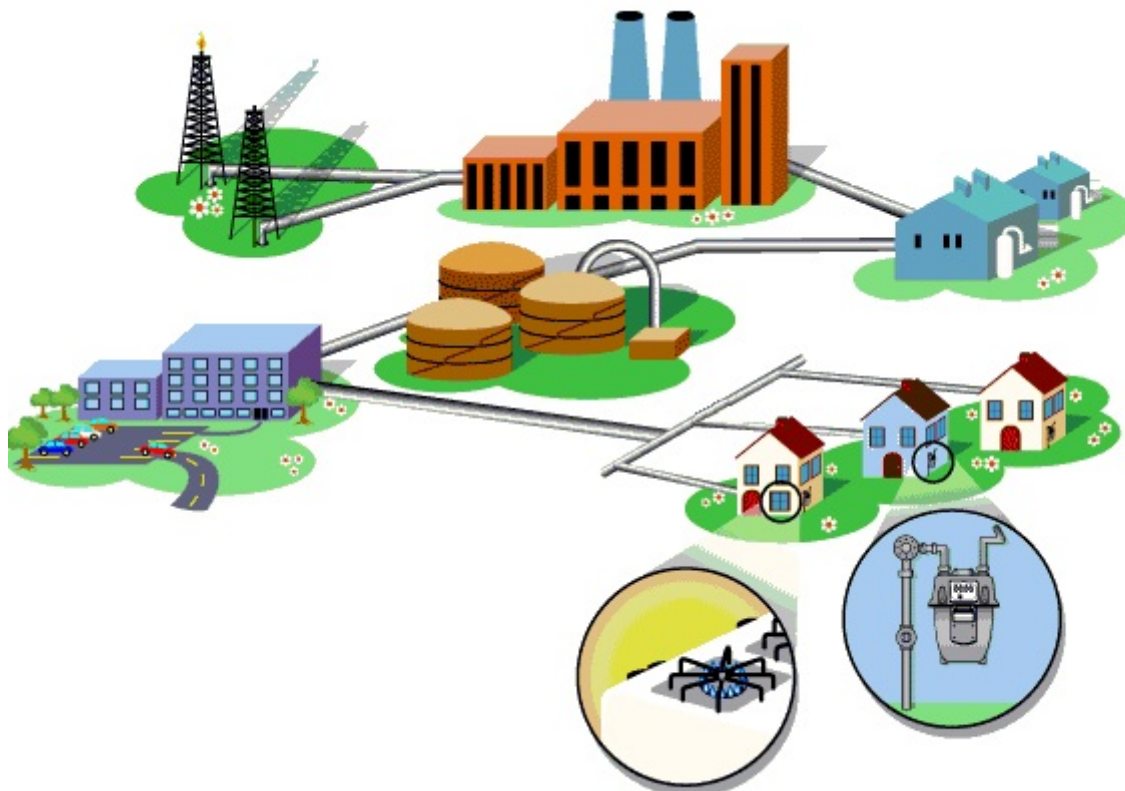




**Georgian Oil
&
Gas Corporation**

Executive Phase

Specification for Quality Assurance Requirements



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1. PURPOSE AND SCOPE

1.1 Purpose

This document describes the Quality Assurance requirements that shall be achieved by the Contractor and suppliers (organisations). It describes the interface between these organisations and GOGC with respect to quality assurance, quality control, quality surveillance and the use of independent third party inspection.

1.2 Scope

The document shall be applied to any contract awarded by GOGC to the Contractor and their subcontractors and suppliers.

2. DEFINITIONS AND ABBREVIATIONS

Company: GOGC, as defined in the Contract Agreement

Contractor: Performing Company(s), as defined in the Contract Agreement

Sub- contractor: organisation appointed by the Contractor to execute a scope of work

Supplier: organisation appointed by the Contractor to supply goods

Organisation: collective term for any Contractor, supplier, and sub-contractor

ISO: International Standards Organisation

ITP: Inspection and Test Plans (also known as Quality Control Plan)

Work: the activity and processes and deliverables to be produced by the Contract Scope of Work

DCC: Document Control Centre

PEP: Project Execution Plan

QA: Quality Assurance

QC: Quality Control

3. CONTRACT QUALITY PLAN

3.1 Scope of Contract Quality Plan

Contractor shall prepare a specific Contract Quality Plan. The plan shall describe how they will manage the work in accordance with the Quality System.

The Contract Quality Plan shall describe the relationship between the quality management systems together with the functional responsibilities.

The Contract Quality Plan shall describe how the work shall be delivered in accordance with the Contract Scope of Work and compliance with the Codes and Standards, specifications and legal and statutory regulations included in the Contract instructions. The design, manufacturing, purchasing, inspection and testing processes and the relevant procedures shall be included.

3.2 Quality Management Procedures

The Quality Plan shall be supported by a set of documented procedures that describe the processes to be used to execute the Work. An index of the procedures shall be prepared which shall differentiate between existing procedures and those to be developed specifically for the contract.

3.3 Quality Systems for Sub-Contractors and Suppliers

Contractor shall ensure that the requirements of this document are applied to the activity of sub-contractors and suppliers, as relevant to their Scope of Work.

4. PERSONNEL RESOURCES

4.1 General

Each organisation shall ensure that all personnel assigned to execute the works are competent and have the necessary qualifications experience and training for their designated functions.

4.2 Quality Function personnel

The Quality Plans shall define:

- Responsibility and authority of the QA and QC personnel
- Design and Engineering organization and outline of the QA and QC function of Engineering Manager and support personnel
- Procurement organization and outline of the QA and QC function of Procurement Manager and support personnel
- Site organization and outline of the QA and QC functions of Site Manager, Construction Manager, Field Engineers, other senior personnel, craft supervisors and inspectors.
- Independence of the QA and QC personnel and reporting to a management level, who have the authority and freedom to identify quality problems, initiate or recommend solutions and verify implementation of corrective measures.

Organizations shall make available for review all qualification documents of personnel who will be involved in the achievement of quality. The qualifications shall be educational, professional and trade related. Functional qualifications, e.g. welding or NDT, shall be in accordance with the codes and standards and contract specifications.

4.3 Training

Organisations shall ensure that personnel are trained and competent to allow them to be able to execute their functions in accordance with the relevant procedures. Training needs shall be identified and a training programme developed and implemented as necessary.

5. DOCUMENT CONTROL

5.1 Engineering Documents

Contractor's Document Control procedures shall ensure that current applicable revisions of documents from whatever source are managed in a controlled manner. These documents shall include drawings, calculations, specifications, procedures manuals and similar. The DCC shall distribute the documents, as relevant to locations where work is performed. Obsolete documents shall be identified as such and withdrawn.

Input data shall be reviewed and authorised for use by a designated person, prior to use. A register of input data and revisions shall be maintained.

The exchange of engineering documents between all organisations involved in the contract and GOGC shall be by means of a documented transmittal procedure.

5.2 Manufacturing and Inspection records

Each Contractor, Sub-Contractor or suppliers shall establish a document control and information management system. The system will capture and deliver to GOGC on completion of the Work, manufacturing and inspection and test data and documents in the form of a database.

5.3 Document Format.

The document control system shall be designed on the basis of an electronic database format. The specification shall be agreed with GOGC, including the ability to exchange documents between the organisations involved in the contract.

5.4 Inspection and Test Plans

Contractor shall develop and use Inspection and Test Plans (ITP). Contractor shall ensure sub-contractors and suppliers develop and use ITP. Contractor shall collate ITP into packages related to discrete products or services.

5.4.1 ITP Scope

The Scope of an individual ITP shall be constrained to one of the following categories:

- Specific items, such as packages or pressure vessels
- Specialist activities, e.g., civil construction, mechanical equipment, electrical and instrumentation installation
- Purchase, receipt and control of welding consumables
- Materials management, including goods receipt, positive materials identification, cutting plans and materials release and distribution.
- Inspection of equipment protection, storage and preservation

5.4.2 ITP Content

The ITP shall include information that will allow the identification of the following:

- Item, product or process to be tested.
- Codes, standard or specification applicable to activity and tests or inspections
- The process or inspection or test procedure
- Test acceptance criteria
- Sequence of testing
- Mandatory test or hold point, at which Company or third party inspectors shall be present
- Inspection and Test Records required, and approving party

5.5 Testing Procedures

The testing procedures to be used shall describe in detail the technical requirements of the test method. In addition they shall include, as relevant, factors that affect safe operation of the test equipment and the items to be tested, safety of personnel and permit to work.

6. CONTRACTOR AND THIRD PARTY INSPECTION

6.1 Designating Inspection Bodies

Contractor will indicate in the Contract or ITP the organisations that will be involved in the activities prescribed. The options are:

- Independent Inspection, including design review and verification. The ITP shall include all relevant activity.
- Contractor's Inspectors who will attend inspection and test activity.

6.2 Contractor's Responsibility

When Independent Inspection is required, including design review and verification, Contractor shall:

- Provide all design data and documentation to the Inspection Body
- Make corrections and revisions to achieve compliance as required by the Inspection Body
- Track document movement and revisions in accordance with a Document Control Procedure.
- Contractor shall also make corrections and reissues to achieve compliance as required by GOGC Inspectors.

6.3 Inspection, Measuring and Test Equipment

Contractor shall develop procedures for the calibration and maintenance of inspection measuring and test equipment. The accuracy of calibration instruments shall be traceable to International Standards.

7. QUALITY AUDITS AND TECHNICAL INTEGRITY REVIEWS

7.1 Quality Audits

Contractor shall develop the following specific Contract Audit Schedules:

- Internal Audits covering the contract scope of work
- Audits of sub-Contractor Companies and suppliers.

Contractor shall make available to GOGC all audit reports relevant to the contract scope of work. GOGC may audit the activity of Contractor, sub-Contractor or suppliers within the context of the contract scope of work.

7.2 Technical Integrity Reviews.

Contractor shall undertake technical Integrity Reviews. The objective of these reviews will be to determine that the designed, constructed and commissioned Work meets the design, operational and contract requirements. The Technical Integrity Reviews shall be in accordance with an agreed procedure and undertaken at agreed times within the overall contract schedule.

8. NON-CONFORMANCE AND CORRECTIVE ACTION

8.1 Items arising from Audits

Non-Conformances identified on a system audit as a departure from procedural requirements shall be addressed with a Corrective Action Request for due consideration by a responsible management representative and appropriate corrective action taken. A follow up audit shall be undertaken to ensure that the corrective action has been implemented. Preventative action shall be taken to ensure that the non-conformance will not recur. Non-Conformances and subsequent Corrective Actions shall be reported to GOGC.

8.2 Non-Conforming Products

Procedures shall be applied for the control of non-conforming products, when inspection or testing identifies deviations outside of the technical and engineering specifications. The procedures shall include the following:

- Identification of the defective material or part
- Imposition of quarantine procedures
- Investigation of defect and development of remedial treatment
- Register of the defect.
- Formal Notification to GOGC of the occurrence of the defect
- Execution of the remedial treatment and re-examination.

8.3 Action Tracking Procedure

Contractor shall develop and implement an action tracking procedure. The procedure scope shall include:

- Registration of non-compliance against technical and contractual requirements of the Purchase Order, as identified by engineering reviews, audits, quality surveillance and risk management reviews
- Determination of actions to be taken to correct the non-compliance
- Responsibility of persons allocated to implement the action
- Establishing dates at which the actions will be completed
- Formal close out of the action and the outcome.

9. CHANGE CONTROL

The Contract Quality Plan shall include Change Control procedures that describe:

- Receipt and implementation of Changes proposed by GOGC
- Implementing changes as identified by the Contractor, sub-Contractor or suppliers
- Process for investigation of the impact of change, in terms of technical integrity, schedule and cost.
- Process for authorizing change and gaining the approval of GOGC
- Process for the registration and tracking of Changes, including status and close out.

10. PRODUCT IDENTIFICATION AND TRACEABILITY

10.1 Identification Procedure

The identification of items of equipment and certified materials, ITP and all test records shall be maintained. Records shall be identified, registered and stored in a systematic manner. The Contractor will prepare and implement a product and materials traceability procedure.

10.2 Positive Material Identification

A Positive Materials Identification procedure shall be developed by the Contractor and applied in accordance with the criticality index of the component or equipment. The materials management procedure shall include procedures for this to provide traceability of materials from original source to final location in the work. Alloy identification shall be applied if there are reasonable doubts concerning the identity and traceability of a material for critical equipment.

11. INSPECTION, CERTIFICATION AND TEST RECORDS

Contractor shall prepare dossiers. Dossiers shall be contained in the Document Control electronic data system, structured and made available to GOGC. The dossiers shall include the following:

11.1 Construction Records

Contractor shall compile and maintain the inspection and test records and data. An index file shall be maintained by the Contractor of all acceptance certificates and shall be transmitted to GOGC upon completion of the Work. This shall include all supporting information, test records and engineering data. Certification, as required by the Contract, shall be presented for materials, equipment and items incorporated as permanent materials for the Work

The hand-over of all inspection and test documentation shall be completed prior to the issue of Provisional or Final Acceptance Certificates.

11.2 Supplier Data Books

Contractor shall be responsible for Supplier Data Books for all equipment and materials included in the permanent Work

Hard copy certificates shall be produced to an agreed Contractor's format for all inspections and tests carried out. The certificates will be endorsed by the appropriate responsible representative of the Contractor and endorsed by GOGC's representative where GOGC has expressed the intent to witness the inspection or testing activity.

12. QUALITY ASSURANCE KICK-OFF MEETING

Contractor, sub-Contractor and suppliers shall present in the Contract kick-off meeting the review of Quality Assurance requirements as described in this document. GOGC QA representatives shall attend the meeting.

A separate Quality Assurance kick-off meeting shall be held to ensure the management of the Quality Assurance issues is effective.

In both cases, the meeting shall be formal and minutes made and approved by all attending parties. The records shall be included with those of the overall kick-off meeting.

The meeting shall:

- Review the Quality Assurance requirements described in this document, and all other contract documents
- Confirm the document review and approval process
- Clarify QA Issues where required
- Establish the Audit Schedule and the Technical Integrity Review programme