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|  | Work Instruction | Matla Power Station |
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Title: **QUALITY REQUIREMENTS SPECIFICATION**

Document Identifier: **557-4497**

Alternative Reference Number: **4497**

Area of Applicability: **Matla Power Station**

Functional Area: **Risk and Assurance (Quality)**

Revision: **3**

Total Pages: **25**

Next Review Date: **January 2026**

APPROVED
Matla Power Station
Documentation
Centre

Disclosure Classification: **Controlled Disclosure**

| Reviewed by | Supported by | Functional Responsibility | Authorized by |
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| Date: <u>31/01/2023</u> | Date: <u>2023/01/31</u> | Date: <u>07/01/2023</u> | Date: <u>2023/02/08</u> |

File name: [557-4497](#)

Template ID: 32-4 (Rev 12) Document template (for procedures, manuals, standards, instructions, etc.)

Formatted by: [MPS DOC CENTRE_KM_13.01.2023](#)

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1. Introduction

The intention of this specification is to specify and describe the minimum quality requirements for all existing and potential Eskom suppliers and define the quality criteria for the selection, monitoring, assessment and auditing of suppliers and maintenance activities.

Eskom's position is to partner with suppliers who fully demonstrate commitment to the development, implementation, and maintenance of a quality management system (QMS) that conforms to the requirements of ISO 9001 standard. The priority is to encourage suppliers to continually improve their QMS and enhance service delivery by implementing and conforming to the standard.

2. Supporting Clauses

2.1 Scope

2.1.1 Purpose

The purpose of this procedure is to ensure that quality work is managed effectively and efficiently to ensure client/customer satisfaction, with minimum loss to both the client and the contractor/service provider.

2.1.2 Applicability

This procedure is applicable to all Matla Employees, including Contractors and Suppliers internal system (s) as well as any additional contractual requirements which are not covered specifically by the system.

2.1.3 Effective date

Same as authorisation date.

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

- [1] ISO 9001 Quality Management Systems
- [2] Business Manual
- [3] OMOP 2570 – Auditing Procedure
- [4] OMOP 2401 -Calibration Standards
- [5] OMOP 2570 - Internal / External Audits Procedure
- [6] OMOP 4320 - Corrective and Preventative Action Procedure
- [7] OMOP 2553 - Matla Power Station Occurrence Management procedure

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[8] OMOP 2255 - Control of Non-conformity

[9] OMOP 4418 – Document and record management work instruction

2.2.2 Informative

[10] SANS ISO 9001 (ISO 9001) - Quality Management Systems – Requirements

[11] SANS ISO 9004 (ISO 9004) - Quality Management Systems - Guidelines for Performance Improvement

[12] GPC 36-698 - Quality Requirements for Engineering and Construction Work

[13] 32 – 1034 – Eskom Procurement and Supply chain management procedure

[14] 240 105658000 QM-58 Supplier Contract Quality Requirements Specification

[15] Outage Manual

2.3 Definitions

2.3.1 'Application for defect acceptance: shall mean the same as a 'concession', which may be granted by the client to use product 'as is', if there is a deviation from the works information.

2.3.2 The 'contract quality plan': shall be a document setting out how the contractor intends to manage the contract quality to ensure compliance with all contractual and quality requirements as set out by the client or in the relevant associated legislation.

2.3.3 Corrective action': shall mean action implemented to correct a defect or non-compliance that has already occurred to ensure that compliance is achieved.

2.3.4 A 'corrective action request' shall be requested to correct any deficiencies or deviations that are found in or from the documented Quality Management System procedures or work.

2.3.5 A 'data book': shall represent a collection of all contract quality related records accumulated by the contractor during the contract or project and is handed over to the client on completion of the contract.

2.3.6 A 'defect': shall be any deviation from the specified works information or scope of work, including any non-conforming product or work that may or may not be specifically identified or described in the works information.

2.3.7 A 'defect notification': shall be an official notification of any defect (non-conformance) in workmanship, product or service, which needs to be rectified (repaired) or accepted by the client by means of an application for defect acceptance

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- 2.3.8** Hold Point – A point of inspection/test on the QCP that requires the presence of the inspector organization. Production cannot proceed beyond this point until it has been cleared by the inspection.
- 2.3.9** Inspection Organisation – An organisation appointed by the project to carry out or witness inspection and tests. This may be a department of Eskom, or an Eskom approved outside organization authority e.g., third-party inspection.
- 2.3.10** Intervention Points: Are those control points indicated by the various controlling bodies concerned with the implementation of a specific quality control plan.
- 2.3.11** Surveillance Point – This may be when the party would wish to verify the inspection or event by random inspection and by documentation checks.
- 2.3.12** Witness Point – A point of inspection /test on the QCP that requires the presence of the inspector of the organization. Production can proceed beyond this point of inspection organization has not attended, providing due notice of the activity has been given to the inspection organisation, in terms of the relevant contract.
- 2.3.13** An 'inspection agency': shall be an organisation or person appointed by the client, or contractor with the client's approval, for the purpose of performing:
- Quality control monitoring
 - Quality assurance monitoring
 - Inspection and testing services
- 2.3.14** A 'hold point': shall be an activity on the quality control plan beyond which no further activities shall be undertaken unless there is a signed acceptance by the project manager, supervisor, inspection agency, or inspection authority.
- 2.3.15** The 'inspection authority': shall be an organisation or person appointed by the client or contractor (with client approval) and approved Chief Inspector of the Department of Labour in terms of the OHS Act.
- 2.3.16** 'Non-conformance': shall mean the same as a defect, deviation, deficiency, or non-compliance.

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2.3.17 'Preventive action': shall mean action instituted to prevent a defect or non-compliance from recurring or occurring in the first place.

2.3.18 'Product': shall be a product produced, or service provided, or material (parts, equipment) used by the contractor during the execution of the contract.

2.3.19 A 'quality control plan': shall mean the same as 'inspection and test plan' or 'quality assurance plan', which is a plan setting out how the contractor plans to control and assure the quality of the work performed under the contract and must be approved by the client before any work.

QCP: The Quality Control Plan is a document that describes the actions (measurements, inspections, quality checks or monitoring of process parameters) required at each phase of a process to assure the process outputs will conform to pre-determined requirements (e.g., Scope of work).

2.3.20 A 'quality dossier': shall be the same as a data book, but for smaller Projects/ contracts.

2.3.21 A 'regulatory body': shall mean a person or persons representing a statutory body, as required by law.

2.3.22 'Repair': shall mean the process of correcting a defect.

2.3.23 A 'stop work order': shall mean an official notification that all further work on the contract is stopped until such time that all defects are corrected to the client's satisfaction. Work may only re-commence with the client's written authorisation.

2.3.24 A 'witness point': shall be an activity on the quality control plan requiring the presence of the client representative during the inspection or test and which has been accepted as satisfactory, by signature, before work can continue.

2.3.25 The 'works information': shall mean the same as the 'scope of work' or 'product brief' as specified in the tender enquiry and describes what needs to be achieved by the contract.

2.4 Abbreviations

| Abbreviation | Explanation |
|--------------|--|
| CAR | Corrective Action Request |
| CQP | Contract Quality Plan |
| CV | Curriculum Vitae |
| DN | Defect Notification |
| EMV | Expected Monetary Value ($EMV = P_{(x)} * R$), where: $P_{(x)}$ = Probability of Occurrence and R = Rand Value |
| H | Hold Point |
| ISO | International Standards Organisation (International Organisation for Standards) |

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| Abbreviation | Explanation |
|--------------|-----------------------------------|
| NCR | Non- Con formance Report (NCR) |
| NEC | New Engineering Contract |
| OHS | Occupational Health & Safety |
| PQP | Process Quality Plan. |
| QA | Quality Assurance. |
| QCP | Quality Control Plan |
| QIP | Quality Inspection Plan. |
| QMS | Quality Management System |
| QR | Quality Representative |
| SABS | South African Bureau of Standards |
| SE | System Engineer |

2.5 Roles and Responsibilities

2.5.1 Quality Requirements

2.5.1.1 Quality Documents to be submitted with the Tender

- All the plant classification enquiries shall be accompanied by Quality requirement as defined in the Eskom Procurement and Supply Chain Management Procedure (QM 58:240-105658000, 32-1034 and 32-188).
- All Suppliers that are asked to tender shall be Eskom approved Suppliers in accordance with their scope of supply.
- The contractor submits a **Quality Management Plan** which must include the following minimum requirements:
 - **Management responsibilities:** defining the role and responsibilities.
 - **Contract review:** indicate when, how, and by whom the requirements specified for the product/service should be reviewed.
 - **Design Control:** indicate when, how, and by whom the design process is to be carried out, controlled, and documented.
 - **Document and data control:** the documents and data applicable to the product, e.g., drawings.
 - **Purchasing:** any important product that to be purchased by the customer are identified and controlled e.g., tools, test equipment.
 - **Product identification and traceability.**

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- **Process Control:** indicates how the production, installation and servicing processes will be controlled to ensure that specified requirements are met.
 - **Inspection and testing:** quality inspection and control plan, QIP/QCP.
 - **Control of Inspection:** measuring and test equipment e.g., calibration methods and certificates.
 - **Control of non-Conforming products and corrective action reports:** Quality Assurance must have a copy of non-conformance and closed actions
 - **Training:** specific training requirements for personnel carrying out a process that is a subject of the plan, and how such training is to be achieved.
 - **Responsibilities:** Projects, System Engineer and Procurement.
- The System Engineer evaluates/End-user the contractor's capabilities regarding Quality Assurance and Quality Control with inputs from QA as applicable based on the Submissions and known performance history of Contractor.
 - Pre-award assessments are performed where necessary by the stem Engineer/End-user, contract management or outage coordinator to giving further information to aid in the selection process.

2.5.2 Document to be submitted after the contract is awarded and before the work starts (by Contractor).

- As per quality requirements according to categories on the tender evaluation process.

2.5.3 Responsibilities for compiling and approval of PQP.

- A contractor or supplier will compile a QCP or QIP with, hold, witness and control intervention points as determined by the activity and forward it to the relevant System Engineer or the maintenance Supervisor overseeing the activity for approval.
- The System Engineer, or Authorised person, or component Maintenance Supervisor will review the QCP or QIP for relevance and the appropriateness of the intervention points. If necessary, the designate will inform the contractor about the amendments or changes to the QIP/QCP. The Contractor or supplier will make the changes and resend the QIP/QCP to the Eskom designate for approval.

2.5.4 Responsibilities to carry out the interventions.

- Upon approval by the Eskom designate personnel, the contractor or supplier will carry out the required activity and timeously inform the system Engineer/Quality Controller/ Maintenance Supervisor of the required Quality inspection intervention.

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- Both parties (System Engineer and Projects/End User) will conduct the interventions and upon approval, both parties will sign off the QIP/QCP.
- If the contractor or supplier does not fulfil the inspection requirements, a non-conformance report and a defect/deviation form will be issued against the contractor or supplier. A corrective action will be implemented, and re-inspection conducted by projects/contractor.
- Should the supplier fail to meet the specified requirements, a stop work order, will be instigated against the supplier. The supplier will also be at liberty to request for a concession if the request warrants one.

2.5.5 Document to be submitted by projects upon completion of the Contract/order.

- Contract or Order Data packs or job packs.

2.5.6 Control of in-process inspections at the manufacturer's premises.

- Instances where quality in-process inspections must be conducted during the manufacturing stages of a product, a week before the intervention point. The technical specialist in the relevant field will be informed of the intervention and the team to carry out the necessary inspection will be formulated.
- The inspection will be conducted and upon approval of the intervention by the team both parties (Projects / System Engineer) will sign off the QIP/ QCP, in case of any non-conformity or deviations, a non-conformance report and a defect/deviation form will be issued to the supplier for corrective action.
- The supplier will implement corrective action and request a re-inspection.
- Should the supplier fail to meet the specified corrective action requirements? A stop work order will be instigated against the supplier until the Matla Power Station designate is content that the non-conformance will not re-occur.
- The supplier is also at liberty to request for a concession if the request warrants one.
- When all the required inspections are conducted, a Quality Assurance product release form, will be completed by the System Engineer or Eskom representative to accept and release the product from the supplier's premises where applicable.

2.5.7 Contract Quality Management Plan requirements.

- The contractor prepares a contract Quality Management plan, scope and contents of which are determined by the scope of works.
- The contract Quality Management plan, where appropriate:
 - Indicates the interface with the contractors Quality system and applicable documents such as procedures and work instruction.
 - Establishes communication channels between the contractor and the project Manager in respect of Quality and the integration of such with the prescribed contract communication channels.
 - Indicates how specific sub-contractors will be monitored.
 - Identify items or activities for which Quality Control will be prepared.

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- Identifies the specifications, drawings and acceptance criteria for material for which Quality Control plan are required.
- Identify the areas or processes requiring special controls.
- Identifies special tools which are required and calibration certificates thereof.
- Identifies the Quality records pertaining to the contract/order and how they are controlled and retained.
- Identifies the Contractor's Management Representative and personnel responsible for the control of Quality activities and their relationship to the Contractor's management structure.
- Identifies the documentation which is to be submitted to the Project Manager.
- Indicates the Contractors post award Quality monitoring programme.

2.5.8 Responsibilities: System Engineer

- The System Engineer being the custodian of the plant develops a scope with guidelines as to how the task/job must be executed.
- It is the responsibility of the System Engineer to develop and raise the scope of work and give his specifications as the plant system owner for any maintenance brake down, outages and Project work.

Note: The Plant System owner must take accountability of his plant.

- The System Engineer must ensure that the executor of the scoped task follows/meets the minimum requirements and or standards.
- The system engineer must sign off on all his nominated tasks to give quality assurance that a product or service met specified requirements and standards.
- When changes on the original submitted SOW is required, the System Engineer must retract the scope and submit a new revision. This process is managed through the scope variation process.
- The System Engineer on a QCP is to make sure that his requirements are captures and are also met.
- During routine maintenance the System Engineer can randomly sign off on QCP's should there be persistent rework on his plant then he shall be fully involved so that he can identify the root cause.
- During maintenance plant breakdown or modification, the System Engineer shall sign on his surveillance/visual inspection or hold point on the QCP.

2.5.9 Responsibilities: Quality Control Assurance

- Quality Assurance review scope of work to ensure that quality requirements are covered in a scope like standards, measurements, drawings etc.

NOTE: where quality personnel is not available to recommend the QC for approval, System Engineer can do so on behalf of the Quality personnel.

- Quality Assurance during work execution verifies that the contractor is using the current and signed scope of work by all relevant signatories where required.

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- Review QCP's to ensure that it is aligned to scope of work where required.
- Add interventions points on a QCP where required.
- Conduct random inspection.
- Report any quality deviation to the System Engineer, Project and Quality Assurance Manager.

2.5.10 Quality Control Plan / Quality Inspection Plan requirements

- The contractor or subcontractors Quality Control Plans cover inspection and test proposals for items or activities to be supplied in the contract.
- The Quality Control Plan indicates the following as appropriate:
 - The identification of the item.
 - The material specifications.
 - A list of the sequence of operations including inspections and tests and special processes e.g., heat relief test.
 - The identification of the specification, drawing or procedures for each operation.
 - The acceptance criteria with reference to the appropriate technical specification in house, national or international standard and relevant clause number. The inspections and tests the Contractor has nominated by Project Manager, and/or Authority/Agency for hold and witness points.
 - Provision for inspection status indication.
 - Inspection and test records which are generated by the Contractor which must be authorised and signed off.
 - Identifies authorised personnel.
 - Indicates the tolerance levels.
 - Identifies special tools.
 - Calibration results.
 - Acceptance criteria.

2.5.11 Responsibilities: Projects and System Engineer

- For each category of the operation, the Quality control or Quality Inspection plan should answer the following question:
 - Who will be responsible for the QC during operation?
 - What will that person do to ensure contract compliance? What authority will the person have over operations?
 - Where will these activities be performed? Will manufactured materials be at the manufacturer's site or on site?
 - When will these activities be performed? The earlier the QC activities are performed the more latitude the contractor or supplier has in dealing with no-conformities or deviations.

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- How will the inspections be performed? E.g., using checklist or specifications.

2.6 Process for Monitoring

2.6.1 Monitoring will be conducted through internal audits, random inspections and control on non-conformance reporting. Non-conformances must be notified through Matla Non-conformance and corrective action procedure OMOP 2255.

2.6.2 Decisions concerning whether activities on level 2 and 3 plant components to be made hold points, lies with designated authority e.g. level group e.g. activities on maintenance and personnel from maintenance group.

2.6.3 All QIP's must be registered with configuration that will in return provide each QIP with a Quality Plan number and product code.

2.7 Related/Supporting Documents

2.7.1 Training

Training on the respective intervention points will be provided when a need for one arises.

2.7.2 Measurement of Effectiveness

To ensure that required and planned interventions are undertaken at the scheduled time, internal audits will be conducted to ensure conformance to the requirements of this procedure.

2.7.3 Records

All the records generated from the Quality Control Inspections will be maintained and filled with the contract data packs/job packs for the respective projects and stored according to the document and records control procedure.

3. Document Content

3.1 Tender Enquiry Refer to 32-1034

3.1.1 The main contractor shall be responsible and accountable for the quality of product delivered or service provided by sub-contractors.

3.1.2 The main contractor shall verify that the sub-contractor has an ISO 9001 compliant QMS.

3.1.3 In the event that the sub-contractor does not have his/her own QMS they shall work within the main contractor's QMS.

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3.1.4 It shall be the main contractor's responsibility to assure him/herself that the sub-contractors are capable of compliance to all conditions of the contract and where applicable submit the same documentation to the contractor as the contractor submits to the client.

3.1.5 The contractor shall submit the CV for his/her quality representative with the tender.

3.1.6 If there is a company and site quality representative, then both CVs shall be submitted.

3.1.7 The CV shall clearly indicate the qualifications and experience the incumbent has in the field of:

- Quality control.
- Quality assurance.
- Inspection and testing.
- Experience in the discipline covering the major aspects of the scope of work.

3.2 The Contract Quality Plan

3.2.1 The contract quality plan (CQP) shall be submitted to the client within the contractually specified time.

3.2.2 The CQP shall be verified and approved by the client quality representative before the contractor commences with any work.

3.2.3 The CQP is a living document and shall therefore be reviewed and revised to keep track of any changes that may occur during the execution

3.2.4 Any revisions to the CQP shall be submitted to the contract/project manager or client quality representative for approval before such revisions are implemented and if necessary before any further work is undertaken.

3.2.5 The original CQP shall be retained as a baseline for comparison at the completion of the project.

3.3 The CQP shall contain the following information:

- *The footer on each of the CQP shall contain the following information:*
 - Revision number.
 - Date.
 - Page number and how many pages the CQP consists of.
- *Cover Page - Contract Information and Signatures:*

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- Contract Title.
 - Client/Employer Name.
 - Contract Number.
 - Start Date.
 - Completion Date.
 - Prepared by Name, Signature and Date.
 - Approved by Name, Signature and Date.
- *A Table of Content in the following format:*
 - Section number and where relevant the sub-section number.
 - The section title.
 - Page number where the section starts.

- **Description of the Works**

This is a comprehensive description of the scope of work to be performed as outlined by the client in the tender enquiry or as possibly amended in the contract awarded. The statement shall describe what the deliverables of the contract are, not how it will be done nor to what specifications or standards.

- **Communications Channels**

In this section the following shall be supplied in respect of all relevant stakeholders, except suppliers and subcontractors whose details appear in a later section:

- Name of individual.
- Name of organisation.
- Position in the organisation.
- Contact numbers.
- Address where required.

Describe how communication with the various stakeholders will take place. For example, various meetings, progress reports, informal discussions, etc.

- **Organogram**

The organogram shall show the reporting structure for the project team. Operators and labourers do not have to be named, only indicate the numbers. Where appropriate a second organogram shall be provided to depict the management structure of the contracting company clearly indicating where the responsible contractor's project manager fits into the organisation.

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The quality function and personnel responsible for quality in the organisation and on the project shall be clearly indicated on both diagrams.

- **Interfacing Documents between Contractor and Client/Employer**

A diagram or list of all documents shall be provided to show the interface in respect of the quality and contractual requirements between the client and contractor.

- **Schedule of Documents Submitted**

A list of all documents shall be submitted to the client at the various stages of the contract in the categories listed below:

- *Documents Submitted to the Client/Employer During the Project*

This section shall list all the documents that will be submitted during the contract execution phase.

- *Documents Captured in the Contractor's Quality System*

List all documents that will be captured in the contractor's quality system, which are not included in the list of documents to be submitted during execution of the contract. This includes quality documents and records which may or may not be included in the data book. If not included in the data book this must be indicated next to the document.

- *Documents Submitted Prior to Completion of the Contract/Project/Works*

List all documents to be submitted to the client prior to the completion of the works, which may include, but not be limited to:

- ⇒ Safety Clearance Certificates.
- ⇒ Final Inspection Certificates.
- ⇒ Clearance of notified defects.
- ⇒ Commissioning reports.

Although the data book/quality dossier can be listed here, this is usually only handed over after the final handover before the contract is officially closed.

- **List of Suppliers and Sub-Contractors to be Used**

All suppliers and sub-contractors of quality critical items must be listed here, and the following information must be provided:

- Name.
- Address.
- Contact number.

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- Products or services to be provided.

The client shall have the right to reject any supplier or sub-contractor mentioned in the list and to recommend an alternative.

- **Monitoring of Suppliers and Sub-Contractors**

Describe the means and how the quality of product and/or service provided by the suppliers and sub-contractors will be monitored and measured.

- **Proof of Suppliers and Sub-Contractors Working to Specified Quality Standards**

Describe and list what documentary proof will be available to ensure that the suppliers and sub-contractors are working according to specified quality standards. This can include certificates of conformance provided by the suppliers with every delivery or approved and signed off QCPs for work by sub-contractors.

- **Items to be Manufactured, Refurbished and Newly Purchased**

- *Manufactured Items*

List the items to be manufactured by either the contractor or his/her sub-contractors. In the case of sub-contractors mentioned which of the previously listed sub-contractors will be manufacturing the items.

- *Refurbished Items*

List the items to be refurbished by either the contractor or his/her sub-contractors. In the case of sub-contractors mentioned which of the previously listed sub-contractors will be refurbished the items.

- *Newly Purchased Items*

List all quality critical items that will be newly purchased from the previously mentioned suppliers.

3.4 Quality Control Plans

3.4.1 The contractor shall draw up QCP's for all items as per the list provided in the CQP (refer Section 3.2) for:

- Design (if applicable)
- Items to be manufactured
- Installation and erection
- Commissioning

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- Maintenance

Note: The client may require or request the contractor to use the client standard form for the QCP instead of his own.

3.4.2 The QCP shall be approved by Engineering, reviewed, authorised for use, and recommended by the Quality Department before the contractor commences with the work.

3.4.3 The client's contract/project manager or quality representative shall where necessary, consult with the appropriate representative of the functions involved and the inspection authority and/or agency in respect of the completeness of the QCP.

3.4.4 If additional activities/items and/or inspection, witness and hold points are required, they shall be added to the QCP before approval is given.

3.4.5 QCPs shall be reviewed and revised in respect of changes to the scope of work and be approved before any new work is undertaken or work progresses.

3.4.6 Contents of the QCP

The following information shall be contained in a QCP:

- Client/Employer.
- Contract number.
- Contract title.
- Contractor's order number
- The sequence of activities/operations performed.
- Items, activities, and operations requiring inspection and testing.
- The acceptance criteria, with reference to:
 - Relevant technical specification.
 - In-house, national, and international standards (as applicable).
 - Witness and hold points nominated by the:
 - ⇒ Contractor
 - ⇒ Contract/project manager/engineer
 - ⇒ Client Quality Representative
- Signature and date by the responsible parties.
- Reference to inspection and test records created during the process.

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3.5 The Inspection Authority

- 3.5.1** An inspection authority, approved by the Department of Labour, shall be appointed in terms of the OHS Act where this is required.
- 3.5.2** The inspection authority shall where applicable approve the design, manufacture, construction, erection, commissioning, maintenance, or repair and testing of plant, equipment and machinery, with specific reference to:
- Pressure system of boilers.
 - High pressure and/or temperature pipe work.
 - Associated material of high pressure/temperature systems.
- 3.5.3** The inspection activities are carried out in terms of the OHS Act and the scope of work, after which the final inspection certificate is issued by the inspection authority.
- 3.5.4** The contractor shall submit all information and documentation as per the scope of work to the inspection authority, on request by the contract/project manager.
- 3.5.5** The inspection authority shall ensure that the work performed by the contractor conforms to the specified scope of work and meets all applicable legislative requirements.
- 3.5.6** The activities of the inspection authority shall include, but not be limited to:
- Witness of inspections and tests.
 - Monitoring the contractor's quality function.
 - Sampling checks against the contractor's records.
 - Record verification.
 - Performing or witnessing independent inspection and tests.
- 3.5.7** No plant, equipment or machinery shall be put into service (operation) until such time that a certificate has been issued by the inspection authority stating that such plant, equipment or machinery is safe to use.

3.6 Inspection Agency

- 3.6.1** Where necessary an inspection agency (3rd Party Inspector) shall be appointed by the client to carry out inspections and tests where the:
- Client requires independent third-party inspection and tests to be performed.
 - Contractor does not have the necessary expertise or cannot handle the high workload imposed by the number of inspections and tests to be performed.
- (The contractor may recommend an inspection agency to the client).

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3.7 Inspection and Testing

- 3.7.1** The contractor shall ensure that all work has been fully inspected, accepted and documented prior to requesting any inspection and testing by the client's quality representative or the inspection authority/agency.
- 3.7.2** The contractor's quality representative shall ensure that all inspections and testing is performed according the applicable QCP.
- 3.7.3** The appropriate active/operation shall be signed and dated by all persons as indicated on the QCP.
- 3.7.4** Where contractually required an acceptance or quality assurance certificate shall be made out and signed by the issuing party.
- 3.7.5** The contractor shall give the client's quality representative, contract/project manager and/or inspection authority 24 hours advance notice of witness or hold points on the QCP.
- 3.7.6** The notification shall be in writing and include the following information:
- Order or contract number.
 - Items involved.
 - Inspection and test plan reference and activity/operation number.
 - Location of the inspection and test.
 - Time and date.
 - Contact person's name and telephone number.

3.8 Control of Defects/ Non-Conformance

- 3.8.1** Defect notification shall be raised by the contractor's and client's personnel whenever any non-conformances are detected in product, material, items, parts, plants or workmanship in general.
- 3.8.2** The defect notification raised by the contractor shall be submitted to the contract/project manager or client's quality representative for review if requested or contractually required.
- 3.8.3** All client defect notification shall be submitted to the client's quality representative for registration, review, and submission to the contractor's quality representative for action.
- 3.8.4** All defect notifications are permanent quality records and shall be controlled in accordance with the client's procedure for control of quality records.

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3.8.5 The contractor's quality representative shall register all defect notifications, irrespective of whether the client or the contractor's own staff has raised the notification, in the appropriate register and process the document as per the relevant procedure laid down in his/her QMS.

3.8.6 As a minimum the processing of the defect notification includes:

- A description of the defect or potential defect.
- Investigation results.
- Proposed corrective action (defect only).
- Proposed preventive action (defect and potential defect).
- Implementation of actions.
- Follow-up to establish success or failure of implemented actions.
- Formal closure.

3.8.7 All defects or potential defects shall be investigated to determine the cause of the defect.

3.8.8 Corrective action shall be formulated, agreed, and implemented.

3.8.9 All corrective actions shall be followed up, evaluated and closed out.

3.8.10 In the event where a defect or variation from specification cannot be corrected the contractor shall submit an application for acceptance of defect or concession. This situation normally arises where:

- There is a defect, but the performance of the product, equipment or plant is not affected.
- The cost of correcting the defect is very high and there is only a minor impact on the performance of the product, equipment or plant is not affected.
- The defect cannot be corrected.
- Original replacement parts are no longer available due to the age of the plant or equipment, or the original manufacture parts are not currently available and substitute or generic parts must be used

3.8.11 An application for defect acceptance or concession means to 'use as is' or 'in place of and shall be made in writing.

3.8.12 The client shall give written approval before the concession can be implemented otherwise the responsibility for any damages or losses incurred as well as the impact of related latent defects will lie with the contractor.

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3.8.13 Any non-compliance with a defect notification, or corrective action request, continued poor workmanship resulting in recurring non-conformance to contractual requirements, including those that are not of a quality nature shall, as a last resort, result in the issuing of a 'stop work order.

3.8.14 The stop work order shall imply that all work on the contract shall be stopped until such times that the problem issues have been resolved to the satisfaction of the client, or the inspection authority or the inspector from the Department of Labour.

3.8.15 Work shall only recommence when the contract/project manager has given written authorisation to do so.

3.9 Handling of Product

3.9.1 Release of plant and material (product) shall fall into two categories:

- Release for shipment/transport (delivery to client or site).
- Release of site work (work performed on site).

3.9.2 No plant or material to be inspected in accordance with a QCP shall be released for shipment or transport unless it has been inspected and released as conforming to requirements by the contractor's quality staff and the contract/project manager and client quality representative and/or inspection authority/agency.

3.9.3 A copy of the release certificate (documentation) shall accompany the ship from its origin to its destination and shall be produced before entrance to the site is granted.

3.9.4 A copy of the release certificate (documentation) shall accompany the ship from its origin to its destination and shall be produced before entrance to the site is granted.

3.9.5 No plant or material produced or manufactured on site requiring inspection in accordance with specific QCP shall be released for further use or put into service unless it has been released by the responsible person.

3.9.6 If the plant or material conforms to requirements the responsible person shall issue a release certificate.

3.9.7 To ensure that the equipment or plant operated safely and effectively the contractor shall provide any or all special instruction, at the time of delivery or handover.

3.9.8 Such instructions shall include special requirements for:

- Safe handling.
- Storage.
- Protection from environmental degradation.

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- Shelf life.
- Use (operating instructions).
- Special safety precautions during operation.
- Moth balling (this should also be specified by OEM or fabricator).

3.9.9 Where contractually agreed certain items, such as batteries, shall not be installed or placed into service, except for testing purposes, until such time that the equipment or plant is put into operation.

3.9.10 The contractor shall ensure that product, plant, equipment or machinery is delivered in a condition that meets the client's (contractual) requirements.

3.9.11 The contract/project manager and client's quality representative, and/or inspection authority/agency shall accept product, plant, or material only after inspection and testing as stipulated in a QCP to ensure that all requirements are met.

3.9.12 Items that do not conform shall be rejected, suitably identified as non-conforming or as a defect and handled as described in Section 5.11. Concession will be used to accept defective equipment or material.

3.10 Control of Records

3.10.1 All quality records shall be controlled in accordance with the requirements of ISO 9001, covering the following:

- Identification
- Legibility
- Storage
- Access (Security)
- Retrieve ability
- Disposal

3.10.2 Certain records shall be designated to be proprietary records, which are the property of the contractor or sub-contractor.

3.10.3 These records shall not form part of the data book, but the contractor/sub-contractor shall:

- Control these records in the same manner as he/she would control all other records (refer Section 5.13.1).
- Retain the records for a time period agreed with the contract/project manager or client's quality representative.
- On request make such records available to the client's designated representatives who require access in order to perform their functions.

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3.11 The Data Book/Quality Dossier

3.12 The contractor shall assemble all quality records, as specified in the index submitted in the CQP, in data book or quality dossier.

3.13 The data book shall be handed to the client on closure of the contract/project.

3.14 The client's quality representative shall verify the contents of the data book against the index submitted in the CQP.

3.14.1 The client's quality representative shall notify the contractor, by means of a defect notification/ NCR, of any discrepancy or non-compliance the contents of the data book.

3.14.2 The data book shall contain, but not necessarily be limited to the following:

- A cover page containing:
 - Contract/project name.
 - A summary of the scope of work.
 - Client's contract number.
 - Contractor's order number.
 - Sub-contractor's order number(s) (if any).
 - Contractor's review.
 - Contractor's approval signatures.
 - Date of compilation.
 - Date handed to client.
- A table of contents. As the data book may cover several files and be partially or fully in electronic format, the table of contents must mention the file number or folder names in which various documents are stored. Each file or folder must have its own table of contents to indicate what record types are stored therein.
- A table of specific product, equipment, plant and material to which data book or sub-data books apply, with unique identification numbers and in which files and/or electronic folders the relevant records can be found.
- A summary of design calculations if the contract/project involved design.
- A checklist verifying that technical and quality assurance requirements have been met and that the data book meets contractual requirements.

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- All completed original inspection and test plans.
- All inspection and test records.
- All certificates of conformance for product and material purchased.
- A register of all NCRs issued.
- The defect notification register and all original defect notifications.
- All release forms.
- A list of order numbers and a description of product, plant or material purchased.
- If contractually required copies of all un-priced purchase orders.
- All other quality records relevant to the contract/project not listed above (except contractor proprietary records).
- A copy of the latest revision of the approved contract quality plan.
- A copy of the contract/project post-mortem report.

4. Acceptance

This document has been seen and accepted by:

| Name | Designation |
|-------------------|----------------------------|
| Maserati Lesolang | General Manager |
| Thabo Gininda | Operating Manager |
| Mpho Ntshangase | Risk and Assurance Manager |
| Lufuno Tshidzumba | Environmental Manager |
| Neo Mkhize | Procurement Manager |
| Monyane Mokoena | Maintenance Manager |
| Jabu Khoza | Production Manager |
| Jan Ngoepe | Production Manager |
| Boitumelo Mohale | Production Manager |
| Hilda Moloisoa | Production Manager |

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| Name | Designation |
|--------------------|---------------------|
| Elias Katasa | Finance Manager |
| Lindokuhle Ngobese | Engineering Manager |
| Lolo Thulare | Human Resources |
| Thwadi Dasi | Outage Manager |
| Mike Nkosi | Training Manager |
| Koena Moholola | Program Manager |

5. Revisions

| Date | Rev. | Compiler | Remarks |
|----------------|------|------------|---|
| January 2023 | 3 | P Moji | No changes made to the document. |
| October 2019 | 2 | D Mkhonto | Removed 3.1-3.4 Tender Enquiry replaced with reference to 32-1034. Responsibilities of System Engineer on QCP were clarified. Quality Control assurance roles and responsibilities. |
| April 2016 | 1 | D Mkhonto. | It was time for document to be reviewed. Merging OMOP 4497 as OMOP 2290 was a duplicate of this document. Compliance to ISO 9001:2015 |
| September 2014 | 0 | D Mkhonto | Original issue |

6. Development Team

The following people were involved in the development of this document:

- Manager Quality Assurance: Dorah Mkhonto

7. Acknowledgements

- Manager Design and specification: Ettienne Van Zyl
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- Mechanical Quality Control: Jabulani Sithole

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