	<p style="text-align: center;">Scope of work</p>	<p style="text-align: center;">Generation Komati Power Station</p>
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Title: **THE SUPPLY OF SODIUM CARBONATE & SODIUM HYPOCHLORITE AT KOMATI WATER TREATMENT PLANT**

Unique Identifier: **285-169322**

Alternative Reference Number:

Area of Applicability: **Komati Power Station**




Documentation Type: **Scope of work**

Revision: **0**

Total Pages: **8**

Next Review Date: **February 2026**

Disclosure Classification: **CONTROLLED DISCLOSURE**

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<p>Date: 15/03/2023</p>	<p>Date: 15/03/2023</p>	<p>Date: 24/03/23</p>

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1. INTRODUCTION

The Komati Water treatment plant produces potable water for consumption at Komati Power Station, Komati Village, Koorfontein Village & Mine. For potable water production sodium carbonate is used to pH correction while sodium hypochlorite is used to disinfect potable water. These two chemicals are very important in potable water production to render the potable water safer for human consumption as per SANS 241.

2. SUPPORTING CLAUSES

2.1 Scope

2.1.1 Purpose

To define the scope of work covered under the supply of Sodium Carbonate and Sodium Hypochlorite at Komati Water Treatment plant.

2.1.2 Applicability

This document shall apply to Komati Power Station.

2.1.3 Effective date

This document is effective from the 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

- ISO 9001 Quality Management Systems
- OHS Act Occupational Health and Safety Act
- 240-55864764 Chemistry for Potable Water Standard
- 240-92139372 Guideline for Managing of Bulk Chemicals Deliveries
- SU21299 Operating Technical Specification-Water treatment Plant
- PAB 20100 Waste Management and Disposal Procedure
- PAB20240 Komati Power Station Occurrence Management
- South African National Standard (SANS 241)

2.2.2 Informative

- Outside plant Module OP/1 Water Reticulation System

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- Outside plant Module OP/1 Raw Water Treatment

2.3 Definitions

none

2.4 ABBREVIATIONS

Abbreviation	Explanation
SANS	South African National Standards
DCS	Distributed Control System
IBI	Integrated Business Improvement
LIMS	Laboratory Information Management System
OEM	Original Equipment Manufacturer
SHE	Safety Health and Environment
SHEQ	Safety Health Environment and Quality
MSDS	Material Safety Data Sheet
SS	Shift Supervisor
SSS	Senior Shift Supervisor
TOC	Total Organic Carbons
WTP	Water Treatment Plant

2.5 ROLES AND RESPONSIBILITIES

➤ Employer Representative

- Ensure Supplier representative is familiar and conversant with this scope.
- Consult and inform Supplier representative of any intended modification to the scope.
- Review the scope as and when required.
- Carry out their duties in line with this scope of work

➤ Supplier Representative

- Familiarize to all applicable standards and procedures associated with the excursion of this scope of work.
- Influence any review or modification of this scope.

2.6 Process for Monitoring

- Not applicable

2.7 Related/Supporting Documents

N/A

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3. SCOPE

Supplier shall comply with Eskom's policies and site regulations, including no smoking in restricted areas, adherence to Eskom's lifesaving rules, etc.

Supplier to take note of the following:

	Descriptions	Estimate usage (Kg/month)	Estimate usage (Kg/36 months Contract Duration)	Item Price (R/kg)	Total Price (R/36 months Contract Duration)
Sodium Hypochloride	Symbol: NaOCl Supplied: 1 000 kg Flowbin Physical State: Liquid. Strength/Purity: 15% minimum	3000	108000		
Sodium Carbonate (Soda Ash)	Symbol: Na ₂ CO ₃ Supplied: 25 kg Bags Physical State: Solid. Strength/Purity: 99% minimum	900	32400		
				Total Cost	

3.1 Technical Evaluation Criteria

Description	Proof	Weight
Proposals will be required to meet a total of 75% qualifying score to be considered technically acceptable.		
Certificate of analysis (COA)	<ul style="list-style-type: none"> Provide COA per chemical in accordance with the most recent SANS 50881, SANS 50883, SANS 51407, SANS 51409, SANS 51410. COA to include all regulated impurities. <p>Score Distribution</p> <p>2 Attached 40%</p> <p>1 Attached 20%</p> <p>0 Attached 0%</p>	40%

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<p>Manufacturer 9001 certification</p>	<ul style="list-style-type: none"> • Provide a valid ISO 9001:2015 accreditation certificate for the proposed chemical manufacturers. One certificate can be used for if both chemicals are from common manufacturer. <p>Score Distribution</p> <p>2 Attached 15%</p> <p>1 Attached 7%</p> <p>0 Attached 0%</p>	<p>15%</p>
<p>Manufacturer 14001 certification</p>	<ul style="list-style-type: none"> • Provide a valid ISO14001 certificate of compliance for the proposed chemical manufacturers. One certificate can be used if both chemicals are from common manufacturer. <p>Score Distribution</p> <p>2 Attached 15%</p> <p>1 Attached 7%</p> <p>0 Attached 0%</p>	<p>15%</p>
<p>Manufacturer Safety Data Sheet (SDS)</p>	<ul style="list-style-type: none"> • Provide 16 points SDS from the manufacturer of the chemicals compiled in accordance with the most recent SANS 11014, for each of the chemicals. <p>Score Distribution</p> <p>2 Attached 30%</p> <p>1 Attached 15%</p> <p>0 Attached 0%</p>	<p>30%</p>

3.2 REQUIREMENTS

3.2.1 Adherence to Eskom generic policies. All Supplier employees shall comply with Eskom’s policies and site regulations, including no smoking in restricted areas, adherence to Eskom’s lifesaving rules, etc. The Supplier shall always adhere to all SHEQ requirements stipulated by the employer.

3.2.2 TESTS

- Provide the COA (e.g. colour, pH, SG etc.) before offloading on site. No delivery will be accepted without the QC check for the chemicals.
- Provide certificate of Analysis with every delivery of chemicals. The certificate of analysis must provide a complete list of all impurities in the products, as well as their concentrations. All analysis to have been done using SANAS accredited methods, to ensure traceability to international standards. List of SANAS accredited analyses and methods used to be submitted

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with the tender. Where non-accredited methods are utilized, details of such methods to be submitted with the tender.

3.2.3. Marking, labelling and packaging

For each of these chemicals the supplier must ensure the following requirements are met:

- The supplier must provide a Material Safety Data Sheets which includes all the 16 points and Local Contract details (South African Telephone Numbers)
- Provide the COA (e.g. colour, pH, SG etc.) before offloading on site. No delivery will be accepted without the QC check for the chemicals.
- Provide certificate of Analysis with every delivery of chemicals. The certificate of analysis must provide a complete list of all impurities in the products, as well as their concentrations. All analysis to have been done using SANAS accredited methods, to ensure traceability to international standards. List of SANAS accredited analyses and methods used to be submitted with the tender. Where non-accredited methods are utilized, details of such methods to be submitted with the tender.
- The supplier must prove that they comply with SANS 10228 Identification and classification of dangerous goods for transport, SANS 10231 Transportation of Dangerous Goods –Operational requirements for road vehicles, SANS 10233 Transportation of dangerous goods – intermediate bulk containers for road and rail transport, SANS 10229-1Transportation of dangerous goods- Packaging and large packaging for road and rail transport: Part 1 Packaging.
- Further, no chemical container shall be accepted by the responsible Chemistry or Water Treatment Plant personnel and or received at Eskom Stores Receiving chemical container without adequate identifying label information, container damage or leakage. The label should include, as a minimum, the substance name, shelf life or date of expiry, appropriate hazard warnings and identification of the manufacturer or distributor. The supplier must ensure all these requirements are met.
- The supplier shall be responsible for all costs associated with chemical deliveries that are rejected by Eskom due to quality issues (non-conformance of product to quality requirements) as well as products with damages or leakage issues. This will include delivery costs, recall costs, etc.
- The supplier is required to prepare contingency to reasonably protect Komati's supply of product in the event that a supplier's facility cannot continue to operate due to a catastrophic event (e.g. utility interruptions, fire, flood, storm damage, temporary or limited data loss, chemical spills, air/water contamination, complete data loss). A copy of the Disaster Recovery Plan should be submitted with the tender.
- The supplier accepts that Eskom may, at any time during the course of the contract, request a Correct Action Report from the supplier to address non-conformances in the products supplied.

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4. ACCEPTANCE

This document has been seen and accepted by:

Name	Designation
Mpho Manamela	Manager Chemistry
Reuben Kgosana	Senior Supervisor Chemistry
Sibusiso Vilakazi	Senior Supervisor Chemistry

5. REVISIONS

Date	Rev.	Compiler	Remarks
February 2023	0	B.P. Khumalo	First issue

6. DEVELOPMENT TEAM

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

- Reuben Kgosana
- Emmanuel Manyaga

7. ACKNOWLEDGEMENTS

None.

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