# SCOPE OF WORK FOR THE SUPPLY OF SODA ASH DENSE FOR A PERIOD OF 36 MONTHS

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Revision[1]: **1.0 see** legend at bottom of page

Revised date: 19/06/2026

| NAME | TITLE | Empl. no | SIGNATURE | DATE |
|---|---|---|---|---|
| **COMPILED – RECOMMENDATION** | | | | |
| VR Zimu | Acting Production Engineer | 17232 | | 29/07/26 |
| **APPROVAL TO PROCEED** | | | | |
| Z. Mzimela | Quality Assurer | 503265 | | 29/07/2026 |
| L. Raphiri | Acting Snr Manager Technical & CI | 504826 | | 30 July 2026 |
| D. Magatikele | Acting Snr SHREQ Manager | 505975 | | 30/07/2026 |
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# SCOPE OF WORKS

# 1.0 Background, Present Situation and Proposed Solution

## 1.1 Background

Phosphoric acid plant is a plant that is composed of two sections, namely Reaction and Filtration Section and Concentration Section. These sections have a design capacity of 2350 MTPD of $P_2O_5$ each. Reaction and Filtration Section produce weak acid which is at 27% $P_2O_5$ through reaction of phosphate rock from the Foskor Phalaborwa Mine and sulphuric acid which is locally produced by Foskor Chemicals Division in Richards Bay in the sulphuric acid plant. The weak acid is then concentrated in the Concentration section to 53% $P_2O_5$ which sold locally and internationally. The Concentrated acid is also used in the Granulation Plant to Produce Fertilizer.

## 1.2 Present Situation

Foskor's main sewer line's pH is low due to acid seepage through ground water contamination, which is against the effluent discharge permit. The sewer line has aged and some of the acid leaks into it. To mitigate the issue of low pH, the homogenous soda ash solution mixed with water is gravitationally pumped into the main sewer line. This assists in maintaining the required pH, before it is pumped out to the Municipality.

## 1.3 Proposed Solution: Reason for this scope of work

The proposed solution is to appoint a competent supplier for the supply and delivery of soda ash dense which complies with the technical specification and delivery requirements outlined in this tender document.

## 1.4 Legislation, Standards and Codes of Practice

Latest revisions or amendments of the listed codes and specification are applicable to this contract:

| Number | Title / Description | Revision |
|---|---|---|
| Act 85 of 1993 | Occupational Health and Safety (OHS Act) | Latest |
| ISO 9000 | Quality Systems Series | Latest |

All work listed in this scope of work shall be completed in accordance with the specifications and codes as listed above. It is the responsibility of the Supplier to be in possession of the latest standards and codes as listed above in the execution of this contract.

### 1.5 Plant Data

To deliver at

FOSKOR(Pty) LTD – RICHARDS BAY DIVISION,
21 JOHN ROSS PARKWAY,
RICHARDS BAY,
3900
SOUTH AFRICA

### 1.6. Foskor Supplied Services

| **Foskor shall be responsible for** | | **Applicable:** |
|---|---|---|
| **1** | Supply a copy of the relevant Foskor Procedure Specification(s). | **YES** |
| **2** | Supply the relevant Foskor Technical Specifications | **YES** |
| **3** | Supply a copy of reference drawings if required. | **N/A** |
| **4** | Supply equipment (if applicable) | **YES** |
| **5** | Provide access to ablutions facilities.<br>▪ Successful Tenderer worker to be fully dressed in required PPE when coming on site.<br>▪ The successful Tenderer to ensure that its workers/subcontractors'/ supplier that are making use of facilities do so in an orderly and well-mannered way.<br>▪ Approved access is required prior to the use of facilities such as change room, etc | **YES** |

| | | |
|---|---|---|
| 7 | Make available duly authorized personnel to represent Foskor on this project | **YES** |
| 8 | Waste/ Scrap bins for disposal of waste (general and contaminated) where and when required. (Only if not part of the scope of works) | **YES** |

### 1.7. Successful Tenderer (Supplier) Responsibilities

| **The successful Tenderer (Supplier) shall be responsible for (inter alia):** | | **Applicable:** |
|---|---|---|
| 1 | Supply suitable qualified and competent labor inter alia: truck driver, to fulfill the scope of work. | **YES** |
| 2 | Supply of tools and any specialized equipment. | **YES** |
| 4 | Supply suitable (approved) personal protective equipment (PPE). | **YES** |

## 2. Scope of Work

- The Scope of Work ("Works") calls for the supply of **Soda Ash Dense** to Foskor Richards Bay site.
- The supplier will be required to:
  - The supplier shall supply and deliver 18 000kg of soda ash dense packaged in 25kg bags which will must be palletized and shrink wrapped.
  - The delivery of soda ash must be accompanied by Certificate Of Analysis (COA), a Safety Data Sheet (SDS) and delivery documents.
  - The supply must be consistent and uninterrupted, and any delays must be communicated at least 24hours in advance.
  - The supply of soda ash shall be for a period of 36 months (3years).
  - The supply of soda ash dense will be required monthly.
- The soda ash dense should have the following technical specifications:

| **Chemical Composition** | |
|---|---|
| **Parameter** | **Specification** |
| $Na_2CO_3$ (Sodium Carbonate) | ≥ 99.2% |
| NaCl (Sodium Chloride) | ≤ 0.4% |
| $Na_2SO_4$ (Sodium Sulphate) | ≤ 0.15% |
| Fe (Iron) | ≤ 20ppm |
| Loss on ignition (300°C) | ≤ 0.5% |
| Water-insoluble matter | ≤ 0.05% |
| Calcium + Magnesium (as $CaCO_3$) | ≤ 100ppm |
| Heavy metals (as Pb) | ≤ 10ppm |
| **Impurities Control (Typical Limits)** | |
| **Impurity** | **Max Limit** |
| Chloride ($Cl^-$) | ≤ 2.500ppm |
| Sulphate ($SO_4^{2-}$) | ≤ 1.500ppm |
| Silica ($SiO_2$) | ≤ 100ppm |
| Alumina ($Al_2O_3$) | ≤ 50ppm |
| **Physical Properties** | |
| **Property** | **Typical Value** |
| Appearance | White crystalline powder or granules |
| Form | Anhydrous solid |
| Bulk Density | 0.5 – 1.1 g/cm$^3$ (Light vs Dense) |
| Solubility in water (20°C) | ~21.5 g/100ml |
| pH (1% solution) | 11.0 – 11.5 |
| Melting Point | 851°C |

## 2.2. Transportation and offloading

### 2.2.1. Transportation requirements

- Road truck must comply with all road traffic requirements which are as per National Road Traffic Act, 1996 (Act 93 of 1996).
- Be maintained in a roadworthy condition throughout the contract period
- Road truck must be suitable for transporting 18MT of soda ash dense and must securely fastened.
- Road truck must be covered with tarpaulin.
- Road truck must not have mixed loading with other raw materials or chemicals.
- The road truck driver must have proof of HAZCHEM training.
- The road truck must have spill kit
- The truck driver must have signage showing carrying of hazardous materials.

### 2.2.2. Offloading requirement

- Offloading shall take place in the designated store area where the Foskor personnel will be available to accept delivery.
- Foskor personnel will do an analysis of the soda ash before offloading.
- Each delivery shall be accompanied by
  - Delivery note indicating quantity of soda ash dense supplied
  - Batch number and soda ash identification
  - Certificate of analysis (COA)
  - Safety Data Sheet (SDS)
- Forklift from Foskor together with the forklift driver will be provided by Foskor for offloading palleted soda ash dense bags

(c) WARRANTY

Without prejudice against any other rights of Foskor under these conditions, the Tenderer warrants that:

1. The supplied soda ash dense meets the specification as outlined in the SOW on delivery
2. This warranty shall survive any inspection, delivery, acceptance, or payment by Foskor

## 2.2. Site Conditions

The site is located on the Foskor Richards Bay Plant; approximately **500** meters from the main entrance and access for vehicles **are** possible.

## 2.3. Location of the Works

The store warehouse site is situated within the premises of Foskor at Richards Bay.

## 2.4. Sample of Materials

As part of technical evaluation criteria suppliers are required to submit 2kg of the sample during tendering process.

## 2.5. Invoicing and Payment

Payment will be made by Foskor, after approval by the Foskor Project Representative (i.e., Engineer, Area Manager) of the submitted purchase meeting to the supplier within **30** (thirty) days from the date of receipt of the Supplier approved statement.

The invoice shall be approved in accordance with the provisions of Foskor's terms and conditions.

The statement submitted is to be in a format acceptable to the Foskor Project Representative and needs to contain the following minimum information:

- Company details, registration no and VAT registration no
- Purchase Order no
- Details of work done to date
- Detail of claims to date (Excluding the current claim)
- Value of the current claim and work done
- VAT charged

## 2.6. Non-compliance with supply and delivery agreement

Where the supply and delivery of 18 000kg of soda ash is not in accordance with the agree contract terms including but not limited to chemical specification (quality), packaging, delivery schedule such supply and delivery shall be deemed to be non-compliant. Foskor shall notify the supplier in writing of any non-compliance identified and the supplier shall at its own expense rectify any non-compliance within seven days. Payments will be withheld for any quantity of soda ash dense that is non-compliant until it has been rectified.

## 2.7. Cancellation of the Contract by Foskor

The repeated failure to comply with the supply and delivery requirements of soda ash dense including the following:

- Failure to meet the soda ash specification
- Failure to deliver 18 000kg of soda ash dense.
- Failure to deliver on agreed timeline which is per month

Foskor may, by written notice to the Supplier, cancel the Contract.

## 2.8. Quality Management

The successful Tenderer is to adhere to Foskor's Quality Management System and specifications incorporated in this Tender Document.

### 2.8.1. Quality Assurances:

i. It is a requirement of the contract that the successful Tenderer (Supplier/Consultant) maintains an effective documented system for the control of product quality.

ii. Proof of compliance (performed quality document) with a recognized quality assurance standard, such as ISO 9000, should be submitted with the Tenderer's (Supplier /Consultant) tender.

iii. The Tenderer's (Supplier /Consultant) Quality Assurance Department Manager shall be responsible for a senior executive only and not be under the control of persons responsible for production.

iv. The Tenderer's (Supplier/Consultant) Quality Assurance Manager is regarded as the principal link between the Tenderer (Supplier /Consultant) and Foskor in all matters affecting quality.

v. The successful Tenderer's (Supplier/Consultant) Quality Manager shall have access to the successful Tenderer's (Supplier/Consultant) offer document and to all other associated specifications, drawings and documents necessary for the satisfactory execution of the project.

## 3. OHS Act & SHREQ Requirements

This specification covers the health and safety requirements to be met by the successful Tenderer (Supplier) undertaking work within Foskor premises to ensure a continued safe and healthy environment for all workers, employees and subcontractors/consultants and for all other people entering the site of works.

SHREQ Requirements

The successful Tenderer (Supplier) shall ensure that all employees under his/her control, including the subcontractors/consultants and their employees, undergo a health and safety induction training course by a Foskor competent person before entering site.

a. The Supplier shall prepare a safe working plan for the work to be done.

b. Provide the product safety data sheet (SDS)

c. The transporting road truck must be certified to carry dangerous goods, labelled with the United Nations product identification number (UN 1910) and the product hazard classification (Class 8 Corrosive Substance). Additional labelling required is an orange danger warning sign.

d. The transport road truck driver must hold a valid professional driving permit (PrDP-D) with a dangerous good category; they must be 25 years or older with a valid annual medical fitness certificate.

e. The Supplier shall ensure all his/her personnel have attended the Safety Induction, by Foskor (Pty) Ltd before they enter the site.

f. The Supplier on entering site, must wear Foskor minimum required PPE at all times namely safety glasses, acid resistant overalls, safety harnesses (on heights), safety boots or steel cap gumboots, ear protection and carry gas masks

**(Half mask double filter – screw type with filter type A1B1E1K1 – North Safety Product or similar approved product)** and goggles **(Ovex ultra vision – W1663459B – DIN CE 0196) preferably in a pouch.** Should a Supplier be found on site without the above-mentioned safety clothing, he/she will be removed from site and will not be allowed to return. FFP3 dust mask fitted with an exhalation valve must be used when working in dusty environment.

g. **Overalls must be Blue Sweet Orr overall (80% Polyester 20% Viscose Rayon Acid repellent) with Company names either on front of jacket or back OR Blue North Safety Acid/Flame overall (Flame retardant acid resistant anti-static ATPV 15.4CAL/CM2) with company names either on front of jacket or back and fluorescent reflective strips to be stitched onto sleeves and on the knees.**
h. The Supplier must take safety precautions when working on site.
i. A complete safety file is to be submitted to Foskor (Pty) Ltd Safety Department before any work commences.
j. The Supplier's vehicle when entering the Plant must always have rotating orange lights on and must have wheel chocks to be used when the truck is parked.
k. The truck driver must undergo a full medical at either Foskor (Pty) Ltd.'s Clinic or Caredoc Richards Bay or a Foskor (Pty) Ltd approved medical facility. A full lung function test must be done. Medical certificates are valid for one year only. For medical costs and bookings please contact Sister Nkosazana Nxumalo at Foskor (Pty) Ltd Clinic on 035 902 3267.
l. A once-off fee is also required for access cards from Foskor Security. Please contact Foskor (Pty) Ltd Security Reception at 035 902 3267 for information.

**NB**: A Supplier that has been awarded work shall register with the HSEC Online, which is a Supplier management system for Foskor Acid Division where all Supplier are required to submit their safety files.

MANDATORY AS ENVISAGED BY SECTION37(2) OF THE ACT

By the submission of a tender, any tenderer will, if awarded the contract to which this tender document relates, be deemed to be mandatory as envisaged by Section 37 (2) of the Act.

As a mandatory the successful tenderer will be deemed to be the "principal supplier" and an employer in his/her/their own right with duties as prescribed in the Act and accordingly will be

deemed to have agreed to be solely responsible for ensuring that in connection with the service to which this tender document relates, all work will be performed in accordance with the Act.

It is further noted that: -

a) The Supplier shall comply with all Foskor Regulations and Safety Standards.
b) The Supplier shall fully comply legislation requirements which includes OHS Act (Act 85 of 1993), NEMA (National Environmental Management Act) and other relevant legislation.
c) The Supplier shall fully comply with Covid-19 compliance as part of Section 37(2) of the Act.
d) The Supplier shall fully comply with Foskor's COP 6 (Contractor Management)

IMPORTANT NOTE

The above is a summary of some of matters as defined in the Act. The successful Tenderer (Supplier) is required and advised in his/her own interest to make a careful study of the Act and the Construction regulations.

Ignorance of the Act and the Regulations will not be accepted in any proceedings, as valid reason if non-conformance to the Act and the Regulations are committed.

# 4. Tender Adjudication

Proposals will be adjudicated on a mix of the following criteria (in no order):

- Technical support
- Track record
- Foskor's HDSA Policy. Policy available on request.
- Price

## 4.1. Site Visit

Site visit is not mandatory, but it can be arranged if required.

## 4.2. Bill of Quantities (BOQ)

| Item no. | Description of work | Unit | Quantity | Frequency | Rate | Total cost |
|---|---|---|---|---|---|---|
| 1 | Supply of Soda ash dense | Kg | 18000 | Monthly | | |

# END OF SCOPE

# 5. Tender Evaluation (TEV)

**Supply of Soda Ash Dense for neutralization of main sewer line acidity**

**TECHNICAL REQUIREMENTS**

| **Evaluation Criteria** (Technical) | | | | |
|---|---|---|---|---|
| **Main sewer line neutralization using soda ash dense** | | | | |
| **No.** | **Technical Criteria Description** | **% Contribution** | **Proof/Documents to be submitted** | **Notes** |
| | | | | |
| **1** | **Product quality compliance** | | | |
| | Supplier to comply with the scope of work. | **45%** | Certificate of Analysis (COA), | |
| | | | | |
| **2** | **Experience in similar contract** | | | |
| | Supplier successfully supplying a minimum of 18000kg of soda ash or similar product.<br>1.1. Above 36000kg of soda ash or similar product : 20%<br>1.2. Above 18000kg to 36000kg of soda ash or similar product: 15%<br>1.3. 18000kg of soda ash or similar product supplied: 10%<br>1.4. No relevant experience: 0% | **20%** | Supplier must submit proof of purchase order documents/signed delivery notes for similar quantities/ signed contracts from both parties/signed reference letters from referring companies clearly stating the quantities delivered, date of order placed (Supplier must ensure that the information submitted is for the bidding company). | |

| | | | | |
|---|---|---|---|---|
| | | | | |
| **3** | **Lead time** | | | |
| | Suitability of supplier to deliver on time as per SOW section 2 requirement.<br><br>Delivery of soda ash within 48 Hours 10%<br>Delivery of soda ash within 72 Hours 7%<br>Delivery of soda ash within 120 Hours 5% | **10%** | Submit letter confirming lead times | |
| | | | | |
| **4** | **SHE plan**<br>1. Supplier developed the SHE plan according to scope work 5%<br>2. No SHE plan developed according to scope of work 0% | **5%** | Supplier to supply the SHE plan | |
| | | | | |
| **5** | Safety data Sheet<br>Supplier must submit detailed safe handling, storage and emergency procedures for the product (SDS) | **20%** | Safety Data Sheet (SDS) document | |
| | Total Points | 100% | | |
| | Minimum Threshold | 70% | | |