

## The 2025 study for Environmental Remedial obligation and asset retirement obligation for Foskor Acid Division.

Tender No:

Cost Code: **30405000**

Revision<sup>1</sup>: **1** see legend at bottom of page

Revised date: **04 March 2025**

NAME	DESIGNATION	EMPLOYEE No:	SIGNATURE	DATE
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### COMPILED - RECOMMENDATION

Lwazi Dlamini	Environmental Officer	505520		04/03/2025
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### APPROVAL TO PROCEED

Sandile Mdamba	Environmental Technologist	503404		04/03/2025
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Revision Legend:

**0.n** = Draft, **1** = Final version

Thus first draft = 0.1, second draft = 0.2, etc, and final approved = 1.0

Should the final be revised for whatever reason the revision would be 1.1 etc.

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## 1. Background and Present Situation

Foskor (PTY) LTD (Foskor) Richards Bay is located 3 km from the deep-sea port, and produces sulphuric acid (H<sub>2</sub>SO<sub>4</sub>), phosphoric acid (P<sub>2</sub>O<sub>5</sub>) and granular fertiliser. Sulphuric acid is primarily an input in the production of phosphoric acid. Production facilities comprise one granulation, two phosphoric acid and three sulphuric acid plants, supported by various storage amenities.

Operations at the plant commenced in 1976. The plant complex covers a relatively limited area of 30 ha, characterized by a compact and densely developed/built-up industrial typology. Several off-site areas are also associated with the plant, including a historical gypsum dam located 4 km southwest of the plant area.

In terms of generally accepted accounting practices, Foskor is required to make financial provision for its foreseen closure liability. Towards this end, annual reviews, and updates of its Asset Retirement Obligation (ARO) are conducted, reflecting the computed costs for retiring of the assets at eventual scheduled plant closure. It is expected that the plant still has several decades of functional life, until 2070 and beyond, although it is anticipated that the semi-dormant gypsum dam or its eventual footprint area will be rehabilitated or closed earlier due to operational reprocessing. The ARO (also referred to as closure cost estimate in this report) was determined for the first time in 2016 by WSP Group Africa (PTY) LTD (WSP).

In addition to the above, Foskor requires a clear understanding of outstanding and ongoing site rehabilitation requirements that could be addressed during operations (Environmental Remediation Obligation (ERO)), not only for regulatory compliance, but also to reduce their closure liability gradually/incrementally, thus eventually facilitating eventual plant closure.

Although the determination of closure costs for industrial sites are not required in terms of the Financial Provisioning Regulations in terms of the National Environmental Management Act, No. 107 of 1998 (NEMA), this mining specific legislation provides a well-developed costing framework that can also be adapted for industrial and manufacturing facilities and has therefore been employed in determining the closure cost estimate for Foskor Richards Bay.

## 2. Project Requirements

### 2.1 Authorisation

Prior to commencing with the fieldwork for the investigation, the relevant authorisation and permitting should be obtained from Foskor. This will be related to health and safety issues, as well as obtaining permission to work in the various areas of the site of investigation

## 3. Drawings

The following drawing and data remain the property of Foskor and shall be returned to Foskor on completion of the work.

Drawing No.	Title / Description	Revision
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	Site Plan- submitted on day of tender	
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All work listed in this scope of work shall be completed in accordance with the latest copies of drawings as listed above. It is the responsibility of the tenderer to ensure that the tenderer has the latest copies of drawings as listed above for the execution of this project.

On completion of the project, the contractor must certify all documentation and drawings for correctness and conformance to the OHS Act.

## 4. Supplied Services

### a. Foskor Supplied Services

Foskor shall be responsible for the following:

- i Supply a copy of the Foskor Procedure Specifications.
- ii Supply a copy of reference drawings and equipment instruction manuals.

### b. Contractor Responsibilities

The contractor shall be responsible for the following:

- i Supply his own labour, supervision, specialized manpower and other staff to fulfill the scope of work.
- ii All equipment, tools, etc. that the contractor will bring to Foskor will be subject to review and approval by Foskor and shall conform to Foskor standards and procedures.
- iii Supply of tools and specialized equipment, consumables and site establishment to fulfill the scope of work.

Foskor will not be held responsible for any losses to the contractor's equipment.

## 5. Scope of Work

The proposed scope of work required for the assessment would be as follows:

Being an industrial activity, water and waste-related operations at Foskor is governed by the provisions of NEMA, the National Water Act (Act no 36 of 1998), and National Environmental Management Waste Act (Act no 59 of 2008). These Acts do not have specific requirements for the determination or presentation of decommissioning and rehabilitation costs for industrial activities. Therefore, the closure planning and associated financial provisioning for Foskor has been aligned to that for the mines which is currently governed by the Financial Provisioning Regulations (2015, as amended), under NEMA. This mining specific legislation provides a well-developed costing framework that can also be adapted for industrial facilities and has been employed in determining the ARO and ERO costs for Foskor. Additionally, given that the facility includes various areas supervised in terms of the National Nuclear Regulator Act (Act 46 of 1999) (NNR), closure of the facility will most likely be conducted in terms of Section 5 of the NNR.

The proposed scope of work for the review and update the ARO and ERO will also require the following:

- Undertake a site visit and kick-off meeting. Key matters to be addressed in the kick-off meeting include Changes in site battery limits (if applicable)
- New specialist studies, authorizations, or licenses to be considered
- The status of rehabilitation and remediation activities already implemented on site
- Verifying the closure scenario i.e., site-specific conditions that will prevail after closure
- A site assessment will be conducted to verify the current site status
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- Review initial available information, technical work/studies and other relevant information that could inform the 2024 ARO and ERO update
- Confirm/update rehabilitation/closure measures for the ARO related to the following: Dismantling and demolition of infrastructure (aligned with identified post closure/next land uses)
- Handling, transport and disposal of waste/residue and demolition waste
- Rehabilitation of the stormwater dams and associated infrastructure
- Rehabilitation of processing residue
- Groundwater remediation and contaminated land clean-up
- Post closure activities
- Monitoring and care and maintenance
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- Confirm and update the measures for the ERO related to the following: Re-processing of a portion of the gypsum dam

The ARO and ERO costs, as determined, are reflected in terms of the following aspects:

- Infrastructural areas
- Processing waste deposits (including stormwater impoundment dams and gypsum dam)
- General surface rehabilitation
- Surface water reinstatement
- Pre-site relinquishment monitoring and aftercare
- Additional allowances, including preliminaries and general and contingencies

## **6. Safety and quality assurance**

### **6.1 SHREQ Evaluation**

- Safety Plan/ file to be submitted.
- Section 37 agreement to be signed.

- Correct PPE to be used as necessary
- Adhere to COP 6 requirements.

**6.2 Risk Management**

A safety plan needs to be submitted to the safety department for approval 7 days prior to commencing work

**7 Work Methodology**

Adhere to requirements stated in COP 6.

**8 Reporting**

A technical report should be compiled and should include the costing for both ERO and ARO and reasons why the costing would be of such looking at Foskor Environmental implications in the event of closure.