

SCOPE OF WORK

Tender No.: T / 25

Description: Filters Vacuum System Life Cycle Support

1 INVITATION TO TENDER

This document describes the work scope for the 3-year service level agreement to be provided at the Filtration section in repairing, testing and maintaining belt filters' vacuum and filtrate removal equipment and capability. This service shall look at the vacuum system holistically to obtain the specified moisture of 8 – 8.5% at a running rate of 100t/h on the 37m² belt filters and 150t/h on the 55m² belt filter. This service shall exclude the Horizontal belt filters and focus on the vacuum and filtrate removal equipment.

1.1 DEFINITIONS AND ABBREVIATIONS

BOQ	–	Bill of Quantities	MHSA	–	Mine Health and Safety Act
BRA	–	Baseline Risk Assessment	NDT	–	Non-destructive Test
COC	–	Certificate of Compliance	OH&S	–	Occupational Health and Safety
COP	–	Code of Practice	OHC	–	Over-Head Crane
CTD	–	Critical task Descriptions	PEE	–	Portable Electrical Equipment
DAP	–	Diammonium Phosphate	PPE	–	Personal Protective Equipment
DB	–	Distribution Boards	QA	–	Quality Assurance
DWA	–	Department of water affairs	QC	–	Quality Control
DWG	–	Drawing	QCP	–	Quality control Plan
ECO	–	Engineering Change Order	QMS	–	Quality Management System
HDG	–	Hot-Dip galvanizing	RFI	–	Request for Inspection
HIRA	–	Hazard Identification and Risk Assessment	ROPS	–	Rollover Protection System
IFC	–	Issued for Construction	SANS	–	South African National Standards
ISO	–	International Organization of Standardization	SHE	–	Safety, Health, Environment

LDV	–	Light Delivery Vehicle	SHERQ	–	Safety Health Environment Risk & Quality
MAP	–	Monoammonium phosphate	TMMS	–	Trackless Mobile Machines
MCOP	–	Mandatory Code of Practice	WBS	–	Work-breakdown structure

1.2 SCOPE BACKGROUND

This scope specifies the requirements of the services and products required to support the filter belts' lifecycle in terms of operability and maintainability to achieve operational and business objectives in a costly manner.

The supplier is required to operate on a quality system in accordance to ISO 9001:2015. All refurbishments/replacements shall be done in accordance to the OEM's standards and specification, where proof of knowledge of specification can be requested at any time to confirm quality of refurbishments/replacements and testing is being maintained. All repairs shall carry a minimum of 6 month mechanical warranty after installation of the pump.

Upon successful award of services order, the successful supplier is required to conduct a site visit where an in detail audit is done on all 7 (seven) filter belt vacuum systems, and a report handed to Foskor for recommendations and improvements to achieve and maintain OEM recommended operating specifications.

The successful supplier would be requested to conduct training on vacuum systems and pumps to Foskor's maintenance staff and management, and refreshers when required.

Foskor owns the following equipment that requires support in terms of repairs, servicing and testing back to as-new condition.

Vacuum Pumps

- PV 2BE1 353 Vacuum Pumps (Eleven Pumps in position)
- PV 2BE1 405 Vacuum Pump (One pump in position)
- NASH CL3002 Vacuum Pump (Two Pumps in position)

Filtrate Pumps

- PV 100 - 230 Turbo Bare Shaft pumps (Three in position)
- PV 100 - 230 Turbo Flange Mount pumps (Five in position)

This scope includes all site work, supervision, accommodation, travel, consumables, permit requirements and any omissions from this scope, shall be with a written agreement between Foskor and the supplier.

1.2.1 Scope – Extent of Work or service required

- 1) Provision must be made for all site work for testing and vacuum system support services
- 2) The contractor / consultant must clearly state in his tender submission that there is an exclusion on the Foskor scope (As per the site meeting procurement scope and site meeting minutes) Failure to state the exclusion will mean that the full Foskor scope is still applicable.

1.2.2 Scope – General Requirements

- 1) Contractor to ensure that they have a permit to work before commencing with any work on Foskor premises.
- 2) Tenderer must be in the position to supply team members who have all required Foskor training and authorization as per the permit to work requirements before any site work commences.
- 3) Tenderer must take all the precaution in to account so as not to damage any of the working equipment. Any equipment damaged during work must be rectified/ replaced at Vendor's cost.

- 4) Quote for site establishment and medical requirements for the team for the quoted duration of the service contract.
- 5) All personnel to comply to Foskor code of practices, which are available on request.
- 6) All components shall be inspected and tested as applicable whether specifically listed within the scope. The above work may be conducted during normal working hours.
- 7) Provide professional services for the inspection, conducting testing of the vacuum system components as specified
- 8) The testing firm shall provide all the equipment, labour, and technical supervision to perform all inspection, testing, and commissioning work.
- 9) Quote for site establishment and medical requirements for the team for the quoted duration of the service contract. Contractor to ensure that they have a permit to work with all relevant authorisations for the team before the time.
- 10) A site diary to be kept by successful supplier and signed off after each visit by the relevant Foskor engineer.

1.3 COMPANY BACKGROUND

Foskor is one of the world's largest producers of phosphate rock (concentrate) and phosphoric acid. It is one of the world's few vertically integrated producers of phosphoric acid and is the second-largest supplier to India, the world's largest consumer of phosphoric acid.

The Company owns and mines phosphate resources and beneficiates the mined material to produce a phosphate concentrate at Phalaborwa, in the Limpopo Province of South Africa. The phosphate concentrate is sold locally and transported to the Richards Bay plant on the coast of Kwa-Zulu Natal to produce phosphoric acid, sulphuric acid and granular fertilisers MAP and DAP from phosphoric acid and is the leading supplier of fertilisers to South Africa. In all about 95% of the phosphoric acid is exported and the granular sales are divided between exports and local markets. Since 1951 Foskor has supplied more than 95% of South Africa's fertiliser requirements.

1.4 ENVIRONMENTAL MANAGEMENT SYSTEM SPECIFICATIONS

The successful or appointed service provider shall comply with the following Environmental Specifications, Policies and Procedures:

- a) COP 41 Housekeeping and workplace organisation
- b) COP 49 Waste Management
- c) COP 51 Resource conservation, energy, and materials
- d) COP 70 Storage of petroleum products and other hazardous material
- e) National Environmental Management Act 107 of 1998 (NEMA)
- f) National Environmental Management Waste Act 59 of 2008 (NEMWA) as amended
- g) The successful service provider shall include in his/her SAFETY FILE, and comply with, the following documents:
 - i. Environmental Aspect and Impact Register (Applicable to this contract).
 - ii. Environmental Objectives and Targets (Applicable to this contract).
 - iii. Waste Management Plan (Applicable to this contract).
 - iv. FOSKOR Atmospheric Emissions License (Copy available on request)
 - v. FOSKOR Waste Management Licence (Copy available on request)

vi. FOSKOR Water Use Licence (Copy available on request)

2 SCOPE OF WORK

2.1 BACKGROUND DOCUMENTATION

Operation and Maintenance manuals are available from the OEM of the PV 2BE1 and PV100-230 turbo range pumps as well as NASH for the CL3002 range pumps.

2.2 GENERAL CONSIDERATIONS

2.2.1 General Scope Considerations:

Please allow for a competent Quality Control Officer to compile and manage the contractor's quality management. In the event of quality system failures, Foskor will request the Quality Official's experience and qualifications and if this is not acceptable, it will be expected that the contractor obtains this service at its own cost.

Please allow for a competent person to compile the method statement and the subsequent Microsoft Project plan. This person will manage and update this plan weekly and present it to the Foskor Project Engineer. It is expected that this planning and management is executed by the contractor. This service will be provided at the contractor's cost. If the contractor cannot execute this planning and report to management, it will be expected that the contractor obtain this service at his/her cost.

Scaffolding needs to be arranged by the contractor. It is expected that arrangements will be communicated to Scaffolding Contractor at least 3 days before the requirement. Proof of request and arrangements and actual scaffolding installation for Scaffolding to be provided to Foskor on request.

2.2.2 Project costing and expenses:

The contractor shall supply all engineering services, materials, labour, transport, supervision, and consumable materials, equipment, tools and every item of expense for the scope of work to be completed successfully unless otherwise stated taking the following into consideration.

2.2.3 Disposal of refuse

The Contractor shall be responsible for disposal of refuse and waste generated by his staff daily. The site is to be kept clean, neat, and tidy, by complying with Foskor Waste Management COP.

2.2.4 General requirements for commissioning

Commissioning or handover will be executed as per Foskor Procedures or as directed by the Engineer. Normally the Foskor Punch list and Hand over certificate will be used.

2.2.5 Scope Specific statutory and legislative requirements Legislative requirements

The successful service provider shall ensure that all work is carried out under the following specifications and requirements.

The successful or appointed service provider shall comply with:

- ▯ HEI standard

Off- and on-site vacuum testing in accordance to HEI-2854 Standards

- ▯ International Standards

ISO 9001:2015 – Quality Management

The successful or appointed service provider shall comply with the latest revisions of the following Foskor COPs (Codes of Practice) and Engineering Specifications.

3 TECHNICAL SPECIFICATIONS

3.1 BASIC REQUIREMENTS

All work must be conducted in accordance to Foskor COP's, engineering specifications and OEM's technical specifications. The scope describes a turn-key maintenance project, where components specified are to be supplied and replaced. All expertise, tools and consumables are for the supply of the OEM's service provider.

3.1.1 Scope – Vacuum Pumps

1. Collect Vacuum Pump(s) from Foskor Mining Division, Phalaborwa and transport them to own site for assessment after written request has been received from a Foskor representative
2. Conduct condition assessment on the vacuum pump by cleaning, shot-blasting, stripping, NDT and inspecting components for out-of-spec conditions to repair/replace
3. Provide Foskor with a detailed failure report and quotation to repair, indicating photos of major components with annotations that describes the components in question
4. Refurbish Vacuum pump component(s) in accordance with agreed upon QCP or replace components with new OEM parts if unfeasible to refurbish
5. Off-site vacuum performance testing in accordance to HEI-2854 Standards after repairs have been conducted, before approval for delivery
6. Quarterly on-site vacuum pumps performance testing according to HEI standards, to determine the pump(s) condition and recommend remedial actions when required. It is mandatory that the successful supplier provide the on-site test results and recommendations immediately using the necessary vacuum testing software

3.1.2 Scope – Filtrate Pumps

1. Collect Filtrate Pump(s) from Foskor Mining Division, Phalaborwa and transport them to own site for assessment after written request has been received from a Foskor representative
2. Conduct condition assessment on the filtrate pump by cleaning, shot-blasting, stripping, and inspecting components for out-of-spec conditions to repair/replace
3. Provide a detailed failure report and quotation to repair, indicating photos of major components with annotations that describes the components in question
4. Refurbish Filtrate pump component(s) in accordance with agreed upon QCP or replace components with new OEM parts if unfeasible to refurbish
5. Off-site performance testing in accordance with HEI-2854 Standards after repairs have been conducted, before approval for delivery

3.1.3 Scope – Vacuum Systems

1. On-site Vacuum System Fault Finding shall be conducted on an 'as and when' required basis
2. Vacuum System leak detection shall be conducted on an 'as and when' required basis using an approved vacuum leak detection method (this may include using Ultrasonic leak detection equipment, helium detection, smoke generators, hydrostatic pressure etc)
3. Vacuum piping and tank thickness testing using Ultrasonic Thickness measurement tool
4. Vacuum Process and Design reviews and optimisation on an 'as and when' required basis
5. All Reporting shall be done in a written format or official report to Foskor in an approved format indicating sufficient information for traceability
6. The successful supplier would be requested to conduct training on vacuum systems and pumps to Foskor's maintenance staff and management, and refreshers when required.

3.2 SPECIFICATIONS

Below are the criteria and specifications to which the successful supplier must comply to upon final release of the refurbished equipment to Foskor

3.2.1 Vacuum Pump(s) Refurbishment

a) Shot blasting

The vacuum pump's heads, body, rotor, bearing brackets, port plates, cones, manifold and separator shall be shot blasted to SA 2.5 shot blasting standards.

b) Vacuum Pump Internal Body

The internal body shall be shot blasted and assessed for wear and damage. The body thickness would be measured to determine the wear inside the body.

Should there be wear on the inside of the body, it shall be repaired with Chesterton Arc BX2 (or equivalent) and machined to OEM specifications and coated with Chesterton Arc SD4i / CN200 (or equivalent). Should the body be uneconomical to repair a new OEM part would be quoted for replacement

Should there be any wear in the shrouds, the next options would be discussed and decided on in written confirmation between Foskor and the successful supplier:

- Option 1 : The shrouds would be repaired with Chesterton Arc BX2 (or equivalent), pre and final machined to OEM standards and coated with Arc SD4i / CN200 (or equivalent).

- Option 2 : The shrouds would be fitted with 316 stainless steel rings, pre and final machined. c) Heads
2BE Pumps

The heads would be shot blasted according to standard and assessed for wear or damage. Should there be wear on the port plates it would be repaired with Chesterton Arc BX2 (or equivalent), pre and final machined back to OEM standard and coated with Chesterton Arc SD4i / CN200 (or equivalent). If port plates cannot be repaired, they would be replaced with new OEM ones. All wetted parts of the heads would be coated with Arc SD4i / CN200.

Nash CL Pumps

The heads shall be shot blasted according to standard and assessed for wear and damage.

Should there be any wear in the heads, the next options would be discussed and decided on in written confirmation between Foskor and the successful supplier:

- Option 1: The faces would be repaired with Chesterton Arc BX2 (or equivalent) and coated with Arc SD4i / CN200 (or equivalent).
- Option 2: 316 Stainless steel plates would be fitted to the faces, pre and final machined back to OEM standard.

d) Shaft

2BE Pumps

The shaft shall be assessed for wear or damage. The gland sleeves shall be replaced if necessary. Bearing journals would be assessed and measured to determine if still acceptable and within OEM specification and QCP tolerances. No weld repairs are allowed to be done on the shaft.

Nash CL Pumps

The shaft shall be assessed for wear or damage. The gland journals shall be repaired with Arc spray and machined to OEM specifications if necessary. Bearing journals would be assessed and measured to determine if still acceptable and within

OEM specification and QCP tolerances. No weld repairs would be performed on the shaft e) Rotor

2BE Pumps

The rotor shall be shot blasted and assessed for wear and damage. Should there be any wear the rotor faces and tips, it shall be pre-machined, coated with Chesterton Arc BX2 (or equivalent), final machined to OEM standards and coated with Chesterton Arc SD4i / CN200 (or equivalent). The rotor buckets shall be coated with Chesterton Arc SD4i / CN200 (or equivalent).

Nash CL Pumps

The rotor shall be shot blasted and assessed for wear and damage. Should there be any wear on the rotor faces, tapers and tips the rotor shall be pre-machined, coated with Chesterton Arc BX2 (or equivalent), final machined to OEM standards and coated with Chesterton Arc SD4i / CN200 (or equivalent). The rotor buckets would be coated with Chesterton Arc SD4i / CN200 (or equivalent).

f) Cones (Nash CL Pumps)

The cones shall be shot blasted according to standard and assessed for wear and damage. Should there be any wear on the cones it would be pre machined, repaired with Chesterton Arc BX2 (or equivalent), final machined to OEM specifications and coated with Chesterton Arc SD4i / CN 200 (or equivalent). If cones are not repairable, they must be replaced with new OEM cones.

g) Bearings

Bearings shall be replaced with new Foskor approved Timken bearings as standard practise. No reconditioned bearings are permitted to be fitted.

h) Performance testing

The vacuum pump/s shall be performance tested in the supplier's factory on an approved test bed, and the results would be plotted over a minimum of six points on the original OEM performance curve. The test measure must comply with the HEI-2854 performance standards for liquid ring vacuum pumps and compressors, using the accurate orifice method specified. The supplier must be able to show the test bed, method of testing and software used on inspection of the factory. The performance results would be included in the data book.

i) Painting specification

The vacuum pump(s) shall be painted with corrosion resistant Carboline primer 893 and Carboline final 134 to manufacturers specification.

j) Documents for submission on Final Release

The data book for submission before refurbished pump(s) are returned to Foskor should consist of the following:

- Balancing certificate ISO 1940/1 G6.3.
- Chesterton Arc BX2 and SD4i/CN200 (or equivalents) applicator certificates.
- Pictures of all parts coated & Arc DFT certificate.

- Paint DFT measurements.
- Carboline paint specifications.
- Vacuum pump performance test results with software print out.
- Assessment photos and final inspection photos.

3.2.2 Filtrate Extraction Pump(s) Refurbishment

a) Shot Blasting

The filtrate pump/s cover plate, volute (body), impeller, bearing brackets (box) shall be shot blasted to SA 2.5 shot blasting standards.

b) Internal Volute

The internal volute (body) shall be shot blasted and assessed for wear and damage. The volute thickness must be measured to determine the wear inside the volute and reported in the failure report.

Should there be wear on the inside of the volute it would be repaired with Chesterton Arc BX2 (or equivalent), machined to OEM specifications, and coated with Chesterton Arc SD4i / CN200 (or equivalent). Should the volute (body) be uneconomical to repair a new OEM part would be quoted.

c) Cover plate

The cover plate shall be shot blasted according to standard and assessed for wear or damage. Should there be wear on the cover plate it would be repaired with Chesterton Arc BX2 (or equivalent), pre and final machined back to OEM standard and coated with Chesterton Arc SD4i / CN200 (or equivalent). If cover plate is unfeasible to be repaired, it shall be replaced with a new OEM one.

d) Shaft

The shaft shall be assessed for wear or damage. Bearing journals would be assessed and measured to determine if still acceptable, and within QCP tolerances. NO weld repairs shall be performed on the shaft by any means. e) Impeller

The impeller shall be shot blasted and assessed for wear and damage. Should there be any wear on the impeller, taper faces shall be skimmed. If the wear on the impeller is too severe and unfeasible to be repaired, it shall be replaced with a new OEM - 27 % hard chrome impeller.

f) Bearings

Bearings shall be replaced with new bearings as standard practise. NO reconditioned bearings shall be fitted during refurbishment of the pump.

g) Performance test

The filtrate pump/s must be performance tested in the supplier's factory under vacuum conditions, on an approved test rig, and the results would be plotted over six points on the original OEM performance curve. The supplier must be able to show the test rig, method of testing under vacuum as well as calculations used on inspection of the factory. The performance results would be included in the data book.

h) Painting specifications

The filtrate pump/s shall be painted with corrosion resistant Carboline primer 893 and Carboline final 134 to manufacturers specification.

i) Documents for submission on Final Release

The data book for submission before refurbished pump(s) are returned to Foskor should consist of the following:

- Balancing certificate ISO 1940/1 G2.5.
- Chesterton Arc BX2 and SD4i/CN200 (or equivalents).
- Pictures of all repaired and coated parts.
- Paint DFT measurements.
- Carboline paint specifications
- Filtrate pump performance test results on OEM performance curve.

- Assessment photos and final inspection photos.

3.2.3 On-site testing and services

The specifications of the on-site services to be rendered are described in the section below.

a) Onsite vacuum system Performance testing

Vacuum pumps shall be tested on-site at FOSKOR quarterly, or as requested by FOSKOR on ad-hoc basis. The onsite performance tests would be according to the HEI standards of liquid ring vacuum pumps using the accurate orifice method. The supplier must be able to produce the results on-site immediately using the necessary software. The report shall contain the on-site performance test results compared to a new original OEM performance curve, and recommendations shall be provided within one working week from date of testing in written format.

The supplier must be able to proof that they have extensive knowledge of vacuum systems and pumps. The supplier must be able to do on-site system problem solving and root cause fault finding.

The supplier must be able to provide training on vacuum systems and pumps to FOSKOR maintenance staff and Management.

b) Vacuum System leak detection

On-site vacuum system leak detection shall be conducted on an 'as and when' required basis. An approved vacuum leak detection method must be used, that will not cause any harm to the vacuum equipment or the health and safety of employees.

It is also important to consider a simpler and more economic method of testing to stay competitive in the tender.

c) Vacuum Piping and tank thickness testing

Vacuum piping and tank material thickness measurements shall be taken at least once for all 7 vacuum systems in the critical areas namely:

- Vacuum Receiver Tank
- Knockout /Moisture trap tanks (2)
- Vacuum manifold and piping to receiver tank
- Vacuum piping bends

This shall be done on a written request basis from FOSKOR and is not mandatory, but provision therefor should be made. d) Vacuum system design reviews

Expertise and support services shall be rendered to FOSKOR on new improved vacuum system designs and optimisation of current systems. An initial site visit shall be conducted where FOSKOR's 7 (seven) vacuum systems shall be reviewed and a detailed report submitted for improvements and other feasible optimisations.

System process flow diagrams and drawings available at Foskor, shall be made available to the supplier for system operating performance reviews.

e) Reporting

It is required that an on-site diary be kept up to date on each request of on-site testing and fault finding. The site diary shall be signed off by the supervisor and the engineer on completion of the site visit.

The supplier must be able to produce the results on-site immediately using the necessary software.

A formal report from the supplier shall be drafted and submitted to Foskor detailing the request for visit and all accompanying information and results of the tests conducted.

The detailed formal on-site report shall consist of:

- Methodology used to conduct on site performance tests. Test method shall comply to HEI standard for liquid ring vacuum pumps
- The original on-site test sheet with information
- Software calculation sheet with captured information
- OEM performance curve with at least six test points indicated.
- Indication of the efficiency in percentage of the duty point
- Indicate actual duty point on the performance curve
- Indicate the efficiency in percentage on the performance curve
- Perform water and ambient temperature calculations and result in the report
- Assessment photos and final inspection photos of deviations from OEM operational specifications and improvement recommendations.
- Recommendations on system improvements and suggested replacement of equipment for the consideration of

Foskor

f) Vacuum equipment and system training

Training is required for the operation, fault finding and maintenance of the vacuum systems. The training shall be conducted on different levels of understanding for the operational personnel and the maintenance personnel which covers their duties and responsibilities.

4 SERVICE URGENCY

Service urgency is defined below:

1. The service level agreement is urgent in the sense that it should kick-off directly after placement of the order

2. The supplier must be ready with all the training, medicals, permits before the first on-site visit
3. Contact shall be made after placement of the order for an official kick-off meeting and arrangements of pump collections
4. The refurbishment turnaround time shall be a maximum of 3 months for the Vacuum pumps and 1 month for the filtrate pumps. Any deviation from this shall be in writing to the Foskor Engineer and will be taken into consideration for the evaluation of future business with the supplier.

5 DELIVERIES OF MATERIALS AND EQUIPMENT

TAKE NOTE - Foskor pays for material delivered to Foskor site only!

NB: The contractor/ consultant must clearly state in his tender submission if there is an exclusion on the Foskor scope (As per the site meeting procurement scope and site meeting minutes) Failure to state the exclusion will mean that the full Foskor scope is still applicable.

Lay down areas will be agreed on during the site meeting

6 BATTERY LIMITS – INCLUSIONS AND EXCLUSIONS

6.1 TABLE OF INCLUSIONS AND EXCLUSIONS

List the boundaries in terms of equipment (Foskor plant specific). Up to where is it Foskor's responsibility and where/what is the contractor's responsibility.

WHO WILL SUPPLY THE FOLLOWING?													
FF = FOSKOR, FREE OF CHARGE FC = FOSKOR, AT COST TO CONTRACTOR C = CONTRACTOR N/A = NOT APPLICABLE													
1. Sanitary		2. Transport		3. Quality		4. Security		5. Lifting and Rigging		6. Medicals		7. Communication devices	
1.1 Water on site and toilet facilities / janitorial services	FF	2.1 Labour	C	3.1 Plan, Management, QA, QC	C	4.1 Site Security	C	5.1 All rigging equipment (Slings, Chain blocks, turfers, etc	FF	8.1 Entry and Exit	C	7.1 All communication devices like laptops, computers, networks, radios, cellphones, etc	C
1.2 Potable connection point	FF	2.2 Pump from Site	C	3.2 All quality test Civil, Paint, Mechanical, etc	C	4.2 Foskop ID Card	C	5.2 Rigger	FF	8.2 First aid box at place of work	C		
1.3 Connection to construction water supply	FF	2.3 Equipment	C	3.3 Sampling and laboratory testing	FF			5.3 Mobile cranes	FF				
1.4 Change rooms	FF	2.4 Materials	C										
8. PPE		9. Surveying		10. Safety File		11. Training & Authorizations		12. Site Establishment		13. Waste management		14. Painting	
8.1 Supply, Issue, inspect and manage	C	9.1 Site Surveys	C	10.1 Foskop will issue template	FF	11.1 All Required Training	C	13.1 Site office/s with suitable facilities for daily "Green Area" meetings, and lunch area	N/A	13.1 Transport all on site to waste to Foskop designated waste sites	FF	14.1 All Equipment and tools paint, labour, etc	C
				10.2 Ensure file conform/ populate to Foskop standards	C	11.2 Authorisation - As per Foskop COP	FF	13.2 Site establishment space	N/A				
15. Fuel		16. Mechanical		17. Labour		18. Compressed air		19. Scaffolding		20. Tools & Equipment		21. Training	
15.1 Fuel Supply	C	16.1 Test Equipment	C	17.1 All labour as per Scope of Work to execute task including management	C	18.1 Sandblasting or flash blast	C	19.1 Scaffolding Supply & Erect	FF	20.1 All Portable Electrical Equipment	C	21.1 All required training and training manuals as required to ensure that Foskop can train its workforce and operate the plant / equipment safely	C
15.2 Fuel storage	C	16.2 All specific components mentioned in scope	C			18.2 Compressor	C	19.2 Scaffolds be managed by the Contractor	C	20.2 Hot Work Equip as per Foskop COP - Welding Machines, Gas Cutting, Grinding, Gauging, etc	C		
15.3 Fuel fire protection	C	16.3 Consumables	C			18.3 Air for power tools - If available	FF	19.3 Cherry Picker's – only when available by pre-booking	N/A	20.3 Tools as required to execute task	C	21.2 All manuals and related documents to be supplied to project Eng. and Foskop Drawing office for safe keeping	C
15.4 Refuelling	C							19.4 Cherry Picker's Driver– Trained and authorized driver	N/A				
22. Certificates		23. Consumables		24. Storage and inventory control		25. Electrical							

22.1 Supply All certificates as required	C	23.1 Welding rods	C	24.1 Protective coverings/tarpaulins	C	25.1 Generators	C	25.4 Temporary lighting	C	25.7 Electric panel + distributing wiring	N/A
		23.2 Bolts & Nuts, etc.	C	24.2 Storage area and inventory control	FF	25.2 Electrical Extensions	C	25.5 Power for tools on site from existing Foskop electrical supply point (Welding plugs and 220 v plugs	C	25.5 Electrical connection point	FF
						25.3 COC Site Establishment	C	25.6 Connection to Electrical supply	C	25.9 Electrical and Instrumentation Installation	N/A

****NOTE**

Foskor has made provision for the supply scaffolding free of charge the size and nature of the works. It is expected that arrangements will be communicated to the appointed Scaffolding contractor at least 3 days before requirement. Proof of request and arrangements and actual scaffolding installation for Scaffolding to be provided to Foskor on request

It should be noted that FOSKOR has an existing appointed and accredited scaffolding supplier who could be sub-consulted and provide part of the local company requirement of the contract.

6.2 ADDITIONAL BOUNDARIES

Not applicable

7 DRAWINGS

Vacuum system drawings which are available at Foskor, will be provided to the supplier on request for design reviews and verification

8 QUALITY

The service provider must provide the necessary quality management systems and plans to ensure that the quality of his work complies with the requirements of this scope of work ii. The service provider shall during all phases of construction comply with the Foskor approved Quality Assurance Plan iii. The service provider shall be responsible for all the resources required for executing the Quality Management System including but not limited to, developing the Quality Assurance Plan & performing the Quality Control measures to ensure that the deliverables comply with the specifications & standards mentioned in the scope of work iv. Any change requests / additional work resulting due to inadequate quality management system will be to the account of the service provider

v. Foskor might appoint a third party for Quality Control Inspections vi. The Service provider will have to provide an approved quality system for all work executed.

vii. This will include the following but is not limited to:

- a. Quality plan
- b. Quality compliance – Performance and reports
- c. Quantity surveying
- d. Quality Assurance
- e. Quality Authorization matrix – part of the Quality plan
- f. Quality control

- g. Quality administration. – All documents, checks, measurements, reports, variances, analysis, Corrective actions, etc.
 - needs to be properly filed and available on request at any time. The file will require an index
 - h. Includes all test work, laboratories, Filing, etc.
 - i. Survey and survey verifications
 - j. Construction versus design - Any Deviations from the approved "Construction Drawings"
 - k. Quality communication – What needs to be reported to whom and at what frequency
- viii. Foskop envisage a complete quality System driven by the Service provider and this system/plan will be approved by Foskop and the appointed designer (if applicable) before construction/fabrication will be started.
 - ix. Compliance to this plan will be measured and failure to adhere to the quality plan will result in the stopping of construction activities until concerns have been addressed. The cost for this delay will be for the service provider's account.
 - x. Foskop may appoint a third party to measure and control Foskop's interest in the terms of quality in this contract and the service provider is expected to work in conjunction with this company xi. Hold points will be discussed and finalized with the successful service provider based on the approved Quality plan The Quality plan will only be compiled and signed off after the Method Statement and WBS* have been compiled.

Quality on Shutdown type tasks will be included in the Scope of Works, but the service provider will have to submit proof of an experienced quality assurer or relevant qualifications. IF the service provider does not have this it will be required that this service be hired in by the service provider at his cost.

- I. State any specific hold points that are not negotiable here ii.
- State any other applicable quality that is not in the "Parameters" section

Method statement – the service provider must list all steps and actions required to complete the work as per the scope of work – typically includes the items listed below:

- i. Key step and stages of the work required
- ii. Tools, Equipment, TMMS, etc
- iii. Labour requirements, etc
- iv. Spares, resources,
- v. Safety requirements

*WBS is a hierarchical and incremental decomposition of the project into phases, deliverables, and work packages. It is a tree structure, which shows a subdivision of effort required to achieve an objective, for example, a program, project, and contract.

This includes arrangements, tools, equipment labour, Tasks, Purchase, Quality, Communication, etc

8.1 QUALITY FILE INDEX

The quality file index listed below will be the minimum requirement.

This file must be kept up to date for the duration of the project and will be handed to the Foskor project Engineer on completion of the project

8.1.1 QUALITY FILE INDEX

	<div>QUALITY FILE INDEX</div> <div>FOSKOR: TSS - PROJECTS</div>	Doc. No.:	FSK-P-GEN-IX-001
		Rev. No.:	00
		Date:	12 - July - 2019

Contents

Issued for Construction (IFC) drawings – Approved.....

1

Quality Control Plan (QCP) Approved.....

2

Competency of People – Welder Qualifications, Trade, Authorization, Certifications, etc

3

Designer/Engineers Instructions, Specifications, Approvals, Concessions applied for & approved. Site instructions, Variations and ECO's

4

Method Statement of contractor– Approved

5

Material orders & Delivery notes.....

6

Certificates – Material, Data Sheets, Compliance, Certification, etc

7

Test Results – Each Discipline – Test cubes, NDT, etc.....

8

Request for inspection (RFI).....

9

As Built Drawings.....

10

Reports - Survey, etc.....

11

Punchlist/Snag list

12

Handover/ Occupations/ Taking over Certificates/Commissioning.....

13



8.2 ADDITIONAL QUALITY REQUIREMENTS

(Not applicable)

9 SERVICE DELIVERABLES

9.1 THE DELIVERABLES FOR THIS SERVICE INCLUDE:

- Refurbished Pumps
- Quality Control reports and equipment release documentation
- Inspection and Test report on file
- Inspection and Test report in soft copy format
- Daily site Journal
- On-site service reports
- Improvement on efficiency of Vacuum systems

9.2 DATA BOOKS

On completion of the tests, the service provider shall submit a DATA BOOK that shall contain the following documents and information:

- a) Components replaced
- b) Inspection reports of the equipment
- c) Further recommendations for improved operation efficiency
- d) Defects to be rectified
- e) Quote and pricing for items identified to be replaced
- f) Commissioning report with data
- g) Daily site Journal for transparency
- h) All refurbishment and performance reports as described in predeceasing sections NB! ALL CERTIFICATES AND DOCUMENTS MUST BE CROSS-REFERENCED

9.3 MANUALS AND DOCUMENTATION

The following must be supplied:

□ Any relevant manual i.e., Installation, operation, and maintenance manuals.

9.4 FORMAT OF DOCUMENTS AND MANUALS

Electronic Format is the preferred format of Documentation Transmittals

Note! - All Manuals must be in English

9.5 TRANSMITTAL OF DOCUMENTS AND MANUALS

Documents and Manuals to be submitted in the flowing formats:

Type of Document	Hard Copy	Electronic Format
Manuals		X
Drawings		X
Reports		X
Data Books		X

Hard Copy: Book or binding arch file format and must be durable and of high quality.

Soft Copy: Manuals, Reports and Data Books – Word, Excel, PDF, etc.

Storage – Compact Disk, Data traveller, WeTransfer Language:

English

9.6 SERVICES COMPLETION

After completing of the refurbishment, the invoice will be signed off and captured. However, a warranty of 12 months must be provided after delivery of the pumps and 6months from date of installation.

10 DOCUMENTS / DRAWINGS ISSUED BY FOSKOR

Drawing Document No	or Title	Revision

Note	Please read your Scope of Work	
------	--------------------------------	--

11 ON-SITE SUPERVISION REQUIREMENT

A service provider 2.9.2 to be permanently on-site, with Foskor LACA

11.1 ADDITIONAL REQUIREMENTS

Not applicable

12 TENDER DELIVERABLES

The deliverables will include: -

- Complete Foskor pricing schedule (BOQ)
- Preliminary lead time till delivery
- Tax Clearance
- Letter of Good standing (Workman compensation)
- BEE Certificate
- Commercial documents requested by Procurement
- Not submitting the required documentation or not completing the documentation (Pricing Schedule) correctly will lead to a disregard of the tender.
- Take note of the tender evaluation documents that need to be submitted

13 SAFETY

Service provider to refer to the full and updated Foskor COP's available:

- i. The service provider and sub-service providers need to always comply with the Mine Health and Safety act. All Foskor COP's Policies and procedures need to be adhered to.
- ii. A service provider 2.9.2 to be permanently on-site.
- iii. Medical, Induction, Foskor ID Card, etc. is approximately R800 per person. Exit medicals need to be done at the termination of the contract.
- iv. The Successful tenderer will be required to compile a Foskor Work permit and at least 2 weeks should be allocated for this. The service provider must provide the following appointed persons in terms of the MHSA: 2.6.1; 2.9.2 and Section 29(1) –

SHE REP for the duration of the contract

- v. All vehicles and cranes and other TMM's to be inspected before entering Foskop Premises.
- vi. All person competencies to be verified before being allowed to work on Foskop premises for a specific task.
- vii. The service provider must compile a Safety File as per Foskop standard for all service providers and sub-service providers
- viii. Site access will need to be controlled and all persons must receive site-specific induction before entering the site.
- ix. Conduct inspections as per Foskop Safety System. Analyse data and trends and recommend preventative measures where required
- x. Ensure all authorizations are in place as per the Foskop Safety System. Arrangement with Foskop training to be done by the service provider to ensure that authorization and training are conducted. Arrange timeously.
- xi. Ensure all workers competencies are available and have been validated.
- xii. Ensure proper security, signboards, fencing, and barricading is in place on-site where applicable
- xiii. The service provider shall in general comply with the FOSKOR General Engineering Specifications, COP's, latest revisions, and all relevant regulations
- xiv. The service provider must complete a Baseline Risk Assessment (COP 01) before a work permit can be issued for the installation.
- xv. All service providers not in possession of a valid Foskop ID card have to complete the Foskop induction course and have to undergo a medical examination at the Foskop clinic for the service provider's account
- xvi. The service provider shall be responsible for coordinating and integrating his schedule and responsibilities with other FOSKOR appointed contract manager on-site for this Scope of Work.
- xvii. All personnel operating mobile equipment including LDV's must have a Foskop driver's permit.
- xviii. An open Pit Licence is required for driving in the mining area's
- xix. All the required PPE and Safety Equipment are for the service provider's account.
- xx. All service providers must ensure that:
 - a. His workers are issued with the correct personal protective equipment free of charge.
 - b. That the workers wear the PPE per the project area's requirements or as given by the service provider Supervisor.
 - c. Training is provided in the correct use of PPE to workers.
 - d. Daily inspections are done on PPE.

- e. The registers will be complete at least monthly on findings on PPE. (All PPE must be kept in good condition)
- xxi. All providers of services need to be informed of the following minimum training applies to all service providers (irrespective of the tasks or scope of work) that will enter the Foskor Phalaborwa site with effect from 1 April 2014. This training is not presented by the Foskor Training section and service providers must ensure that the training is sourced through accredited external training companies:
 - a. Basic health and safety principles
 - b. HIRA
 - c. First Aid Training
- xxii. All other training requirements must be aligned with the baseline risk assessment. Risks identified in the baseline risk assessment will guide the requirements for training. A summary of the training must be completed as well as status on required authorization as per Foskor COP's.
- xxiii. Training certificates will be accepted if complying with the following:
 - a. Unit Standard Title
 - b. Learner Full name
 - c. Learner ID number
 - d. Competency achieved
 - e. Date of Assessment
 - f. Assessor's signature
 - g. Training provider logo
 - h. Training provider registration number and accreditation number.
 - i. Seta logo

14 LEGISLATIVE REQUIREMENTS – SUMMARY

14.1 MINIMUM LEGISLATIVE REQUIREMENTS:

The successful or appointed service provider shall comply with:

- i. The Mines Health and Safety Act with Regulations (Latest revision) ii. The National Road Traffic Act with Regulations (Latest revision) iii. All applicable national and international legislative requirements and regulations. iv. Foskop (Pty) Ltd. COP (Code of Practise) No. 25 for Service Provider Control (Available on request)
- v. Foskop (Pty) Ltd. COP (Code of Practise) No. 59 for Trackless Mobile Machinery (Available on request) vi. All Foskop (Pty) Ltd. safety, health, quality, and environmental procedures applicable to the successful application of the contract. (Available on request) vii. All Foskop procedures and policies apply to the successful application of the contract. (Available on request)

14.2 SUMMARISED REQUIREMENTS/EXTRACTS FROM FOSKOR COP'S

14.2.1 Before entering and operating a service vehicle (Own vehicle) on the Foskop site, the appointed service provider shall:

- i. Ensure that his driver/s have a valid national driver's licence for the specific class of vehicle, has been tested by the Foskop mobile equipment training centre and authorised by a Foskop MHSA (Mines Health and Safety Act) regulation 2.13.1 appointee for the class of vehicle to be used on site.

(Contact the Foskop mobile equipment training centre on 015 789 2840 to make an appointment for competence testing and authorisations) ii. The appointed service provider shall, before entering and operating a vehicle or trailer on the Foskop premises:

- a. Obtain permission from the Foskop Safety & Security manager to operate his nominated service vehicle/s or trailers on the Foskop site. (Forms will be provided)
- b. Obtain a certificate of fitness from the Foskop Light Vehicle maintenance workshop supervisor or appointed a Foskop inspector for his nominated service vehicle/s. Inspections conducted daily between 08:00 and 08:30 and between 13:30 and 14:00 (Excl. Fridays) at the Light Vehicle Maintenance workshop.
- c. Submit the above permission and COF at the main security office for the issue of a vehicle access disk.
- iii. Ensure that his service vehicles/trailers have been inspected (Daily) by the Foskop standard (COP 59) to ensure that they are safe and fit for use. (Forms will be provided)

See Foskop COP 59, Trackless Mobile Machinery for details.

14.2.2 Before entering and working on the Foskop site the appointed service provider shall ensure that his workmen are:

- i. Briefed on the required task and have been informed of any abnormal conditions/situations.
- ii. Physically, emotionally, and mentally fit to perform their duty.

- iii. Issued with the necessary PPE (Personal Protective Equipment) to safely operate his service vehicles and perform the duty of maintaining, servicing, inspecting, and testing earthmoving- and mobile equipment.
- iv. Before commencement of work:
 - a. All tools and equipment shall have been inspected and tested to be in good and safe working order.
 - b. All workmen have participated in the completion of a standard Foskor site risk assessment (Commonly known as a HIRA or Hazard Identification and Risk Assessment) and taken appropriate actions to mitigate any identified hazards.

14.2.3 Before entering and working on the Foskor site the appointed service provider shall:

- i. Ensure that his portable electrical equipment has been tested and declared safe to use by the Foskor electrical services workshop.

15 PERMIT TO WORK

Before any on-site work under this contract may commence, the appointed or successful service provider shall obtain from Foskor a PERMIT TO WORK. The following guidelines are provided to assist the appointed service provider in obtaining a PERMIT TO WORK.

(See Foskor COP 28 Permit to work and COP 25 Control of Externally Provided Processes, Products and Services (Service provider Control) for details):

- i. The PERMIT TO WORK can be obtained from- and on completion returned to the Legal Administrator, Foskor Safety department.
- ii. Obtain a contract number from the Foskor procurement or projects department.
- iii. Appoint a subordinate manager under Regulation 2.6.1 and an on-site supervisor under Regulation 2.9.2 of the Mines Health and Safety Act.

The appointed subordinate manager and -supervisor shall be required to write and pass the Foskor 2.6.1 and 2.9.2 legal examinations within 30 days after being awarded this contract.

Attend an hour-long legal exam briefing any Thursday between 08:00 and 09:00 at the Security training hall.

Write legal examination any Friday between 07:30 and 10:30 at the Security training hall. (Please book) iv. Appoint an on-site SHE-Rep under section 29(1) of the MHSA to assist Regulation 2.6.1 and 2.9.2 in the daily on-site management of health, safety and environmental issues.

The designated SHE Rep must have the ability to read, write and express him/herself.

The appointed SHE-Rep shall be required to attend a five-day SHE-Rep training course within 30 days after being awarded this contract (Training free of charge). Make booking on 015 789 2531

A pre-requisite for attending the SHE-Rep training course is successful completion of Basic Health & Safety Principals- and HIRA training.

See Foskop's COP 5 Health and Safety Representatives for details.

- v. Provide a name list, including ID numbers, residential and postal addresses, and telephone numbers of all of the appointed service providers on-site employees.
- vi. All the appointed service providers on-site employees shall undergo a full medical examination at the Foskop on-site CLINIX Clinic. The clinic can be contacted at 015 789 2427 for an appointment. Please note:

All NEW- and employees LEAVING the service of the appointed service provider must undergo a full entry or exit medical examination

Women who are pregnant or suspect that they may be pregnant must notify the examining medical practitioner.

- vii. The appointed service providers designated on-site drivers shall receive competence testing and authorisation to operate vehicles on the Foskop site
- viii. All the appointed service providers' employees shall receive/have received training in:
 - a. First aid level 1 (Provide own training)
 - b. Working at heights (Provide own training)
 - c. Basic Health & Safety Principals (Provide own training)
 - d. HIRA (Provide own training)
 - e. Basic firefighting. (Provide own- or receive Foskop training, contact 015 789 2531 to book)
 - f. Lockout. (Provide own- or receive Foskop training, contact 015 789 2531 to book)

All training not provided by Foskop must be verified by the Foskop training superintendent Mr Johan Fouche. Please contact him on 015 7789 2525 to make an appointment or email proof of training and certificates to johanfo@foskor.co.za to confirm compliance before requesting his approval on the PERMIT TO WORK.

- ix. All the appointed service providers' on-site employees shall receive the basic Foskop site induction training at the Foskop Security office.
- x. All the appointed service providers' on-site employees shall receive site-specific induction training provided by the Foskop area Regulation 2.6.1 appointee/s.
- xi. A BRA (Baseline Risk Assessment) shall be completed for ALL "typical" tasks that will be completed under this contract. The

BRA to be approved by the responsible Foskor MHSA 2.13.1 appointee and signed by all of the service providers employees. Make use of Foskor's BRA document, Annexure 1.2, contained in COP 1, Risk and Opportunities Management (Available on request) xii. Attach a detailed SCOPE OF WORK describing the required task and -outcome of this contract.

- xiii. All Foskor's appointed MHSA Regulation 2.9.2, 2.6.1, 2.13.1 and 3.1. a manager must undersign/approve the PERMIT TO WORK.
- xiv. Registration and proof of payment under the Compensation for Occupational Injuries and Diseases Act, no. 130 of 1993. The registration number must be provided.
- xv. SARS issued a tax clearance certificate. xvi. All relevant documentation and/or evidence of compliance must be attached to the PERMIT TO WORK.
- xvii. Upon successful completion and approval of the PERMIT TO WORK the security department will issue the appointed service providers' employees with access ID cards.
- xviii. Any other documents, certificates or records as requested by a Foskor official deemed necessary to ensure that all safety, legislative and administrative requirements have been met must be attached to the PERMIT TO WORK.
- xix. The appointed service provider must allow at least three to ten working days to complete all the PERMIT TO WORK requirements.

16 SAFETY FILE

The appointed contractor must compile a SAFETY FILE specifically for this contract. The SAFETY FILE must always be available for inspection by a Foskor official: The following guidelines are provided to assist the appointed contractor in compiling a SAFETY FILE:

Before any work may commence, the appointed service provider must IN CONJUNCTION WITH THE FOSKOR SAFETY DEPARTMENT, compile a SAFETY FILE specifically for THIS contract. (Contact the area responsible safety representative, Ms. Dineom Mgaga at 015 789 2206 / dineom@foskor.co.za or attend the monthly service providers meeting every 2nd Monday of the month (3rd Monday if 1st or 2nd Monday a public holiday) at 13:30 in the Foskor Plant Training Hall)

The SAFETY FILE must always be available for inspection by a Foskor official.

16.1 FOSKOR SAFETY FILE INDEX - TYPICAL

Template SHE FILE INDEX: - TYPICAL

ISO clause / Description of item File divider

1. Integrated Management System. Clause 5.1 & 5.2	1
2. Policies	
Clause 5.2: OH&S Policies	2
3. COP 1: FOSKOR risk management	
Clause 6.1.2.1 & 6.1.2.2: Hazard identification, risk assessment and determining controls.	3
4. COP 88: Objectives, targets and management programmes	
Clause 6.2: Objectives and programs	4
5. COP 2: Compliance obligations and appointments	
COP 5: Health and safety representatives,	
Clause 5.3: Legal and other requirements	
Clause 5.3 / 7.1: Resources, roles, responsibility, accountability, and authority	
Clause 6.1.3: compliance obligations/ legal and other requirements	
5 6. COP 15: SHERQ Competency and awareness training	
Clause 7.2 / 7.3: Competence, training, and awareness	6
7. COP 17: Mobile, technical and process training	
Clause 7.2 / 7.3: Competence, training, and awareness	7
8. COP 6: SHERQ Committees	
COP 7: Communication	
Clause 7.4: Communication, participation, and consultation	8
9. OCCUPATIONAL HYGIENE	
COP 42: Lighting: natural and artificial.	
COP 43: MCOP Occupational health programme on thermal stress	
COP 44: Sanitation plant hygiene amenities	
COP 45: MCOP occupational health program on personal Exposure to Air borne Pollutants	
COP 64: Ergonomics	
COP 86: MCOP for Occupation Health Program for noise	
Clause 8.1.2 Eliminating hazards and reducing OH&S risks	9

10. COP 49: Waste management	
COP 58: Hazardous chemical substances and control Hazchem and waste management	
Clause 8.1.2 Eliminating hazards and reducing OH&S risks	10
11. COP 53: Lock out system and usage	
Clause 8.1.1 General	
Clause 8.1.2 Eliminating hazards and reducing OH&S risks	11
12. COP 55: Stair's walkways handrails and Ladders	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	12
13. COP 56: Lifting machinery and lifting Tackle	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	13
14. COP 57: Boilers and vessels under pressure work forms	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	14
15. COP 59: MCOP for the operation of TMM's	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	15
16. COP 60: Portable electrical equipment checks and registers	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	16
17. COP 61: Earth leakage Relays and checks	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	17
18. COP 62: General Electric installations and machinery in hazardous locations	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	18

19. COP 63: Hand tools	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	19
20. COP 65: Personal Protective Equipment	
COP 67: MCOP Women in mining PPE	
Clause 8.1 Operational planning and control	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	20
21. COP 69: Maintenance of fire equipment.	
Clause 8.1 Emergency preparedness and response,	
Clause 8.1.2 Eliminating hazards and reducing OH&S	21
22. COP 72: Firefighting emergency drill and instructions	
COP 74 Emergency preparedness and response	
Clause 8.1 Operational planning and control,	
Clause 8.2 Emergency Preparedness and response	22
23. COP 93: MCOP for the safe use of conveyors installation for the transportation of minerals, material or personnel	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	23
24. COP 94: Hot work	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	24
25. COP 95: Confined space entry	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	25
26. COP 96: Working on Heights	
Clause 8.1 Operational planning and control	

Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	26
27. COP 97: Erection and use of scaffolding Clause	
8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	27
28. COP 98: Water safety	
Clause 8.1 Operational planning and control,	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	28
29. COP 101: MCOP: The right to refuse dangerous work and withdraw from dangerous workplace.	
Clause 8.1 Operational planning and control	
Clause 6.1: Actions to address risks and opportunities/Hazard identification, risk assessment and determining controls.	
Clause 8.1.2 Eliminating hazards and reducing OH&S Risk	29
30. COP 102: MCOP: Risk based emergency care on mine	
Clause 8.1 Operational planning and control	
Clause 8.2 Emergency preparedness and response	30
31. COP 103: Use of mobile devices on the mine premises	
Clause 6.1: Actions to address risks and opportunities/Hazard identification, risk assessment and determining controls.	
Clause 8.1 Operational planning and control	
Clause 8.2 Emergency preparedness and response	31
32. COP 22: SHEQ Inspection	
Clause 8.1 Operational planning and control	
Clause 8.2 Emergency preparedness and response	32
33. COP 23: Internal and external audit.	
Clause 9.2 Internal audit	
Clause 9.2.1 general and 9.2.2 internal audit programme.	33

Notes:

1. If a COP is not applicable to your section, please complete and attach the “Not Applicable” form in the space of the COP.
2. Always keep your file neat and clean
3. A Foskop representative may add or remove any other Foskop safety, health, quality and environmental policies and/or procedures deemed applicable.
4. If a COP is not applicable to this contract/project, please complete and attach the “Not applicable” form in the space of the COP

16.2 TYPICAL CONTENTS OF SAFETY FILE:

- i. Title and index cover page
- ii. A copy of the PERMIT TO WORK. iii. A copy of the MHSA Regulation 2.6.1 and -2.9.2 and SHE Rep appointment letters.
- iv. A copy of Foskop COP 25, Service provider control.
- v. Base line risk assessment of ALL and ANY POTENTIAL tasks that may be performed on site under this contract. See Foskop COP 26, Critical Task Descriptions for details.
- vi. Copies of critical task descriptions and standard operating/maintenance procedures.
- vii. Copies of the appointed service providers safety, health, environmental, HIV and AIDS, smoking and waste management policies.
- viii. Training records of all on-site employees.
- ix. Employee records of actual time worked (Normal and overtime).
- x. Copy of on-site induction training.
- xi. Records of inspections of TMM (Trackless Mobile Machinery) and trailers. See Foskop COP 59, Trackless Mobile Machinery for details.
- xii. Records of issues and inspections of PPE (Personal Protective Equipment) and safety equipment. See Foskop COP 65, Personal Protection Equipment for details.
- xiii. Records of issues and inspections of PEE (Portable Electrical Equipment). See Foskop COP 60, Portable electrical Equipment for details.
- xiv. Records of issues and inspections of tools and equipment. See Foskop COP 63, hand tools for details xv. Records of daily, weekly and monthly 2.6.1 / SHE Rep safety inspections. See Foskop COP 22, SHE Inspections for details. xvi. Records of daily green-area and safety talks. See Foskop COP 7, Communication for details. xvii. Any other documents, certificates or records as requested by a Foskop official deemed necessary to ensure that all safety, legislative and administrative requirements have been met.

Note:



The bidder / Service provider can obtain updated Foskor COP's and Engineering Specification on request

16.3 COP 25 – CONTRACTORS LEGAL OBLIGATION AND MINIMUM REQUIREMENTS

Contractor must comply to the requirements below within 4 weeks from awarding the contract unless otherwise agreed with 3.1 a and SHE Manager within 10 days from the awarding of such contract

	Visitors	Short Term Contractors (1-5 days)	Medium Term Contractors (1 days -1 month) – low risk	Long Term Contractors (>1 month) – low risk work	Medium or Term Contractors (1 days up to 12 month) – Risk work
Definition	Consultations, Salespersons, Foskor arranged and organised visitor groups, Family of injured employees	Deliveries, Consultation, Specialist, Auditors for less than 5 days and do not exceed 4 visits per year	Contractors working on the Mine premises for period more than 6 day but less than 1 month.	Duration of work is longer than 1 month	Duration of work is irrelevant (Only focus on Risk exposure)
Special conditions	May perform no work on site	May perform no physical work on site that will involve tools, equipment, or machinery.	No work that relates to life saving rules e.g., Construction, Conveyors, Lifting, Electrical, Lock-out, Working at Heights, Hot work. Specialist and consultants (experts) working in teams smaller than 5 for less than 1 month on site.	No construction work or work that relates to life saving rules e.g., Conveyors, Lifting or Rigging, Electrical maintenance, Lock-out, Hot work, confined spaces, use of TMM's, Working at heights	This includes all work relating to relates to <u>life saving rules</u> (risk work) and therefore must comply to relevant training and Authorisations as required in the Foskor COP's before work can start and permits signed.
Supervision	The organiser is responsible for the group. The visitors <u>must</u> be accompanied by a Foskor Regulation 2.9.2, Regulation 2.6.1, or legally appointed person.	Direct supervision of Foskor appointed Regulation 2.9.2. and Regulation 2.6.1	Direct supervision of Foskor appointed Regulation 2.9.2. and Regulation 2.6.1 appointed manager may be provided if contractor is unable to supply.	Must provide dedicated Regulation 2.9.2. with proof of competency and direct supervisor. Regulation 2.6.1 appointed manager may be provided if contractor is unable to supply.	Must provide <u>dedicated</u> Regulation 2.6.1. and Regulation 2.9.2. appointees with proof of competency. The Regulation 2.9.2 appointee must have technical competency and experience in line with scope and trained in the in all aspects as defined in Baseline risk.
Medical Surveillance	Only completed a declaration of fitness and health matters relevant to visit	Shortened medical surveillance Must declare Pregnancy and all chronic medical conditions at Mine Clinic	Full Medical Surveillance as per COP Must declare Pregnancy and all chronic medical conditions at Mine Clinic	Full Medical Surveillance as per COP Must declare Pregnancy and all chronic medical conditions at Mine Clinic	Full Medical Surveillance as per COP Must declare Pregnancy and all chronic medical conditions at Mine Clinic
Permit required	Day Permit is obtained at Security (Valid for 1 day)	Short term ID card at Security Return permit to Security when completed. (Permit each day)	Short term ID card at Security Permit to work at Foskor is required unless Specialists or Product experts. Return Permit to Security when work is complete	Permit to work at Foskor Permanent ID at security Return Permit to Security when work is complete	Permit to work at Foskor Permanent ID at security Return Permit to Security when work is complete
Induction	SHERQ Induction pamphlet only	Attend full Foskor Induction Site Specific Induction SHE Induction Pamphlet	Attend full Foskor Induction Site Specific Induction SHE Induction Pamphlet	Attend full Foskor Induction Site Specific Induction SHE Induction Pamphlet	Attend full Foskor Induction Site Specific Induction SHE Induction Pamphlet

Minimum training	None	None	First Aid Training HIRA Understanding Basic Health and Safety Principles	First Aid Training HIRA Understanding Basic Health and Safety Principles <u>PLUS</u> , all training as defined in Baseline risk assessment and Scope (COP 1)	First Aid Training HIRA Understanding Basic Health & Safety <u>PLUS</u> , all training as defined in Baseline risk assessment and Scope (COP 1). When construction or maintenance work is done – minimum 1 artisan per team.
Letter of Good standing	Not required	Not required	<u>May</u> be required (dependant on scope) and correct nature of business must reflect on the Letter of Good standing	Required and correct nature of business must reflect on the Letter of Good standing	Required and correct nature of business must reflect on the Letter of Good standing

16.4 REMINDER OF RISK IDENTIFICATION – LIFE SAVING RULES

- Risk Assessments and clearance certificates
- Lifting operations
- Working at heights
- Confined space entry
- Positive energy Isolation and lockout
- Moving Machinery
- Personal protective equipment

Risk assessment is applicable to all jobs and training apply to all that will do physical work!

16.5 ADDITIONAL SAFETY REQUIREMENTS

N/A

17 PARAMETERS

17.1 DESIGN PARAMETERS

All plant and equipment will be designed to:

- Operate satisfactorily under atmospheric, ambient, and other conditions present at the site location
- Ensure interchangeability of units and/or sub-parts throughout the plant to reduce spares holding requirements – take old plant equipment into account
- Ensure reliability and maintainability. Minimum availability of 98% is required
- Operate without undue vibration, stresses (temperature and built-in) and excessive noise □ Comply with legal requirements in terms of the water license and DWA

17.2 SPECIFICATIONS, CODES, STANDARDS AND REGULATIONS

The Latest edition of the South African National Standards in effects at the date of projects design shall establish the minimum requirements for design, materials, and construction. This should be referenced with the Foskor General Engineering specifications and requirements of the Foskor SHERQ system (COP's)

No work shall be contemplated which is in breach of any legislation in South Africa – Typically:

- Water license (04/B72K/ACGIJ/962)

- Occupational Health and Safety Act
- South African Mine Health and Safety Acts and regulations (Act 29 of 1996)
- Explosive Acts and Regulations - South Africa
- DWA and the National Water Act.
- Foskor COP's
- Foskor Engineering Specifications
- The latest revisions of the SANS standardized specifications and Foskor Specifications as applicable at the time of quotation shall apply to this contract.

Note! The equipment to be capable of continuous operation 24 hrs/day, 365 days/year with operating availability equal to 100%.

17.3 SITE GEOGRAPHY

The plant is located at Phalaborwa, Limpopo, South Africa























17.4 AMBIENT CONDITIONS

- Ambient temperature

Summer	35 °C Avg.	50 °C Max
Winter	17 °C Avg.	2 °C Min

- Site Altitude: 380 m
- Prevailing wind direction: Generally South Easterly - Maximum design velocity 40 m/s (144 km/h)
- Very dusty conditions
- Average annual rainfall = 540 mm

17.5 FOSKOR GENERAL ENGINEERING SPECIFICATIONS (SHOULD BE CONSULTED BEFORE FINALIZATION OF ANY DESIGN OR SPECIFICATION)

	Name		Modified	Modified By
	Engineering Specification Index	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS001 - General Design Information - Rev 1	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS002 - Engineering Drawings - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS003 - Quality Control Procedures - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS005 - Concrete and Formwork - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS007 - Plate work - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS008 - Welding procedures - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS009 - Structural fabrication and erection - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS011- Piping - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS012 - Pressure vessels - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS013M - Painting and Protective Coatings	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS014 - Rubberlining - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS015 - Fencing - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS016 - Roofing and side cladding - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS017 - Fuel - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS018 - Lubrication - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS019 - Liquid containemt bund walls - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS020 - General purpose valves - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS021 - Gearboxes - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GS022 - Chainblocks and lever hoists - Rev 0	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu
	GSI-004 - Field Instrumentation Standards	...	15 April, 2016	<input type="checkbox"/> Khayelihle Pepu

Service provider /Contractor /Supplier - Please ensure that you have the latest copy of the specifications before any activity is committed.

17.6 SPECIFICATION

ELECTRICAL SPECIFICATIONS		
NUMBER	REVISION	TITLE
EE-1	Latest Revision	Motor Control Centre & Switchgear
EE-2	Latest Revision	Squirrel Cage Induction & Wound Rotor Motors
EE-11	Latest Revision	Power Factor Correction Equipment
GE-1	Latest Revision	Design Criteria for Electrical Installations
GA-1	Latest Revision	Procedures for Enquiries & Tenders
GD-1	Latest Revision	General Requirements for Design, Project Management & Tenders
GD-2	Latest Revision	Engineering Change Order (E.C.O) Procedure
GM-1	Latest Revision	Mechanical Equipment
GM-5	Latest Revision	Pipe Standards
GM-6	Latest Revision	Engineering Drawing & Document Requirements
GM-8	Latest Revision	Surface Protection
GM-3	Latest Revision	Painting & Surface Protection of Steel
GS-1	Latest Revision	Structural Steel work & Plate work Fabrication & Erection
GQ-1	Latest Revision	Quality Control
GI-1	Latest Revision	General specifications & Procedures
GI-2	Latest Revision	Installation & Commissioning

GI-3	Latest Revision	General Equipment Specification
GI-4	Latest Revision	Field Instrumentation Specification

17.7 ADDITIONAL SPECIFICATIONS IF REQUIRED

□ None

18 PROJECT MANAGEMENT - CONTRACTOR

- a) Nominate a single window of communication to Foscok – Typically the appointed contractor 2.6.1
- b) Attend meetings as agreed during the project kick-off meeting
- c) Submit Progress reports (Format & interval) as defined in the Kick-off Meeting (Invoicing, Labour, Performance against the plan, Contractor purchases, Quality Management, Safety, Etc.
- d) Manage and participate in the "Daily Journal" as part of executing the project
- e) All meetings will be held at FOSKOR offices unless otherwise stated
- f) The contractor to provide updated project management plans on progress as defined by the Foscok Project Engineer.
- g) If the project is executed based on a shutdown approach the contractor will produce a formal Works Breakdown Structure of the works.
- h) If the contractor cannot produce a proper WBS then the contractor will be required to subcontract this function to produce the WBS and manage the WBS for the duration of the project. This cost must be included in the contractor's price
- i) WBS - WBS is a hierarchical and incremental decomposition of the project into phases, deliverables, and work packages. It is a tree structure, which shows a subdivision of effort required to achieve an objective, for example, a program, project, and contract.
- j) This includes arrangements, tools, equipment, labour, Tasks, Purchase, Quality, Communication, etc
- k) Project progress updates - If the contractor cannot produce proper updates on a WBS then the contractor will be required to subcontract this function to produce the WBS updates for the duration of the project. This cost must be included in the contractor's price

The Service provider is responsible for managing the project and this is graphically displayed below indicating where what functions lies. Graphical presentation only covers some basic aspects.

18.1 ADDITIONAL PROJECT MANAGEMENT REQUIREMENTS:

None

18.3 PLANNING AND SCHEDULING:

The lead times will be supplied and must strictly be adhered to. Any risks or change to the delivery date supplied must be communicated to Foskor immediately.

19 LIAISON AND CO-OPERATION WITH OTHERS

The CONTRACTOR/ SERVICE PROVIDER shall be required to co-operate and liaise with Foskor appointed project manager

19.1 ADDITIONAL REQUIREMENTS

None

19.2 SERVICE PLANNING/SCHEDULING

A reasonable repair lead time must be allowed for and agreed on between the supplier and Foskor for planning purposes.

20 GENERAL CONDITIONS – COMMERCIAL

20.1 EXTENSIONS, PENALTIES AND RETENTIONS

- a) Extension on the promised completion or Milestone date may be requested but needs to be approved by Foskor. The contractor should be in possession of a formal document issued via Foskor Procurement indicating that this request was approved
- b) Any additional works not defined in the order needs to be approved by Foskor in writing before any work commence.

Description	Condition	Duration
Penalties	N/A	Late Delivery after signed-off completion date (delays on contractor's account)
Retention	N/A	6 months after equipment hand-over for performance monitoring
Type of Contract	Foskor General condition of contract	
Tender price validity	180 business days	
Escalation	To be defined in the pricing schedule	Yearly, over a three-year period

All delays must be immediately brought under the attention of the section engineer and the responsible party agreed upon immediately.

20.2 AFTER SALES SERVICE OR REQUIREMENTS

20.2.1 After sales service requirements are listed below:

A warranty of 12 months to be provided after delivery of repaired equipment and 6 months from the start of installation date, whichever comes first.

20.3 INVOICE DUE DATES

The due dates for claim certificate are the 15th of every month. Invoices are due the latest the 23rd of every month.

21 TENDER EVALUATION CRITERIA

- As part of the process to assist with the evaluation of the bidder's proposal/quotation and to make an informed decision in the awarding of this tender, the following information is required
- The following tender evaluation criteria will be used for adjudicating the Contractor submitted tender.
- Please provide the required documentation as requested in the "Proof/documents to be submitted" column. Please be specific when submitting documents by ensuring that they answer the item specified.
- Please use the annexure number as indicated to identify the proof submitted.
- Failure to submit the relevant documentation as requested in the Evaluation criteria document may lead to a disregard of the submitted tender.

21.1 ESSENTIAL RETURNABLE DOCUMENTS

- Valid CK documents
- B-BBEE certificate
- Valid letter of good standing where applicable
- Valid tax pin document – to be certified by Foskor (If Non-compliant, supplier will be disqualified)
- Valid ID documents for Directors
- Shareholders Certificates
- Ownership of Directors in company
- Local Development Plan
- CPIC (Companies & Intelligence Property Commission) Certificate
- CSD (Central Supplier Database) Certificate

No	Pre-qualification	Proof / documents to be submitted	Notes
1	ISO 9001 accreditation	Valid ISO 9001:2015 Accreditation	

2	<p>HEI "Performance standard for liquid ring vacuum pumps" - testing capabilities</p> <p>Vacuum test bed/equipment and procedures to test vacuum pump performance to HEI standard.</p>	<p>Provide</p> <p>-Photos of vacuum test bed -Calibration certificates of testing equipment</p> <p>-Method statement of how Vacuum tests are conducted on- and off-site -Sample report of on- and off-site testing conducted</p> <p>A site visit shall take place in confirmation of test equipment upon shortlisting -lack thereof may lead to disqualification</p>	
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22 EVALUATION CRITERIA (TECHNICAL)

TECHNICAL EVALUATION				
FOSPHB-RFP-12-25/26 - Filters' Vacuum System Life Cycle Support				
No	Technical Criteria Description	% Contribution	Proof / documents to be submitted	Notes
1	<p>Company – Experience in Years</p> <p>Previous vacuum pumping system installation and/or maintenance contracts experience of 5 years or more (All contract durations accumulated to specified requirement)</p> <p>Scoring:</p> <p><6 months 0%</p> <p>7 – 12 months 25%</p> <p>13 – 24 months 50%</p> <p>25 – 59 months 75%</p> <p>≥5Years 100%</p>	30%	<p>Provide references of previous contracts indicating:</p> <p>-Date of contract award</p> <p>-Duration of award</p> <p>-Client/Customer name</p> <p>-Contract value</p> <p>-Contract reference number -Client's contact number for verification</p> <p>NB: References to be in client's letterhead (PO, Contracts or Reference letters or Completion certificate)</p>	

2	<p>Company – Assets</p> <p>Appropriate and Sufficient assets to fulfil the requirements of Refurbishments including TMM to transport equipment, centre lathe, pedestal drill, overhead cranes, testing rig, office station, etc, in support of contract</p> <p>Scoring:</p> <table><tr><td>No equipment</td><td>0%</td></tr><tr><td>1- 2 equipment</td><td>25%</td></tr><tr><td>3-4 equipment</td><td>50%</td></tr><tr><td>≥ 5 equipment</td><td>100%</td></tr></table>	No equipment	0%	1- 2 equipment	25%	3-4 equipment	50%	≥ 5 equipment	100%	30%	<p>List of assets/equipment, with models, year of acquisition related to the requirements of scope with photographic evidence thereof and facilities where refurbishment will take place.</p> <p>Proof of purchase or ownership should be provided/ Signed inventory report.</p> <p>NB: A site visit shall take place in confirmation of assets upon shortlisting</p>	
No equipment	0%											
1- 2 equipment	25%											
3-4 equipment	50%											
≥ 5 equipment	100%											
3	<p>Team - Ability to provide teams with skills and experience for filter vacuum system life cycle support maintenance or similar projects done in Last 3 years,</p> <p>Scoring:</p> <table><tr><td>No experience</td><td>0%</td></tr><tr><td>1- 2 experience</td><td>25%</td></tr><tr><td>3-4 experience</td><td>50%</td></tr><tr><td>≥ 10 experience</td><td>100%</td></tr></table>	No experience	0%	1- 2 experience	25%	3-4 experience	50%	≥ 10 experience	100%	10%	<p>Provide CV's and qualifications or Trade test certificate for:</p> <ul style="list-style-type: none">- Fitters and turner, TO experience on fitting and turning- Technician-Quality control personnel- Note reference required for all CV's attached	
No experience	0%											
1- 2 experience	25%											
3-4 experience	50%											
≥ 10 experience	100%											

4	<p>Declaration of Refurbishment turnaround time</p> <p>Spare parts readily available for short as possible turnaround time on refurbishments of both, vacuum pumps and filtrate pumps</p> <p>Scoring:</p> <p>Vacuum pumps >3 months 0%</p> <p>Filtrate pumps >6 weeks 0%</p> <p>Vacuum pumps 2-3 months 50%</p> <p>Filtrate pumps 3-6 weeks 50%</p> <p>Vacuum pumps <2 months 100%</p> <p>Filtrate pumps <3weeks 100%</p>	10%	<p>Provide:</p> <p>-Contractually Binding declaration of maximum refurbishment turnaround time for Vacuum pumps and Filtrate pumps respectively.</p> <p>Bidders must submit signed lead-time from the previous client.</p>	
No	Technical Criteria Description	% Contribution	Proof / documents to be submitted	Notes
5	<p>Technical Capability – Refurbishment product expertise</p> <p>ARC Chesterton (or equivalent) product approved applicator certificate</p> <p>Scoring:</p> <p>No Capability/Proof 0%</p> <p>Competent ARC Chesterton (or equivalent) Approved applicator 100%</p>	10%	<p>Proved copy of certificate of Competent ARC Chesterton (or equivalent) Approved applicator</p>	
6	<p>Minimum Safety & Compliance Training</p> <p>Scoring:</p> <p>No Comply 0%</p> <p>Comply 100%</p>	10	<p>Provide information of training and appointments, previous appointments also valid, provide proposed service organogram structure using proposed organogram template.</p> <ul style="list-style-type: none"> First Aid certificates HIRA 	
	Total	100%		
Note: For the bid to be considered the bidder needs to score 70% and above and comply to all mandatory requirements				

23 PRICING SCHEDULE

Tender No.: T /25

Description: T /25 **Filters' Vacuum System Life Cycle Support**

The following needs to be included in your rates or totals – Refer to Scope – Typically but not limited to

- PPE
- Work Permit
- Training (All mandatory training and specific work-related training)
- Authorisation (All mandatory authorizations and specific work-related authorisations)
- Site establishment
- Medicals
- Transport
- Supervision
- Safety Equipment and related items
- Site clean-up
- Supply,
- Labour
- Painting& touch-ups,
- Preparation work,
- Equipment
- Consumables
- Electrical Extensions for Work
- Quality control

NOTE: The onus lies with the tenderer to make sure that all formulas and calculations are correct. Calculation errors discovered during the evaluation process will be logged as a nonconformance and the tender / quotation will therefore be disregarded.

23.1 MEASUREMENT AND PAYMENT CLAUSES:

Measurement and payment clauses of the COLTO (1998) Standardised Specifications, as well as the Particular Specifications, shall be deemed to form part of and included in the pricing instructions.

23.2 UNITS OF MEASUREMENT

The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

%	–	Percent	m ³	–	cubic metre
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h	–	Hour	m ³ .km	–	cubic metre-kilometre
ha	–	hectare	mm	–	millimetre
kg	–	kilogram	MN	–	meganeutron
kℓ	–	kilolitre	MN.m	–	meganeutron-metre
km	–	kilometre	MPa	–	megapascal
km-pass	–	kilometre-pass	No.	–	number
kPa	–	kilopascal	P C sum	–	Prime Cost sum
kW	–	kilowatt	Prov. sum.	–	Provisional sum
ℓ	–	litre	sum	–	lump sum
m	–	metre	t	–	ton (1 000 kg)
m ²	–	square metre	W/day	–	Workday
		Square Metre-Pass			
m ² .pass	–				

23.3 BILL OF QUANTITY

Bill of quantity to be specified by OEM supplier, with overview of pricing schedule specified below. It needs to be noted that the schedule of quantities may change, thus items removed, quantities changed as deemed required by Foskor. All changes shall take place in written communication after receipt of tender submissions.

23.4 SCHEDULE OF QUANTITIES

Refer to the attached annexures for completion of the pricing schedules.

The total Contract value shall be calculated in the following manner:

Annual Contract value

- 4 x 2BE1 353 Major refurbishments
- 1 x 2BE1 405 Major Refurbishments
- 4 x PV100-230 (Flange) Major refurbishments
- 2 x PV100-230 (Bare shaft) Major refurbishments
- 4 x On-site performance tests on 7 vacuum equipment
- 2 Vacuum System design reviews (incl drawings etc)

- 1 x On-site Leak Detection tests on 2 equipment
- 1 x on-site Vacuum system thickness testing on 2 equipment
- 5 sessions On-site training and coaching on vacuum systems

*Quantities may change at the discretion of Foskor, with contractor being notified in advance

No	Description	UOM	Qty	Rate Price	Total Price
	Refer to attached Annexures for detailed pricing schedules				
	Total Contract Value (Excl. Vat) for the duration of 36 months			R	

23.5 SCHEDULE SUMMARY:

Description	Amount R
SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS	
(Insert relevant text in context with the project – not applicable)	
TOTAL excl. VAT	
VAT @ 15%	
TOTAL incl. VAT	

All price alterations must be signed for by the bidder confirming that such changes were made by the Bidder. PLEASE NOTE THAT PRICE CHANGES WITHOUT A SIGNATURE WILL LEAD TO THE DISQUALIFICATION OF THE BID SUBMITTED.

NOTE: The onus lies with the tenderer to make sure that all formulas and calculations are correct. Calculation errors discovered during the evaluation process will be logged as a non-conformance and the tender/quotation will therefore be disregarded

24 ACCEPTANCE

The conditions and requirements as stated in this “Scope of Work” are accepted with the following exceptions/exclusions: -

The conditions and requirements as stated in this “Scope of Work” are accepted with the following inclusions: -

25 SUB-CONTRACTOR (PLEASE PROVIDE LIST AND FUNCTION)

Failure to complete this form will lead to disqualification – Please do not leave blanks!

BBBEE Level

Black Ownership

%

Black Woman Ownership

%

Tender Validity

Days

Manufacturing Period

Days

Installation Period

Days

Guarantee

Months

Commencement after receipt of official purchase order

Days

Payment terms

Price Basis for the duration of the contract/till supply of goods (Please tick):

Fixed

Duration of fixed price

12 Months

24 Months

Variable

Price Base Date

If variable provides price variation factors, percentages and formula in the cover letter. (Please specify indices to be used)

Price variation factors & percentages (e.g. material, labour, fuel, overheads, admin etc)

Factor	%

Factor	%

Factor	%

Factor	%

Factor	%

Where prices include a foreign currency rate please provide:

% of price, subject R O E % ROE = ZAR

ROE Base Date

Note: If the above fields are not completed, it is confirmed that the quoted price/s are valid for the entire contract period mentioned and no escalation in the price is allowed under any circumstances.

I, _____ in my capacity as _____ for and on behalf of _____ hereby acknowledge that I have read and understand the Instruction to Tender and the Scope of Work as detailed in this document and accept all the Terms and Conditions of Tender T103-21.

Signed at _____ on this the _____ day of _____ 2021

Signature: _____

Witnesses:

1. _____ Name: _____

2. _____ Name: _____

For and on behalf of Foskor (Pty) Limited

Name: _____ Signature: _____

Designation: _____ Date: _____

Note: It is imperative to complete this schedule in full where applicable, marked "N/A" where not applicable and signed off in full,

unsigned bids will not be accepted. All the supporting documentation requested with the tender document, scope of work and evaluation criteria need to be submitted with the tender. Tenders received without supporting documentation requested for the tender evaluation will not be considered.

26 DOCUMENTED INFORMATION

DESCRIPTION	RESP.	LOCATION	FILE NAME / INDEX	RETENTION TIME (MINIMUM)
Scope of Works	Procurement	Procurement	Procurement	As per Procurement Policies and procedures

27 REFERENCES

Code of Practice Foskor Risk Assessment (COP 01).

Quality Management Systems – Requirements (ISO 9001:2015).

Environmental Management Systems – Requirements with guidance for use (ISO 14001:2015).

Occupational Health and Safety Systems – (ISO 45001)