

## **Annexure A**

### **SERVICE REQUIREMENTS**

#### **SCOPE OF WORK**

#### **1. INTRODUCTION**

- 1.1 The scope of works covers three categories of works:
  - a. High Pressure Cleaning or Water Jetting
  - b. Industrial Vacuuming and cleaning
  - c. Diesel Refuelling
- 1.2 The contractor shall supply all labour, supervision, consumables, materials, equipment, instruments, tools, services and transport required for performing the works. Materials must conform to the SANPC standards.
- 1.3 Work performed will be measured and remuneration shall be based on the Schedule of prices.
- 1.4 The contractor shall not, without the prior written consent of SANPC Refinery, make any alteration or addition to the Scope of Work.

#### **2. SCOPE OF WORK – PARTICULAR**

- 2.1 The contractor is required to perform various tasks for SANPC Refinery, the scope of which shall be determined by the Area Engineer or a duly authorised person.
- 2.2 Except as otherwise expressly provided herein the contractor shall supply all labour, equipment and special PPE to achieve the required standard of SANPC Refinery.
- 2.3 SANPC Refinery will provide lighting as required to safely execute the works.
- 2.4 SANPC Refinery will make available cranes and associated resources where required by the contractor.
- 2.5 Works will be carried out on the SANPC Refinery site on the various cleaning pads and / or the relevant unit / zones where the works will be carried out In-Situ.
- 2.6 All internal combustion engines are to be diesel driven and inspected by the SANPC Refinery EMS department before use.

- 2.7 Wherever delays may occur the contractor's representative must immediately inform SANPC Refinery Focal Point and an endorsed. Failure to do may result in standing time claims being rejected by SANPC Refinery.
- 2.8 Any change or additions to the agreed scope of work will require authorised site instructions approved by SANPC Refinery Area Engineer or designated person.
- 2.9 The works as generally described may be carried out in all operating and non-operating areas, and at all levels within the unit structures within the SANPC Refinery precinct.
- 2.10 The works shall comprise of but not be limited to high pressure jetting, use of vacuum trucks for desludging, cleaning and bagging of contaminated and non-contaminated waste and diesel refuelling detailed below:

#### **2.10.1 High Pressure Jetting**

The contractor shall provide high pressure water jetting services for penetration and removal of heavy and light hydrocarbon and other deposits from process equipment such as heat exchanger tubes and tube bundles, exchanger components, header boxes, drums, vessels, pots, towers, columns, tanks, piping, pumps, strainers, structures, walls and floors. The application is for single or more equipment of a process, Unit and/or Turnaround.

- 2.10.1.1 The contractor shall mobilize labour and equipment only after receiving a Works Order.
- 2.10.1.2 The cleaning of HE bundles, both internally and externally, as well as dome covers to the standard as specified by SANPC Refinery.
- 2.10.1.3 The cleaning of Vessels and Column internals, to be completed to the standard outlined by SANPC Refinery or designated inspection authority.
- 2.10.1.4 The cleaning of piping, both internally and externally, to be completed in line with the standard outlined by SANPC Refinery.
- 2.10.1.5 HP Jetting machines (sizes based on fouling levels) are to be discussed with SANPC Refinery.
- 2.10.1.6 Contractor to stipulate water requirements.
- 2.10.1.7 The contractor will supply tarpaulin screens for fin fan cleaning.
- 2.10.1.8 The contractor to supply transportation for towing the HP Jetting

machines with the correct type of tow bars / hitches

- 2.10.1.9 SANPC Refinery will be responsible for arranging all the rigging activities involved in “pulling” the bundles clear within the plant and transporting to the cleaning pad, as well as all the movement of bundles / equipment in the cleaning pad.
- 2.10.1.10 The contractor must detail in his / her method statements the use of the TLE drive unit, Power Lances and flexible lances.
- 2.10.1.11 Grit blasting/ shot blasting of exchanger tubes to clear plugged tubes will only be applied if approved by the SANPC Refinery Area Engineer.
- 2.10.1.12 Residue materials must be manually bagged and bags to be placed in designated skips as directed by the SANPC Refinery environmental lead/ Safety lead.

## **2.10.2 Industrial Vacuuming**

Industrial Vacuuming services provided by the Contractor will involve the use of vacuum trucks capable of handling hydrocarbon liquid generated waste, sludge and dry solids. This will include transportation to in-house landfills and other approved waste disposal facilities.

- 2.10.2.1 On occasions, cleaning activities will include work inside confined spaces to be performed by manual methods e.g. scraping, wire brushing, hand sweeping or other similar hand cleaning methods as well as vacuuming.
- 2.10.2.2 The contractor will provide the necessary labour to manually bag residue material and sludge into plastic bags that must be placed in dedicated waste skips.
- 2.10.2.3 Vacuum trucks, hoses and associated equipment and tools to be supplied by the contractor.
- 2.10.2.4 All equipment, vehicles, hoses, fittings, tools to be of sound condition and inspected by the contractor before use on site.
- 2.10.2.5 SANPC Refinery environmental lead/ Safety lead will specify destination of all materials vacuumed.
- 2.10.2.6 In the event of an emergency the Contractor is expected to respond and have a vacuum truck on site at SANPC Refinery within 24 hours.**
- 2.10.2.7 Vacuum trucks to be fitted with audible reverse buzzers

- 2.10.2.8 Truck to be fitted with revolve emergency light
- 2.10.2.9 Spill kit to be available in truck at all times
- 2.10.2.10 Trucks to be fitted with hazchem orange plate
- 2.10.2.11 Signage on truck to include emergency contact details
- 2.10.2.12 Truck battery to be fitted with isolation switch (4 pole ADR isolation switch)
- 2.10.2.13 High level emergency alarm sensor to be fitted on tanker
- 2.10.2.14 Automatic gate valve shut off system to be fitted on suction port of tank

### **2.10.3 Diesel Refuelling**

The contractor shall supply all labour and PPE to support the SANPC Refinery with re-fuelling of compressors, generators and SANPC pool vehicles on site. The contractor labour shifts are to be arranged so that refuelling of the specified equipment is sufficient to avoid unplanned stoppages as a result of fuel starvation.

- 2.10.3.1 The refuelling will be executed 24hrs / 7 days a week or as dictated by the responsible SANPC/ CEF designated person/s.
- 2.10.3.2 The contractor must ensure they have sufficient resources to support this operation.
- 2.10.3.3 SANPC Refinery will provide a vehicle with the appropriate towing hitch, along with the accompanying mobile bowser to re-fuel all diesel driven equipment across site in line with the SANPC Refinery equipment list. The contractor will inspect the listed equipment routinely to ensure no equipment "runs dry".
- 2.10.3.4 The contractor will report any issues related to the vehicle, mobile pump, bowser, generators, compressors noted to the SANPC Refinery designated person/s.
- 2.10.3.5 The contractor will maintain a list of records indicating dates, times and amount of diesel refilled on each equipment on the equipment list. These records are to be updated and submitted to the SANPC Refinery designated person/s on a weekly basis.
- 2.10.3.6 The contractor will fill the mobile bowser from SANPC Refinery Utilities diesel tank located at the OMUTDE area.
- 2.10.3.7 SANPC Refinery will ensure that the diesel level of the Utilities tank is maintained

### 3. SCOPE OF THE WORKS - GENERAL

3.1 The description given below defines the general requirements particular to the scope of the works and is to be read in conjunction with the other documents forming the Tender and/or the agreement as the case may be. Procedures for job card shall follow the sequence of events as per Central the Planning Workflow and as outlined in 3.1.1 to 3.1.10 below:

- a) SANPC Refinery normally uses individual job card numbers to apportion the works. The contractor will be required to use the job card system for call-offs (pricing) and the SANPC Refinery job card system for progress reporting of the works in conjunction with the duly authorised SANPC Refinery Zone Supervisor.
- b) The contractor is required to provide man-hours expended to execute the work from the schedule of prices, and compare against those listed in the man-hour norms for the job. The overall schedule will be compared against the initially agreed schedule.

3.1.1 The Area Engineer or the duly authorised person, together with the Zone Supervisor identifies the required maintenance work, where after a priority is placed against each maintenance activity.

#### **MAINTENANCE PRIORITISATION TABLE**

PRIORITY	PRIORITY/RISK LEVEL	START DATE	INITIAL COMPLETION PERIOD
C	Routine	Request Date + 30 days	3 Months
B	Routine	Request Date + 14 days	1 Month
A	Schedule Breaker	Request Date + 1 days	1 Week
E	Emergency	Immediate	ASAP + Overtime

Priorities A, B, C & E are scoped by the respective Zone Scooper or the discipline Artisan.

A job card number is assigned to the scope and job card is issued to the contractor. Emergency Status Classification will be the 'A' and 'E' priority jobs. In such a case the Area

Engineer agrees upon the staffing and general planning requirements with his execution Team (Scoper, Planner, Zone Supervisor and the Contractor). The Area Engineer confirms the release of the works and identifies which lower priority job(s) can be postponed to accommodate the Emergency priority job.

- a) An 'E' priority job is supposed to commence immediately and shift work is to be effected, and an 'A' priority job will require the contractor to commence within 24hrs of receiving the scoping form and order number. An 'A' priority job may require extended hours to be undertaken by the dayshift crew.
- b) In the event that the contractor resources in the Zone are insufficient for the Emergency Job, then the Area Engineer is to be consulted as he/she has overview of all resources and is in the position of suggesting what jobs across site could be postponed to accommodate the 'E' priority job.
- c) For an 'E' priority job after hours, the Planner is to immediately issue a Manual job card for the work to start. In the event the 'E' priority job occurs outside of normal working hours, the system generated job card with a valid job card number will be issued at the beginning of the next normal working day.
- d) The contractor is expected to obtain the necessary permits and proceed with the works. The workflow from here shall proceed in the same manner as for normal priority works.

3.1.2 For (A, B, C & E) priority work a scope of work package, in the form of a Contractor Work Request (CWR), is generated in SAGE by the Area Scoper. A job card is generated by the Zone Scoper and followed up with a manual scoping form to the contractor. The contractor estimates the cost and man hours for a CWR, in accordance with the Schedule of prices, and returns the estimated CWR in electronic format to the Area Engineer. The Area Engineer evaluates and awards the contractors estimated CWR.

- a) When awarded, the contractor compiles a Work Pack which includes the relevant drawings and Material Take-off's (MTO's) etc.
- b) The Contractor's supervisor is required to facilitate the generation of the Safety Certificate.

- 3.1.3 The contractor presents the compiled work pack to SANPC Refinery, which must be reviewed and verified in writing by the respective SANPC Refinery authorities. SANPC Refinery shall, at the same time, ensure that the material required is in stock or ordered. Central Planning draws up a 30-day look-a-head schedule, for review by the Area Execution Team including the contractor. From time to time, SANPC Refinery may impose a limit to contractor numbers on site.
- 3.1.4 After confirmation with all relevant parties in the Weekly planning meeting, the Planner issues a seven day look-ahead level 1 schedule. From that schedule, job cards will be issued to the relevant contractor. The seven day schedule will be extracted from the monthly schedule.
- a) The contractor is to ensure that the relevant QCP, Work-pack is approved and that the permits are obtained at the latest by close of business of the day prior to the planned start date.
  - c) Thereafter the contractor is to get daily clearances for each activity from the respective Maintenance Services Focal Point (MSFP) before commencing with the works.
- 3.1.5 In the event of any variations to the scope of the works, SANPC Refinery Authorised person (Area Engineer, the Zone Planner, the Zone Scoper) and the contractor shall identify such variation/s and this must be recorded. The contractor shall include such variations into the work pack. A variation order (VO) shall be raised and approval by the Area Engineer before the extra work commences.

Execution of works without a job cards will not be accepted.

- 3.1.6 The contractor must submit the job cards to the Planner for progress reporting. These job cards must be signed by the Discipline Supervisor as verification that the work is completed to the required standard and to process payments.
- 3.1.7 The contractor must submit the job cards to the Planner for progress reporting. These job cards must be signed by the Discipline Supervisor as verification that the work is completed to the required standard and to process payments.
- 3.1.8 The contractor must submit the job cards to the Planner for progress reporting. These job cards must be signed by the Discipline Supervisor as verification that the work is completed to the required standard and to process payments.

3.1.9 The Planner updates all progress and also closes off the work upon issue of the handover/takeover certificate from the contractor .

3.1.10 Quality of workmanship must be verified by duly appointed persons for all categories of work which will be on record as part of the contractor workpacks.

3.2 SANPC Refinery may require the contractor to prepare a workpack prior to commencement of the works, which may include:

- a) Health, Safety and Environment Action Plan
- b) Method Statement
- c) Quality Plan
- d) Completion of the SANPC Refinery integrated Risk Assessment Method Statement ("RAMS"); and

## **4 SAFETY**

**4.1** The contractor and contractor personnel must, as far as reasonably practical comply with requirements prescribed by the OHS Act and OHS Regulations- Act 85 of 1993.

**4.2** The contractor will also comply with the SANPC Refinery rules and regulations

**4.3** The contractor safety officer will ensure that regular audits are done on site to identify and intervene on unsafe situations and near miss acts during work execution. Any findings to be reported and recorded in the SANPC Refinery incident management system

**4.4** All incidents to be reported immediately to the relevant clearance issuers and maintenance supervisors

## **5. ADMINISTRATION PROCEDURES**

### **5.1 Meetings**

5.1.1 The following meetings are compulsory for contractor's representative to attend:

- a) Daily planning and progress meetings as directed by Area Engineer and/or



the Zone Planner.

- b) Weekly look-ahead meetings as directed by Area Engineer and/or the Zone Planner.

5.1.2 The following meetings are compulsory for the contractor Site Manager to attend:

- a) Monthly KPI review meeting
- b) Quarterly performance and safety review meetings or as directed by the CCM.

## **5.2 Planning and Progress**

5.2.1 SANPC Refinery shall provide the contractor with a 30 day look-a-head schedule outlining planned windows for activities. The contractor is to manage and administer the manpower resources as such to enable him to comply with the defined service levels and meet the required works order completion dates, irrespective of absenteeism or leave. The contractor must ensure these objectives are fully understood and that management structures and procedures are in place to ensure timeous and successful execution under the above-mentioned constraints.

5.2.2 The contractor is responsible to plan, supply, coordinate and manage his manpower, logistics, equipment and materials resources for the works in accordance with the schedule from Central Planning as a guide. The coordination, progress monitoring and reporting is the responsibility of the contractor and shall take place at the daily progress meetings. These meetings shall be recorded (as per respective meeting's criteria) by the Zone Planner and agreed to or signed by the contractor. The contractor shall update his plan, and provide progress at the daily and weekly progress meetings.

5.2.3 The contractor is to arrange and coordinate with the required SANPC Refinery personnel, all RAMS sessions in order to ensure that work starts timeously.

5.2.4 The contractor's attention is drawn to the fact that the works to be executed may be in the vicinity of insulated pipework, equipment and electrical and instrument installations. The contractor shall be held responsible for any

damage caused to these or any other installations by his operations. If damages are identified prior to commencing work, the Area Engineer or the Supervisor must be notified of such damages immediately.

- 5.2.5 All electrical equipment brought on site for work execution must be inspected and approved by the SANPC Refinery electrical department.

### **5.3 Staff Issues**

- 5.3.1 As a control system the **contractor** is to supply a full organogram with functions and names of all resources to SANPC Refinery. SANPC Refinery reserves the right to assess all contractor supervisors before they report for work at the SANPC Refinery sites.
- 5.3.2 SANPC Refinery shall have the right to assess the contractor's core resources and performance on a continuous basis for the duration of this agreement.
- 5.3.3 Only approved resources may be used by the contractor. Changes in core resource staff shall be justified to and approved by the SANPC Refinery CCM, whose approval will not be unreasonably withheld. (This includes non-recoverable resources).

## **6 DIVISION OF RESPONSIBILITIES**

### **Definitions:**

E	Execute
P	Participate
A	Approve
S	Supply
M	Maintain

### **6.1 Division of Responsibilities - Work Descriptions**

The following work descriptions define the division of responsibilities with respect to the work required and exclusions from the agreement scope of work:-

Work Description	By CONTRACTOR	By Others	By SANPC Refinery
Timeous Application for Work Permits	E		P
Issue of daily work permits			A/E
Gas Testing			E
Quality Checking	E		P/A

## 6.2 Division of Responsibilities - Provision of Construction and associated Equipment

The following defines the division of responsibility with respect to the provision of construction and associated equipment for the implementation of the agreement work:

Equipment Description	By CONTRACTOR	By Others	By SANPC Refinery
Transportation	S		
Site huts, ablution facilities, storage and where required services	M		S
Lighting – General			S/M
Required protective clothing and equipment include. B Compressor	S/M		
Craneage		S/M	
Lifting gear, ropes, slings and shackles			S/M
Safety Equipment	S/M		
Firefighting facilities			S/M
Resuscitator			S/M
Standby B.A. set			S/M

## 6.3 Division of Responsibilities - Supply of Installed Equipment and Materials

The following defines the division of responsibility with respect to the supply of installed equipment and materials required for the **agreement** work:

Task Description	By CONTRACTOR	By Others	By SANPC Refinery
Identify work and raise Job card			E/A
Prepare and issue detailed scope work	P		E
Price	E		A
Rates for non-bill items	E		A
Plan sequence of work	E		A
Carry out the work	E		
Progress reporting	E		A
Prepare V.O	P		E/A
QA	E		A
Handover (ready to use)	E		A

The above noted items are intended to be indicative of the categories of work to be undertaken. They are not intended as a comprehensive list of the same.

## 7 DRAWINGS

7.1 Drawings/ sketches may be issued by SANPC Refinery as required to clarify written instructions given.

## Evaluation Criteria

### 1. Mandatory Requirements

No.	Description of the Mandatory requirements	Comply	Not Comply
1.1	<p>HP Jetting Operators must have valid training certificates.</p> <p><b>Bidder to submit:</b>  <b>Refresher training certificate for each Operator operating HP machines</b></p>		
1.2	<p>HP machines are to be roadworthy.</p> <p><b>Bidder to provide a copy of valid license disk for each HP machine.</b></p>		
1.3	<p>Bidders must have an adequate Health and Safety Policy which must comply to national standards.</p> <p><b>Bidder to provide a copy of the Health and Safety file.</b></p>		
1.4	<p>Vacuum trucks need to meet the requirements of the pressure vessel regulations, South African National Standard (SANS) 347.</p> <p><b>Bidder to submit copies of the following:</b>  <b>Valid dye pen test on wall thickness of tank conducted annually.</b>  <b>Valid annual pressure test on tank.</b></p>		
1.5	<p>Drivers of vacuum trucks transporting hazardous materials are to hold a valid certificate of training issued by a training provider accredited by the South African Qualifications Authority (SAQA) and the Transport Education and Training Authority (TETA ). This certificate is mandated by law and demonstrates the driver's competence in handling dangerous goods, as per Regulation 277(2) of the National Road Traffic Act.</p> <p><b>Bidder to submit valid copies of drivers' training certificates.</b></p>		
1.6	<p>Transporting of hazardous waste requires a waste management license issued by the National Traffic Inspectorate in South Africa.</p> <p><b>Bidder to submit copies of vacuum truck license discs indicating dangerous goods transporter.</b></p>		

1.8	<p>Vacuum Truck Operators must have a valid training certificates.</p> <p><b>Bidder to submit:</b></p> <p><b>Valid training certificate for each Operator operating the vacuum trucks from authorized training institution.</b></p>		
1.9	<p>Driver of the refueling vehicle must have valid code 10 or above driver's license.</p> <p><b>Bidder to submit valid copy of driver's license.</b></p>		
1.10	<p>COIDA Registration</p> <p><b>Bidder to submit proof of registration and valid COIDA Letter of Good Standing</b></p>		
1.11	<p>Driver of the refueling vehicle must have valid conveyance of dangerous goods by road from the <b>authorized training institution.</b></p> <p>Bidder to submit valid copy of certificate.</p>		

## 2. TECHNICAL EVALUATION CRITERIA

### 2.1 Company Profile

The bidder must submit the Company profile that show the number of years for high pressure water jetting and industrial vacuuming at petrochemical /chemical plants

	Evaluation Criteria	Document as Evidence	Score	Weighting %
	8 years or more years' experience for high pressure water jetting and industrial vacuuming at petrochemical /chemical plants.	Company Profile	5	20%
	>6 but <8 years' experience for high pressure water jetting and industrial vacuuming at petrochemical /chemical plants.		4	
	>4 but < 6 years' experience for high pressure water jetting and industrial vacuuming at petrochemical /chemical plants.		3	
	>2 but <4 years' experience for high pressure water jetting and industrial vacuuming at petrochemical /chemical plants.		2	
	<2 years' experience for high pressure water jetting and industrial vacuuming at petrochemical /chemical plants.		0	

### Company Experience

The bidder must provide **signed and dated** reference letters on clients **letterhead** from previous and current clients. The reference letters should not be more than five years (2020 to date). The reference letter should indicate clearly **when the work was executed**. The reference letter should indicate specifically the work done on industrial vacuuming at petrochemical /chemical plants within (2020 to date).

Evaluation Criteria		Document as Evidence	Score	Weighting %
Bidder submitted 5 relevant reference letters	Reference letters on company letter heads indicating the detail of work undertaken with reference to lifting and hoisting		5	30%
Bidder submitted 4 relevant reference letters			4	
Bidder submitted 3 relevant reference letters			3	
Bidder submitted 2 relevant reference letters			2	
Bidder submitted 1 relevant reference letter			1	
Bidder did not provide any relevant reference letters			0	



### HP Operators experience

The bidder's HP Operators must have a minimum of 7 years' experience in operating HP machines.

	Evaluation Criteria	Document as Evidence	Score	Weighting %
	7 years and more years of experience	CVs of HP Operators clearly indicating experience in operating HP machines, the organization worked for, and the period of employ for each organization.	5	<b>25%</b>
	6 but less than 7 years of experience		4	
	5 but less than 6 years of experience		3	
	4 but less than 5 years of experience		2	
	3 but less than 4 years of experience		1	
	Less than 3 years of experience		0	

### Vacuum Truck Operators experience

The bidder's HP Operators have a minimum of 7 years' experience in operating vacuum trucks.

	Evaluation Criteria	Document as Evidence	Score	Weighting %
	7 years and more years of experience	CVs of Vacuum Truck Operators clearly indicating experience, the organization worked for, and the period of employ for each organization	5	<b>25%</b>
	6 but less than 7 years of experience		4	
	5 but less than 6 years of experience		3	
	4 but less than 5 years of experience		2	
	3 but less than 4 years of experience		1	
	Less than 3 years of experience		0	