

Annexure A

SCOPE OF WORK

REQUEST FOR TENDER [RFT]: THE APPOINTMENT OF THE SERVICE PROVIDER TO ASSIST WITH DEMOLITION OF THE NORTH FLARE AT THE SANPC REFINERY.



1. INTRODUCTION

- 1.1. SANPC Refinery located at 1 Refinery Road, Isipingo, Durban, South Africa requires the services of a demolition Contractor to safely demolish Z3601 (North Flare). The flare falls under the Oil Movements and Utilities area of the refinery. The flare is currently out of service and placed in a decontaminated state since 2022.
- 1.2. Z3601(North Flare) is made up of a steel structure that houses piping for hydrocarbons, steam and fuel gas to the flare tip. Instrument cables housed in piping also run up the structure up to thermocouples installed at the flare tip. The flare tip is mounted 56m above ground level giving a total height of 60m. The base of the structure is mounted on a concrete base and held up in position using guy ropes.
- 1.3. The flare steel structure has been compromised due to severe corrosion over the years. A structural survey carried out in September 2024 concluded that the flare

structure is unsafe and needs to be safely demolished. Access to the flare structure is not allowed.

- 1.4. Experienced demolishing contractors are required to develop and propose safe methods of demolishing the flare in a manner that will not cause harm to people, the environment or surrounding equipment and structures. The evaluation team will base their selection and award on the Contractor's experience, proposed method and price.
- 1.5. Arrangements will be made for potential bidders to attend a site visit to be aware of the extent of SANPC Refinery's Operating Areas and are familiar with all matters pertaining to the restrictions placed upon the methods of working. This mandatory site visit is so the bidders gather all the information required to develop a safe method of demolishing the flare.
- 1.6. Except as otherwise expressly provided herein, the Contractor shall supply all adequate and competent labour, supervision, tools, equipment, consumables, materials, services, testing devices ensuring every item of expense necessary for the demolition of the existing Z3601 North Flare is included in their pricing schedule. Any items not included on the pricing schedule may be added by the bidding contractor.
- 1.7. Access to certain areas may be restricted and the Contractor should be fully aware of the effect this will have on progress and general execution of the demolition work and make allowance for all costs which may arise out of this factor.
- 1.8. In their submission the Contractors' are to clearly write out their proposed methods of demolishing Z3601 (North Flare). It is expected that sketches will be submitted together with the proposed methods of demolition to support the understanding.
- 1.9. In their submission Contractors are expected to provide the pricing schedule detail with a total cost of demolishing with no omissions for consideration after submission. Timelines for SANPC Refinery inductions, training, badging, mobilization, setup and execution must be detailed.
- 1.10. This tender process will proceed as follows after tender responses:

- 1.10.1. Stage 1 (Site Visit)- Mandatory site visit to gather information on the layout and restrictions imposed on the lowering of Z3601 North Flare. At this stage all necessary information must be gathered to enable the potential bidders to develop a safe method of demolition and establish the manpower, tools and equipment required.
- 1.10.2. Stage 2 (Tenders)- Bidders to submit tender documents. All items related to costs of design, fabrications as applicable, materials, consumables, equipment, resources, logistics, site establishments, inspections, certifications, approvals, administrations, PPE, vehicles, transportation, accommodation, allowances, mobilization, de-mobilization, housekeeping and any other associated costs to be included in the schedule of rates. Bidders to also submit requirements as per the mandatory and technical evaluation documents.
- 1.10.3. Stage 3 (Selections)- The SANPC Refinery tender evaluation committee will make selections based on the method, track record, safety, durations and pricing.
- 1.10.4. Stage 4- Method Presentation: Bidders that pass the mandatory and technical evaluation will be required to present their proposed method of demolition to the evaluation team for clarity and sound understanding. Sessions for individual presentations will be arranged by the evaluation team.
- 1.10.5. Stage 5 (Execution)- SANPC Refinery will notify the successful contractor and a purchase order will be issued for demolishing Z3601 North Flare. Training and mobilization will follow after agreed date for execution.

2. SCOPE OF WORK

- 2.1. The Contractor is deemed to have visited and is aware of the extent of SANPC Refinery's Operating Areas and is familiar with all matters pertaining to the restrictions placed upon his methods of working.
- 2.2. SANPC Refinery will erect scaffolding, disconnect flanges, instrumentation and electrical connections at ground level. This will separate the connections from the process plant and power supply from the flare structure.
- 2.3. The Contractor scope of work to demolish Z3601 North Flare includes the following:
 - 2.3.1. The complete flare stack including all attachments
 - 2.3.2. The complete flare tip.



- 2.3.3. The complete derrick steel structure around the flare stack, including ladders and platforms and guy wires.
- 2.3.4. All utilities, pilots, hydrocarbon and ignition piping attached to the flare and derrick structure.
- 2.3.5. All electrical cables attached to the flare stack and derrick structure.
- 2.3.6. All instrumentation cables attached to the flare and derrick structure.
- 2.3.7. The thermocouple cables run from the enclosures to the tip of the flare.
- 2.4. The Contractor will cut components to manageable sections and transport to a dedicated laydown area. Materials will be separated in accordance with SANPC Refinery's instructions (electrical, instrumentation, scrap metal).
- 2.5. If the Contractor's demolition method requires design and fabrication of any devices or attachments, the design of the devices or attachments must be approved and signed off by a registered (PR Eng.) Design Engineer.
- 2.6. Contractor to indicate the distance around the flare that needs to be cleared for the demolition. Due cognizance needs to be taken to existing equipment not planned to be demolished or removed from site.
- 2.7. Prior to commencement of demolition activities, the Contractor and SANPC Refinery shall jointly conduct a photographic/video baseline condition walkdown of all equipment and structures within the clearance zone identified under 2.6. This record shall be signed off by both parties before work commences and shall serve as the reference condition for any subsequent assessment of damage.
- 2.8. The Contractor to indicate any services / obstructions / surface preparations required to execute the work.
- 2.9. The Contractor to indicate the laydown requirement for site establishment and heavy machinery.
- 2.10. Heavy duty machines to be supplied with compliance check lists and validation of service checks.
- 2.11. Copies of valid inspection certificates for all lifting devices must be included in the Contractor's workpack and available on request.

- 2.12. Additional barriers/cordoning off for HSE protection and or containment of debris is to be supplied and managed by the Contractor.
- 2.13. Material required for the execution of the work is to be supplied by Contractor. This includes the preparation and removal of the material used for demolition.
- 2.14. The Contractor to prepare HSE documentation and Presentations for the Methodology to be used - this will need to be presented and approved by SANPC Refinery.
- 2.15. The Contractor shall remove all temporary items installed after the demolition.
- 2.16. **The Contractor to provide a method statement and program/ schedule including a high level milestone plan with durations, i.e set up/ site preparation/ demolish / removal/ site clearance.**
- 2.17. Contractor is required to prepare and submit a baseline risk assessment of the activities based on their method of demolition. An example is provided in 5.8 below.
- 2.18. If cranes are to be used, this shall be supplied by the Contractor and all cranes to be inspected by a certified Lifting Machinery Inspector (LMI), as per the requirements set out in SANS 19 and OHS Act: Driven Machinery Regulations. The Contractor shall provide all necessary supervision, labour, plant, equipment, consumables, transport and permits etc. to establish cranes and site facilities.

If complex lifting activities is part of the method of demolition the Contractor shall provide rigging study work packs for craneage containing:

- Drawings of the cranes and trailers (if applicable).
- Detailed drawings of the rigging study.
- Lift plan and pre-check list.
- Footprints of the cranes and any associated outriggers, together with the maximum ground bearing pressures.
- Crane hardstand requirements, including for access ramp widths and maximum slopes, the minimum overall hardstand plan dimensions and level requirements; and the details of the crane pads and how they are to be supported and integrated into the hard stand.
- Space requirements for the setting up and dismantling of the cranes and the durations of these activities.

- Operator's certification of competency and responsible person.
- All lifting beams, slings, shackles and lifting tackle as required shall be supplied with valid load test certificates.

2.19. The Contractor shall allow for safety inductions, medicals, badging and training (Permit Receiver, hot work license) of their personnel for site work.

2.20. The following items are excluded from the Contractor's Scope of Work:

2.20.1. Supply of Scaffolding. The Contractor to indicate the scaffolding requirements as applicable.

2.20.2. De-energizing and disconnecting of Electrical and Instrumentation cables from the process unit at ground level.

2.20.3. Unbolting flanges, instruments and electrical cables at the battery limits.

2.21. Furnished by Contractor (to be included in the pricing schedule of rates):

- All PPE for their personnel.
- Site establishment including all necessary transportation to SANPC Refinery,
- All equipment necessary to carry out the work on site with experienced and suitably qualified resources.
- Transport of personnel to and from SANPC Refinery.
- Accommodation for personnel from outside the DURBAN area.
- Fuel and lubricants for the Contractor equipment for the period of work, including management thereof.
- All consumables required to carry out the work.
- Secure storage facilities, for safe storage of materials, tools and equipment, which can be subject theft or damage by weather.
- The Contractor shall have spares and technician/s available if there are any breakdowns of their equipment.
- Cranes, rigging gear and rigging crews.

2.22. Furnished by SANPC Refinery:

- Temporary construction facilities and utilities.
- Contractor's lay-down, storage area.
- Temporary lighting.
- Ablutions and eating areas.
- Potable water- containers to be provided by the Contractor.
- Fire protection equipment.
- First aid facilities.
- Parking facilities. SANPC Refinery will not be responsible for any damage or unlawful acts to any of Contractor's equipment or private vehicles parked in designated parking areas.

2.23. SANPC Refinery Operations personnel will issue Daily Work Permits required for performance of the Work at the Worksite, provided that the Contractor prepares and submits all applications for such permits to SANPC Refinery Operations personnel timeously (i.e.: not less than two (2) days prior to Work commencement).

2.24. The following drawings for Z3601 flare are available for information:

Equipment No	Drawing Title	Drawing No.
Z3601	Shell plate and connections details	45-3601-14
Z3601	Emergency flare stack Z3601	45-3601-17
Z3601	General Arrangement Flare Stack Z3601	45-3601-18
Z3601	Details Flare Stack Supporting Structure Section L1	45-3601-19
Z3601	Details Flare Stack Supporting Structure Section L2 & L3	45-3601-20
Z3601	Details Flare Stack Supporting Structure Section L4	45-3601-21
Z3601	Details Flare Stack Supporting Structure Section L5	45-3601-22
Z3601	Details Flare Stack Supporting Structure Section L6	45-3601-23
Z3601	Details baseplate assembly for flare structure Z3601	45-3601-24
Z3601	General Assembly Guy Ropes for Flare Stack Z3601	45-3601-27
Z3601	Detail Tensioner on Guy Ropes Z3601	45-3601-28
Z3601	General Assembly and orientation of piping for flare tip Z3601 Upper Level	45-3601-29
Z3601	General Assembly and orientation of piping for flare tip Z3601 Lower Level	45-3601-30
Z3601	FS 30720 Flare Tip GA Item Z3601	45-3601-31

3. LEGISLATION, SPECIFICATIONS, ATTACHMENTS AND EXHIBITS

All Work shall be performed in strict accordance with the following described specifications, drawings and other documents, which by this reference are made a part hereof.

3.1. Applicable Legislation

Number	Year	Title
Act No. 85	1993	Occupational Health and Safety Act
Act No.85	2015	Driven Machinery Regulations
Act No. 103	1977	National Building Regulations and Building Standards
Act No. 79	1989	Environmental Conservation Act of South Africa (Act 73 of 1989).
Act No. 130	1994	Compensation for Occupational Injuries and Diseases Act
Act No. 29	1989	Road Traffic Act
Act No. 102	1980	National Key Points Act

3.2. Applicable Codes of Practice

Number	Year	Title
GNR 1010	2003	Construction Regulations

3.3. SANS Codes of Practice

SANS Number	Year	Edition	Title
SANS 9001	2000	3	Quality management systems - Requirements
SANS 45001	2018	2	Occupational health and safety management systems

4. PERFORMANCE SCHEDULE AND SEQUENCE OF WORK

- 4.1. Contractor shall commence performance of the work as per the project schedule upon Contract award and shall complete the work no later than the dates agreed.
- 4.2. Working hours shall be 07h30 to 15h30, Monday to Friday.
- 4.3. Contractor to develop a level 3 execution plan. Potential delays due bad weather or any other reasons must be accommodated into the schedule and costing as no variations to the submitted pricing will be entertained.
- 4.4. Contractor shall attend a daily co-ordination meeting. The person or persons designated by Contractor to attend the meetings shall have all the required updates on progress and look ahead activities.



5. HEALTH, SAFETY AND ENVIRONMENT

- 5.1. SANPC Refinery shall provide induction and hotwork license training.
- 5.2. The Contractor shall designate a safety representative. The Contractor's Safety Representative shall be responsible for initiating the safety program, ensuring that worksite safety requirements and procedures are being enforced, conducting safety inspections of work being performed. The Safety representative will also be responsible for surveying its operations, to ensure that the probable causes of injury or accidents are monitored and that operating equipment, tools and facilities are used, inspected and maintained as required by applicable safety and health regulations.
- 5.3. Daily toolbox talks to be organized and conducted by Contractor and attended by all of Contractor's craft employees.
- 5.4. SANPC Refinery will have the right to stop work whenever safety violations are observed. The expense of any such work stoppage and resultant standing time shall be for Contractor's account. The failure or refusal of the Contractor to correct the observed violation may result in the termination of the Contract, and/or the dismissal from the jobsite of those responsible for such failure or refusal.
- 5.5. The Contractor shall obtain all necessary work permits as required by SANPC Refinery for work within the Plant and units of the Plant.
- 5.6. The Contractor shall comply with all SANPC Refinery work rules and regulations and the Occupational Health and Safety Act (OHS ACT) No. 85 of 1993 and Regulations.
- 5.7. Emergency response will be the responsibility of the SANPC Refinery Emergency Services Team in an event of an emergency.
- 5.8. Baseline Risk Assessment

A baseline risk assessment for demolishing a hydrocarbon flare structure should identify hazards, evaluate risks, and define controls before demolition work begins. Because flare systems can contain residual hydrocarbons, comprise elevated structures, and heavy steel components, the assessment should be comprehensive and site-specific. Bidders are to consider these factors and from the information gathered, develop a baseline risk assessment of the flare demolition and submit this together with the required documentation. Upon engagement of the selected bidder the SANPC Refinery team will review and provide input into the risk assessment

before the activity starts. The baseline risk assessment must be developed with consideration of the following factors and not prescriptive:

- Isolation and decommissioning of flare system
- Preparation activities for demolition
- Removal of associated pipework, Electrics and instrumentation
- Demolition of flare stack and support structures
- Waste handling and disposal
- Site restoration

Risk Rating Matrix (Example)

Likelihood	1	2	3	4	5
Description	Rare	Unlikely	Possible	Likely	Almost Certain

Severity	1	2	3	4	5
Severity	First aid, negligible asset damage	Medical treatment, minor asset damage	Lost time injury, repairable asset damage	Permanent disability, major asset damage	Fatality, multiple fatalities, fire/explosion

Risk Score = Likelihood × Severity

Baseline Risk Assessment Table (Examples)

Hazard	Potential Consequences	Initial Risk	Controls Required	Residual Risk
Residual hydrocarbons in flare system	Fire, explosion, fatalities	$5 \times 5 = 25$	Positive isolation, gas freeing, nitrogen purge, gas testing, permit to work	$2 \times 5 = 10$
Dropped objects from height	Disability or major asset damage	$4 \times 4 = 16$	Exclusion zones, tool lanyards, barricading, spotters	$2 \times 4 = 8$
Heavy equipment operation	Vehicle collision, lost time injury	$3 \times 4 = 12$	Traffic management plan, trained operators, spotters	$2 \times 3 = 6$
Adverse weather (high wind/lightning)	Loss of load causing disabling injury, major asset damage	$4 \times 4 = 16$	Wind limits, weather monitoring, stop-work criteria	$2 \times 3 = 6$
Structural instability during demolition	Collapse causing fatalities, asset damage	$5 \times 5 = 25$	Engineering demolition plan, sequence control, temporary supports	$2 \times 5 = 10$



6. Liability, Indemnity and Insurance

The Contractor shall be liable for, and shall indemnify SANPC Refinery against, any loss or damage to SANPC Refinery's plant, equipment, or property within the demolition clearance zone arising from the Contractor's acts, omissions, or operations during execution of the Works, assessed against the condition recorded in the joint baseline walkdown conducted under 2.7. This liability excludes damage attributable to the pre-existing condition of such plant or equipment as recorded in that walkdown, or to acts or omissions of SANPC Refinery or its personnel. The Contractor shall maintain public liability insurance, and all-risk insurance covering its plant and equipment, at a minimum value of R20,000,000 (twenty million Rand), for the duration of the Works, and shall provide proof of such cover prior to commencement.

Annexure B

EVALUATION CRITERIA

7. MANDOTARY REQUIREMENTS

At this phase service providers must submit the required supporting documents to substantiate compliance to the requirements below. It must be noted that if the service provider does not meet any of the requirements, the service provider will be disqualified and not be evaluated further.

No.	Description of the Mandatory requirements	Comply	Not Comply
7.1	Bidders must have a valid SHEQ Policy which must comply to national standards. The Bidder to provide a copy of their valid SHEQ policy.		
7.2	Bidders must have ISO 9001 certification for Demolition Services. The Bidder must submit copy of valid ISO 9001 certificate issued by an organization that have been recognized by an accreditation body, like SANAS or IAF		
7.3	Bidders must have ISO 45001 certification. The Bidder must submit copy of valid ISO 45001 certificate issued by an organization that have been recognized by an accreditation body, like SANAS or IAF		
7.4	Bidder to submit copy of valid COIDA Letter of Good Standing relevant to demolition work. The Bidder must submit copy of valid COIDA certificate relevant to demolition work.		
7.5	Bidder to have valid registration on the CIDB database against 5 SE or higher. Bidder to submit proof of valid registration document indicating their grade is 5 SE or above.		



8. TECHNICAL EVALUATION CRITERIA

Bidders will be evaluated according to the below technical evaluation criteria. Minimum Technical Threshold is 70%. It must be noted that if the Bidder does not meet the 70% minimum threshold, the bidder will be disqualified and not be evaluated further.

8.1 COMPANY EXPERIENCE

Proven company's experience in providing Demolition Services at Major Hazard Installations within the last six years (2020 to date).

The bidder must provide reference letters from previous and current clients on clients' letterheads for the provision of Demolition Services at Major Hazardous Installations. The reference letters should be dated, signed and not be more than six years old (2020 to date).

Evaluation Criteria	Document as Evidence	Score	Weighting %
Bidder submitted 4 or more relevant reference letters – Provision of Demolition Services at Major Hazardous Installations	Reference letters on Client company letter heads indicating that demolition work was undertaken.	5	25%
Bidder submitted 3 relevant reference letters - Provision of Demolition Services at Major Hazardous Installations		4	
Bidder submitted 2 relevant reference letters - Provision of Demolition Services at Major Hazardous Installations		3	
Bidder submitted 1 relevant reference letters - Provision of Demolition Services at Major Hazardous Installations		2	
Bidder did not provide any relevant reference letters - Provision of Demolition Services at Major Hazardous Installations		0	

8.2 Oral Method Presentation:

All service providers must demonstrate a thorough understanding of the objectives and scope of work for this work project including displaying the relevant competencies and experience by preparing and providing an oral presentation for SANPC Refinery Management.

At a minimum, the presentation must cover the following aspects:

- **Safety of Demolition Method** - Demonstrates lowest risk to personnel and assets
- **Technical Soundness** - Engineering feasibility and practicality
- **Risk Management** - Quality of risk assessment and controls
- **Protection of Adjacent Assets** - Ability to prevent damage to surrounding equipment
- **Programme and Execution Strategy** - Realistic schedule and execution planning

Environmental Controls - Debris containment, dust, waste handling

Evaluation Criteria	Document as Evidence	Score	Weighting %
Fully Comprehensive presentation adequately addressing all critical aspects of the demolition process.	Oral Presentation.	5	25%
Moderate presentation addressing critical aspects of the demolition process.		4	
Generic presentation addressing critical aspects of the demolition process.		2	
No presentation provided.		0	

8.4. Experience of Site Manager

The bidder's proposed Site Manager must have extensive skills and experience in leading and managing large multidisciplinary workforces for demolition projects within Major Hazardous Installations.

Bidder to provide CV of the proposed Site Manager clearly listing the name of clients within Major Hazardous Installations, position held and the nature demolition work carried out for each project.

Evaluation Criteria	Document as Evidence	Score	Weighting %
>10 years experience as a Site Manager on demolition projects in Major Hazardous Installations.	CV of the Proposed Site Manager clearly listing the name of clients and demolition work previously completed	5	25%
>8 years but < 10 years experience as a Site Manager on demolition projects in Major Hazardous Installations.		4	
> 5 years but < 8 years experience as a Site Manager on demolition projects in Major Hazardous Installations.		3	
5 years experience as a Site Manager on demolition projects in Major Hazardous Installations.		2	
> 3 years but < 5 years experience as a Site Manager on demolition projects in Major Hazardous Installations.		1	
3 years or less experience as a Site Manager on demolition projects in Major Hazardous Installations.		0	

8.5. Experience of Safety Coordinator

The bidder's Safety Coordinator must have sufficient experience in managing safety of the workforce on demolition projects within Major Hazardous Installations.

Please provide CV of the Proposed Safety Coordinator clearly listing the name of clients and demolition work previously completed indicating the dates and durations of the work completed with each client.

	Evaluation Criteria	Document as Evidence	Score	Weighting %
	5 years or more experience as a Safety Coordinator on projects in Major Hazardous Installations.	CV of the Proposed Safety Coordinator clearly listing the name of clients and durations of work previously completed	5	25%
	4 years experience as a Safety Coordinator on projects in Major Hazardous Installations.		4	
	3 years experience as a Safety Coordinator on projects in Major Hazardous Installations.		3	
	2 years experience as a Safety Coordinator on projects in Major Hazardous Installations.		2	
	1 year experience as a Safety Coordinator on projects in Major Hazardous Installations.		1	
	Less than 1 year experience as a Safety Coordinator on projects in Major Hazardous Installations.		0	

9 Pricing schedule

Schedule of Rates - North Flare Demolition			
Description	Qty/ Hours	Rate	Total
Mobilization, Site Establishment and Demobilization			
Project Manager			
Construction Manager			
Design and Fabrications			
Safety Resources			
Technicians & Riggers			
Field Resources			
Demolition Equipment & Tools			
Consumables			
Diesel			
Travel and Accommodation			
PPE			
Training & Induction			
Safety File			
Other- Delays, bad weather, etc			
Insurance			
Subtotal			R
VAT			R
TOTAL			R

Note: The above Schedule of Rates above may not be comprehensive, so bidders are allowed to make changes to ensure all related costs are included to arrive at a final cost.