

## TECHNICAL SPECIFICATIONS

### RT67:2024 SUPPLY AND DELIVERY OF LIQUID CHLORINE GAS TO THE STATE FOR A PERIOD OF SIXTY (60) MONTHS

1. It is compulsory that bidders comply with the following technical specification requirements.

Item No.	Deliverables
1.	The service provider must:
1.1	Supply and deliver Liquid Chlorine Gas to the state for a period of 60 months.
1.2	Supply and deliver Liquid Chlorine Gas country wide.
<b>2. CHEMICAL COMPOSITION AND COMPLIANCE CERTIFICATES:</b>	
2.1	The service provider must:
2.1.1	Ensure that the valid compliance certificates and material safety data sheet are available for scrutiny throughout the contract period.
2.1.2	Submit the Certificate of Analysis to end user departments for review on an ongoing basis throughout the contract period and ensure that it is submitted upon every delivery.
2.1.3	Ensure a chlorine % Purity of >99.5% Chemical Composition: Boiling point: Minus 34,1 °C at 101,3 kpa Vapour Pressure at 0 °C: 369 kpa Vapour Pressure at 55 °C: 1625 kpa Liquid density at 0 °C: 1,468 g/cm <sup>3</sup> Liquid density at 55 °C: 1,299 g/cm <sup>3</sup> Vapor density at 0 °C: 2,49 at 101,3 kpa (air = 1)
<b>3. EQUIPMENT AND INSTALLATION REQUIREMENTS:</b>	
3.1	Service providers must familiarize themselves with the location and connectivity, access restrictions or limitations on sites.
3.2	Service providers will be responsible for all signage and safety data sheets at the sites.
3.3	Maintenance of the equipment will be the sole responsibility of the successful service provider for the duration of the contract.
<b>4. CONTINUITY OF SUPPLY:</b>	
4.1	The service provider must maintain sufficient stock to meet demand throughout the duration of the contract.
4.2	The service provider must ensure that their manufacturers guarantee assurance of supply to avoid disruptions.
<b>5. SUPPLY AND CONTROL:</b>	
5.1	Empty cylinders and returns will be collected by the service provider.
5.2	The cylinders remain the property of the service provider who will be responsible for the maintenance, inspections, testing, and replacement of any parts.
5.3	The service provider will be held responsible for damages to state property due to negligence.
<b>6. SAFETY REQUIREMENTS:</b>	
6.1	The service provider must ensure:
6.1.1	The safe handling of cylinders.
6.1.2	That all cylinders are inspected to ensure that there are no damages, such as dents, corrosion etc.
6.1.3	That employees/staff are suitably trained to handle hazardous chemicals.
6.1.4	Delivery vehicles are permitted to transport hazardous chemicals.
6.1.5	That the driver and the vehicle used to transport the liquid chlorine gas comply with the National Road Traffic Act 93 of 1996.
6.1.6	That the vehicle used for the transportation of the chlorine gas contains the necessary dangerous goods license disk and safety kits.
6.1.7	That the employees delivering the chlorine gas wear the appropriate personal protective equipment.

6.1.8	That the driver has a Professional Driving Permit (PrDP) as well as a valid driver's license for the type of delivery vehicle when transporting the liquid chlorine gas and must have undergone hazardous driving training.
6.1.9	Service providers will be required to submit proof of compliance with the Occupational Health and Safety Act, by submitting a comprehensive health and safety plan to the end-user department detailing the following information: -Safety measures in handling hazardous material -Driver trained to transport hazardous material

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