



REQUEST FOR INFORMATION (RFI) 56/2024/2025

TO ASSESS THE MARKET FOR POTENTIAL SUPPLIERS FOR THE BULK SUPPLY OF CARBON DIOXIDE GAS FOR USE IN DRINKING WATER TREATMENT WITHIN THE CITY OF CAPE TOWN

Purpose

1. This Request for Information (RFI) relates to the supply, delivery, off-loading and storage of carbon dioxide gas to various water treatment plants within the City of Cape Town and the rental/purchase and maintenance of on-site storage facilities.

Background

2. The City of Cape Town requires a Service Provider for the supply of carbon dioxide gas to be used at various Water Treatment Plants (WTPs).
3. The total quantity required is approximately 5 000 tonnes per annum.
4. The scope includes the establishment, rental/purchase and maintenance of the on-site storage equipment for the gas delivered.

Request for Information

5. The City of Cape Town intends to test the market to determine if there are carbon dioxide gas suppliers that have the ability to meet the bulk supply requirements of the City, i.e., approximately 5000 tonnes of carbon dioxide gas per annum at the treatment plants specified below.
6. The demand fluctuates seasonally in accordance with treated water demand and continual replenishment of the on-site storage units will be required.
7. If the company is not able to supply the full annual quantity, they can indicate the maximum guaranteed volume that they are capable of supplying to the City. Proposals on which sites can be best accommodated will be required.
8. Information regarding the source(s) of carbon dioxide must also be provided and whether the company will be able to secure supplies from another source should they experience shortages in production of the carbon dioxide gas from their main supply.
9. The onsite tanks and equipment currently belong to the previous supplier who is one of the two major suppliers of CO₂ in South Africa. The requirement of on-site storage facilities (10 to 18 tonne silos) with associated appurtenances such as heat exchangers, vaporisers pumps, pressure monitoring, transfer pumps, etc., will require new suppliers to negotiate with the previous supplier to take over the on-site equipment or remove it and replace it with new infrastructure. The new vendor must be in a position to approach and negotiate with this major supplier of CO₂ in South Africa.
10. The new suppliers will need to inject capital to install their own "external" equipment and/or refurbish the old infrastructure. Information is required as to whether the company has the means to design and install and/or refurbish the on-site storage equipment or whether they will outsource this component and whether they will be able to provide agreements/commitments.
11. Kindly complete the Returnable Schedule attached and supply any additional information that may be relevant.

Timeline

12. The expected timeline for the potential sourcing of a solution is yet to be determined. However, this is dependent on positive response to this RFI and internal City supply chain processes.

Product Information

13. The carbon dioxide gas to be supplied shall to be compliant to SANS 50936:2000.

On-site storage facility capacity will range from approx. 35 kg cylinders (Constantia Nek) to 18 tonne bulk silos. At some sites, more than one bulk silo will be required. New infrastructure will need to be installed at sites where no existing storage and transfer equipment are in place

Historically, for sites that have storage silos, the carbon dioxide gas was delivered in bulk road carriers with an approximate payload of 20 tonnes.

Water Treatment Plants that require gas are as follows:

| WTP | | Average Tonnes Per Annum | Average Tonnes Per Month | Supply Requirement |
|--------------|----------------|--------------------------|--------------------------|--|
| 1 | Blackheath | 1 440 | 120 | Bulk Silo Storage (No Existing Structure In Place) |
| 2 | Brooklands | 30 | 3 | Bulk Silo Storage |
| 3 | Constantia Nek | 10 | 1 | 35 Kg Gas Cylinders |
| 4 | Faure | 1 850 | 154 | Bulk Silo Storage |
| 5 | Kloof Nek | 70 | 6 | Bulk Silo Storage |
| 6 | Steenbras | 600 | 50 | Bulk Silo Storage |
| 7 | Voelvrei | 600 | 50 | Bulk Silo Storage (No Existing Structure In Place) |
| 8 | Wemmershoek | 400 | 33 | Bulk Silo Storage |
| TOTAL | | 5 000 | 417 | |

Interaction with Respondents

14. Respondents are advised that The City reserves the right not to utilise information gathered during the RFI process in order to complete a specification, which is to be put forth for tendering.
15. Please contact Janet Chunderduri (Janet.Chunderduri@capetown.gov.za) should you have any technical queries.

No Obligation

16. This RFI places no obligation on the City to embark on any subsequent process to obtain any item listed herein and respondents hereto shall obtain no preference or favour by responding to the RFI.
17. Responses to this RFI are voluntary. Do not include any proprietary, classified, confidential, trade secret, or sensitive information in your response. The responses will be reviewed by City staff, and individual feedback will not be provided to any respondent. The City will use information submitted in response to this RFI at its discretion. The City reserves the right to use any submitted information on its public websites, in reports, in summaries, in any possible resultant solicitation(s), grant(s), or cooperative agreement(s), or in the future development regarding this subject.
18. This RFI is for information and planning purposes only and shall not be construed as a solicitation, grant, or cooperative agreement, or as an obligation on the part of the City of Cape Town. The City will not pay for the preparation of any information submitted or for the use of such information. No basis for claims against City shall arise as a result of a response to this request for information or from the use of such information.
19. The research obtained from this RFI will inform the technical and functional specification of the proposed goods and services to be obtained, which may then follow an open competitive bidding process, should the City opt to implement such a system (Viability and Feasibility assessment, budgetary provisions, etc.). The City reserves the right not to proceed with any further process, should the research/technology indicate it is not viable and feasible. The City reserves the right to apply different procurement strategies, while exploring different methods to validate and test information provided in response to this RFI.

Submission Requirements

20. Please provide all inputs electronically on or before **12:00 on Friday, 21 February 2025.**
21. All responses to be sent: Janet.Chunderduri@capetown.gov.za

Thank you

Demand Management

Directorate of Finance
Department of Supply Chain Management
Email: SCM.Research@capetown.gov.za



| RETURNABLE SCHEDULE – RFI56/2024/25 SUPPLY OF CARBON DIOXIDE GAS | | |
|---|--|-----------------------------------|
| Item | Question | Information to be Provided |
| 1 | <p>Annual Capacity</p> <p>(i) Can your company provide approximately 5000 tonnes of CO₂ gas per annum?</p> <p>(ii) If not 5000 tonnes per annum, what is the maximum annual quantity of CO₂ gas that your company can supply?</p> <p>(iii) Which sites are the preferred sites for supply based on the above?</p> | |
| 2 | <p>Source(s) of CO₂ gas.</p> <p>(i) Who is the main supplier/producer of the gas?</p> <p>(ii) Who is the alternative source (if applicable)?</p> <p>(iii) Are the suppliers/producer based in South Africa?</p> <p>(iv) Are the suppliers/producers major suppliers of CO₂ in South Africa?</p> <p>(v) If the supplier/producer is not based in South Africa, are there gas storage facilities located in SA?</p> <p>(vi) If there are no gas storage facilities located in South Africa, what are the expected delivery timelines?</p> | |
| 3 | <p>Company Experience</p> <p>(i) How much experience does your company have in the supply and delivery of carbon dioxide gas (or similar gas)?</p> <p>(ii) If an outsourced agreement is applicable, how much experience does the external partner have in the supply and delivery of carbon dioxide gas (or similar gas)?</p> | |

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|---|---|-----------------------------------|
| Item | Question | Information to be Provided |
| 4 | <p>Chemical Specification</p> <p>(i) Will the gas be compliant with the SANS 50936:2000 guideline?</p> <p>(ii) If not, what deviations from the specification may be required?</p> <p>(ii) Are there risks to the production of drinking water, associated with the above deviation?</p> | |
| 5 | <p>External Gas Storage Equipment</p> <p>(i) Is your company in a position to approach and negotiate with the previous supplier and come to an agreement in terms of the onsite equipment?</p> <p>(ii) Does your company have the resources required for installing and maintaining the external storage equipment and associated appurtenances?</p> <p>(ii) If not, will your company have agreements with any external parties for the supply and delivery of the CO2 gas or the maintenance of the external storage equipment?</p> <p>(ii) If so, which portions will be outsourced and which portion will your company be directly performing?</p> | |

Kindly attach any other relevant information.