

REPUBLIC OF SOUTH AFRICA
DEPARTMENT OF PUBLIC WORKS
AND INFRASTRUCTURE

FULL COMPREHENSIVE INDOOR AIR QUALITY ASSESSMENTS
FOR CGO BUILDING

REFERENCE NUMBER: ID- 3277246

CONTACT PERSON FOR ANY QUIRIES OR SITE VISIT ARRANGEMENT

NAME: JEREMIAH GWANGWA

TEL: 012 310 5040

CELL: 083 677 2652

E-mail: Jeremiah.gwangwa@dpw.gov.za

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1. RESPONSIVE & EVALUATION CRITERIA

RESPONSIVE CRITERIA REQUIRED FOR QUOTATION IS TABULATED BELOW

NB: FAILURE TO COMPLY WITH THE CRITERIA STATED HEREUNDER SHALL RESULT IN THE QOUTATION OFFER BEING DISQUALIFIED FOR FURTHER CONSIDERATION.

DESCRIPTION	RESPONSIVE & EVALUATION CRITERIA REQUIREMENT
QUALIFICATION REQUIRED	<ul style="list-style-type: none">➤ Demonstrated experience in IAQ assessments (minimum 3 years)➤ Registered with the Department of Labour as an Approved Inspection Authority (AIA)➤ Qualified occupational hygienist or environmental scientist➤ SANAS-accredited laboratory partnership (on request)➤ Valid calibration certificates for all instruments (on request)➤ Professional indemnity insurance (on request)
VALUE FOR MONEY	ALL PRICES MUST BE MARKET RELATED. IN CASE OF PRICES WHICH ARE NOT MARKET RELATED THE DEPARTMENT RESERVES THE RIGHT TO ADJUST THE BILL OF QAUNTINTY PRICES OR TO DISQUALIFY THE BIDDER

2. SCOPE OF WORK

2.1 Pre-Assessment Activities

- Full site walk-through of all floors, basements, and HVAC plant rooms
- Review of building documentation (HVAC drawings, maintenance logs, occupancy data)
- Development of a detailed IAQ Sampling Plan

2.2 IAQ Measurements

➤ **Physical Parameters**

Temperature, relative humidity, CO₂, CO, air velocity, ventilation rates (ACH), PM₁, PM_{2.5}, PM₁₀

➤ **Chemical Contaminants**

VOCs, formaldehyde, ozone, NO₂, SO₂, NH₃, radon (if applicable)

➤ **Biological Contaminants**

Airborne bacteria, fungi, surface swabs, Legionella

2.3 HVAC System Assessment

Inspection of AHUs, FCUs, filters, ducts, coils, drains, fresh air intakes, dampers, airflow balancing

2.4 Laboratory Analysis

SANAS-accredited laboratory testing and chain-of-custody documentation

2.5 Reporting

Full technical report, executive summary, compliance tables, graphs, root cause analysis, recommendations, and presentation

3. BILL OF QUANTITIES (BOQ)

3.1 Pre-Assessment & Mobilisation

Item No.	Description	Unit	Qty	Rate (ZAR)	Amount (ZAR)
3.1.1	Mobilisation to CGO Building	Sum			
3.1.2	Pre-assessment site walk-through	Hours			
3.1.3	Review of building documentation	Hours			
3.1.4	Development of IAQ Sampling Plan	Sum			

3.2 IAQ Measurements - Physical Parameters

Item No.	Description	Unit	Qty	Rate	Amount
3.2.1	Temperature & RH measurement	Point			
3.2.2	CO2 measurement	Point			
3.2.3	CO measurement	Point			
3.2.4	Air velocity measurement	Point			
3.2.5	Ventilation rate (ACH)	Zone			
3.2.6	PM1 / PM2.5 / PM10 measurement	Point			

3.3 IAQ Measurements - Chemical Contaminants

Item No.	Description	Unit	Qty	Rate	Amount
3.3.1	VOC sampling	Sample			
3.3.2	Formaldehyde sampling	Sample			
3.3.3	Ozone measurement	Sample			
3.3.4	NO2 sampling	Sample			
3.3.5	SO2 sampling	Sample			
3.3.6	NH3 sampling	Sample			
3.3.7	Radon measurement	Sample			

3.4 IAQ Measurements - Biological Contaminants

Item No.	Description	Unit	Qty	Rate	Amount
3.4.1	Airborne bacteria sampling	Sample			
3.4.2	Airborne fungi sampling	Sample			
3.4.3	Surface swab sampling	Sample			
3.4.4	Legionella testing	Sample			

3.5 Laboratory Analysis (SANAS-Accredited)

Item No.	Description	Unit	Qty	Rate	Amount
3.5.1	VOC lab analysis	Sample			
3.5.2	Formaldehyde lab analysis	Sample			
3.5.3	Microbial analysis	Sample			
3.5.4	Legionella culture analysis	Sample			
3.5.5	Chemical gas analysis	Sample			
3.5.6	Radon lab analysis	Sample			

3.6 HVAC System Assessment

Item No.	Description	Unit	Qty	Rate	Amount
3.6.1	AHU inspection	Unit			
3.6.2	FCU inspection	Unit			
3.6.3	Filter condition assessment	Unit			
3.6.4	Duct inspection	Zone			
3.6.5	Fresh air intake inspection	Unit			
3.6.6	Coil cleanliness assessment	Unit			
3.6.7	Condensate drain inspection	Unit			
3.6.8	Damper functionality test	Unit			
3.6.9	Airflow balancing verification	Zone			

3.7 Reporting & Documentation

Item No.	Description	Unit	Qty	Rate	Amount
3.7.1	Full IAQ Assessment Report	Sum			
3.7.2	Data tables & graphs	Sum			
3.7.3	Root cause analysis	Sum			
3.7.4	Recommendations	Sum			
3.7.5	Presentation to client	Session			

3.8 Health, Safety & Compliance

Item No.	Description	Unit	Qty	Rate	Amount
3.8.1	RAMS submission	Sum			
3.8.2	PPE & safety compliance	Sum			

3.9 Disbursements

Item No.	Description	Unit	Qty	Rate	Amount
3.9.1	Travel & parking	Sum			
3.9.2	Consumables	Sum			
3.9.3	Calibration certificates	Sum			

3.10 BOQ Summary

Section	Amount (ZAR)
Pre-Assessment & Mobilisation	
IAQ Physical Measurements	
IAQ Chemical Measurements	
IAQ Biological Measurements	
Laboratory Analysis	
HVAC Assessment	
Reporting	
Health & Safety	
Disbursements	
Total (Excl. VAT)	
VAT (15%)	
Total (Incl. VAT)	

4. MANDATORY REQUIREMENTS

- Company profile
- CVs of key personnel
- SANAS lab partnership letter
- Calibration certificates
- COIDA
- Tax Compliance Status
- Professional Indemnity Insurance
- Signed BOQ
- **To ensure confidentiality the contractor must:**
 - **Provide two copies of manual reports to be delivered to the Regional Office.**
 - **All pages on the individual copies to be numbered on each page with either copy 1 or copy 2 on the respective reports.**
 - **Copy 1 will be circulated to selected officials in the Regional Office**
 - **Copy 2 will be circulated to selected officials in Head Office.**

TENDERER'S SIGNATURE: _____

ADDRESS: _____

DATE: _____