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|---|--|--------------------------------|
|  Eskom | <b>Scope of Work for fugitive dust sampling contract</b> | <b>Grootvlei Power Station</b> |
|---|--|--------------------------------|

|  |                               |                              |
|--|-------------------------------|------------------------------|
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## **1. INTRODUCTION**

Grootvlei Power Station requires a suitable service provider for fugitive dust monitoring, sampling, analysis and Reporting.

## **2. SUPPORTING CLAUSES**

### **2.1 SCOPE**

This document covers the Fugitive dust monitoring, Sampling, analysis and reporting scope of work for the works that are to be covered monitoring, sampling, analysis and reporting. The overview of this document is to ensure that all analysis and sampling points determination, installation and maintenance comply with the National Environmental Management: Air Quality Act, 2004; (Act No. 39 of 2004) National Dust Control Regulations NEM:AQA Dust Regulations and latest sampling methodology(D1739-98) and industry standards and best practises. Including SANS1137:2019

This document covers the Scope of Work (SoW) to be carried out by the contractor on the sampling points determination, installation of stainless steel sampling stand and cages, sampling, analysis, and reporting installation, at Grootvlei PS.

The scope will entail the following requirements, amongst others;

- Determination of 20 sampling points
- Monitoring of 54 sampling points
- Monitoring of the 42 elements
- Analysis of samples
- Compilations of 2 monthly reports
- Replacement of 10 damaged samplers
- Installation of 20 Additional Samples

#### **2.1.1 Applicability**

This document shall apply to Grootvlei Power Station Fugitive dust sampling within Environmental Management Department .

## **2.2 NORMATIVE/INFORMATIVE REFERENCES**

### **2.2.1 Normative**

As a minimum, the Contractor is expected to comply with the following Eskom Engineering governance documents:

- [1] National Environmental Management: Air Quality Act, 2004; (Act No. 39 of 2004)
- [2] National Dust Control Regulations
- [3] SANS 1137:2019
- [4] D1739-98

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[5] Atmospheric Emission License: Dipaleseng/Eskom H SOC Ltd/GPS/0015/2024/F04

### 2.2.2 Informative

[6] National Environmental Management Act 107, 1998 (Act No. 107 of 1998).

## 2.3 DEFINITIONS

N/A

### 2.3.1 Disclosure Classification

**Controlled Disclosure:** Controlled Disclosure to external parties (either enforced by law, or discretionary).

## 2.4 ABBREVIATIONS

| Abbreviation | Description  |
|--------------|--|
| NEMA         | National Environmental Management Act              |
| NEM:AQA      | National Environmental Management: Air Quality Act |
| SoW          | Scope of Works                                     |
| PS           | Power Station                                      |

## 2.5 ROLES AND RESPONSIBILITIES

**The Environmental Management Officer is delegated with the authority to perform the following functions:**

- Compile and review the scope of work
- Ensure the procurement requirements are followed during the transaction.
- Ensure the scope is in line with approved methodology
- Ensure all reporting requirements are fully met.
- Support and coordinate activities associated with the transaction
- Ensure suppression activities are undertaken

### **Snr Advisor Environmental Management**

- Review and recommend the transaction
- Ensure that oversight role is fulfilled

### **Environmental management Line Manager**

- Reviews and authorises the document.
- Manages the execution of the works.
- Ensure value for money is attained

### **Contractor**

- Executes the SoW in line with relevant and applicable industry standards and norms.

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- Compiles the reports in accordance with the scope of work

## **2.6 PROCESS FOR MONITORING**

The process for monitoring will be governed by compliance audits and reviews .

Weekly inspections and observations

## **2.7 RELATED/SUPPORTING DOCUMENTS**

- Atmospheric Emission License: Dipaleseng/Eskom H SOC Ltd/GPS/0015/2024/F04

## **3. SCOPE OF WORK**

### **3.1 DETAILED SCOPE**

The required works by the contractor will cover the following items, objectives, and technical deliverables:

- a) Determination of sampling points and allocation of GPS coordinates for each point
- b) Installation of stainless steel sampling stands and cages with a foundation of 10L concrete at the bottom.
- c) Mount the sampling buckets with lockable mechanisms in each determined point
- d) Replace damaged sampling points and reposition them where required
- e) Collects samples within a period of 30+3 days
- f) Send samples to a SANAS Accredited laboratory for soluble and insoluble including elementary analysis
- g) Compile monthly reports for internal and external analysis: the reports should be as follows:
  - a. Introduction with a background summary of the works, methodology and purpose of the works.
  - b. Site overview with google earth maps showing the sampling regime.
  - c. Table of results for dust particles (pm2.5-pm10)
  - d. Table of results for elementary analysis
  - e. Display of meteorological data with wind-roses indicating wind patterns and how the winds influenced the results
  - f. Results interpretation graphs
  - g. Compliance statement of results trends comparing each point with its previous results
  - h. Recommendations
  - i. Conclusion
- h) All reports should have an annexure of the Accreditation certificates of the Laboratory used for analysis
- i) Each report to have a power point display of the results as an annexure
- j) All repots should be submitted to the services manager within ten calendar days after the samples were taken.
- k) Submit annual summery reports focusing on results

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I) The contract shall be for five years (12months)

**Price list for the fugitive dust sampling at Grootvlei Power Station**

| Description   | Unit        | days       | Quantity        | Rate        | Amount        | No. of years         | Total        |
|---|-------------|------------|-----------------|-------------|---------------|----------------------|--------------|
| <b><u>Section 1</u></b>   |             |            |                 |             |               |                      |              |
| <b><u>Preliminaries and General (Cost Breakdown)</u></b>  |             |            |                 |             |               |                      |              |
| -   |             |            |                 |             |               |                      |              |
| <b><u>Preliminaries and Generals : Safety</u></b>   |             |            |                 |             |               |                      |              |
| Site establishment  | Sum         |            | 1               |             | R 0,00        | 1                    | R 0,00       |
| Site de-establishment   | sum         |            | 1               |             | R0,00         | 1                    | R 0,00       |
| Police clearance  | Sum         |            | 3               |             | R0,00         | 5                    |              |
| Medicals  | sum         |            | 3               |             |               | 5                    |              |
| <b><u>Health and Safety</u></b>   |             |            |                 |             |               |                      |              |
| Safety File   | Sum         |            | 1               |             | R 0,00        | 1                    | R 0,00       |
| Personal Protective Equipment <ul style="list-style-type: none"> <li>• Two piece overalls</li> <li>• Safety boots</li> <li>• Socks</li> <li>• Gloves</li> <li>• Dust masks</li> <li>• Goggles'</li> <li>• Sun hat</li> <li>•</li> </ul> | Sum         |            | 3               |             | R 0,00        | 5                    | R 0,00       |
|   |             |            |                 |             |               |                      |              |
| <b><u>Transportation</u></b>  |             |            |                 |             |               |                      |              |
| Site visit-travelling   | km          |            | 600             |             | R 0,00        | 60                   | R 0,00       |
| Accommodation for 3 people  | Nights      | 2          | 60              |             | R 0,00        | 60                   | R 0,00       |
| <b>Sub-Total</b>  |             |            |                 |             |               |                      | R 0,00       |
| <b>Description</b>  | <b>Unit</b> | <b>Hrs</b> | <b>Quantity</b> | <b>Rate</b> | <b>Amount</b> | <b>No. of months</b> | <b>Total</b> |
| <b><u>Section-3</u></b>   |             |            |                 |             |               |                      |              |

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|   |    |  |    |  |        |    |        |
|---|----|--|----|--|--------|----|--------|
| <b><u>Site assessment and evaluation</u></b>  |    |  |    |  |        |    |        |
| Sampling point determination and modelling  | ea |  | 55 |  | R 0,00 | 1  | R 0,00 |
| 10L Concrete base for stainless steel stand installation  | ea |  | 55 |  | R 0,00 | 1  | R 0,00 |
| Lockable stainless-steel cages with wind shields installation   | ea |  | 55 |  | R 0,00 | 1  | R 0,00 |
| Sampling bucket   | ea |  | 55 |  | R 0,00 | 60 | R 0,00 |
| Replacement of damaged sampling points  | ea |  | 10 |  | R0.00  | 1  | R 0.00 |
| <b><u>Sampling</u></b>  |    |  |    |  |        |    |        |
| Elementary sampling and lab analysis  | ea |  | 55 |  | R 0,00 | 60 | R 0,00 |
| Dust sampling and lab analysis  | ea |  | 55 |  | R 0,00 | 60 | R 0,00 |
|   |    |  |    |  |        |    |        |
| <b><u>Reporting</u></b>   |    |  |    |  |        |    |        |
| <b><u>Elementary Report</u></b>   |    |  |    |  |        |    |        |
| First 42 elements to be sampled in all 55 sampling points. Results shall be trended against previous results. | ea |  | 2  |  | R 0,00 | 60 | R 0,00 |
|   |    |  |    |  |        |    |        |
| <b><u>Fugitive Dust Reports</u></b>   |    |  |    |  |        |    |        |
| <b>Monthly report with:</b>   |    |  |    |  |        |    |        |
| Introduction and background   | ea |  | 2  |  | R 0,00 | 60 | R 0,00 |
| Site overview Google map indicating GPS coordinate for all sampling points, indicate exceedance points        |    |  |    |  |        |    |        |
| Table of sampling results<br>Put on power point for stakeholder updates                                       |    |  |    |  |        |    |        |
| Trends for each sampling point  |    |  |    |  |        |    |        |
| Table for exceedance  |    |  |    |  |        |    |        |
| Conclusion and recommendations with SANAS accreditation certificate   |    |  |    |  |        |    |        |
|   |    |  |    |  |        |    |        |
| <b><u>Annual reports</u></b>  |    |  |    |  |        |    |        |

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|  |    |  |   |  |        |   |               |
|--|----|--|---|--|--------|---|---------------|
| <b>Annual elementary with:</b>                     |    |  |   |  |        |   |               |
| Annual trends for all sampling points consolidated | ea |  | 1 |  | R 0,00 | 5 | R 0,00        |
| Conclusion with SANAS accreditation certificate    | ea |  | 1 |  | R 0,00 | 5 | R 0,00        |
|  |    |  |   |  |        |   |               |
| <b>Fugitive dust annual report with:</b>           |    |  |   |  |        |   |               |
| Annual trends for all sampling points consolidated | ea |  | 1 |  | R 0,00 | 5 | R 0,00        |
| Conclusion with SANAS accreditation certificate    | ea |  | 1 |  | R 0,00 | 5 | R 0,00        |
| <b>Sub-Total</b>                                   |    |  |   |  |        |   | <b>R 0,00</b> |
| <b>Contract Price Adjustment</b>                   |    |  |   |  |        |   |               |
|  |    |  |   |  |        |   | R             |
| <b>Total</b>                                       |    |  |   |  |        |   |               |
|  |    |  |   |  |        |   |               |

### 3.2 RECEIVABLES

### 3.3 DELIVERABLES

- (a) Scheduled Rates / Cost estimate / BOQ including schedule estimate for the monitoring regime
- (b) Method Statement Document with Quality Control Plan

### 3.4 SKILLS & EXPERIENCE

Skills and experience required are as follows but not limited to:

1. Certifications and qualifications
  - (a) National Diploma /Bsc Environmental Management or Sciences
  - (b) Compliance Management plan
2. Experience
  - (a) Proven track record of completing similar services within an industrial Environment not less than five years' experience

### 3.5 TIME FRAME & SCHEDULE

All the sampling points should be exposed for a minimum period of 30 days but not more than 34 days.

All reports to be submitted not more than ten days after samples were collected from site

After twelve month of uninterrupted sampling a consolidation report shall be submitted annually

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In case of a call out the team should be on site within 24hours time frame

### **3.5.1 General Notes and Requirements:**

- (a) The Contractor is to comply with the National Environmental Management: Air Quality Act and its National Dust regulations.

## **4. AUTHORISATION**

This document has been seen and accepted by:

## **5. REVISIONS**

## **6. DEVELOPMENT TEAM**

## **7. ACKNOWLEDGEMENTS**

- N/A

## **8. APPENDIX**

- N/A

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