	Scope of Work	Kusile Power Station Project
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The Provision of Occupational Hygiene Services

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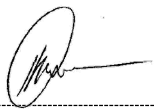
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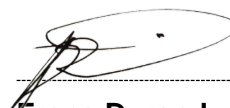
Functional Responsibility



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1. Introduction

This Occupational Hygiene Services scope of work is to propose and approve the occupational hygiene survey management programs contract at Kusile Power Station for a period of 24 months. This document supports the overall Purchasing and Supply Chain Management Procedure (32-1034) within Eskom Holdings SOC Limited.

The implementation of this scope of work will result in the following benefits to Eskom:

- Overall Compliance to the requirements of the Occupational Health and Safety Act, (Act No 85 of 1993) and related Regulations.
- Assessment of occupational health stressors and implementation of corrective actions thereby ensure the health and safety of employees.
- Early response to and containment of non-compliance to legislative requirements.
- Prevent or minimise the risk of occupational disease reported to the Department of Employment and Labour.
- Ensure compliance to the reporting of all stressors to the Department of Employment and Labour.

2. Supporting Clauses

2.1 Scope

The scope of work requires the services of an Approved Inspection Authority (AIA) in Occupational hygiene to be appointed for the period of 24 months for Eskom Kusile Power Station GCD employees only.

The services will include but not limited to the following:

- Occupational Hygiene Stressors monitoring as per Kusile Health Risk Assessment in line with the OHSAct Requirements(Indoor Air Quality and Ventilation (IAQ), Illumination, Ergonomics, Hazardous Biological Agents(HBA), Thermal Stress) Offices Areas
- Occupational Hygiene Stressors monitoring as per Kusile Power Station Occupational Hygiene assessment program as identified the Occupational Hygiene officer for Three (3) days every second month to adhere with quarterly reporting.
- Noise and Illumination Surveys for Hand over purposes on completion of Units as baseline assessment to Generation Kusile Power Station Business unit

2.1.1 Purpose

To outline the scope of the occupational hygiene services required for Kusile Power Station Group Capital Division.

To propose and approve the appointment of an Approved Inspection Authority (AIA) for Occupational Hygiene to conduct Occupational Hygiene Monitoring and consultation Services at Kusile Power Station for a period of 24 months

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2.1.2 Applicability

This document is applicable to all Kusile Power Station GCD employees.

2.1.3 Effective date

This scope of works shall be effective immediately once signed by all stakeholders

2.2 Normative/Informative References

2.2.1 Normative

- **SANAS 17020 Occupational Hygiene AIA Requirement**

2.2.2 Informative

Parties using this document must apply the most recent edition of the documents listed below

- [1] Occupational Health and Safety Act, Act No 85 of 1993
- [2] ISO 9001:2015 Quality Management System
- [3] ISO 45001:2018 Occupational Health and Safety Management System
- [4] 32-727: Safety, Health, Environment and Quality (SHEQ Policy)
- [5] 240-62196227 Eskom Life Saving Rules
- [6] 32-288: Policy Procurement and Supply Chain Management Standard
- [7] 32-599: Standard Procurement and Supply Chain Management Standard
- [8] SANS 10083:2021 The measurement and assessment of occupational noise for hearing conservation purposes.
- [9] SANS 10103:2008 The measurement and rating of environmental noise with respect to land use, health, annoyance and to speech communication
- [10] SANS 10114:2020 Artificial Lighting for Interiors
- [11] SANS 7243:2013 Hot Environments-Estimation of the heat stress on working man, based on the WBGT-index (wet bulb globe temperature)

2.3 Definitions

- a) **Approved:** Means acknowledged and authorized in accordance with the authoritative governing bodies, i.e., SANS, EN and so forth.
- b) **Approved Inspection Authority (AIA):** an inspection authority approved by the chief inspector in respect to occupational hygiene.
- c) **Employee:** Any person who is employed by or works for an employer and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an employer or any other person.
- d) **Responsible Manager:** The manager formally appointed and within his/her delegation of authority is overall responsible to ensure occupational health and safety within the defined area of responsibility.
- e) **Risk assessment:** Overall process of hazard identification, risk analysis and risk evaluation.

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- f) **PPE:** Equipment designed to be worn or used by any person to provide adequate protection from specific hazards in the workplace, when properly used.
- g) **Properly used:** Used with reasonable care and with due regard to any information, instruction or advice supplied by the designer, manufacturer, importer, seller or supplier, as the case may be.
- h) **Medical Surveillance:** is a planned programme of risk based periodic examinations (which may include clinical examinations, biological monitoring or medical tests) of employees by an occupational health nurse or in prescribed cases, by an occupational medicine practitioner. The results from this programme act as an important indication of the adequacy of worksite health and safety control measures.
- i) **Periodic Health Screening:** a medical examination and/or tests performed on a regular basis throughout an employee's work life cycle in order to monitor their health status in relation to the specific health and safety hazards to which they are exposed.
- j) **Occupational Health Practitioner:** an Occupational Medicine Practitioner, or a person who holds a qualification in Occupational Health recognised by the Medical and Dental Board of Health Professions Council of South Africa, or the South African Nursing Council. This includes both Occupational Medicine Practitioner(s) (OMP) and Occupational Health Nursing Practitioner(s) (OHNP).
- k) **Occupational Health:** means the anticipation, recognition, evaluation and control of conditions arising from the workplace, which may cause illness or adverse effects to persons.
- l) **Occupational Risk Exposure Profile:** occupational risks that an employee is exposed to and the relevant medical examinations and their frequency that must be conducted on the employee.
- m) **Risk:** the probability that injury or damage will occur.
- n) **Employer:** Any person who employs or provides work to a person and remunerates that person, or expressly or tacitly undertakes to remunerate him/her, excluding labour brokers (Temporary Employment Service Agents) as defined in the Labour Relations Act (Act No. 28 of 1956) and in terms of section 16.2 of the OHS Act.
- o) **Medical certificate:** A certificate issued in terms of medical surveillance and the Control of Eskom Employees, using the OREP (Occupational Risk Exposure Profile) form.

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2.4 Abbreviations

Abbreviation	Description
AIA	Approved Inspection Authority
BU	Business Unit
CA&F	Corporate Assurance and Forensics Department
COID	Compensation for Occupational Injuries and Diseases
Department	Department of Employment and Labour
EIMS	Eskom Insurance Management Services
ISO	International Organisation for Standardisation
NIOSH	National Institute for Occupational Health and Safety
OESSM	Occupational Exposure Sampling Strategies Manual
OHNP	Occupational Health Nurse Practitioner
OHP	Occupational Health Practitioner
OHS	Occupational Hygiene and Safety
OHSLC	Occupational Health and Safety Liaison Committee
OMP	Occupational Medical Practitioner
OREP	Occupational Risk Exposure Profile
PPE	Personal Protective Equipment
SANS	South African National Standards
SHEQ	Safety, Health, Environment and Quality
WBGT	Wet Bulb Globe Temperature Index
GCD	Group Capital Davison
SANAS	South African National Accreditation System

2.5 Roles and Responsibilities

2.5.1 Contractor

- a) The Contractor shall provide the following:
- a) The services of an AIA in Occupational hygiene for conducting occupational hygiene stressor assessment/monitoring as per the identified health risk assessment and relevant legislation.
 - b) Influence Kusile Power Station Occupational Hygiene program based on the required surveys

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- c) Will use accredited methods, calibrated equipment and competent personnel for provision of occupational hygiene services(SANAS)

2.5.2 Criteria:

The following criteria will be used in the selection of the preferred service provider:

- a) Registration of the service provider with the Department of Employment and Labour as an Approved Inspection Authority (AIA) for Occupational hygiene and the schedule of accreditation from SANAS.
- b) Ability to provide a SAIOH Registered Occupational Hygiene Technologist/Occupational Hygienist to conduct the surveys
- c) Use of internationally accepted methods for measurement and assessment of the workplace occupational health stressors
- d) Proven track record and ability to conduct the project of this nature and magnitude (Good reference sources for previous performed work)
- e) Availability of the measuring equipment and access to SANAS analytical laboratory.

2.5.3 Report Writing Special Request:

- a) The report shall be typed and with a clear stipulation of survey areas and comply with the SANAS standards.
- b) Recommendations for corrective actions should be clearly defined in the report and feedback sessions.
- c) Inclusion of area maps for surveyed plant will be Area sketches will be provided by the client and the service provide must include the sketch in the report as per SANAS requirements.
- d) Survey reports of stressors that don't require laboratory analysis to be submitted 28 days after completion of the survey and those requiring laboratory analysis to be submitted after at least 35 days.

2.5.4 Required Surveys:

2.5.4.1 Noise

- Personal and area noise exposure measurements shall be conducted as per the legal requirements or as when required by the station. Measurements should be conducted according to SANS 10083 codes requirements.
- Handover baseline Noise surveys for unit 5 and unit 6
- Noise Assessment done every 2 years as per OHSAct Requirements for GCD Environment

2.5.4.2 Hazardous Chemical Agents

The hazardous chemical agents shall be assessed as per the requirements of the Regulation of Hazardous Chemical Agents of 2021. Hazardous chemical stressors include all forms in which a

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chemical could be found, i.e., dust, in GCD employees exposed areas and will be surveyed in accordance with the approved and recognised surveying/test methods, i.e. NIOSH & OESSM.

2.5.4.3 Illumination Survey

The illumination survey will include measurements of artificial i.e., Day and Night –time illumination for unit 5,6 and GCD Buildings. The survey must be conducted in accordance with SANS code as referenced below, must exclude natural light influence.

References:

- Occupational health and Safety Act, (Act no 85 of 1993) Environmental Regulations for workplaces.

2.5.4.4 Indoor Air Quality and Ventilation

Indoor air quality survey is required for the GCD Buildings, administration building

References:

- Occupational health and Safety Act, (Act no 85 of 1993) Environmental Regulations for Workplaces GNR1754

2.5.4.4 Hazardous Biological Agents / Microbiological Surveys:

Bi-annual Personal and environmental swabs required for biological / microbiological monitoring. Main focus at the food handling premises (to include food sampling), **Sewage plant, sanitary facilities (especially shower facilities), Legionella and Air conditioning systems**. This to be covered during the 3 days adhoc consultations.

References:

- Occupational health and Safety Act, (Act no 85 of 1993) Facilities Regulations and Regulation for Hazardous Biological Agents.

2.5.4.5 Ergonomics Assessment

Ergonomics Assessment is required to determine the risk of employees to ergonomic stress related disorders, musculoskeletal strain injuries, handling and lifting of materials for GCD Employees. The competency of a person performing the assessment must comply with the latest regulations as defined in the Occupational health and Safety Act, (Act no 85 of 1993), Ergonomics Regulation 2018:

2.5.4.6 Thermal Stress Monitoring (Heat and Cold Stress)

The thermal Stress Environments affecting the GCD employees shall be identified and evaluated in accordance with the required legislation. The control measures should be in line with the requirements of appropriate legislation, as well as local and international standards. This to be covered during the 3 days adhoc consultations

- Occupational Health and Safety Act, (Act No 85 of 1993), Environmental Regulations for Workplaces and the applicable SANS standard.

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2.5.4.7 Laboratory analysis

All the assessments that require chemical, microbiological and/or biological analysis must be sent to a SANAS accredited laboratory and proof of that should be shared with the reports

2.6 Process for Monitoring

Compliance with the requirements of this scope of work shall be audited by the SHE management system ISO 45001

2.7 Related/Supporting Documents

Not applicable

2.8 General information regarding health and safety

The following outlines the general requirements for health and safety and details the Client's commitment to the health and safety of all persons involved in its business process activities.

The contractor shall align with the SHE specification for Kusile GCD project

- a) The Contractor must be fully committed to health and safety on the project and to the creation of an injury free working environment.

3. Acceptance

This document has been seen and accepted by:

Name	Designation
Gladstone Morake	Fire and EP Manager
Anville Rhode	Occupational Health and Safety Manager
Frans Durand	Middle Manager SHE
Siphiwe Mahlangu	Environmental Manager

4. Revisions

Date	Rev.	Compiler	Remarks
February 2023	0	Kenneth Hlungwane	New document

5. Development Team

The following people were involved in the development of this document:

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6. Acknowledgements

None

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