

Date:  
24 October 2022

Enquiries: T Cekwane  
Tel +27 11 629 4307

Dear Supplier

## **SCOPE OF WORK FOR OCCUPATIONAL HYGIENE SERVICES FOR ESKOM ROTEK INDUSTRIES**

### **1. Bulk Materials Services Product Group Outline**

The group manages bulk handling activities such as ash, coal and water handling from a central place. It offers a wide range of services from delivering coal via road to power station, to provision and maintenance of coal conveyer. The following are Bulk Material Services' core product offerings.

#### **1.1 Bulk Water Supply Infrastructure Operations**

Contracted to manage the Komati Water Scheme, a network of pipes originating at the reservoir in Mpumalanga and supplying water to various Eskom power stations. Part of the core function is the mechanical and electrical maintenance of three Pump Stations.

#### **1.2 Coal and Ash Handling Operations**

These operations focus on operation, maintenance and reclaiming of coal stockyards; screening and crushing of coal; operation and maintenance of ash dumps; rehabilitation of ash dumps; moving of conveyor structures.

#### **1.3 Power Station Maintenance**

BMS offers electrical and mechanical maintenance to coal fired power stations including maintenance on transformers, generators, and motors.

### **2. Turbo Gen Services**

Turbo Gen Services is a turbine generator maintenance service provider. This division is uniquely positioned within the organisation because of its capability to refurbish large power generation turbines, generators and

related equipment, with a special focus on the maintenance engineering of the turbine and the generator island.

## **2.1 Turbine and Generator Refurbishment**

This process that takes place either on-site, or in the Turbo Gen Services Rosherville based workshops. The services offered refer to all maintenance, refurbishment, modification and repair of power generating and auxiliary equipment.

## **2.2 Power Station Maintenance**

Turbo Gen Services manages turbine, generator and auxiliary specialised and first line maintenance on all Eskom power stations. Services include the executing of preventative and corrective maintenance, continuous standby assistance and call-out services on strategic plant.

## **2.3 Condition Monitoring**

This service is rendered through condition monitoring either by remote, on-line, as well as manual plant assessment.

# **3. Transformer and Switchgear Services**

Transformer and Switchgear Services, a division of Eskom Rotek Industries, offers maintenance, refurbishment, repair and modification services for transformers and switchgear, both on site and at workshop facilities in Rosherville..

## **3.1 Transformer Services**

On-site transformer services range from loading and off-loading, transporting, installation and commissioning, treatment of oil with mobile oil plants and performing various transformer tests together with technical assessments to determine the condition and general health of the transformer. Testing, servicing, repairs and replacement is performed in the field on tap-changers, bushings and auxiliary equipment.

## **3.2 Switchgear Services**

Switchgear maintenance involves work on all types of circuit-breakers, disconnectors and isolators, both AC and DC equipment of voltages from 11kV to 765kV. Switchgear services include installation and removal, routine maintenance, as well as refurbishment and repairs on site.

## **3.3 Engineering Services**

Transformer and switchgear engineering services perform investigations into plant failure or poor performance; advise on repair strategies and provide cost versus benefit analyses.

## **4. Logistics Services Product Group Outline**

Logistics Services offers road transport, materials handling, warehousing and road logistics services. These include the transport of boilers and turbines to and from power stations, transformers and switchgear from substations, poles and pylons to remote sites, as well as all power generation and distribution equipment

### **4.1 Transport Services**

Logistics Services ship anything from 1 kg to 500 tons anywhere in South Africa. It operates from its main yard in Rosherville, but has a wide network of depots in Johannesburg, Polokwane, Durban, Richards Bay, Cape Town, Middelburg and East London.

### **4.2 Materials Handling and Consolidation**

In addition to transport services, Logistics Services offers the consolidation or breaking of bulk materials, not only for full utilisation of loads. The division also offers warehouse management services to its clients.

### **4.3 Waste Management**

Logistics Services specialises in the management, transportation and disposal of waste in a safe and environmentally responsible manner. Logistics Services is a registered asbestos contractor and dangerous goods transporter. Waste transported includes general waste, hazardous waste, compactable and non-compactable waste, medical waste, building rubble, conveyor belting and wood.

## **5. Construction Services Product Group Outline**

Construction Services (CS) specializes in both civil and electrical construction, from constructing conveyor systems at coal stock piles; to terracing and reticulation in preparation for building new power stations; building and cabling sub-stations and erecting towers for power lines. The following are CS core product offerings:

### **5.1 Infrastructure Construction**

CS constructs new substations of up to 765 kV and upgrade existing substations of all voltages. With a specialist road building team, CS construct all types of roads from gravel to regional and provincial black topped roads.

### **5.2 Cable Installation and Green Power Services**

The service include the installation and maintenance of underground cables in residential areas with specialist teams having been developed to operate under these unique conditions.

### **5.3 Power Line Construction and Electrification**

Eskom Rotek Industries Construction Services is involved with installation of rural overhead reticulation networks. This include erecting of wood or concrete pole structures; stringing of conductors; installation of all auxiliary equipment; and, installation of meters and airdac in houses.

## 6. Scope of Work

An Approved Inspection Authority is needed to conduct occupational hygiene inspection for the Bulk Materials Handling and Construction Services of Eskom Rotek Industries. Inspection Work is to be conducted at various sites as listed below with corresponding geographical locations, estimated travel distance (Predicted from Rosherville Head Office in Johannesburg, Germiston) and required inspections.

### 6.1 Bulk Materials Services and Turbo Gen Services

Site Name / Product Group	Geographical Location (Closest Town)	Return Trip (Estimated from Rosherville Office)	Required Inspections
Arnot	Arnot Mpumalanga	440 km	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Arnot Valves Maintenance	Arnot Mpumalanga	440	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Camden	Mpumalanga (Ermelo)	580	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Camden Valves Maintenance	Mpumalanga (Ermelo)	580	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Duvha	Mpumalanga Witbank	300	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Duvha Valves Maintenance	Mpumalanga Witbank	300	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Grootvlei	Grootvlei Mpumalanga	180	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Grootvlei Valves	Grootvlei Mpumalanga	180	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Hendrina	Mpumalanga Hendrina	390	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Homebase	Witbank Mpumalanga	300	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Kendal	Ogies Mpumalanga	210	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Koeberg	Cape Town	1844	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Komati	Komati Mpumalanga	350	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Komati Valves Maintenance	Komati Mpumalanga	350	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Kriel	Kriel Mpumalanga	270	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Kriel Valve Maintenance	Kriel Mpumalanga	270	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Kusile	Bronkhorspruit	226	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Lethabo	Vaal	150	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Majuba	Mpumalanga (Volsrust)	600	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Matimba	Elisrus	716	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Matla	Kriel	270	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Matla Works		270	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Medupi	Elisrus	716	HRA, Noise, DPM, SiO <sub>2</sub> and, HBA
Komati Water Scheme / BMS	Mpumalanga (Arnot Workshop, Vygeboom, Booslop and Wintershoek)	320	Noise, DPM, and, HBA

## 6.2 Construction Services

Site Name / Product Group	Geographical Location (Closest Town)	Return Trip (Estimated from Head Office)	Required Inspections
Camden AWRD	Ermelo – Mpumalanga	580	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Majuba projects	Amersfoort – Mpumalanga	600	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Majuba projects	Amersfoort – Mpumalanga	600	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Medupi projects	Lephalale – Limpopo	740	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
New generator store	Rosherville – JHB	Head Office Precinct	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
PAS projects	Rosherville – JHB	Head Office Precinct	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
PAS projects	Rosherville – JHB	Head Office Precinct	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Kusile projects	Emalahleni/Bronkhorstspuit	220	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Grassridge Dedisa 132 Line	Grassridge – Port Elisabeth	To be advised	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Nuwekloof Sub station	Gouda western Cape	To be advised	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Belhar Sub station	Belhar Western Cape	To be advised	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Kusile P20	Kusile Power Station	220	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Tubatse Selemela 400KV line	Tubatse Selemela Limpopo	To be advised	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Kusile P4	Kusile Power Station	220	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Northrand Offices and Workshops	Northrand Gauteng	70	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA

## 6.3 Transformer & Switchgear Services

Site Name / Product Group	Geographical Location (Closest Town)	Return Trip (Estimated from Head Office)	Required Inspections
<b>Rosherville Workshop 200 Ton</b>			
Active Parts	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Tanking	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Oven	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
<b>Rosherville Workshop 600 Ton</b>			
Active Parts	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Tanking	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Vapor Phase	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Windings	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Oven	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Oil Depot	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Mobile Oil Plant	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA

Site Name / Product Group	Geographical Location (Closest Town)	Return Trip (Estimated from Head Office)	Required Inspections
Paint Bay	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Grit Blasting Bay	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Boiler Shop	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Bushings & CTs	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Switchgear Workshop	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Tap Changers	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA

## 6.4 Logistics Services

Site Name / Product Group	Geographical Location (Closest Town)	Return Trip (Estimated from Head Office)	Required Inspections
Durban Depot	Durban Prospecton	1100	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Medupi Waste	Elisrus	700	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Matimba	Elisrus	700	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Duvha	Witbank	300	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Multi Axle	Johannesburg Rosherville	N/A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Rosherville Ops	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Rosherville Workshop	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Warehouse	Johannesburg Rosherville	N / A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
King Williams Town			HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Polokwane	Polokwane	650	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Cape Town	Brackenfell	N/A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
East London Office	East London	N/A	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA
Kusile	Bronkhorstspuit	200	HRA, Noise, DPM, SIO <sub>2</sub> and, HBA

## 7. COSTING / QUOTING GUIDE

Response to requests for quotation shall be guided by the following classification and units of measurements. Quotation must **NOT** include all sites but addressed as one line.

Scope	Unit of measurement	Quoted Price
Consultancy fee	Hourly rate	
Travelling	Per kilometer	
Crystalline silica sampling	Per sample	
DPM sampling	Per sample	
Welding Fume	Per sample	
Noise survey	Hourly rate	
HBA sampling	Per sample	

Yours sincerely




---

Thulani Cekwane  
Occupational Hygiene Manager

24 / 10 / 2022

---

Date