

	Scope of Work	Camden Power Station
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1. Introduction

Camden Power Station Common Plant is looking for assistance with maintaining plant equipment. This document contains all the maintenance work that needs to be performed in Ash and Coal plant equipment at Camden Power Station.

2. Supporting Clauses

2.1 Scope

The scope of work is limited to Ash and Coal plant equipment at Camden Power Station.

2.1.1 Purpose

The purpose for this scope of work is to define the requirements for maintenance, repairs and services of Ash and Coal plant equipment.

The objective is to establish 36 months maintenance contract for the contractor to provide maintenance inspections, repairs and services/overhaul of Ash and Coal plant equipment at Camden Power Station on a full-time basis.

2.1.2 Applicability

This document shall apply to the contractor who will be awarded a maintenance contract to execute maintenance, repairs and services of Ash and Coal plant equipment at Camden Power Station.

2.1.3 Effective date

This document is effective on the date of the authorisation signature.

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

- [1] ISO 9001 Quality Management Systems
- [2] <http://mbsa.eskom.co.za/PMTemplates/MainTStrategy> - Maintenance Execution Strategy for Coal Handling Plant
- [3] <http://mbsa.eskom.co.za/PMTemplates/MainTStrategy> - Maintenance Execution Strategy for Ash Handling Plant
- [4] 240-55864434 – Storage and Handling of Conveyor Belting is Eskom Guideline
- [5] 240-55864490 – Splice Design for Steel Cord Reinforced Conveyor Belting Guideline
- [6] 240-120532564 – Splicing and Repairs of Steel Cord and Textile or Plied Reinforced Conveyor Belting

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- [7] 240-55864503 – Belt Conveyor Mechanical Components
- [8] 240-55864553 – Magnetic Separators and Metal Detectors Standard
- [9] 004 9646 – Operating Technical Specification Coal Plant
- [10] 004 9645 – Operating Technical Specification Ash Handling Plant
- [11] PSR & ORHVS
- [12] Safety Entry Regulations
- [13] SANS 1313-1:2012 – Conveyor Belt Idlers Part 1
- [14] SANS 1313-3:2012 – Conveyor Belt Idlers Part 3
- [15] SANS 1669-1:2005 – Conveyor Belt Pulleys Part 1
- [16] SANS 1669-2:2005 – Conveyor Belt Pulleys Part 2
- [17] SANS 1173:2024 – Conveyor Belting – General Purpose Textile Reinforced Construction
- [18] SANS 1366:2024 – Conveyor Belting – Steel Cord Reinforced Construction

2.2.2 Informative

- [19] Occupational Health and Safety Act 85 of 1993
- [20] Doc No 004/4830 Camden Power Station Safety, Health and Environment Specification

2.3 Definitions

Definition	Explanation
<i>Employer</i>	Organisation that employs others. In this case it refers to Eskom Holdings SOC Ltd as the one who is employing the <i>Contractor</i> to perform a scope listed in this document.
<i>Contractor</i>	A person or company undertaking to perform work for the <i>Employer</i> .

2.4 Abbreviations

Abbreviation	Explanation
AWR	Ash Water Return
CBM	Condition Based Maintenance
ECSA	Engineering Council of South Africa
EOD	Electrical Operating Desk
Eskom	Eskom Holdings SOC Ltd
HVR	High Voltage Regulations
FFP	Fabric Filter Plant
ISO	International Organization for Standardization
PM	Planned Maintenance
PPE	Personal Protective Equipment
PSR	Plant Safety Regulations
PTW	Permit to Work
QCP	Quality Control Procedure

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Abbreviation	Explanation
AWR	Ash Water Return
RP	Responsible Person
SABS	South African Bureau of Standards
SAP	Systems, Applications and Products
SAP PM	Systems, Applications and Products Plant Maintenance
SOW	Scope of Work
WM	Works Management

2.5 Roles and Responsibilities

Common Plant Engineering Department – Responsible for drawing up a scope and setting up maintenance contract as per terms stipulated in this scope of work document.

Common Plant Maintenance Department – Responsible to review this scope document and ensure that all maintenance activities are covered before the document can be authorised.

Senior Supervisor Maintenance – Ensures that all activities done by the Contractor are done to the satisfaction of Eskom's standards and procedures.

Contractor – Implements the scope as covered in this document.

Contract Supervisor – Manages the contract with the contractor and ensures that the Contractor performs activities that are within the scope of the contract.

Procurement Department – Responsible to ensure that the procurement process is properly followed in setting up the maintenance contract for Ash and Coal plant equipment.

2.6 Process for Monitoring

N/A

2.7 Related/Supporting Documents

N/A

3. Scope of Work for Maintenance of Ash and Coal Plant Equipment

The work consists of inspections, repairs and service/overhaul of Ash and Coal plant equipment at Camden Power Station on a full-time basis with the following expectations:

- The contractor is expected to take permits as per the PSR (Plant Safety Regulations). The contractor must have a responsible person/s (RP) for each activity during normal working hours, on standby and for multiple activities when required by the client if it is deemed to be safe.
- The contractor is expected to provide skilled and experienced personnel to execute the scope of work stipulated in this document.
- The contractor is expected to liaise on daily basis with the operating contractor to plan work and optimize the availability of plant.

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- The contractor must have representation on daily maintenance and production meetings.
- The contractor shall issue new PPE to employees when the already issued PPE is no longer effective. All PPE (including masks) must be SABS approved.
- The Contractor shall provide correct equipment and tools to its employees to perform task/s given to them.
- The contractor shall provide suitable facilities (e.g. Lockers) for its employees.
- The minimum wage must be paid to all contractor's employees, and an audit will take place from time to time. Only allowable deductions are allowed (e.g. deductions for provision of PPE will not be allowed).

3.1 Maintenance Requirements

The contractor to conduct routine inspections, mechanical repairs and inspections in accordance with the details and inspection frequencies on the maintenance strategy documents. Defects are to be loaded on SAP system by the Contractor for tracking and archiving. The Contractor will be requested by the client to do plant modifications in a form of engineering instruction.

All work should be executed by qualified and trained personnel using correct tools and equipment to ensure a reliable plant. Quality inspections to be done on critical tasks with Eskom personnel signing it off. Quality Control Procedures (QCP) to be submitted and approved by the employer before any work may commence.

3.1.1 Maintenance Scope and Philosophy

The Ash and Coal plant systems are expected to be maintained (by the Contractor) according to a defined maintenance programme developed by the Employer. All system's planned maintenance activities are listed with periods at which stage the activity is to be carried out. The scope of work will focus on a specific plant area and equipment. This is dynamic and contractor will be responsible for it being updated according to the maintenance strategy.

The contractor will perform the following Mechanical maintenance according to Employer approved schedules:

a) Running maintenance/Inspections

Running maintenance/inspections is seen as the daily/weekly plant walk downs that will be done by the Contractor. During these walk downs, qualified and experienced artisans will do inspections while the plant is in operation. All defects or potential failures will be recorded on the SAP system as a base for recording defects. The inspections completed work paperwork and loading defects will be documented accordingly by the contractor.

The defects will be listed, and corrective actions will be planned according to the priority of the defects. Detailed planning of critical/major activities, together with QCPs and risk assessments will be done by the contractor and approved by the Contract Supervisor. Where permit to work (PTW) is required, the work will be planned with the Production Manager of Camden Power Station via Common Plant maintenance personnel.

b) Planned Maintenance

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Planned maintenance schedules are initiated by the Employer, and they will be followed to prevent any potential breakdowns or failures of equipment. These Maintenance schedules will be generated from the SAP PM system and consists of daily, weekly, monthly, quarterly, yearly inspections/activities and as required by the Employer.

c) Corrective Maintenance

All unpreventable and unforeseen plant failure occurrences, replacement/repair of damaged equipment.

d) Condition Based Maintenance

The purpose of the maintenance strategies and Condition Based Maintenance (CBM) is to enable the monitoring of the physical condition and potential failures modes of equipment. Plant Performance Department performs most of the CBM.

The list of CBM work orders will be included in the above-mentioned list of planned maintenance schedules.

3.1.2 QCP's, Safe Work Procedures and Job Observations

- Contractor to develop and submit QCP's for approval before any work can be done at the plant.
- QCP's with action plans, safe work procedures and job observations shall be produced at the request of the Employer at any given time.
- QCP's must be signed and approved by quality controller, engineer and Ash and/or Coal plant Supervisor upon/during execution of the approved activity to be performed in the plant depending on the intervention points that are included during the approval of the QCP by the relevant stakeholders.
- Risk assessment to form part of each activity that is performed at the plant.

3.1.3 Works Management Process

Planning will be done daily between the employer and the contractor. The daily plan will include corrective and planned maintenance schedules.

When a particular task requires pre-planning, the employer may request a program from the contractor. The program to be submitted with all the activities specified in the scope of work, indicating at least the following:

- Activities to be performed in chronological order,
- Timeline for each activity,
- Calendar day/s in which activities will be performed,
- All known interfaces with other activities of the Employer or Others (including scaffolding, lagging, electrical and instrumentation work).

Updating of the plan for the works will be done daily and more regular updating may be required. The Employer will be entitled to change the plan at any time as and when other tasks take precedence.

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An activity for which a corrective or planned maintenance schedule has been issued, will only be recorded as complete when the SAP work order issued for this activity is submitted with all relevant details, signatures and returned to WM for it to be loaded on SAP.

The Employer has a planning system called SAP PM, which records all corrective maintenance identified and all planned maintenance schedules. All the Employers documentation will be used in every activity performed on the respective plant with accurate information of the required actions undertaken to restore the system back to a working condition. All Planned Maintenance (PM) completed to be verified and approved by Ash and/or Coal Plant Supervisor. All man-hours, staff used, material used, corrective or planned actions taken must be recorded on the corrective maintenance (CM) or PM documentation which is forwarded to WM for capturing on the SAP system.

Camden Power Station reserves the right to do quality checks at any time. It will be the philosophy of this contract that if a problem is identified while carrying out an inspection, a defect is raised to rectify the problem as corrective maintenance.

The scope for the contract is for both PM and unplanned corrective maintenance (breakdowns). Standby personnel should be provided for unplanned corrective maintenance/breakdown activities.

Response time for standby personnel callouts after hours (Monday until Friday), over weekends and all public holidays will be one (1) hour from the time the call has been received by the Contractor to the time the Contractor reports to the Shift Manager on standby on site. Standby lists are to be given and updated at Electrical Operating Desk (EOD) via the Contract Supervisor. Standby and call-out costs are included in the monthly contract amount.

This contract includes PTW requirements for sub-contractors excluding specialised work for the Ash Plant equipment and Coal Plant equipment (e.g. Belt splicing and new project work).

The Contractor will be required to create access for other partners (Employer or other personnel asked to perform other activities by the Employer) that perform work at Ash and Coal plant (e.g. Removal and installation of motors and lifting of conveyor counterweight).

Contractor is required to submit a task plan to Common plant supervisor for each planned or breakdown activity which is subject to the approval by production, planners or managers before any work can commence.

3.1.4 Spares Management

The Contractor will contribute to spares management by timeously providing a report/detail of spares required to the Contract Supervisor and this includes conducting stores walk-down to identify zero stock levels/obsolete spares and cataloguing spares. Stores walk-downs and reporting should be done on a weekly basis.

3.1.5 Experience

Below are the qualified and experienced skills that are required:

- Site Manager
- Supervisors
- Safety officers
- Mechanical Artisans

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- Fitter & Turners
- Planner
- Riggers
- Boiler Makers
- Welders
- Semi-skilled workers
- Equipment operators (yellow plant)

Support Structure:

- Drivers (bus/taxi/bakkie)
- General workers

Notes:

- Contractor will be responsible for compiling the scope, programme and resource allocation in the entire task given to them and to ensure that all equipment and tools needed to execute that task are available (e.g. rigging equipment which includes slings, crawls, chain blocks, electric hoists up to 5 tons. Machine tools like grinders and drilling machine etc.)
- Contractor to ensure availability of mobile equipment and drivers on a full-time basis (e.g. telescopic handler, TLB, forklift and cherry picker for execution of pipe work and working at heights).
- Contractor to ensure that their employees are trained to operate the above-mentioned machines and mobile equipment that require a licensed person to operate.

3.1.6 Plant Safety Regulations

The Contractor shall do permit application and verify isolations in the plant from all sources of dangers as described in the Plant Safety Regulations (PSR). The *Employer* shall on request make available a copy of the latest revision of the PSR to the Contractor.

The contractor shall conform to all rules and regulations applicable to PSR requirements and shall complete the Worker's Register prior to working on the plant.

The contractor shall always provide persons who are authorised as RP according to the PSR for accepting a PTW. It is required that a minimum of 50% of the qualified workforce to be authorised as RP. These persons will be required to attend and pass a theoretical course as well as satisfy the examining committee that they are competent before being authorised for both Ash and Coal Plants.

3.1.7 Drawings

Drawings detailing the Ash Plant systems and Coal Conveyor Plant systems are available at Camden Power Station Documentation Centre.

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3.1.8 Rigging Equipment

The Contractor shall:

- Provide rigging and lifting equipment and tools.
- Always ensure availability and reliability of rigging and lifting equipment
- Provide module lifting equipment.
- Perform monthly inspection on own lifting equipment.
- Perform load testing of own lifting and rigging equipment.
- Repair or replace own defective equipment to ensure availability and reliability.

3.2 Coal Plant Maintenance

The maintenance of the Coal Handling plant involves all coal conveyors and all their subsystems and components. These subsystems and components may include the following and more:

- All gearboxes
- All Fluid Drive Couplings
- All Rigid Couplings
- All Gravity Take-up systems and their subsystems
- All Coal Plant chutes and their subsystems
- All the pulleys and their subsystems
- All the Tripper Cars and their subsystems
- All the Skirting Rubbers
- All the Idlers
- All the Belts
- All the magnetic separators and the subsystems
- All the Sampling Hammers and their subsystems
- Sump pumps

3.2.1 Conveyor Belt Repairs/Replacement

The Contractor will pull in and clamp any belting or part thereof that may require repair or replacement as well as prepare such jobs to allow others to perform splicing, repairs or re-lagging activities.

3.2.2 Gearboxes

The Contractor inspects all gearboxes as per maintenance strategy requirements and as instructed by the Employer. The inspections may include but are not limited to:

- Oil leaks and damaged/worn seals

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- Oil level
- Causes for excessive operating temperatures
- Loose bolts
- Defective bearings
- Internal inspection

The Contractor shall perform maintenance on the gearboxes based on the following:

- Issues highlighted during inspections
- As per the maintenance strategy
- Condition monitoring reports
- As and when required/requested by the Employer

The Contractor shall perform the following maintenance activities but not limited to:

- Oil top-ups
- Greasing all backstops and anti-run back
- Fault finding and rectification
- Installation, removal and replacement of gearboxes (this may involve lifting equipment)
- Alignment as per approved procedures.
- Transporting gearboxes to and from stores

3.2.3 Pin-Bush and Fluid Drive Couplings

The Contractor shall conduct inspections as per maintenance strategy requirements and as instructed by the Employer. The inspections may include but are not limited to:

- Damaged components
- Faulty couplings
- Misalignment
- Non-functional fusible plugs on fluid-drive couplings
- Fluid-drive oil level or overload

The Contractor shall perform maintenance based on the following:

- Issues highlighted during inspections
- As per the maintenance strategy
- Condition monitoring reports
- As and when required/requested by the Employer

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The Contractor shall perform the following maintenance activities but not limited to:

- Oil top-ups
- Alignment as per approved procedures
- Replacement of fluid coupling components

3.2.4 Holdback Units

The Contractor shall conduct inspections on holdback units as per maintenance strategy requirements and as instructed by the Employer. The inspections may include but are not limited to:

- Oil levels
- Oil leaks
- Seals inspections
- Backstops inspections
- Stop lugs and internal inspections

The Contractor shall perform maintenance based on the following:

- Issues highlighted during inspections
- As per the maintenance strategy
- As and when required/requested by the Employer

The Contractor shall perform the following maintenance activities but not limited to:

- Oil top-ups and oil changing
- Seals replacement
- Stop lugs replacement
- Internal cleaning with degreasing agent (Grease must never be used for internal lubrication of backstops)

3.2.5 Conveyor Idlers

The Contractor shall conduct daily inspections on conveyor idlers as per maintenance strategy requirements and as instructed by the Employer. The inspections may include but are not limited to:

- Bearing noise
- Worn shells
- Broken bases
- Material build-up

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The Contractor shall perform maintenance based on the following:

- Issues highlighted during inspections
- As per the maintenance strategy
- As and when required/requested by the Employer

The Contractor shall perform the following maintenance activities but not limited to:

- Idler replacement

3.2.6 Pulleys

The Contractor shall conduct inspections on pulleys as per maintenance strategy requirements and as instructed by the Employer. The inspections may include but are not limited to:

- Bearings noise or temperature
- Material build-up
- Seals inspection

The Contractor shall perform maintenance based on the following:

- Issues highlighted during inspections
- As per the maintenance strategy
- As and when required/requested by the Employer

The Contractor shall perform the following maintenance activities but not limited to:

- Pulley replacement
- Bearings replacement
- Lubrication of bearings
- Replacement of seals
- Removal of crown created by material build-up

3.2.7 Belt Maintenance

The Contractor shall conduct daily inspections on conveyor belts and components as per maintenance strategy requirements and as instructed by the Employer. The inspections may include but are not limited to:

Belts:

- Belt misalignment

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- Splice separation/condition

Scrapers:

- Scrapers blade inspection
- Scrapers blade position

Rubber Skirting:

- Rubber skirting inspections (Material build-up, out of position or gaps)

Chutes:

- Coal build-ups
- Chute liners inspections

Movable chutes and floppers:

- Visual inspect rails for deformation
- Visually inspect tripper cars condition (including wheels)
- Visually inspect actuators

The Contractor shall perform maintenance based on the following:

- Issues highlighted during inspections
- As per the maintenance strategy
- As and when required/requested by the Employer

The Contractor shall perform the following maintenance activities but not limited to:

- Belt realignment
- Scraper replacement, repairs and adjustments
- Applying clipjoints on belts
- Lifting of counterweights to aid splicing (Splicing is done by a separate contractor)
- Splice transportation to and from the plant.
- Replacement of scraper blade when worn or damaged
- Adjustment of scraper blade tension
- Adjustment of rubber skirting to prevent spillages or replacements of skirting rubbers
- Unblocking of blocked chutes
- Repairing worn/damaged chute liners (Replacement is done by a separate contractor)

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- Replacement of missing chute fastener caps
- Repair worn-out chute plates
- Grease counterweights wheels
- Repair counterweights defects
- Align rails and tripper car
- Repair pulley guards

3.3 Ash Plant Maintenance

The Contractor will perform maintenance according to Employer approved schedules and requests. The Contractor will be responsible for maintaining the ash handling and ash water return plants to the standards specified by Employer.

Maintenance will include the following:

- All pumps (Ash, sluice, hopper and seal pumps)
- All pipes
- All valves (NRV's, air release valves and other valves)
- Hoppers from slide-gate downwards – including slide-gate (FFP plant and economizers)
- Sluice ways Nozzles and pipework
- Ash crushers
- All Gearboxes
- Barge pumps (including foot valves, pipework and valves)

3.3.1 Fabric Filter Plant (FFP)

The Contractor to inspect as per maintenance strategy requirements and as requested by the employer. The following will be maintained by the Contractor:

- FFP slide gates, square to round, nozzles and venturi pipes
- Gratings with the FFP and Ash plant
- Sluice ways
- FFP valves and pipework (inside FFP and from main supply lines)

3.3.2 Pumps

All pumps in the Ash plant Camden Power Station will be maintained by contractor as per the OEM's manual and as per the maintenance strategy (or as requested by the Employer) of the Ash plant.

The Contractor is expected to:

- Inspect and service all pumps
- Conduct fault finding on all pumps

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- Remove and replace pumps for maintenance requirements
- Rebuild pumps when required by the Employer
- Perform alignment or repairs as per condition monitoring reports

3.3.3 Ash Plant Valves and Gearboxes

The contractor to maintain valves and gearboxes as per maintenance strategy and as per the OEM's manual or as requested by the Employer. The following is what is expected from the Contractor:

- Maintenance of all valve and gearboxes in the Ash plant (including AWR and sluice system)
- Valves inspections and rebuild
- Gearboxes inspections
- Removal and replacement of valves and gearboxes
- Repairs on valves and gearboxes

3.3.4 Ash Plant Pipework

The Contractor to inspect Ash plant pipework as per maintenance strategy requirements and when requested by the Employer. The following is expected from the Contractor:

- All pipework (including ash lines) inspections for wear and repairs to be planned accordingly to avoid further deterioration.
- Painting of Ash plant pipework as per the Employer's requirements.
- Perform ultrasonic wall thickness measurement on all pipework and issue reports (Contractor to supply its own equipment for this activity).
- Ash line rotation to be executed at certain intervals as requested by the *Employer* (i.e. Engineering instruction).
- Replacement of pipework when required.

3.3.5 Ash Crushers

The Contractor to inspect and service crushers as per maintenance requirements and when requested by the Employer. The Contractor is expected to:

- Perform visual inspection and repairs/service
- Remove and replace worn components
- Do fault finding and resolve issues found
- Press flywheel on crusher (Press machine to be supplied by the Contractor)

3.3.6 Sluice and Sump Agitation System

The Contractor to inspect and repair sluice and sump agitation system as per maintenance strategy requirements and when requested by the Employer. The Contractor shall:

- Inspect for nozzle blockages and wear.

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- Remove and replace worn out nozzles and pipework.

3.3.7 Ash Water Return System

The Contractor shall inspect and service AWR system as per maintenance strategy requirements and when requested by the Employer. Maintenance of Dejagers pump barge pumps, pipework, gearboxes and valves will be carried out by the Contractor.

3.4 Types of Maintenance and Plant Excluded from the Scope of Work

a) Excluded Type of Maintenance

Conveyor belt splicing and repairs, pulley re-lagging, tiling of chutes and sluiceways.

b) Excluded Type of Plant

6.6 kV switch gear, high mast lights, civil works, structural steelwork and sheeting, buildings (Switch gear rooms, control rooms, lifts) and all fire protection systems.

3.5 Constraints on how the Contractor Provides the Works PSR

The Employer shall on request from the Contractor isolate required plant from all sources of danger as described in the PSR.

The Employer shall on request make available a copy of latest revision of the Plant Safety Regulations to the Contractor.

The Contractor shall conform to all rules and regulations applicable to Plant Safety and shall complete the Worker's Register prior to working on the plant.

4. Security Management

The *Contractor* applies for access permits (*Contractor's* permit) at the security gate on the start date of the contract. The *Contractor* personnel shall be required to always be in possession of an access permit.

To assist Protection Services with the issuing of permits and the identification of personnel on site the successful *Contractor* is to supply a list of all personnel that intends using on site, at least 72 hours prior to entry of the Security Area. This list must be delivered to Protection Services. The list identified with the *Contractor's* name is to contain the following information:

- Employee name
- Employee ID
- The Employer's Safety Coordinator's signature
- Ash and Coal Plant Maintenance Manager's signature
- Copy of the first page of the ID book of every employee of the *Contractor*, photocopied to reduce the size to 65%.

Access permits must be returned to the protection services when the worker/s leave the site, either after completion of the services, or upon earlier termination of service of a worker during the contract period.

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To speed up the process of gaining access to the site, the *Contractor* must compile detailed lists of all tools and equipment (including serial numbers where applicable) to be taken on site before arriving at the Power Station Security gate. An authorised copy of this list must be retained by the Contractor – to be used again when the tools and equipment are removed from site after the completion of the services.

Any additional tools or equipment brought to site, or any tools or equipment removed during the contract period must be reported to protection services and all lists amended likewise. Gate release permits will not be issued for the removal of any tools or equipment not specified on the tool list.

The *Contractor's* visitors and all personnel shall always conform to the security arrangements in force at the site. Application forms for visitors must be filled in by the *Contractor's* Site Manager and approved by Common Plant Maintenance Manager, one day before the visit and submitted to the Employer's Protection services office. Visitors will not be allowed on site if the necessary forms are not in the possession of the security staff.

The Chief of Protection Services may, with valid cause remove any of the *Contractor's* personnel from the site, either temporarily or permanently. He may deny access to the site to any person whom in the opinion of the said Chief of Protection services, constitutes a security risk.

No unauthorised vehicles will be allowed on site. Only *Contractor's* vehicles with displayed contract vehicle permit disks will be allowed on site. Contract vehicle applications be directed to the Common Plant Maintenance Manager.

The *Contractor* will be restricted to the working areas associated with his place of work. The *Contractor* is forbidden to enter any other areas and must ensure that his employees abide by these regulations.

No recruiting of casual labour may be done on the Employer's premises, including the area outside the Power Station Security Gate.

5. Transport

The *Contractor* will be responsible for own transport on site as well as for standby purposes. No passengers will be allowed at the back of a bakkie (LDV) even if fitted with a canopy.

6. Health and Safety Requirements

6.1 General

The *Contractor* must ensure that all his personnel attend a Health and Safety Induction Course prior to starting with their work. The induction course can on request be provided by the Employer and will be valid for the duration of the services.

Safety Risk Management has the right and authority to visit and inspect the *Contractor's* workplace or site establishment to ensure that tools, machinery and equipment comply with the minimum safety requirements.

The Common Plant Maintenance Manager shall be entitled to instruct the Contractor to stop work without penalty to the Employer, where the Contractor's personnel fail to conform to safety standards or contravene health and safety regulations. The Common Plant Maintenance Manager is entitled to call the Contractor to discipline his employees and to submit disciplinary action and submit a report to the Common Plant Maintenance Manager. The contractor shall implement additional health and safety precautions where necessary.

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The Contractor will provide all his personnel with the required personal protective equipment.

Risk Assessment, Pre-job briefs, post-job briefs and job observations will be conducted for all jobs.

All Construction Regulation Safety requirements should also be adhered to:

- Safety Plan
- Fall Protection Plan (repairing/replacing of pipe using scaffolding)

6.2 Pandemic Control Management

- Contractor to ensure there are resources provided/allocated in case of a pandemic outbreak
- Contractor to adhere to Eskom processes and guidelines with regards to pandemic management

6.3 Fire Precautions

- Any tampering with the Employer's first aid equipment is strictly forbidden.
- All exit doors, fire escape routes, walkways, stairways, stair landings and access to electrical distribution boards must be kept free of obstruction, and not to be used for work or storage at any time. Firefighting equipment must always remain accessible.
- In case of a fire, report the location and extent of the fire to the Electrical Operating Desk at extension 3471.
- Take the necessary action to safeguard the area to prevent injury and spreading of the fire.

6.4 Reporting of Accidents

The Employer follows an accident prevention policy that includes the investigation of all accidents involving personnel and property. This is done with the intention of introducing control measures to prevent a recurrence of the same incidents. The Contractor is expected to fully co-operate to achieve this objective. The Common Plant Maintenance Manager must be informed immediately of any incidents and any damage to property or equipment must be reported within 12 hours.

NOTE: This report does not relieve the Contractor of his legal obligation to report certain incidents to the Department of Labour, or to keep records in terms of the Occupational Health and Safety Act, also Compensation for Occupational Injuries and Diseases Act.

6.5 Barricading and Screens

The contractor will provide and install barricades and warning devices to ensure that equipment and persons are not exposed to danger or to prevent access to dangerous areas.

All welding, flame cutting and grinding work shall be properly screened to protect persons from any injury.

All gratings shall be covered with adequate protective screening when welding or flame cutting in the vicinity.

CONTROLLED DISCLOSURE

7. Quality Requirements

The Contractor will comply with the Employer's Quality Requirements.

Quality requirements include visual inspection by the employer who will be entitled to witness progress of work at any time. The Employer shall also have the right to stop work and re-instruct the Contractor who will comply with the requests.

The Employer may by arrangement inspect completed work. If in opinion of the employer the work does not comply with the quality requirements expected from the Contractor, the Employer shall instruct the Contractor to rectify the faults. The Contractor will comply with the instructions.

8. Personnel Qualifications

The Contractor's Site Manager shall ensure that only qualified and experienced artisans be allowed to work on plant which may cause production losses or safety risk. The Common Plant Maintenance Manager shall be entitled to verify the qualifications of any artisan. All qualifications certificates of the *Contractor's* employees shall be vetted by the *Contractor* and proof to be kept (*Employer* reserves the right to request this at any time).

9. Services and Other

This section describes what the Employer is to supply specifically for the purpose of the works. The Contractor is to supply everything else required to provide the works.

9.1 Spares, Tools and Consumables

Unless otherwise stated, all spares will be supplied by the *Employer*. The Contractor may be required to procure spares on as an when required basis. In this event, the Contractor will be paid the actual cost of the procured spares plus a fee percentage.

The Contractor will be responsible for all free issue material control functions, including but not limited to receipt, checking, offloading, taking temporary possession and proper storage of all materials as well as returning any unused or refurbish able items to the Supervisor.

The Contractor shall supply all tools and equipment used to maintain the plant. The Employer shall supply tools in exceptional cases with the authorisation of the Workshop Supervisor or Common Plant Maintenance Manager.

The Contractor shall provide own stationary, rags, printing equipment and computers.

The Contractor shall provide own PPE (as per employer's requirements) to all employees as required. All PPE and masks must be SABS approved.

The Contractor to provide own consumables (including rags).

The Contractor shall provide suitable facilities (e.g. Lockers) for Employees.

9.2 Use of Employer's Equipment

If the Contractor requires use of any of the Employer's Equipment, including compressed air, electricity, water supply and cranes, it must be requested via the supervisor.

CONTROLLED DISCLOSURE

The contractor will be responsible for the repair, replacement or correction as necessary of all items of plant and/ or materials supplied by the Employer which are damaged and/ or lost whilst in the Contractor's custody and control.

The Contractor Site Manager must ensure that anyone of his employees or subcontractors, operating hoist equipment belonging to the Employer is authorized by the Employer.

9.3 Accommodation and Catering

The *Contractor* will be responsible for the provision of accommodation to his personnel as the *Employer* does not provide accommodation.

The *Contractor* or any of his employees or subcontractors will be allowed to use the *Employer's* dining facilities.

The *Contractor* or any of his employees or subcontractors may also buy take away meals from the fast-food outlet onsite.

The *Contractor* will be responsible for the change rooms of its employees and subcontractors.

9.4 Office and Toilet Facilities

The Employer will provide the Contractor with access to the Supervisor's office and toilet facilities. Site Manager's office and other offices required by the *Contractor* shall be supplied by the *Contractor*. Storage facility for spares and equipment will be made available by the *Employer*.

9.5 Medical Facilities

The *Contractor* provides a First Aid service to his employees and subcontractors. In the event where these prove to be inadequate, as in the event of a serious injury, the Employer's Medical Centre and facilities will be made available.

Outside the Employer's office hours, the Employer's First Aid services will only be available for serious injuries and life-threatening situations.

The Employer shall be entitled, however, to recover the costs incurred in the use of the above *Employer's* facilities from the *Contractor*.

9.6 Refuse Disposal

The *Employer* will provide and empty special colour coded bins for refuse disposal. The *Contractor* will be responsible for refuse bins for his own site.

The *Contractor* ensures that all workers under his control strictly adhere to the correct use of refuse bins.

For the full duration of the services, the *Contractor* is responsible to keep the work area clean of any rubble and to place all refuse into the bins provided.

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10. Boundaries

10.1 Coal Handling Plant

Boundary Start: Inlet to the conveyor 18 grizzly bars at the coal stockyard and conveyor E1 in-loading chute including sampling hammers and conveyor belts and accessories.

Boundary End: Discharge off over the bunker tripper car conveyors into the mill bunkers for unit 1 to unit 8 including grizzly bars.

10.2 Ash Water Return (AWR)

Boundary Start: AWRD discharge pipework, AWR reservoir together with the inlet and outlet isolating valves to sluice pumps. Including new Ash dam and AWR.

Boundary End: Hopper sprays at Boiler 1-8 and the hydrovac valves, slurry system (i.e. Ash sumps, pumps, ash lines and valves) and sluice way nozzles including the venture pipes.

11. Limit of the Scope

The scope only covers Ash plant and Coal plant.

12. Acceptance

This document has been seen and accepted by:

Full Name and Surname	Designation
	System Engineer – Common Plant Engineering
	System Engineer – Common Plant Engineering
	Snr Engineer – Common Plant Engineering
	Snr Technician – Common Plant Maintenance
	Technician – Common Plant Maintenance
	Snr Supervisor – Common Plant Maintenance
	Snr Supervisor – Common Plant Maintenance

13. Revisions

Date	Rev.	Compiler	Remarks
January 2025	01		Original issue

14. Development Team

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

- System Engineer
- System Engineer

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- Snr Engineer

15. Acknowledgements

Not applicable.

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