

	Scope of Work	Camden Power Station
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Compiled by



D Phakathi
Senior Technician
Operating

Date: 21/01/2022

Functional Responsibility



M Dubazana
Ops Support
Manager

Date: 25/01/2022

Authorized by



D Mailula
Operating Group
Manager

Date: 10/02/2022

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1 INTRODUCTION

Camden Power Station intends to enter into a contract with a suitably qualified, experienced and established contractor with the capacity to execute the scope of work as listed below. It is important to note that the contractor must have an auditable track record in the field of providing similar services in the industrial cleaning environment.

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2 SCOPE

2.1 GENERAL DESCRIPTION

Site establishment, planning, supervision, and execution of industrial cleaning of production and outage plant at Camden Power Station.

Furnishing of all materials, equipment, tools, consumables, labour, chemicals and each expense necessary for the provision of industrial station cleaning services.

Provision of plant and services as may be necessary such as supply, erect, etc. of all mechanical structural, moving and other equipment to provide a complete service in terms of this scope of work.

In general, the applied cleaning methods should utilize mechanised cleaning machinery or vacuum plant / equipment. To minimise dust in the plant manual cleaning methods such as dusting should be minimised by all means only in those areas where use of mechanised cleaning machinery or vacuum plant / equipment is not viable, can manual cleaning methods or water wash be applied.

Cleaning equipment must be highly reliable, robust, self-sustaining and not be dependent on prolonged recharging of its power sources.

NB: All equipment listed under the Technical Requirements shall always be kept on site and must be available 24/7 for the duration of the contract. In case of breakdowns Services Manager must be informed immediately and replacement of such equipment must be arranged by the contractor if the equipment is going to be out of service for a prolonged period. In case of regular/scheduled service and maintenance, contractor must submit a service/maintenance schedule to the Services Manager in time for proper planning of activities.

The following are timelines/replacement periods that will be allowed for maintenance of critical equipment and must be complied with. Should maintenance go beyond these maximum allowable periods a replacement must be arranged, failure to do so may lead to penalties being effected as per the NEC contract.

Vacuum Truck	– 72hrs with one truck available and 12hrs without standby
HP Machine	– 72hrs with one HP Machine available and 12hrs without standby
Portable slurry pump	– 72hrs with at least one pump available and 12hrs without standby
Bobcat	– 72hrs

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As part of this philosophy the following types of equipment will be taken into consideration

- **Vacuum Equipment:**

Mobile heavy duty vacuum plant (Vacuum Trucks) for vacuum cleaning, clearing of coal and ash spillage, emptying of sumps/drains, cleaning of pipe trenches, draining water where needed, etc

Industrial portable vacuums to vacuum all the settled ash and pulverised fuel dust on grated floors, cable racks, plant equipment's, plant structures, etc...

- **High Pressure Cleaning equipment**

Unblocking pipelines and drains, cleaning hard settled ash, etc

- **Floor washing, scrubbing and sweeping equipment**

In house floors where accessible to be swept and scrubbed with mobile floor sweepers and scrubbers, inaccessible areas must be cleaned manually with manual tools and the dirt from these areas to be swept into the sweepers pathway and be removed immediately. No piling is allowed.

- **Basement floors washers.**

Given the amount of dirt that settles on these floors, Basement floors at 0ml may be water washed, using water hoses and industrial floor washing machines. Water hoses may only be connected to water points provided for floor washing. The cleaning contractor is responsible for the provision of the hoses and floor washing equipment

NB. USE OF FIRE WATER FOR PLANT CLEANING IS PROHIBITED

2.2 SCOPE TO BE EXECUTED

2.2.1 Once off

2.2.1.1 Site establishment

2.2.1.2 Site de-establishment

2.2.2 Daily Cleaning

2.2.2.1 Turbines and Auxiliaries unit 1 – 8

2.2.2.2 Boilers and Auxiliaries unit 1 – 8

2.2.2.3 Station equipment rooms

2.2.2.4 Water treatment plant

2.2.2.5 Cooling water plant (including CW pump houses east and west)

2.2.2.6 Coal sumps X3

2.2.2.7 Hydrogen Plant

2.2.2.8 Fuel oil plant and oil stores (including sumps)

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2.2.2.9 Dirty drain treatment plant

2.2.2.10 Unblock all station drains

2.2.2.11 Sewage plant (including emptying all septic tanks in the Station)

2.2.2.12 Roads and remaining areas

2.2.2.13 Workshops and stores

2.2.2.14 Compressor houses (East and West)

2.2.2.15 Used oil management

2.2.2.16 Ash plant

2.2.2.17 Fabric Filter Plant (FFP)

2.2.2.18 Ash line trenches cleaning from the ash sumps up to the new fence inside the station

2.2.2.19 Ash sumps cleaning x4

2.2.2.20 Weekend cleaning scope

2.2.3 As and when required basis

2.2.3.1 Cleaning of Cooling Towers

2.2.3.2 Unblocking of ash pipe lines / any pipe line per 12meter length.

2.2.4 Applicability

This document shall apply to Camden Power Station, and the scope will be executed at Camden Power Station Premises inside and outside of the Power Station fence e.g Ash pipelines and trenches up to the ash dams, Camden Ash Dams old and new, Makoya, AWR plant, Coal stock yard and all Camden dams but areas are not limited to the listed areas only. (see remaining areas on page 31)

2.3 ADDITIONAL REQUIREMENTS

The supplier must meet the following additional requirements:

The supplier must own the plant / equipment required for the execution of this scope and/or must have a valid lease agreement from the leaser for the duration of the contract NB. Lease agreement must also state the availability of all equipment to be rented. All equipment must be on site readily available before the contract start date and they must be kept on site (at Camden Power Station) for the duration of the contract. All the equipment used must be maintained in good working order and must conform to statutory requirements.

2.3.1 Contractor must be able to supply sufficient work force, to execute the scope

Minimum 120 employees.

NB. The *Services Manager* may request additional work force depending on the need. Number of Supervisor's on site will be determined by the number of people on site as per safety requirements. (x5 Supervisors)

Normal Working Times 07:15 to 16:30 (With 30 minutes lunch from 12:00 to 12:30, employees are only allowed to have lunch at their designated sites only)

Contractor must ensure that their site is well established and fully furnished to accommodate the number of their employees on site.

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2.3.2 The contractor must have a weekend team that will clean 0 – 12 ml, boiler and turbine side from unit 1 – 8; road sweeping and deep cleaning of all units on all accessible areas or units off load (refer to page 34 under deep cleaning for detailed scope) or any other area that needs attention that could not be attended to during normal working days due to plant unavailability or while the units are on load.

NB. Working hours during weekends **07:00 to 14:00 with a minimum of 35 employees.**

2.3.3 The contractor must have formal appointments as per SHEQ profile including a Quality Controller (QC)

2.3.4 Contractor must comply with all Regulations applicable to Eskom i.e Fossil Fuel Firing (FFFR), High Voltage (HV) and Plant Safety Regulations (PSR), to supervise work and for access into all restricted areas contractor must have an authorised Responsible Person (RP) and Authorised Supervisor. Training will be provided by Eskom and the contractor will be given 2 months to ensure their staff is fully trained and competent to execute the scope of work as per the contract.

2.3.5 Cleaning of unit on outage will take place as and when required by the outage coordinator, before and after outage.

2.3.6 Contractor must supply material for cleaning including but not limited to solvents and degreasers (Suitable for normal and Bunker 150 – Fuel Oil), detergents, floor polish & stripper, etc

2.3.7 Contractor to supply lights and additional tools to carry out tasks e.g torches, DC lights, extensions, slings, harnesses, jack hammer etc. (prices per activity must include cost for these tools)

2.3.8 Contractor to ensure that all cleaning tools are maintained in good working condition at all times e.g PPE, shovels, brooms, feather dusters, Bins, Wheel barrows, etc... and register of issuing updated at all times, maintain good housekeeping in the storage area where all tools are kept.

2.3.9 Contractor's overalls must be branded, be of different colour from Eskom and other contractor's where possible for easy identification. Penalties will be applicable where non-compliance is raised.

2.3.10 Contractor must provide proper PPE for work to be done in the following areas

- A) on more dusty areas (Respirators & disposable overalls),
- B) wet areas (rain suits and gumboots) and
- C) hot areas (TST heat resistance suits and boots)

2.3.11 A fee determined by Finance Department will be charged on the contractor for every contractor's employees issuing and lost gate pass permit

2.3.12 All equipment's, machinery and tools required carry out all the duties stipulated in the works information must always be available and be kept on site for easy access when needed. Contractor must inform the Service Manager immediately in writing in case of breakdown and replace if repairs will take longer as per timelines provided above.

2.3.13 All equipment brought to site must be registered with Security and nobody is authorised to issue a removal permit for any equipment that has to leave site only the Services Manager or a person delegated by the Services Manager in his/her absence can issue such permit.

2.3.14 The cleaning contractor must take note that Camden Power Station has a duty to achieve or sustain a 5-Star NOSA rating of which housekeeping plays a major role, thus the reliance will be on the contractor for Camden Power Station to achieve this.

2.3.15 The cleaning staff shall at all times be presentable and conduct themselves in accordance with Camden Power Station accepted practices and comply with all Eskom's Life Saving Rules.

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- 2.3.16 The contractor must be able to handle and clean oil, ash and coal spillages. Disposal will be arranged by Services manager with relevant contractor.
- 2.3.17 The Employer (Eskom) will not tolerate any form of abuse of employees by the contractor, the contractor must always maintain fair labour practices. Strikes and go slow is not allowed on site the contractor will be penalised should any of these events take place.
- 2.3.18 Illegal strikes are not allowed on site and Criminal offences will not be tolerated on site, will lead to immediate removal of the relevant/affected employee from site.
- 2.3.19 Technical and SHEQ internal audits will be conducted monthly to ensure compliance, Contractor is expected to always comply with these requirements therefore noncompliance may lead to work stoppage by Services Manager until compliance is proven and contractor will be penalised.

2.4 TECHNICAL REQUIREMENTS

2.4.1 Equipment

- 2.4.1.1 2X Diesel Vacuum Truck (10m³)
HPVR – 1000 Liquid ring (12500 litres Vacuum Tank)
HPVR – 1000 Liquid ring (12000 litres VacJet - Combination)
- 2.4.1.2 2X HP Jetting machine (1000 – 1500 bar)
- 2.4.1.3 1X Double cab bakkie
- 2.4.1.4 1X Road sweeper with enclosed cabin for operator/driver
(NB: No Tractor and no Bobcat combination)
- 2.4.1.5 1X Bobcat
- 2.4.1.6 4X Ride on Sweepers
- 2.4.1.7 4X Walk behind Sweepers
- 2.4.1.8 4X Ride on Floor Scrubbers
- 2.4.1.9 2X small Walk behind Scrubbers
- 2.4.1.10 2X Heavy Duty Slurry Submersible Pump

Specifications:

Pump type: 100 ANZE Submersible pump

Head: 38 m

Maximum solid content: >65%

Flow Requirement: 220 m³/hr

Voltage: 380V (Three phase)

NOTE: The pump must be equipped with an Inducer which makes settled solids to flow.

Pump curves, Performance test Certificate must be attached on delivery.

- 2.4.1.11 1X Diesel Pump

Specifications:

Pumping capacity – : Flow rate 650 m³ /hr to 780 m³ /hr;

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Maximum speed – 1800rpm

Head – 50m to 60m

2.4.1.12 8X Industrial Portable Vacuum cleaners (380v)

2.4.1.13 2X Industrial Pressure Washers for basement floors

2.4.1.14 3X 40m Heat Resistance pipe

2.4.1.15 2X Cherry Picker / Scissor's Lift (12m and 18m)

NB: ALL THE ABOVE MENTIONED EQUIPMENT IS COMPULSORY AND MUST BE KEPT ON SITE 24/7 IN GOOD WORKING CONDITION

2.4.2 Skilled/Semi-skilled Labour

2.4.2.1 2X Vacuum Truck Drivers

2.4.2.2 6X Vacuum Truck Operators

2.4.2.3 6X HP Machine Operators

2.4.2.4 2X Bobcat Operators

2.4.2.5 2X Rigger (Level 5 with min 3 years' experience – attach CV)

2.4.2.6 2X Cherry picker / Scissor's lift Operators

2.4.2.7 Responsible Person (RP) –for Plant Safety Regulations – this will not form part of evaluations
(Training will be provided by Eskom – two months grace period for authorisation)

2.4.2.8 Authorised Supervisor – for High Voltage Regulations– this will not form part of evaluations
(Training will be provided by Eskom – two months grace period for authorisation)

NB: PROVIDE PROOF OF COMPETENCIES AND CV's WHERE APPLICABLE

(CERTIFIED COPIES OF VALID COMPETENCY CERTIFICATES)

3 WORKS INFORMATION

The following information and schedules only indicate the *Employer's* estimate of the cleaning activities and the time intervals to be carried out on the different type and areas of the plant. It remains the contractor's responsibility to ensure that the areas of the plant are kept clean.

3.1 TURBINE HOUSE

3.1.1 Boundaries

At the turbine house, the boundary wall will be a straight line half way between the turbines on the one unit and the generator of the adjacent unit (from unit 1 to 8 – at 12ml and 0ml). Where there is no adjacent unit the boundary will be at the turbine house wall (Unit 1 and 8)

Included in the turbine house:

- 12ml – Turbine, Generator, Main oil tanks, Cable spreader room, pipe work, auxiliaries, roofs & gutters
- 9ml – Boiler feed pumps, Steam Feed pumps, LP & HP heaters, pipe work, auxiliaries, oil pumps

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- 0ml – Condenser, oil stations, oil sumps, oil tanks, pipe trenches, pipe work, auxiliaries, diesel generator bay, sampling stations.
- And all areas in between the levels mentioned above

3.1.2 Expected nature of rubbish and dirt

The expected nature of rubbish and dirt to be cleaned in the turbine house is expected to be normal dust settling on the plant and equipment. Oil and grease spilling from the machinery as a result of normal maintenance duties and unexpected failures. Coal and ash dust is expected to be of high significance as a result of the opening being in between the boiler and the turbine houses. Spillages are expected to be limited to oil spills only.

3.1.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
EQUIPMENT, COMPONENTS & INSTRUMENTS <ul style="list-style-type: none"> • ELECTRIC PANEL BOARDS (OPEN PANELS NOT TO BE CLEANED) • SWITCH AND CONTROL BOXES • LIGHT FITTINGS AND WINDOWS • TELEPHONE CUBICLES • V GAUGES 	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, AVOID SPRAYING WATER OVER THE MOTORS.	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
BULK OIL TANKS ABOVE 12ML INCLUDING OPEN SPACE	SWEEP, DUST, CLEAN ANY OIL SPILLAGES AND EMPTY ALL BINS	WEEKLY	
CABLE SPREADER ROOM	SWEEP, DUST, MOP & SCRUB	MONTHLY	
PUMPS	DUST AND REMOVE OIL AND GREASE, ALTERNATIVELY DAMP CLEAN	1 X DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
MOTORS & GEARBOXES	DUST, REMOVE OIL AND GREASE AND DAMP CLEAN.	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ACTUATORS - (CRITICAL COMPONENT)	DUST AND DAMP CLEAN. AVOID TOUCHING/MOVING THE LIMIT SWITCHES THIS MAY CAUSE UNIT TRIP	DAILY	RISK OF UNIT TRIP AVOID TOUCHING/MOVING THE LIMIT SWITCHES
DRAINS	HP WASH WHEN REQUIRED, WATER WASH, VACUUM CLEAN, PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	1 X MONTHLY	
OIL TANKS	DUST, REMOVE OIL AND GREASE AND DAMP CLEAN	DAILY	NO WATER OR DETERGENT TO ENTER THE TANK
FIRE EXTINGUISHERS, HYDRANTS AND HOSE REELS	DUST AND DAMP CLEAN	DAILY	

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DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN	DAILY	
CONCRETE ELEVATED FLOORS (9ML AND 12ML)	SWEEP, SCRUB, WATER WASH WITH AND SWEEPERS. WHERE FLOOR SWEEPERS CANNOT ACCESS, WATER WASH AND SWEEP MANUALLY WITH MOP	DAILY	
BASEMENT FLOOR	WATER WASH AND SWEEP.	DAILY	
GRATED FLOORS	VACUUM OR WATER WASH AND PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	DAILY	
PEDESTALS	DUST, SCRUB AND CLEAN	DAILY	
SUMPS(OIL SUMPS 0ML)	AS NEED BE VACUUM SUCK EMPTY, KEEP DIFFERENT SUBSTANCES SEPARATE AND DISPOSE OF ACCORDING TO REQUIREMENTS ASSOCIATED AND MAKE SURE SUMP IS KEPT CLEAN	DAILY INSPECTION	
TURBINE	DUST AND DAMP CLEAN USING A CHERRY PICKER	DAILY	DO NOT TAMPER WITH INSTRUMENTATION
PIPES, HEAT EXCHANGERS, VESSELS ETC.	DUST AND DAMP CLEAN	DAILY	BE AWARE OF HOT PIPES AND DEFECTIVE UN INSULATED AREAS
FANS AND FAN DUCTING	DUST AND DAMP CLEAN	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
BOILER FEED PUMPS	SWEEP FLOORS, VACUUM, DUST AND DAMP CLEAN PUMP	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
STATOR COOLING SYSTEM	SWEEP FLOORS, VACUUM, DUST AND DAMP CLEAN	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
GENERATOR	DUST USING CHERRY PICKER, SWEEP FLOORS AND DAMP CLEAN	DAILY	DO NOT TAMPER WITH INSTRUMENTATION
H2 SYSTEM	WATER WASH	DAILY	NO SMOKING
C02 SYSTEM	WATER WASH	DAILY	
DRIP TRAYS	EMPTY INTO RECEPTACLE, CLEAN AND PLACE BACK	DAILY	
CABLE RACKS AND TRENCHES	VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY, DUST AND REMOVE RUBBISH	MONTHLY	
PIPE TRENCHES	HP WASH, WATER WASH AND VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
PIPE RACKS	WATER WASH AND VACUUM CLEAN, ALTERNATIVELY DUST	MONTHLY	
CONCRETE TRENCHES	HP WASH, VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, AND REMOVE RUBBISH	MONTHLY	
TRENCH GRATING	PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	DAILY	

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STRUCTURES	DUST AND CLEAN	1 X MONTHLY	WEAR SAFETY HARNESSES WHERE REQUIRED
TURBINE HOUSE ROOF, STRUCTURE AND ROOF GUTTERS	DUST, VACUUM SWEEP AND PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN OR DIG OUT	1 X MONTHLY	WEAR SAFETY HARNESSES
WALLS	WATER WASH AND SCRUB, ALTERNATIVELY DUST	1 X MONTHLY	
STEEL STAIR CASE	DUST, VACUUM , PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	DAILY	
HAND RAILS	DUST AND DAMP CLEAN	DAILY	
ROOF STRUCTURES OF ALL BUILDINGS IN THE TURBINE HOUSE INCLUDING GUTTERS	DUST, VACUUM CLEAN AND DIG OUT, PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN (USE CHERRY PICKER)	1 X MONTHLY	WEAR SAFETY HARNESS WHERE REQUIRED

3.2 BOILER HOUSE

3.2.1 Boundaries

At the boiler house, the boundary will be a straight line half way between two adjacent boiler houses (from unit 1 to 8 – 52ml to 0ml). Where there is no adjacent unit the boundary will be at the boiler house outer walls (Unit 1 and 8)

Included in the boiler house area are;

- 52ml – Boiler roof structure, building structures, Return Water Tanks, auxiliaries
- 48ml – Boiler structure, pipework, auxiliaries, boiler drum
- 29ml – Boiler structure, pipe work, ducting's, cable racks, soot blowers, deaerator tanks
- 12ml –Boiler structure, pipe work, ducting's, cable racks, hand rails, auxiliaries, air heaters, burner front (PF and oil burners), Bunker outlet pipes, Mill feeder landings, sampling plant
- 0ml – Cemented floors/Basement, Ash box, PA fans, Mills, ID fans, FD fans, trenches, sluice ways, cable racks, pipe work
- And all areas in between the levels mentioned above (Scaffolding will be arranged by Employer if needed)

3.2.2 Expected nature of rubbish and dirt

The expected nature of rubbish and dirt to be cleaned in the boiler house is expected to be normal dust, pulverised fuel (PF) dust and ash dust settling on the plant and the equipment on the upper levels. Same rubbish and dirt maybe expected on the basement floor including ash and coal.

Oil (Fuel oil – Bunker 150) and grease spilling from the equipment's as a result of normal maintenance duties and unexpected failures. Coal and ash dust is expected to be of high significance. Spillage of coal and ash may be significant and oil spills are expected to be minor.

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3.2.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
EQUIPMENT, COMPONENTS & INSTRUMENTS <ul style="list-style-type: none"> ELECTRIC PANEL BOARDS (OPEN PANELS NOT TO BE CLEANED) SWITCH AND CONTROL BOXES LIGHT FITTINGS AND WINDOWS TELEPHONE CUBICLES VALVES GAUGES 	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, AVOID SPRAYING WATER OVER THE MOTORS.	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ELECTRIC MOTORS	DUST OR DAMP CLEAN WHERE POSSIBLE USING DETERGENT/DEGREASING FLUID, NO WATER WASH ALLOWED	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
PUMPS	REMOVE OIL AND GREASE, DUST AND DAMP CLEAN	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
GEARBOXES	DUST; REMOVE OIL AND GREASE AND DAMP CLEAN	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ACTUATORS - (CRITICAL COMPONENT)	DUST AND DAMP CLEAN. AVOID TOUCHING/MOVING THE LIMIT SWITCHES THIS MAY CAUSE UNIT TRIP	DAILY	RISK OF UNIT TRIP AVOID TOUCHING/MOVING THE LIMIT SWITCHES
FIRE EXTINGUISHERS, HYDRANTS AND HOSE REELS	DUST VACUUM AND DAMP CLEAN	DAILY	
DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN	DAILY	
CONCRETE ELEVATED FLOORS 12ML	SWEEP, SCRUB, OCCASIONAL WATER WASH AND WHERE FLOOR SWEEPERS CANNOT ACCESS SWEEP/SCRUB MANUALLY WITH BROOMS AND MOPS	DAILY	
GRATED FLOORS 48ML & 29ML	VACUUM/DUST GRATINGS PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	DAILY	
BUCK STAYS	DUST AND VACUUM WATER WASH NOT ALLOWED	1 X MONTHLY WHERE ACCESSIBLE OR WHEN THE UNIT IS OFFLOAD	
ASH BOXES	WASH BOILER ABOVE ASH BOX AND DO HOUSEKEEPING, WASH FLOORS AROUND ASH BOXES	WEEKLY DAILY	MAKE SURE NO ASHING ACTIVITIES ARE TAKING PLACE

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
MILLS	VACUUM CLEAN WHERE NEEDED SWEEP, DUST, WATER WASH AREA BETWEEN MILLS AVOID SPRAYING ELECTRICAL EQUIPMENT, NO DIRECT WATER JETS REMOVE PF, ASH AND COAL FROM THE FLOOR	DAILY AS & WHEN REQUIRED	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT NO DETERGENTS TO ENTER OIL SYSTEM
BURNERS ALL A TO E ROW (RESTRICTED AREA – APPLY FOR LAR)	VACUUM CLEAN, SWEEP, DUST, AND DAMP CLEAN. WHEN REQUIRED USE DEGREASER TO CLEAN OIL SPILLAGES	DAILY	NB. RISK OF UNIT TRIP REPORT TO THE UNIT CONTROLLER TO SIGN AN LAR TO GAIN ACCESS TO THESE AREAS.
TOP OF E-ROW DUCTING INCLUDING LEFT HAND AND RIGHT HAND AIR HEATER DUCTS	VACUUM, USE HEAT RESISTANT PPE AND HEAT RESISTANT PIPES.	1 X MONTHLY OR WHEN THE UNIT IS OFFLOAD	HOT SURFACE
DRIP TRAYS	INSPECT DRIP TRAYS FOR OIL REPORT TO RELEVANT DEPT FOR EMPTYING. EMPTY PF/ASH INTO BINS PROVIDED DO NOT DUMP ON THE FLOOR	DAILY DAILY	
FUEL OIL STATIONS - 12ML	VACUUM CLEAN, HP CLEAN, DUST, SWEEP, DIG OUT WHEN REQUIRED USE DETERGENTS TO CLEAN OIL SPILLAGES	DAILY	
DA AREAS	DUST, VACUUM, PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN	1X WEEKLY	
MILL COAL FEEDERS AND SLIDE GATES – (FEEDER LANDINGS)	EXTERNALLY - DUST, VACUUM AND DAMP CLEAN (REMOVE COAL BUILD UP, SPILLAGES) DO HOUSEKEEPING	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
WINDOWS	DUST, WATER WASH	WEEKLY	
PRIMARY AIR, FORCED DRAUGHT AND INDUCED DRAUGHT FANS AND FAN DUCTING	DUST, VACUUM CLEAN, DEGREASE AND DAMP CLEAN USING DETERGENTS WHEN NEEDED. NO DIRECT WATER JETS, SPLASH WATER ALLOWED. SWEEP/WATER WASH AREA AROUND THE FANS REMOVE DEBRIS ON THE SUCTION SCREENS WHEN REQUIRED	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT NO DETERGENTS TO ENTER OIL SYSTEM AND TANK WEAR SAFETY HARNESSES WHERE REQUIRED
AIR HEATERS INCLUDING DUCTING	SWEEP AREA AROUND THE AIR HEATERS, VACUUM CLEAN, DEGREASE AND DAMP CLEAN USING DETERGENTS WHEN NEEDED. DUST OR VACUUM DUCTING'S	DAILY WHEN UNIT IS OFFLOAD	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT NO DETERGENTS TO ENTER OIL SYSTEM AND TANK HOOK UP WHEN WORKING AT HEIGHTS

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
AIR AND GAS DUCTING	DUST, VACUUM CLEAN	CONTINUOUSLY OR WHEN THE UNIT IS OFFLOAD	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT HOT SURFACES
PIPES, TANKS, VESSELS ETC.	DUST AND DAMP CLEAN, DEGREASE WHERE NECESSARY	DAILY	BE AWARE OF HOT PIPES AND DEFECTIVE UN INSULATED AREAS
BASEMENT FLOOR MILLS, BOILER ASH BOXES	WATER WASH AND SWEEP. WHERE FLOOR SWEEPERS CANNOT ACCESS, WATER WASH AND SWEEP MANUALLY.	DAILY	
GRATED FLOORS	WATER WASH AND PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	DAILY	
CABLE RACKS AND TRENCHES	VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
PIPE RACKS/TRENCHES	HP CLEAN, VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
CONCRETE TRENCHES	WATER WASH, VACUUM CLEAN, HP WASH OR ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
TRENCH GRATING	PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	DAILY	
STRUCTURES, HANGERS AND SUPPORTS	DUST OR WATER WASH (GET PERMISSION FIRST)	1 X MONTHLY	WEAR SAFETY HARNESS WHERE REQUIRED AND OBTAIN PERMISSION FROM THE SERVICES MANAGER BEFORE WASHING WITH WATER
BOILER HOUSE WALLS, BEAMS AND STRUCTURE	DUST , DAMP CLEAN AND SCRUB	1 X WEEKLY	
FD FANS SUCTION SCREENS	REMOVE DEBRIS USING CHERRY PICK	1 X MONTHLY	
ID FAN SUCTION SCREES	REMOVE DEBRIS USING CHERRY PICK	1 X MONTHLY	
STEEL STAIRWELLS	DUST, SWEEP, DAMP CLEAN AND PICK UP ALL RUBBISH, RUBBLE DISCARDS	DAILY	
GOODS AND PASSENGER LIFTS	SWEEP AND DAMP CLEAN	2X DAILY	
CABLE RACKS	DUST AND VACUUM WHERE POSSIBLE	1 X MONTHLY	
CEMENT/CONCRETE FLOOR 12ML	SWEEP USING SWEEPER, SCRUB USING SCRUBBERS AND REMOVE PF BUILD UP. IN AREAS WHERE SWEEPERS AND SCRUBBER CANNOT ACCESS, SWEEP AND SCRUB MANUALLY.	DAILY	
BOILER HOUSE ROOF, STRUCTURE OF ALL BUILDINGS IN THE BOILER HOUSE INCLUDING GUTTERS	DUST, VACUUM CLEAN AND DIG OUT, PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN (USE CHERRY PICKER)	1 X MONTHLY	WEAR SAFETY HARNESS WHERE REQUIRED

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3.3 FABRIC FILTER PLANT (FFP)

3.3.1 Boundaries

- FFP area extends from the road on the boiler house side(inside the building) onto the road below the terrace, behind the flue gas stack
- The flue exhaust ducting from the FFP including Induced draught fan and the flue gas stack will be included in this area
- Included in this area are all the FFP hoppers sluice way trenches, structures and buildings containing auxiliary equipment providing a service to the FFP(Level above FFP hoppers – rotating manifolds), FFP blower houses.
- All plant and equipment of the fly ash transport system located within belonging to or passing through the above mentioned plant.

3.3.2 Expected nature of rubbish and dirt

The nature of rubbish and dirt to be cleaned in the Fabric Filter Plant is expected to be ash and normal dust settling on the plant and equipment. Ash dust is expected to be of significance. Ash spillages maybe significant, oil spills are expected to be minor. Coal spillages from the incline conveyors passing through this plant may also be expected.

3.3.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
EQUIPMENT, COMPONENTS & INSTRUMENTS <ul style="list-style-type: none"> • ELECTRIC PANEL BOARDS (OPEN PANELS NOT TO BE CLEANED) • SWITCH AND CONTROL BOXES • LIGHT FITTINGS AND WINDOWS • TELEPHONE CUBICLES • VALVES GAUGES 	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, AVOID SPRAYING WATER OVER THE MOTORS.	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ELECTRIC MOTORS	DUCT AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, SPLASH WATER IS ALLOWED AVOID DIRECT WATER JETS.	1 x WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
DRAINS	VACUUM CLEAN, PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	1 X WEEKLY	
FIRE EXTINGUISHERS, HYDRANTS AND HOSE REELS	DUST AND DAMP CLEAN	1 X WEEKLY	
DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN WHITE BINS	DAILY	

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CONCRETE ELEVATED FLOORS	SWEEP , OCCASIONAL WATER WASH AND SWEEP. WHERE FLOOR SWEEPERS CANNOT ACCESS, WATER WASH AND SWEEP	DAILY	
DRAINS /TRENCHES (SLUICE WAYS)	HP CLEANING MANUALLY REMOVE BIG CLINKERS FROM THE SLUICE WAYS AVOID FLUSHING TO THE SUMP THIS WILL BLOCK ASH PUMPS	MONTHLY	
TRENCH GRATING	PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	DAILY	
AIR VENTS, AIR AND GAS DUCTING	SWEEP, VACUUM CLEAN, DEGREASE AND DAMP CLEAN	CONTINUOUSLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
PIPES	SWEEP AND DAMP CLEAN	CONTINUOUSLY	BE AWARE OF HOT PIPES AND DEFECTIVE UN INSULATED AREAS
BASEMENT FLOOR	WATER WASH REMOVE ASH BUILD UPS BY USING A BOBCAT	DAILY AS AND WHEN REQUIRED	
GRATED FLOORS	DUST, VACUUM AND PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	DAILY	
CABLE RACKS AND TRENCHES	SWEEP AND VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
PIPE TRENCHES	HP CLEAN, VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
PIPE RACKS	WATER WASH AND VACUUM CLEAN	MONTHLY	
CONCRETE TRENCHES	SWEEP AND VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
STRUCTURES, HANGERS AND SUPPORTS	DUST AND DAMP CLEAN	1 X WEEKLY	WEAR SAFETY HARNESSES WHERE REQUIRED
FABRIC FILTER PLANT ROOF, STRUCTURE AND ROOF GUTTERS (INCLUDING DRAINS)	DUST, VACUUM , SWEEP, DIG OUT AND PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN	1 X MONTHLY	WEAR SAFETY HARNESSES WHERE REQUIRED
FABRIC FILTER PLANT HOUSE WALLS, BEAMS AND STRUCTURE	SWEEP, WATER WASH, DUST VACUUM , DAMP CLEAN AND SCRUB	1 X WEEKLY	
STEEL STAIRWELLS	DUST, VACUUM SWEEP AND PICK UP ALL RUBBISH, RUBBLE DISCARDS	1 X WEEKLY	
ROOF STRUCTURES OF ALL BUILDINGS IN THE FFP PLANT INCLUDING GUTTERS	DUST, VACUUM CLEAN AND DIG OUT, PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN (USE CHERRY PICKER)	1 X MONTHLY	WEAR SAFETY HARNESS WHERE REQUIRED
FFP BLOWER HOUSES EAST AND WEST	DO HOUSEKEEPING, DUST SWEEP AND MOP AREA	1 X MONTHLY	

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3.4 STATION SWITCH GEAR ROOMS

3.4.1 Boundaries

Included in this area are:

- Boiler, Turbine, Common plant, Ash plant and Coal plant switch gear rooms, battery rooms and Equipment rooms.
- All these areas are restricted zones and can only be accessed only by Authorised Personnel with Arc Flash suits CAT 2 PPE (to be provided by Eskom)

3.4.2 Expected nature of rubbish and dirt

Expected nature of the rubbish and dirt to be cleaned is expected to be normal dust, ash and coal dust settling on the plant, equipment and floors.

3.4.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
CONTROL AND MIMIC PANELS	DUST, VACUUM SPOT CLEAN AND DRY POLISH. NO WATER ALLOWED	DAILY	
ELECTRICAL PANEL BOARDS	DUST AND DAMP CLEAN	1 X WEEKLY	OPEN PANELS NOT TO BE CLEANED
SWITCH AND CONTROL BOXES	DUST VACUUM AND DAMP CLEAN, NO FREE WATER	DAILY	
LIGHT FITTINGS	DUST, SPOT CLEAN AND DAMP CLEAN, NO FREE WATER	1 X MONTHLY	
TELEPHONE CUBICLES	DUST, VACUUM DAMP CLEAN AND DISINFECT	DAILY	
FIRE EXTINGUISHERS	DUST VACUUM AND DAMP CLEAN	1 X WEEKLY	
DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN	DAILY	
EQUIPMENT ROOM FLOORS	DAMP SWEEP AND POLISH	MONTHLY	IF FLOOR POLISH IS TO BE USED, THIS MUST BE ANTI-STATIC, TESTED AND APPROVED
WALLS & WINDOWS	DUST AND WATER CLEAN	MONTHLY	
CABLE RACKS	VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
ROOF STRUCTURES OF ALL SWITCHGEAR ROOMS INCLUDING GUTTERS IF ANY	DUST, VACUUM CLEAN AND DIG OUT, PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN (USE CHERRY PICKER)	1 X MONTHLY	WEAR SAFETY HARNESS WHERE REQUIRED

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3.5 WATER TREATMENT PLANT

3.5.1 Boundaries

The area includes the pre- treatment room, roofs and gutters, flash mixers, clarifiers, sand filters, demin plant, demin tanks, off loading facilities, pump areas, all sumps and channels. Included in this area is the fire water pump house.

3.5.2 Expected nature of rubbish and dirt

Nature of dirt to be cleaned is expected to be soil and dust settling on the plant, equipment and floors and loose discarded materials. Spillages may occur occasionally and water plant in majority is expected to be watery solutions of chemicals which amongst others may include sulphuric acid, ammonia, caustic soda etc, all to be treated with care/

Minor oil and diesel spillages may be expected in the fire pump house

3.5.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
EQUIPMENT, COMPONENTS & INSTRUMENTS <ul style="list-style-type: none"> ELECTRIC PANEL BOARDS (OPEN PANELS NOT TO BE CLEANED) SWITCH AND CONTROL BOXES LIGHT FITTINGS AND WINDOWS TELEPHONE CUBICLES VALVES GAUGES 	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, AVOID SPRAYING WATER OVER THE MOTORS.	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ELECTRIC MOTORS	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, SPLASH WATER IS ALLOWED AVOID DIRECT WATER JETS.	1 x WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
PUMPS	WATER WASH AND REMOVE OIL AND GREASE, ALTERNATIVELY SWEEP AND DAMP CLEAN	1 X WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
GEARBOXES	DUST, REMOVE OIL AND GREASE AND DAMP CLEAN, SPLASH WATER IS ALLOWED. AVOID DIRECT WATER JETS	1 X WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
DRAINS/TRENCHES/ CHANNELS	HP/VACUUM CLEAN, PICK UP ALL RUBBISH, RUBBLE, DISCARD DEBRIS AND CLEAN	1 X WEEKLY	
FIRE EXTINGUISHERS, HYDRANTS AND HOSE REELS	DUST VACUUM AND DAMP CLEAN	1 X WEEKLY	
DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN	DAILY	

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CONCRETE AND PAVED FLOORS	WATER WASH AND SWEEP. WHERE FLOOR SWEEPERS CANNOT ACCESS, WATER WASH AND SWEEP	DAILY	
GRATED FLOORS	DUST, VACUUM AND PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	DAILY	
SUMPS	AS NEED BE VACUUM EMPTY, KEEP DIFFERENT SUBSTANCES SEPARATE AND DISPOSE OF ACCORDING TO REQUIREMENTS ASSOCIATED AND WATER WASH SUMP	DAILY INSPECTION	
DE-GRITTING SUMPS	AS NEED BE VACUUM SUCK EMPTY, KEEP DIFFERENT SUBSTANCES SEPARATE AND DISPOSE OF ACCORDING TO REQUIREMENTS ASSOCIATED AND WATER WASH SUMP	DAILY INSPECTION	PERMIT TO WORK
WALLS & WINDOWS	WATER WASH	2 X MONTHLY	
AIR VENTS, AIR AND GAS DUCTING	SWEEP, VACUUM CLEAN, DEGREASE AND DAMP CLEAN USING DETERGENTS WHEN NEEDED. NO DIRECT WATER JETS	CONTINUOUSLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
PIPES, VESSELS ETC.	DUST AND DAMP CLEAN	CONTINUOUSLY	
CABLE RACKS AND TRENCHES	SWEEP AND VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
PIPE TRENCHES	SWEEP AND VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
PIPE RACKS	WATER WASH AND VACUUM CLEAN	MONTHLY	
CONCRETE TRENCHES	SWEEP AND VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
TRENCH GRATING	PICK UP ALL RUBBISH, RUBBLE, DISCARD DEBRIS AND CLEAN	2 X WEEKLY	
STRUCTURES, HANGERS AND SUPPORTS	DUST AND DAMP CLEAN	1 X WEEKLY	WEAR SAFETY BELTS WHERE REQUIRED
STEEL STAIRWELLS	DUST, VACUUM SWEEP AND PICK UP ALL RUBBISH, RUBBLE DISCARDS	2 X WEEKLY	
ROOF STRUCTURES OF ALL BUILDINGS IN THE WATER TREATMENT PLANT INCLUDING GUTTERS	DUST, VACUUM CLEAN AND DIG OUT, PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN (USE CHERRY PICKER)	1 X MONTHLY	WEAR SAFETY HARNESS WHERE REQUIRED

3.6 COOLING WATER PLANTS

3.6.1 Boundaries

This area includes six wet cooling towers and fore bay, auxiliary plant, cooling water pump houses (east and west) with six vertical cooling water pumps, basement and cooling water treatment plant.

Other areas included, are switchgear room, roofs and gutters, acid tank, cooling water screen washing bay, bund and offloading bay, cooling water pipe trenches, cooling water valve pits and fire pump house.

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3.6.2 Expected nature of rubbish and dirt

The nature of the rubbish and dirt to be cleaned is expected to be loose discards, cut grass, soil and normal dust settling on the plant, equipment, oil, chemical and water spills.

3.6.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
EQUIPMENT, COMPONENTS & INSTRUMENTS <ul style="list-style-type: none"> ELECTRIC PANEL BOARDS (OPEN PANELS NOT TO BE CLEANED) SWITCH AND CONTROL BOXES LIGHT FITTINGS AND WINDOWS TELEPHONE CUBICLES VALVES GAUGES 	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, AVOID SPRAYING WATER OVER THE MOTORS.	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ELECTRIC MOTORS	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID	1 x WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
PUMPS	DUST, REMOVE OIL AND GREASE	1X WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
GEARBOXES	DUST, REMOVE OIL AND GREASE AND DAMP CLEAN	1X WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
DRAINS AND BASEMENT	SWEEP, VACUUM CLEAN, HP CLEAN, PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	1 X WEEKLY	
FIRE EXTINGUISHERS, HYDRANTS AND HOSE REELS	DUST AND DAMP CLEAN	1X WEEKLY	
DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN	DAILY	
GRATED FLOORS	SWEEP AND PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	DAILY	
PEDESTALS	WATER WASH AND SCRUB, ALTERNATIVELY DUST, SCRUB AND CLEAN	1 X WEEKLY	
SUMPS	AS NEED BE VACUUM SUCK EMPTY, KEEP DIFFERENT SUBSTANCES SEPARATE AND DISPOSE OF ACCORDING TO REQUIREMENTS ASSOCIATED AND WATER WASH SUMP	DAILY INSPECTION	

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
DE-GRITTING SUMPS	AS NEED BE VACUUM SUCK EMPTY, KEEP DIFFERENT SUBSTANCES SEPARATE AND DISPOSE OF ACCORDING TO REQUIREMENTS ASSOCIATED AND WATER WASH SUMP	DAILY INSPECTION	PERMIT TO WORK
PIPES	DUST, WATER WASH AND DAMP CLEAN	1X WEEKLY	BE AWARE OF HOT PIPES AND DEFECTIVE UN INSULATED AREAS
FLOORS	SWEEP, SWEEPING WITH OCCASIONAL WATER WASH AND SCRUB. WHERE FLOOR SWEEPERS CANNOT ACCESS, WATER WASH AND SWEEP	DAILY	
CABLE RACKS AND TRENCHES	VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DUST AND REMOVE RUBBISH	MONTHLY	
PIPE TRENCHES	HP CLEAN, VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
PIPE RACKS	WATER WASH AND VACUUM CLEAN	MONTHLY	
CONCRETE TRENCHES	SWEEP AND HP CLEAN, VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	1X WEEKLY	
TRENCH GRATING	PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	DAILY	
STEEL STAIRWELLS	DUST, VACUUM SWEEP AND PICK UP ALL RUBBISH, RUBBLE DISCARDS	1X WEEKLY	
HAND RAILS	DUST AND DAMP CLEAN	DAILY	
SLUDGE SUMP	DRAIN AND CLEAN	2 X YEARLY	
DOSING ROOM	DAMP CLEAN AND REMOVE DIRT	WEEKLY	
ACID BUND	WASH DOWN AND REMOVE DIRT	WEEKLY	
VALVE PITS	REMOVE DIRT, VACUUM WATER	WEEKLY OR WHEN REQUIRED	
CW SCREEN WASH BAY	SWEEP, PICK UP ALL RUBBISH, RUBBLE DISCARDS	WEEKLY	
ROOF STRUCTURES OF BOTH CW PUMP HOUSES INCLUDING GUTTERS	DUST, VACUUM CLEAN AND DIG OUT, PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN (USE CHERRY PICKER)	1 X MONTHLY	WEAR SAFETY HARNESS WHERE REQUIRED
FIRE PUMP HOUSE	DUST ALL EQUIPMENT AND COMPONENTS SWEEP AND MOP FLOORS CLEAN AND REPORT ANY OIL/DIESEL SPILLAGES	DAILY	

3.7 ASH PLANT

3.7.1 Boundaries

- All ash conveying system from unit 1 to 8 (east and west from ash sumps up to the ash dam) including all New Ash dam facilities, AWR pump house and all pipes, cable racks, pumps, crushers, trenches and all sumps an support structures.

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- Ash lines and trenches from station to ash dam

3.7.2 Expected nature of rubbish and dirt

Nature of rubbish and dirt to be cleaned in the ash plant is expected to be:

- Course and fine ash settling on the plant and equipment, amount is expected to be significant..
- Oil and grease spilling from machinery as a result of normal duties.

Ash spillages may be significant, oil spills are expected to be minor.

3.7.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
EQUIPMENT, COMPONENTS & INSTRUMENTS <ul style="list-style-type: none"> • ELECTRIC PANEL BOARDS (OPEN PANELS NOT TO BE CLEANED) • SWITCH AND CONTROL BOXES • LIGHT FITTINGS AND WINDOWS • TELEPHONE CUBICLES • VALVES & GAUGES 	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, AVOID SPRAYING WATER OVER THE MOTORS.	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ELECTRIC MOTORS	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID,	1 x WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ASH PUMPS	WATER WASH AREA AND REMOVE OIL AND GREASE, ALTERNATIVELY DAMP CLEAN	1 X WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ASH CRUSHER PITS	WATER WASH, HP WASH WHEN REQUIRED. OPEN DRAIN WHOLE	1x WEEKLY OR AS & WHEN REQUIRED	
GEARBOXES	DUST, REMOVE OIL AND GREASE AND DAMP CLEAN, SPLASH WATER IS ALLOWED. AVOID DIRECT WATER JETS	1 X WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
DRAINS	VACUUM CLEAN, PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	1 X WEEKLY	
FIRE EXTINGUISHERS, HYDRANTS AND HOSE REELS	DUST VACUUM AND DAMP CLEAN	1 X WEEKLY	
DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN	DAILY	
CONCRETE ELEVATED FLOORS	WATER WASH AND SWEEP.	DAILY	
BASEMENT FLOOR	WATER WASH AND SWEEP, DO HOUSEKEEPING	DAILY	

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
GRATED FLOORS	DUST, VACUUM AND PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	DAILY	
SUMPS (MAIN ASH SUMPS) 4 ASH SUMPS TO BE CLEANED ROTATING 1 SUMP WEEKLY	CLEAN SUMP USING PORTABLE PUMP, HOSES, JACK HAMMER OR HP MACHINE EXPOSING THE BASE OF THE SUMP. WHEN NEEDED VACUUM SUCK EMPTY, KEEP DIFFERENT SUBSTANCES SEPARATE AND DISPOSE OF ACCORDING TO REQUIREMENTS ASSOCIATED AND WATER WASH SUMP	1 X MONTHLY	
SUMP PUMP AREAS & TRENCHES	CLEAN SUMP, WATER WASH USING HOSES, HP MACHINE WHEN REQUIRED	1 X WEEKLY	
ASH CRUSHER PITS	HP WASH/WATER WASH AND UNBLOCK DRAIN HOLE	WEEKLY OR AS AND WHEN REQUIRED	
CABLE RACKS AND TRENCHES	DUST AND VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
UNBLOCK ASH PIPE LINE (EAST AND WEST FROM THE SUMP TO ASH DAM)	UNBLOCK USING HP MACHINE	AS AND WHEN REQUIRED	PERMIT TO WORK REQUIRED
CLEAN ASH PIPE LINE TRENCHES/CATCHMENT	WATER WASH, HP WASH AND VACUUM TRUCK OR BOBCAT WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT AND REMOVE RUBBISH. FROM THE ASH SUMPS UP TO THE NEW FENCE INSIDE THE STATION	WEEKLY	
PIPE RACKS/TRENCHES	WATER WASH AND VACUUM CLEAN	MONTHLY	
TRENCH GRATING	PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	DAILY	
STRUCTURES, HANGERS AND SUPPORTS	DUST AND WATER WASH	DAILY	WEAR SAFETY HARNESES WHERE REQUIRED
STEEL STAIRWELLS	DUST, VACUUM SWEEP AND PICK UP ALL RUBBISH, RUBBLE DISCARDS	2 X WEEKLY	
HAND RAILS	DUST VACUUM AND DAMP CLEAN	DAILY	
BOILER SLUICE WAYS	WATER WASH AND HP CLEAN	DAILY	
AWR PUMP HOUSE	SWEEP, DUST AND PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	WEEKLY	
ASH BOX TRENCHES	HP WASH, DIG OUT AND DISCARD RUBBLE	AS & WHEN REQUIRED	

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
NEW ASH DAM PUMP HOUSE	DUST ALL EQUIPMENT AND COMPONENTS SWEEP AND MOP FLOORS CLEAN AND REPORT ANY OIL SPILLAGES CONDUCT HOUSEKEEPING	DAILY	
NEW ASH DAM WORKSHOP	DUST ALL EQUIPMENT AND COMPONENTS SWEEP AND MOP FLOORS CLEAN AND REPORT ANY OIL SPILLAGES CONDUCT HOUSEKEEPING	DAILY	

3.8 HYDROGEN PLANT

3.8.1 Boundaries

All plant and equipment belonging to the Hydrogen plant located behind unit 6 next to the transformer bay. Included are all pipe, cable racks, drain trenches, containing equipment which provides a service to the Hydrogen plant, roof and gutters.

3.8.2 Expected nature of rubbish and dirt

The nature of dirt to be cleaned in the hydrogen plant is expected to be limited to dust normal dust settling on the plant and equipment, loose discarded dirt. Spark free tools to be used when cleaning this area.

3.8.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
EQUIPMENT, COMPONENTS & INSTRUMENTS <ul style="list-style-type: none"> ELECTRIC PANEL BOARDS (OPEN PANELS NOT TO BE CLEANED) SWITCH AND CONTROL BOXES LIGHT FITTINGS AND WINDOWS TELEPHONE CUBICLES GAUGES 	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, AVOID SPRAYING WATER OVER THE MOTORS.	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
DRAINS	VACUUM CLEAN, PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	DAILY	
FIRE EXTINGUISHERS, HYDRANTS AND HOSE REELS	DUST AND DAMP CLEAN	DAILY	

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DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN	DAILY	
FLOOR	SWEEP, MOP & POLISH	DAILY	
PIPES	DUST, AND DAMP CLEAN	DAILY	
CABLE RACKS AND TRENCHES	SWEEP AND VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
PIPE RACKS/TRENCHES	DUST AND VACUUM CLEAN	MONTHLY	
CONCRETE TRENCHES	SWEEP AND VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
TRENCH GRATING	PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	2 X WEEKLY	
STRUCTURES, HANGERS AND SUPPORTS	SWEEP AND DAMP CLEAN	1 X WEEKLY	WEAR SAFETY BELTS WHERE REQUIRED
HAND RAILS	DUST VACUUM AND DAMP CLEAN	DAILY	

3.9 FUEL OIL PLANT

3.9.1 Boundaries

- Fuel oil off-loading stations (East and West)

All plant, equipment, buildings, and support structures. Included in this area are all pipe work, cable, pumps, off-loading sump and trenches up to the fuel oil pumping plant.

- Fuel oil plant

All plant, equipment, buildings, support structures, tanks X7 and their bund areas located at the east and west of the power generating plant.

HP and LP Pump houses (east and west), included in this plant are all pipe work, cable, drain trenches, sumps, heaters, pumps, drip trays.

3.9.2 Expected nature of rubbish and dirt

- Fuel oil off-loading

The nature of dirt to be cleaned is expected to be BUNKER 150 Fuel oil settlements, dust and general rubbish.

Spillages during tanker off-loading are expected to be regular but of minor quantities, major spillages may occur occasionally.

- Fuel oil pumping plant

The nature of dirt to be cleaned is expected to be BUNKER 150 Fuel oil settlements, dust and general rubbish. Spillages maybe expected to be regular but of minor quantities, major spillages may occur occasionally.

NB: All Fuel oil sumps need to be maintained at lowest levels possible to prevent overflows in case of major spillages. Oil may not be stored in batches smaller than 210 litres and may not be stored for long periods, report number of full oil drums to the Services Manager weekly for removal/disposal.

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3.9.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
EQUIPMENT, COMPONENTS & INSTRUMENTS <ul style="list-style-type: none"> ELECTRIC PANEL BOARDS (OPEN PANELS NOT TO BE CLEANED) SWITCH AND CONTROL BOXES LIGHT FITTINGS AND WINDOWS TELEPHONE CUBICLES VALVES & GAUGES 	DUST AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, AVOID SPRAYING WATER OVER THE MOTORS.	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ELECTRIC MOTORS	DUST OR DAMP CLEAN USING DETERGENT/DEGREASING FLUID, SPLASH WATER IS NOT ALLOWED AVOID DIRECT WATER JETS.	1 x WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
PUMPS	REMOVE OIL AND GREASE, USING DEGREASER	1 X WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
GEARBOXES	DUST, REMOVE OIL AND GREASE AND DAMP CLEAN. AVOID DIRECT WATER JETS	1 X WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
DRAINS	VACUUM CLEAN, PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	1 X WEEKLY	
FIRE EXTINGUISHERS, HYDRANTS AND HOSE REELS	DUST VACUUM AND DAMP CLEAN	1 X WEEKLY	
DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN	DAILY	
BASEMENT FLOOR	SWEEP AND DEGREASE FLOORS	DAILY	
GRATED FLOORS	PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	DAILY	
SUMPS (OFF-LOADING BAYS EAST & WEST, HP PUMP HOUSES - EAST AND WEST)	INSPECT SUMP LEVEL, DRAIN AND REPORT TO THE SERVICES MANAGER WHEN FULL TO AVOID OVERFLOW	DAILY INSPECTION	
DRIP TRAYS	EMPTY INTO RECEPTACLE, CLEAN AND PLACE BACK	DAILY	
WINDOWS	WATER WASH	DAILY	
AIR VENTS, AIR AND GAS DUCTING	DUST VACUUM CLEAN, DEGREASE AND DAMP CLEAN USING DETERGENTS WHEN NEEDED. NO DIRECT WATER JETS	DAILY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
PIPES, HEATERS,	DUST AND DAMP CLEAN, DEGREASE	DAILY	BE AWARE OF HOT PIPES AND DEFECTIVE UN INSULATED AREAS
CABLE RACKS AND TRENCHES	HP WASH, VACUUM CLEAN WHEREVER POSSIBLE, DUST AND DEGREASE	MONTHLY	
PIPE RACKS/TRENCHES	VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
CONCRETE TRENCHES	HP WASH, VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY DIG OUT, SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
TRENCH GRATING	PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN	DAILY	
STRUCTURES, HANGERS AND SUPPORTS	DUST, DEGREASE AND DAMP CLEAN	1 X WEEKLY	WEAR SAFETY HARNESSES WHERE REQUIRED
ROOFS, STRUCTURES AND ROOF GUTTERS	DUST, VACUUM SWEEP, DIG OUT AND PICK UP ALL RUBBISH, RUBBLE DISCARDS AND CLEAN	1 X MONTHLY	WEAR SAFETY HARNESSES
STEEL STAIRWELLS	DUST, VACUUM SWEEP AND PICK UP ALL RUBBISH, RUBBLE DISCARDS	2 X WEEKLY	
HAND RAILS	DUST AND DAMP CLEAN	DAILY	
FUEL OIL TANK BUND WALLS	DRAIN WATER AND CLEAN ANY SPILLAGES	WHEN REQUIRED	
HP PUMP HOUSE – EAST & WEST (GROUND AND ELEVATED FLOOR ABOVE)	CLEAN ANY SPILLAGES, SWEEP, HP WASH, DEGREASE FLOORS AND DO HOUSEKEEPING	DAILY	
LP PUMP HOUSES – EAST & WEST	CLEAN ANY SPILLAGES, SWEEP, HP WASH, DEGREASE FLOORS AND DO HOUSEKEEPING	DAILY	
USED OIL STORAGE AREAS	DO HOUSEKEEPING AND REPORT NUMBER OF FULL AND EMPTY OIL DRUMS TO THE SERVICES MANAGER	WEEKLY	

3.10 DIRTY WATER DRAIN TREATMENT PLANT AND STATION DRAINS

3.10.1 Boundaries

- All dams (Reclamation dam, coal stock yard dam, AWR)
All equipment within fencing and all dam channels
- Oil skimming plant (North and south) including splitter box
All equipment's, pipe work, trenches, ponds, tanks, dams X4, screens
- Effluent pump house
- All station drains and V drains

3.10.2 Expected nature of rubbish and dirt

Ash slurry, debris, chemical spills, oil spills, sludge removal, removal of absorbent materials.

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3.10.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
PUMP STATION OIL SKIMMING PLANT	SWEEP AND DAMP CLEAN USING DETERGENT/DEGREASING FLUID, DO HOUSEKEEPING	1 x WEEKLY	TAKE CARE WHEN CLEANING MOVING/ROTATING PLANT
ELECTRIC PANEL BOARDS	DUST , DAMP CLEAN AND DEGREASE	1X WEEKLY	OPEN PANELS NOT TO BE CLEANED
LIGHT FITTINGS	DUST AND DAMP CLEAN	1 X MONTHLY	
GAUGES	DAMP CLEAN AND REMOVE OIL AND GREASE	1 X WEEKLY	
DRAINS	VACUUM CLEAN, HP CLEAN, PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN NB. No OIL AND ASH MIXTURE MUST BE DISPOSED AT THE ASH DAMS INFORM SERVICES MANAGER OF SUCH	1 X WEEKLY	DISPOSE OIL AND ASH MIXTURE AT DESIGNATED APPROVED DUMPING SITE.
FIRE EXTINGUISHERS, HYDRANTS AND HOSE REELS	DUST AND DAMP CLEAN	1 X WEEKLY	
DUST BINS	EMPTY INTO LOCAL RUBBISH CONTAINER AND CLEAN	DAILY	
CONCRETE FLOOR	SWEEPING, DEGREASE WHEN NEEDED	1 X WEEKLY	
GRATED FLOORS	DEGREASE, PICK UP ALL RUBBISH, RUBBLE AND DISCARDS	1 X WEEKLY	
CABLE RACKS AND TRENCHES	VACUUM CLEAN WHEREVER POSSIBLE, ALTERNATIVELY SWEEP, DUST AND REMOVE RUBBISH	MONTHLY	
P IPE TRENCHES	HP WASH, DIG OUT, REMOVE RUBBISH AND DEGREASE	MONTHLY	
CONCRETE TRENCHES	INSPECT FOR ANY ASH BUILD UP	WEEKLY	
HAND RAILS	DUST, DEGREASE AND/OR DAMP CLEAN	WEEKLY	
OIL SUMP, OIL TANK, SKIMMER AND BUNDS	WIPE DOWN, DE-GREASE AND EMPTY OIL TANKS	WEEKLY	
SOUTH OIL SKIMMING PLANT MANHOLES	CLEAN/UNBLOCK USING HP MACHINE AND VACUUM TRUCK	MONTHLY OR As & WHEN REQUIRED	
EFFLUENT PUMP HOUSE X2 SILT TRAPS	DRAIN WATER WHEN REQUIRED REMOVE, CLEAN AND DISPOSE CONTENTS CONTAMINATED MATERIAL MAY NOT BE DISPOSED AT ASH DAM, REPORT TO THE SERVICES MANAGER FOR THE RELENT DEPARTMENT TO DISPOSE	AS AND WHEN REQUIRED	IN CASES WHERE THE ASH IS CONTAMINATED WITH OIL, DO NOT DISPOSE BUT REPORT TO THE MATTER TO THE SERVICES MANAGER
SPLITTER BOX	PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES AND CLEAN SCREENS	DAILY	
TANKS AT OIL SKIMMING PLANT	INSPECT LEVEL AND REPORT TO THE SERVICES MANAGER FOR THE RELENT DEPARTMENT TO DISPOSE	DAILY INSPECTION	

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
OIL SKIMMING PLANT (NORTH & SOUTH)	HOUSEKEEPING AND INSPECT & UNBLOCK ANY BLOCKAGES	1 X WEEKLY	
RECLAMATION DAM INLETS (NORTH AND SOUTH)	VACUUM CLEAN	MONTHLY	
RECLAMATION DAM PUMP HOUSE	CONDUCT HOUSEKEEPING DRAIN WATER AS AND WHEN REQUIRED	WEEKLY	
STATION DRAINS (ALL) DRAWINGS TO BE PROVIDED BY THE SERVICES MANAGER	UNBLOCK DRAINS USING, HP MACHINE OR WATER WASH AND VACUUM CLEAN	MONTHLY	IN CASES WHERE THE ASH IS CONTAMINATED WITH OIL, DO NOT DISPOSE BUT REPORT TO THE MATTER TO THE SERVICES MANAGER

3.11 SEWAGE PLANT (INCLUDING ALL SEPTIC TANKS)

3.11.1 Boundaries

- All septic tanks in the stations including manholes at Makoya and both Ash dams (New & Old)
All septic tanks to be emptied as and when required, disposed at the station's sewage plant. (Ensure truck to be used for emptying septic tanks is always clean, there must be no traces of ash or any foreign materials)

NB. Septic tank at the main security gate to be emptied daily (3 to 4 times daily)

- Sewage plant – including new sewage plant pump house next to security gate
All equipment's, pipe work, trenches, ponds, tanks, sumps, switchgear rooms

3.11.2 Expected nature of rubbish and dirt

Sewer, dust

3.11.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
SEPTIC TANKS (ALL)	VACUUM EMPTY SEPTIC TANKS AND DISPOSE AT CAMDEN SEWAGE PLANT NB: SEPTIC TANK AS SECURITY GATE TO BE EMPTIED MORE FREQUENTLY THAN OTHERS	INSPECT DAILY OR EMPTY AS AND WHEN REQUIRED INSPECT DAILY AND EMPTY 3 - 4 TIMES DAILY	NO ASH TO BE DISPOSED AT SEWAGE PLANT – ENSURE TUCK TO BE USED IS CLEAN AT ALL TIMES
UNBLOCK MANHOLES & PIPE WORK	ASSIST WITH UNBLOCKING MANHOLES IF RODS ARE NOT WORKING USING VACUUM TRUCK	AS AND WHEN REQUIRED	

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
SEWAGE PLANT SUMP & POND	TO BE CLEANED	AS AND WHEN REQUIRED	
SWITCH GEAR ROOMS	SWEEP, DUST	WEEKLY	
PUMP STATION	SWEEP AND WATER WASH	WEEKLY	
TRENCHES	WATER WASH OR HP WASH	WHEN REQUIRED	
NEW SEWAGE PLANT PUMP HOUSE	DUST ALL EQUIPMENT AND COMPONENTS SWEEP AND MOP FLOORS CLEAN AND REPORT ANY OIL SPILLAGES CONDUCT HOUSEKEEPING	WEEKLY	

3.12 WORKSHOP AND STORES

3.12.1 Boundaries

- Common Plant maintenance workshop and stores located on the southern side of the station.
- Roof structures and gutters
- Water trenches/drains around the buildings
- Storage areas/yards

3.12.2 Expected nature of rubbish and dirt

Normal dust settling on the equipment's. Minor oil spills may be expected.

3.12.3 Estimated industrial cleaning needs

Sweep, mop, dust, degrease and polish Daily

3.12.4 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
WORKSHOP	SWEEP, SCRUB AND POLISH FLOORS DUST AND DAMP CLEAN RAILS DUST WORK BENCHES WHERE PERMITTED	DAILY	UNBLOCK
	MAKE SURE ALL DRAINS OUTSIDE THE WORKSHOP ARE FLOWING	INSPECT DAILY	
	SWEEP AROUND ENTRANCES AND EXIT DOORS	DAILY	

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
STORES	SWEEP, SCRUB AND POLISH FLOORS DUST AND DAMP CLEAN RAILS DUST WORK BENCHES AND EQUIPMENT'S WHERE PERMITTED	DAILY	UNBLOCK
	MAKE SURE ALL DRAINS OUTSIDE STORES ARE FLOWING	INSPECT DAILY	
	SWEEP AROUND ENTRANCES AND EXIT DOORS	DAILY	
ROOF STRUCTURES AND GUTTERS	MANUAL CLEAN, DIG OUT, VACUUM CLEAN, WATER WASH	1 X MONTHLY	WEAR SAFETY HARNES WHERE REQUIRED
WATER TRENCHES/DRAINS AROUND THE BUILDING	REMOVE DIRT, DIG OUT/HP WASH OR VACUUM	MONTHLY OR AS AND WHEN REQUIRED	
STORAGE AREAS/YARDS	CONDUCT HOUSEKEEPING	MONTHLY OR AS AND WHEN REQUIRED	

3.13 ROADS AND REMAINNG AREAS

3.13.1 Boundaries

Included are all the roads starting from 4 way stop on the military entrance approaching Camden Power Station security, coal stock yard road, visitors parking outside the station, main security entrance both east and west, CMD parking, training Centre and all roads inside the station up to the coal stock yard including parking areas and walk ways (pedestrian's) including all skip bin areas.

Remaining areas - All production and auxiliary plant, equipment, buildings or structures not mentioned in the previously described plant areas up to 20 meters from such area or the nearest road, whichever is nearest which includes similar work activities included in this scope will be covered under this section.

3.13.2 Expected nature of rubbish and dirt

The nature of the rubbish and dirt may vary from area to area and may be expected to be limited to settling of dust and litter. The area may be contaminated with oil and grease as result of spillages. Spillages may be any material that is handled within such plant and may, amongst others, include ash, coal, lubricating oil, grease or fuel oil (bunker 150). Report such spillages

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3.13.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
ROADS AND PARKING AREAS.	SWEEP USING ROAD SWEEPER, PICK UP ALL RUBBISH, RUBBLE, DISCARD AND MANUALLY SWEEP PARKING AREAS AND WALKWAYS	WEEKLY	UNBLOCK
	MANUALLY SWEEP ALL MAIN BUILDINGS ENTRANCES	DAILY	
	INSPECT FOR BLOCKED DRAINS	DAILY	
	EMPTY ALL BINS ALONG THE WAY INTO DESIGNATED SKIP BINS ACCORDING TO WASTE MANAGEMENT PROCEDURE.	DAILY	
SKIP BIN AREAS	DO HOUSEKEEPING AND ENSURE WASTE IS SEPARATED ACCORDINGLY. SWEEP AND/OR WATER WASH WHERE POSSIBLE		
MAIN SECURITY GATE ENTRANCE EAST AND WEST	MANUALLY PICK UP ALL RUBBISH AND DISCARD	DAILY	
	EMPTY ALL BINS	DAILY	
	WATER WASH BOTH ENTRANCES, WALKWAYS AND PARKING AREAS WEEKLY ON WEEKENDS USING COMBINATION VACUUM TRUCK	WEEKLY	
REMAINING AREAS	CONTRACTOR WILL BE EXPECTED TO CLEAN AREAS THAT ARE NOT DESCRIBED UNDER ANY OF THE ABOVE MENTIONED AREAS, BUT STILL FALL WITHIN CAMDEN POWER STATION BOUNDARIES. PROVIDED THE WORK TO BE DONE STILL FALLS WITHIN CONTRACT SCOPE OTHERWISE THE MATTER WILL BE HANDLED ACCORDING TO NEC PRESCRIBED PROCESSES	AS AND WHEN REQUIRED	

3.14 COMPRESSOR HOUSES

3.14.1 Boundaries

Two compressor houses (east and west)

3.14.2 Expected nature of rubbish and dirt

- Normal dust
- Water
- Oil & diesel spills

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3.14.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
COMPRESSOR HOUSES (EAST AND WEST)	DUST ALL EQUIPMENT AND COMPONENTS, SWEEP, PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES, MOP & POLISH FLOORS AND DEGREASE WHERE NECESSARY	DAILY	CLEAN OR UNBLOCK
	INSPECT TRENCHES FOR BLOCKAGES	DAILY	

3.15 USED OIL MANAGEMENT**3.15.1 Boundaries**

- Fuel oil plant including oil sumps, Oil stores, CW plant, Boiler and Turbine

3.15.2 Expected nature of rubbish and dirt

- Used/dirty oil (Turbine oil, Fuel oil Bunker 150), oil may be mixed with water.

3.15.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
OIL STORES	OIL REMOVED FROM THE PLANTS MENTIONED ABOVE MUST BE STORED AT OIL STORES BUT NOT FOR PROLONGED PERIODS.	INSPECT DAILY	
	OIL STORAGE ROOMS TO BE KEPT CLEAN AT ALL TIMES	DAILY	
OIL SUMPS	DEGREASE WHEN NECESSARY, SWEEP, PICK UP ALL RUBBISH, RUBBLE, DISCARD SPARES, MOP FLOORS INSPECT DAILY AND REPORT TO THE SERVICES MANAGER WHEN FULL FOR THE RELENT DEPARTMENT TO DISPOSE/ EMPTY WHEN REQUIRED.		

NB: Disposal of oil & water mixture and sludge removed from the sumps / drums will be arranged by the Services Manager with relevant contractor to dispose. Oil may be stored in demarcated areas in batches not smaller than 210 litres.

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3.16 COAL PLANT

3.16.1 Boundaries

- Coal conveyor 18, 6A&C and 10A&C

3.16.2 Expected nature of rubbish and dirt

- Coal dust, coal spillages and water

3.16.3 Estimated industrial cleaning needs

EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
COAL SUMPS X 3	HP CLEAN, VACUUM EMPTY ALL 3 COAL SUMPS INSPECT WEEKLY	MONTHLY OR AS AND WHEN REQUIRED	

3.17 WEEKEND SCOPE & TEAM

The contractor must have a weekend team that will do deep cleaning of all units (during weekends and units that are offload) and clean any other area that needs attention that could not be attended to during normal working days due to plant unavailability.

NB. Working hours during weekends **07:00 to 14:00 with a minimum of 35 employees.**

3.17.1 Boundaries

- Main focus during weekends will be on from 12ml to Zero ml Unit 1 -8 but not limited to these areas only
- Road sweeping – From 4 ways stop at military base, ash dam and Camden crossing.
- Deep cleaning – Unit 1 – 8 from 56ml to 0ml (Normal running units & units on Weekend Outage/Maintenance)

3.17.2 Expected nature of rubbish and dirt

- Coal and Ash dust
- Oil spillages
- Water leaks
- Rubble

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EQUIPMENT TO BE CLEANED	METHODS	FREQUENCY	REMARKS
12ML	DUST PIPE WORK & ALL STRUCTURES BOTH BOILER AND TURBINE (INCLUDING GENERATORS)	WEEKLY	
	SWEEP, MOP, SCRUB & POLISH BOTH BOILER AND TURBINE FLOORS	WEEKLY	
	DUST & DAMP CLEAN 9ML DOWN TO 0ML	WEEKLY	
0ML	WATER WASH 0ML FROM TURBINE, BOILER, FFP AND ID FANS INCLUDING ALL ENTRANCES	WEEKLY	
	DO HOUSEKEEPING INSIDE THE PLANT AND AROUND ALL SKIP BIN AREAS.	WEEKLY	
ROAD SWEEPING	SWEEP ROAD AND PARKING AREAS FROM 4 WAY STOP UP TO COAL STOCK YARD AND EMPTY ALL BINS.	WEEKLY	
	WATER WASH USING COMBINATION VACUUM TRUCK AND SCRUB BOTH SECURITY ENTRANCE	WEEKLY	
	WATER WASH MAIN BUILDING PARKING AREA	WEEKLY	
DEEP CLEANING OF OFFLOAD UNITS TO ACCESS ALL INACCESSIBLE AREAS AND ON LOAD UNITS WHERE SAFE AND ACCESSIBLE FROM 52ML TO 0ML UNITS 1 – 8 OR ANY OTHER AREA	DUST, VACUUM, WATER WASH WHERE PERMISSIBLE ALWAYS CONFIRM AREAS WITH THE SERVICES MANAGER AND ENSURE INSTRUMENTS ARE COVERED. PIPE WORK & ALL BOILER STRUCTURES CLEAN ID, FD AND PA FANS SUCTION SCREENS ENSURE ALL DEBRIS AND RUBBLE IS REMOVED	WEEKLY	

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4 AUTHORISATION

This document has been seen and accepted by:

Name & Surname	Designation
Musa Dubazana	Operating Support Manager
David Mailula	Operations Manager
Mthokozisi Ngubeni	Common Plant Maintenance Manager
Dumisani Nyathikazi	Boiler Maintenance Manager
Mandla Mzinyane	Turbine Maintenance Manager
Bonga Mbatsane	Maintenance Manager
Oscar Tilodi	Common Plant engineering Manager
Thabiso Mpongo	Environmental Management Manager

5 REVISIONS

Date	Rev.	Compiler	Remarks
January 2021	03	ND Phakathi	New Contract
February 2019	02	ND Phakathi	New Contract
December 2018	01	ND Phakathi	New Contract
May 2016	00	I Mngomezulu	Original issue

6 ACKNOWLEDGEMENTS

- N/A

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