MAKHATINI SUBSTATION CAPACITOR BANK ESTABLISHMENT

ENVIRONMENTAL MANAGEMENT PLAN (EMP)

ESKOM DISTRIBUTION

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1. INTRODUCTION

This Environmental Management Plan (EMP) is for the proposed establishment of two Capacitor Banks at the Eskom Distribution Makhatini 132/22kV Substation, Jozini Local Municipality, Umkhanyakude District Municipality, KwaZulu-Natal.

The substation is located in a relatively densely populated area (Figure 1) and bounded by the busy D9 road in the North-East and the busy P449 in the South-West (Figure 2). Opposite the substation on the D9 is a large School which will result in learners being in close proximity to a construction site. A residential house is situated adjacent to the Substation on its South-South-East side which is in close proximity to the proposed construction area (Figure 2). It is critical that the presence of the residents is taken into consideration prior to and during Construction.

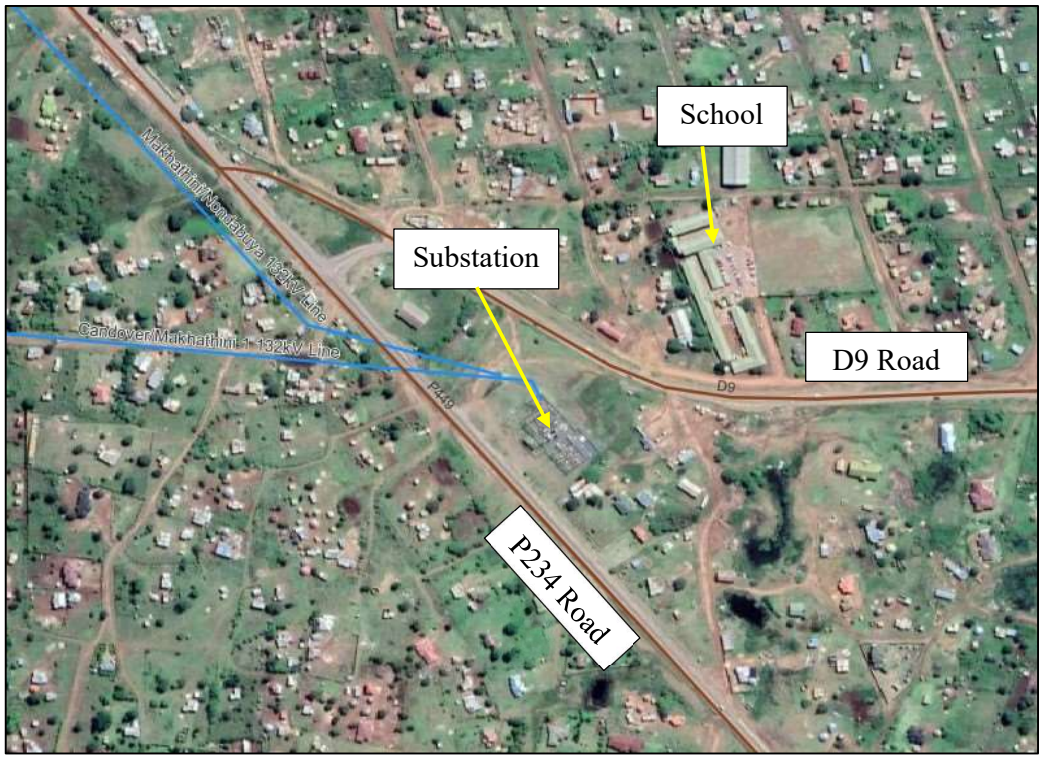

Figure 1: General Overview of the Substation's Location relative to the Local Community

The construction, operation, maintenance and decommissioning of a project has potential for negative impact on the natural and human environment. The Environmental Management Plan (EMP) is a plan of action that sets out how activities that could have negative impacts on the environment, will be managed and monitored and how impacted areas will be rehabilitated. The EMP is compiled in accordance with the requirements of the National Environmental Management Act (NEMA) of 1998 (Act 107 of 1998) and complies with Eskom Safety, Health, Environment and Quality (SHEQ) Policy requirements." Section 28(1) of NEMA (duty of care) requires that every person who causes, has caused, or may cause significant pollution or environmental degradation, shall take reasonable measures to prevent such pollution or degradation from

occurring, continuing or recurring. Where this cannot be reasonably avoided or stopped, reasonable measures should be taken to minimise or rectify such pollution or environmental degradation."

Simultaneously, any potential for negative impacts of the environment on the project are also assessed and mitigation or remedial measures prescribed.

Figure 2: Proposed Construction Site and Proximity to Neighbours

2. PROJECT SCOPE OF WORK

a) Establish the terrace, access road and drainage and extend the existing earthmat for the capacitor bank 1 yard. The terrace for capacitor bank 2 is existing.
b) Establish foundations with earthing, steelwork, and equipment for 2 x 22kV capacitor bank bays 1 & 2 (busbar isolator and combo breaker with surge arrestor).
c) Establish all conductors (jumpers) for 22kV capacitor bank bays 1 and 2.
d) Establish foundations for the capacitor banks and associated equipment which will be designed by the Contractor.
e) Establish 1.8m wire mesh safety fencing around each capacitor bank with its associated reactor and resistor. This fence shall be connected to the main earth mat.
f) Establish an oil bund for each capacitor bank with its associated reactor and resistor.

g) Establish a concrete yard for each capacitor bank with its associated reactor and resistor for prevention of weeds and ease of maintenance.
h) Trench, install and terminate all LV cables to the capacitor bank bay.
i) Installation and commissioning of all control equipment (protection, metering, DC and telecoms) in the control building and substation yard (lighting, auxiliary supply boxes).
j) Top up yard stoning around the new capacitor bank bays.
k) Testing and commissioning of all installed equipment.
l) The contractor for the filter/capacitor bank is to commission the new equipment and complete final checks before energising the filter/capacitor banks as per the Technical Specification for Makhathini Shunt Filter Capacitors (doc #ER00024-P05#A1.5-00) and the Specification for Air Core Reactors (doc #240-42587021).
m) Rehabilitating of the site in accordance with the Environmental Management Plan.

Figure 3: Proposed Construction Site

3. ROLES AND RESPONSIBILITIES

Eskom Environmental Officer (EEO)
The EEO will report to the Eskom Project Manager and is responsible for monitoring compliance and reporting on the implementation of the EMP.

Construction Contractor's Representative
The Contractors' Site Representative is accountable for compliance to and the implementation of the EMP.

4. MONITORING

Compliance with the EMP must be monitored daily by the Contractor's Site Supervisor (CSS). The Eskom Environmental Officer (EEO) will conduct site visits and compliance audits on an *ad hoc* basis.

5. ENVIRONMENTAL CONDITIONS APPLICABLE TO THE PROJECT'S DESIGN

5.1 Storm Water Drainage

The design of the Stormwater Drainage from the proposed Capacitor Banks has been revised and is now directed down the South-Eastern Side of the Substation (Figures 2 and 4) from where it will drain onto the vacant area below the substation on its north-eastern side.

Figure 4: Location of the Cut-Off Drain and Pipe to Dissipate Water

5.2 Bats

A variety of Bat Species occur in the area and no hole must be left for them to gain access inside buildings and infrastructure containers. They can get through very small holes. Once inside, the excrement, referred to as guano, damages equipment and inhibits its safe operation and produces a horrible odour.

Guano is one of the habitats of the fungus *Histoplasma capsulatum*, which can cause the disease histoplasmosis in humans, cats and dogs. Developing any

symptoms after exposure to *H. capsulatum* is very rare; less than 1% of those infected develop symptoms. Only patients with more severe cases require medical attention, and only about 1% of acute cases are fatal. It is a much more serious illness for the immunocompromised, however. Histoplasmosis is the first symptom of HIV/AIDS in 50–75% of patients, and results in death for 39–58% of those with HIV/AIDS.

5.3 Birds

Birds such as owls often get electrocuted by perching on equipment. If there are exposed jumpers which are not insulated, then these MUST be insulated.

6. ENVIRONMENTAL CONDITIONS APPLICABLE TO THE PROJECT'S CONSTRUCTION

6.1 Environmental File

Create a Project Specific Environmental File as per Appendix 2.

6.2 Construction Camp Establishment and Vehicle Park

The construction camp layout is to be approved by the Eskom Environmental Officer (EEO) prior to establishment.

A rudimentary drawing showing the layout of the camp, management of ablution facilities and the location of waste management facilities, must be provided by the Construction Contractor.

The Camp Site is to be fenced and gated and Signage erected outside the camp indicating the: Activity, Developer, Contractor and Contact name and phone number of the responsible person.

Temporary services for water and electricity are to be provided. Routing of such services must be confirmed by the EEO.

In addition, areas where vehicles are to park on site must be demarcated and approved by the EEO.

6.3 Sanitation

Chemical serviced toilets are to be established within the campsite and maintained in a hygienic state and serviced regularly. Toilet servicing records must be kept on site in the environmental file.

Washing facilities shall be provided. The facilities shall comply with Eskom standards.

No human excrement shall be left in the veld. Should this occur, such waste must be buried immediately.

6.4 Waste Management

The Eskom Waste Management Standard, 32-245, dated 31st December 2021, (Appendix 3) and 240-147233604, Waste Management in the KZN OU, Revision 3, (Appendix 4) must be complied with.

The aim is to reduce waste production, practise reuse, recycling, and recovery of waste, and ensure the safe disposal of waste, thereby reducing the environmental risk and contributing to the sustainability of business operations.

Littering or illegal dumping of any waste material is prohibited. Provision must be made for the collection, separation, temporary storage of all waste materials. Bins and skips must be provided with lids, be labelled as per the waste type for which they are intended and conveniently placed. The receptacles (bins and skips) provided must hold the intended waste securely.

The containers must be inspected regularly by the Construction Site Supervisor.

Disposal of all waste materials must be at a licensed or appropriately registered waste disposal site. The construction team may liaise with the local Municipality to obtain the list of all licensed sites in the area.

Documentary proof of proper waste disposal must be kept using the Eskom Waste Report dated April 2022 (Appendix 5). Records / Certificates of the safe disposal of waste must be kept in the site environmental file.

Spill Tech provides oil spill kits and must be contacted to attend to clean-up and dispose of moderate to large oil spills.

EnviroServ is responsible for the disposal of hazardous wastes. Hazardous Waste must be disposed of by the Eskom Contracted Waste Hauliers (Table 1) to a registered Hazardous Waste Disposal Site. This includes the disposal of minor to moderate oil spills which Eskom staff or contractors may have cleaned up due construction related activities and need to be disposed of (see Appendix 6 for the Classification Criteria for Oil Spills).

Compass is currently contracted to Eskom to assist with the disposal of medical waste.

Table 1: Current Eskom Distribution Contracted Waste Hauliers

Company	Eskom Contact Person	Phone	Email
Spill Tech	Martha de Bruyn	+27 82 326 8385 +27 51 404 2506	dbruynmj@eskom.co.za
EnviroServ	Frances Petorious	+27 39 315 4701	pretorfr@eskom.co.za

All environmental incidents associated with Waste must be handled according to the Eskom Environmental Incident Management Procedure, 240-133087117 (Appendix 7) and reported by completing the necessary parts of the form, 240-127206386_Accident Incident Notification Report Revision 17 (Appendix 8).

Burning of waste material such as vegetation and old cleaning materials, resulting from maintenance activities at the site, is strictly prohibited.

All recyclable material should, where economically viable, be re-used, returned to the store or scrapped.

6.4.1 The following wastes are classified as non-hazardous:

- Clean soil;
- Solidified concrete;
- Empty drums which have **not** been used for hazardous materials;
- Rubble **not** contaminated by oil or organic compounds;
- Scrap metal;
- Waste timber (wood);
- Cable;
- Plastic;
- Domestic waste (food waste, paper, cardboard, etc.).

6.4.2 The following wastes are classified as hazardous:

- Construction debris contaminated by oil or organic compounds;
- Empty drums (if previously used for hazardous materials);
- Cement in a powder or liquid form;
- Waste containing appreciable quantities of fibrous asbestos;
- Explosive waste;
- Aerosol containers;
- PCB's (polychlorinated biphenyls) - Hydraulic equipment, oil-filled electromagnets, circuit breakers, voltage regulators, cables and vacuum pumps may contain PCB liquid.

The abovementioned Hazardous Wastes have the potential to impact negatively on the environment, thus causing soil and potentially, ground (underground) water pollution. The following actions will be taken to prevent or manage potential environmental impacts by Hazardous Wastes:

- Ensure that potential hazardous materials on site are adequately stored, accurately identified and labelled and documented in a register (e.g. polychlorinated Biphenyl's – PCB/Askarel).
- Ensure that suitable spill kits and absorption materials are purchased prior to commencement with construction and stored suitably in places where there is a high risk of hazardous spills occurring.
- In accordance with the requirements of the Water Act, surface and ground water shall not be polluted or contaminated (oil, petrol, herbicides, ash, dust, etc.) under any circumstances. No diesel or noxious chemicals, cement, etc.

may be spilt or left on the ground. Where concrete, cement, chemicals or diesel is spilt, clean-up and rehabilitation must be executed.

- Storm water shall be managed to ensure that it does not become polluted.
- All hazardous waste materials including empty chemical containers, used oils, grease/hydraulic fluids and contaminated yard stone, shall be disposed of at a licensed, Class H:H, disposal site.
- Batteries, light bulbs, circuit boards, etc. will be collected, handled and disposed of separately.
- All solid and liquid hazardous waste shall be collected in labelled and appropriate containers and disposed of by the Eskom Contracted hazardous waste haulier to a licenced hazardous waste disposal site.
- All waste containing acidic material or liquid will be placed apart from organic / oily wastes in separate clearly marked containers.
- All liquid hazardous waste products will be securely stored, in suitably bunded areas, that will be capable of containing at least 110% of the volume stored, in case of potential leaks or spills from containers.
- Equipment servicing shall not take place on-site, in instances when breakdowns occur. If possible, the equipment will be removed from site and repaired. If not possible suitable means to control waste must be put in place.
- In the case of contamination of ground / soil by hazardous waste due to the activities of the Construction Contractor, the affected ground / soil will be removed and placed in clearly marked containers, sealed and handled as hazardous waste.
- Documentary proof of proper waste disposal must be acquired from the haulier and records kept using the Eskom Waste Report April 2022 (Appendix 5).
- In the case of water or soil contamination by hazardous waste spills, the Eskom Environmental Incident Management Procedure 240-133087117 (ENV17-R249) (Appendix 7) must be complied with, and the incident reported within 24 hours on 240-127206386: Accident Incident Notification Report Revision 17 (2) (Appendix 8).
- For oil related issues and remediation, consult KZN13TGP-072 Rev 7 Environmental Management of Insulating Oil in KZN OU (Appendix 9).
- The Oil Spill Assessment Form and Report (Appendix 6) must be used to ascertain the magnitude and seriousness of the oil spill.
- The Eskom Department of Safety, Health, Environment and Quality (SHEQS) and the Project Environmental Officer will assist in the statutory reporting to the Department of Water Affairs and Forestry if necessary.
- The need for IMMEDIATE corrective action to limit oil spillage cannot be overemphasized.
- Where reasonably practicable, refuelling of plant will be undertaken within a designated location in the compound by trained operatives.
- The operatives will be trained on the safe procedure for refuelling including emergency procedures for dealing with spillages.
- Ready mix is preferred, however, all cement batching must be done on an impermeable surface.
- No water may be sourced from water courses for batching purposes.

- All contaminated water should be collected and disposed of at an effluent treatment facility.
- Storage of cement shall be such that bags are not left open and cement contents spilled or washed away by stormwater.
- Storage of cement is to be on impermeable surfaces.
- Cement spillages and waste must be collected and disposed of at a licensed waste disposal facility.
- Only Eskom approved chemicals must be used in the control of weeds and pests. The application shall be according to set specifications and the manufacturer's conditions must not be deviated from.
- Only registered soil poisoning specialists are to be utilised and their Certificate copied to the Environmental Officer.

6.5 Dust and Noise

Dust and noise during construction must be monitored so as not to cause a nuisance.

Factors such as wind can often affect the intensity to which these impacts are experienced.

Dust control measures such as watering and chemical stablilisation must be implemented during construction activities should the need arise.

Noise and dust must not impact the neighbours' operations.

Work hours are to be maintained unless permission is granted to continue with work beyond working hours.

6.6 Lighting

Lighting may attract moths, mosquitos and other insects so globes which emit light that doesn't attract insects, as much as other lights, must be used.

Where work is conducted at night, lights must not face towards the premises of Residents adjacent to the Substation (see Figures 2 and 4). Either lights must face away from the neighbour's property or shields must be placed to prevent light pollution where not desired.

Lights used at night must similarly not be positioned and pointed where they can blind drivers passing by on the P449 Road.

6.7 Damage to Property

Any damage to private property shall immediately be reported to Eskom and the owner.

The damage shall be rectified immediately if possible and/or appropriate compensation shall be paid to the owner at the discretion of the project manager/coordinator in consultation with the property owner.

A record of damages and rectifying action shall be kept. The landowner's satisfaction with the outcome of the rectifying action shall be obtained in writing.

All complaints must be reported, recorded and investigated.

6.8 Emergency Procedure and Contact Numbers

A list of the neighbouring property owners' / residents' names, addresses and telephone numbers must be added to Table 2.

The Emergency Contact Numbers for Pongola, listed in Table 2, may be of relevance, however, more relevant numbers closer to the Makhatini Substation and within Jozini and environs must be sourced and replaced or added to this list.

Table 2: EMERGENCY CONTACT NUMBERS

Place / Emergency Services	Name / Location	Contact Number
Doctors (GP) within Pongola	Dr PM Smith Dr MJ Erasmus 13 Jan Kemp Street, Pongola	034 413 2135 034 413 1409
Emergency Doctor Pongola (After Hours) 18h00 - 06h00 Daily 12h30 Sat – 06h00 Monday	Dr PM Smith and Dr MJ Erasmus 13 Jan Kemp Street, Pongola	064 791 2294
Hospital	Bethesda Hospital, Ubombo Itshelejuba Hospital, N2 past Pongola proceeding towards Piet Retief Bayside Hospital, Richards Bay Mangusi Hospital	034 413 4000 035 595 3100 035 780 6111
Fire Brigade	Piet Retief Fire Department	017 826 8237
South African Police Service (SAPS)	SAPS Pongola	034 413 9125
Traffic Department	Traffic Department Pongola	034 413 1223
Snake Specialist (Pongola)	Philip Van Wyk	072 976 6002
Poison Control Centre	National Poison Centre	0861 555 777
Eskom Field Services	Zama Mbatha, Jozini	071 803 0680
Eskom Field Services	Mandla Quabe, Manguzi	082 484 7395
School Near Substation on the D9		
OwnerOccupant South of the Substation		

Owner/Occupants opposite the Substation on the P449		
AMAFA (Heritage Agency)	Pietermaritzburg	033-394 6543
COVID-19 Helpline COVID-19 Help line (Whatapp)	Emergency Hotline Whatsapp line	0800 029 999 0600 123 456

Not all hospitals listed may be able to deal with all types of snake bite victims (i.e. have intensive care units for neurotoxic venom or stock anti-venom) and this must be checked in advance.

The phone number of the school must be listed in case of incidents posing a threat to Learners or matters related to Learners.

See the attached 240-147240322 ENVIRONMENTAL EMERGENCY PREPAREDNESS AND RESPONSE PROCEDURE FOR KZN OU Rev11 (Appendix 10)

6.9 Fire Safety

All staff to be educated in fire prevention and the Contractor is to be held responsible to avoid the risk of fire. No area is to be denuded of vegetation to prevent fires.

No fires shall be lit on private property.

If fires are lit on Eskom's property or in the construction camp, precautions must be in place so that no accidental fires are started.

No firewood may be collected from the surrounding area / private property.

If activities that can cause a fire are carried out, fire extinguishers must be available, serviced and on site and in the construction camp.

6.10 Vegetation and Faunal Management

6.10.1 Damage or Destruction of Vegetation

The law protects various species of indigenous trees, bush and plants and certain types of vegetation habitat (National Forest Act, Act no 84 of 1998).

In terms of legislation it is necessary to obtain a permit from the relevant authority in order to trim or damage protected vegetation.

Figure 5: **Plants such as Aloes (*Aloe marlothii*) are Protected, occur on Site and MAY NOT be Relocated, Damaged or Destroyed without a Permit**

Figure 6: **Aloes, (*Aloe maculata*) which occur on site, are Protected and MAY NOT be Relocated, Damaged or Destroyed without a Permit**

Figure 7: Aloes, which occur on Site, are Protected and MAY NOT be Relocated, Damaged or Destroyed without a Permit

A permit must be acquired from Ezemvelo KZN Wildlife for the removal and relocation or accidental destruction of the Aloes and must be in evidence in the Environmental File prior to Construction Commencement.

The Eskom Environmental Standard, 32–247: Vegetation Management and Maintenance within Eskom Land, Servitudes and Rights-of-Way, 240-70172585, (Appendix 11) must be complied with.

6.10.2 Damage or Destruction of Fauna

Although there is limited potential to impact on Animals (fauna) such as smaller mammals (mice, tortoises, monkeys, frogs, etc.), they can have an impact on Eskom staff and their activities.

Of primary concern is the digging of holes for plinths and cabling in which smaller mammals and insects, can get trapped and die. Holes and trenches must either have a sloped side by which animals and insects can escape or the holes must be checked at least three times a day to enable their rescue and release.

No harming or killing of animals of any kind will be tolerated or permitted.

Poisonous snakes, scorpions, spiders and bees could pose a safety hazard to staff and they must be educated on the content of the attached

Appendices 12.1-12.4 during toolbox talks and attendance records kept of those who attended these interventions.

Animals include domestic animals such as cows, goats and chickens which frequent the area. All due precautions must be adopted not to harm them and keep them away from construction activities.

6.11 Poaching and Theft

Poaching of fauna and damage to the vegetation from the surrounding environment is prohibited.

Theft and vandalism will not be tolerated and punitive measures will be taken.

It is illegal to interfere with any fauna and any transgression will be treated as a criminal offence. The relevant act is the Environmental Conservation Act No 73 of 1989 9, Part 1.2 (ad).

Allegations of theft and poaching of game will be investigated and prosecuted.

Harvesting of indigenous vegetation i.e firewood or for medicinal purposes is not allowed/prohibited.

6.12 Archaeological / Palaeontological Sites

The EEO must be informed in advance when earthworks are scheduled to commence and foundations dug. The term “archaeology” is used here to refer to archaeological, palaeontological (fossils) and historical sites older than 50 years. The KwaZulu Natal Heriatge Act of 1997 makes it an offence to damage, excavate, alter, or remove from its original site any archaeological artefacts older than 50 years, historical and palaeontological material, as well as human graves, without permission from Amafa aKwaZulu-Natali.

If any cultural material is uncovered during activities, the Act requires that work is ceased immediately within the vicinity and the Provincial Heritage Resource Authority, KwaZulu-Natal, AMAFA and Research Institute contacted on 033-394 6543, Pietermariztburg (www.heritagekzn.co.za).

Cultural material may include (but not limited to) ancestral graves (recognizable by stone-packed graves markers), stonewalling, bone, shell, stone artefacts, fossils, potsherds and homestead foundations. Graves are sacred and not to be interfered with in any way.

6.13 Environmental Incidents

All environmental incidents such as bird kills, plants destroyed, indiscriminate damage to land, lack of facilities for waste disposal, etc. must be reported according to the Eskom Environmental Incident Management Procedure 240-133087117 Oct2019 and reported using 240-127206386_Accident Incident Notification Report Revision 17 (2) (Appendix 8).

6.14 Excavation, Stockpiling and Disposal of Excess Spoil

Stone chip and any other foreign material will be cleared from the surface before stripping.

The location for the stockpiling, dumping and disposal of excess spoil/soil shall be done in consultation with the EEO.

Soil will be temporarily stockpiled, separately from rocky materials. The cleared soil will not be mixed with other materials, such as building rubble, rock, etc.

Soil will be stockpiled in areas with the prior consent of the EEO.

Soil stockpiles will be convex and no more than 2 m high.

Topsoil stockpiles will be monitored regularly to identify any alien plants, which will be removed when they germinate.

Stockpiles shall not be covered with materials such as plastic that may cause it to compost or would kill the seed bank.

6.15 Traffic and Parking for Vehicles

The Contractor shall recognise that the Site is situated close to a main road and inhabited areas and shall therefore take all reasonable measures to ensure the safety of people in the surrounding area. Where the public could be exposed to danger by any of the Works/Site or Contractor's activities, the Contractor shall, as appropriate, provide suitable flagmen, barriers and / or warning signs in a language appropriate to the site, as approved by the Employer.

Both the D9 and P449 are very busy roads. It is imperative therefore that construction activities do not cause congestion on these roads and all due safety and precautionary measures are observed so as not to inconvenience or endanger other road users.

Special care must be taken when working in close proximity to the P449.

Flagmen and staff are to assist construction vehicles turning onto the D9 and P449 roads and direct traffic accordingly.

Vehicles may be parked in areas as indicated on the Construction Layout Plan. Areas exist to the Northwest and East of the Substation suitable to this purpose, however, they must not park or stand on the D9 and P449 roads. The East of the substation has Aloes which may not be damaged in any manner. If parking is required here, the Aloes must be adequately demarcated with danger tape and staves / droppers used to protect their location. In addition, vehicles may not park to the east of the Substation if the ground is saturated.

The problem with Learners walking across the construction site and areas of vehicle activity such as parking areas, from the nearby school, must be dissuaded and constantly addressed. The school must be approached if this becomes problematic.

Similarly turning within the confined spaces on site where construction is to transpire must be conducted under the necessary supervision.

6.16 Rehabilitation Specification and Programme

The Eskom Environmental Officer will prescribe Site Rehabilitation where necessary.

The site shall be rehabilitated to as close as possible to its original condition.

See Appendix 13: SPECIFICATION FOR THE REHABILITATION OF COMPACTED AREAS AND BANKS

APPENDIX 13: SPECIFICATION FOR THE REHABILITATION OF COMPACTED AREAS AND BANKS (RIPPING, SOIL RETENTION ON BANKS, FERTILISING AND SEEDING)

(i) Compacted Areas

Areas compacted during construction, requiring rehabilitation, need to be ripped perpendicular to the slope to a depth of 150mm.

(ii) Bank Retention

It is required that straight wooden poles, approximately 60mm in diameter and 3m in length, are pegged perpendicular to the slope in parallel rows approximately 1m apart. Sharpened thinner poles or sharpened branches can be used to peg the poles to the slope. It is not a requirement that the poles be chemically treated.

(iii) Fertiliser

2:3:2 Fertiliser is to be applied @ 300kg/ha where specified.

Receipts and Invoices indicating that the correct fertiliser was purchased, must be retained and filed in the Environmental File for auditing.

(iv) Veld Grass Seed Mix

A Veld Grass Seed mix comprised of the following species is prescribed:
Eragrostis teff, Chloris gayana, Cynodon dactylon, Eragrostis curvula, Digitaria eriantha.

Ratios of the various seed types to be determined by a professional seed retailer.

The application rate of the Seed Mix is approximately 25kg / hectare.

Receipts and Invoices indirectly indicating that the correct amount and type of grass seed was purchased, must be retained and filed in the Environmental File for auditing.

(v) Maintenance Period

It is necessary for the contractor to ensure, in co-operation with the landowner, that livestock are kept off the newly planted vegetation for a period as specified to allow vegetation to establish.

APPENDIX 14: WASTE TYPES

	1 (Low Impact)	2 (Medium Impact)	3 (High Impact)
Hazardous Liquid Waste			• Waste containing acidic liquid. • Waste containing hydrocarbons (oil).
Non-Hazardous Liquid Waste	Kitchen and domestic wastewater		

	1 (Low Impact)	2 (Medium Impact)	3 (High Impact)
Hazardous Solid Waste	Construction debris	Batteries. Light bulbs. • Circuit boards. • Optic fibre wires. • Other waste contaminated by oil or organic compounds. • Empty drums used for hazardous materials. • Empty paint and coating containers. • Contaminated ground/ soil. • Wet concrete.	Wet concrete. Waste containing fibrous asbestos. Aerosol containers. PCB's (polychlorinated biphenyls) - Hydraulic equipment, oil-filled electromagnets, circuit breakers, voltage regulators, cables and vacuum pumps may contain PCB liquid. Rubber (tyres, etc.)
Non-Hazardous Solid Waste	Clean soil.	• Empty drums **not** used for hazardous materials. Rubble **not** contaminated by oil or organic compounds. • Cable. • Plastic. • Domestic waste (food waste, pens, pencils, etc.).	Scrap metal (all types). • Dry concrete. • Waste timber (wood). • Steel cans. • Glass.

Colour	Waste Category	Example
Red	Hazardous	Batteries. • Light bulbs. • Circuit board and Optic fibre wires. • Waste contaminated by oil or organic compounds. • Empty drums/containers used for hazardous materials. • Waste containing fibrous asbestos. • Aerosol containers. • PCB's (polychlorinated biphenyls), containing materials • Rubber (tyres, etc.).
Yellow	Plastic	Plastic bags. Plastic bottles/containers
Green	Paper	White, coloured or board paper
Black	General	• Food waste • Pens, pencils
Blue	Scrap metal	Al type of metals • Steel cans • Beverage/food tins

APPENDIX 15: ENVIRONMENTAL MANAGEMENT PLAN: COMPLIANCE TEMPLATE

PROJECT NAME:

Rating Scale: 0 – No or Poor Compliance; 3 – Moderate Compliance; 6 - Compliant

Category 1: Major (3)
difficult to achieve, major works, relatively high cost to implement, severe impact, long term impact

Item	Factoring	Rating	Score
	3	0-6	

Category 2: Moderate (2)
moderately achievable, moderately available, marginal cost to implement, moderate impact, moderate impact term

Item	Factoring	Rating	Score
	2	0-6	

Category 3: Minor (1)
easily achievable, readily available, relatively low cost to implement, low severity of impact, impact short term

Item	Factoring	Rating	Score
	1	0-6	

Overall Rating: …… %

…….. …… ……
For CONTRACTOR Signed Date

…… …… ……
Eskom Environmental Officer Signed Date

…….. …… ……
Eskom Project Manager Signed Date