

**DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME (EMP):
REITFONTIEN SUBSTATION**

**LINE GROUP RESPONSIBLE (During Construction): Project Management
RESPONSIBLE PERSON (During Construction):
LINE GROUP RESPONSIBLE (After Construction):
RESPONSIBLE PERSON (After Construction):**

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INTRODUCTION AND BACKGROUND

Eskom is proposing to construct a new electricity substation at the Rietfontein Border Post, Rietfontein. The need for the new substation is directly related to the pressures on the existing Eskom and municipal networks and the local development needs in the area.

The following draft Environmental Management Programme (EMP) has been prepared by ERM, for Eskom Distribution Division, Upington, in accordance with the EIA Regulations, of 2006 (Government Notice Regulation No. 386) and refers to the proposed Rietfontein substation. The EMP is broadly aimed at ensuring that the environmental and social mitigation measures, as well as recommendations and commitments in the Basic Assessment Report (BAR) are implemented on the site during construction, operation and decommissioning of the substation. As such, the EMP contains specifications applicable to Eskom staff and outside contractors with regards to addressing environmental issues during the project life-cycle.

It should be noted that this is a draft document and provision has been made for updating this draft EMP should any further requirements be specified by the relevant regulatory authority in the environmental authorisation. The EMP identifies the management actions (e.g. mitigation) required and performance targets to be achieved. Further detailed requirements will need to be developed during the final design and planning phase and as part of the bidding and sub-contracting process for the construction phase.

It is recognised that Eskom have their own environmental policies, guidelines and procedures in place to manage risks and liabilities, and to streamline their operations. Eskom operates under the Eskom Act of 1987 and the Electricity Act of 1987. Policies are determined by the Electricity Council, which represents customers, organised labour and the government. This document has been prepared to ensure that the mitigation measures, recommendations and commitments from the BAR are in line with Eskom's management system and to ensure that this EMP can be utilized effectively.

1.1 PURPOSE OF THE EMP

The overall the aims of this EMP are as follows:

- Ensure continuing compliance with South African environmental legislation and Eskom's policies and procedures;

- Provide the initial mechanism for ensuring that measures identified in the BAR to mitigate potentially adverse impacts are implemented;
- Provide assurance to regulators and stakeholders that their requirements with respect to environmental and social performance will be met;
- Ensure that the construction staff are familiar with the environmental procedures to be followed and comply with all the recommendations made within it;
- Ensure that roles and responsibilities are clearly defined and are understood by the construction staff;
- Ensure that a monitoring schedule is maintained in which any potential negative environmental impacts are identified; and
- Details the mitigatory measures that have been implemented in response to non-compliance.

The following section outlines the roles and responsibilities of those involved in the construction of the substation and the reporting procedures to be followed.

2.1 PROJECT CO-ORDINATOR

The primary responsibility of the Project Co-ordinator (PC) is to ensure that the Contractor complies with the environmental specifications in this document.

The PC shall:

- Assume overall responsibility for the effective implementation and administration of the EMP;
- Ensure that the EMP is included in the Contractor's contract;
- Ensure that the EMP is given to the applicable Construction Supervisor, contractors and sub-contractors (if utilised);
- Undertake regular inspections of the Contractor's site as well as the installation works in order to check for compliance with the EMP in terms of the specifications outlined in this document;
- Keep a register of all incidents (spills, injuries, complaints, legal transgressions, etc) and other documentation related to the EMP;
- Report any problems (or complaints) related to compliance with this document to be solved in co-operation with the Contractor/s;
- Ensure recommendations of audit inspections are implemented; and
- Ensure construction staff are trained in accordance with requirements of the EMP.

2.2 CONSTRUCTION CONTRACTOR

The Contractor shall:

- Ensure that the environmental specifications of this document (including any revisions, additions or amendments) are effectively implemented. This includes the on-site implementation of steps to mitigate environmental impacts;
- Monitor environmental performance and compliance with the specifications contained in this document during site inspections;
- Discuss implementation of and compliance with this document with staff at routine site meetings;
- Report progress towards implementation of and non-compliance with this document at site meetings with the PC;
- Ensure that suitable records are kept and that the appropriate documentation is available to the PC;
- Advise the PC of any incidents or emergencies on site, together with a record of action taken; and

- Report and record all accidents and incidents resulting in injury or death.

2.3

ENVIRONMENTAL PRACTITIONER (EP)

It is envisaged that the Environmental Practitioner (EP) will be internally appointed by Eskom. It must be a person with adequate environmental knowledge to understand and implement the EMP. The EP may not be someone appointed by the contractor, engineer or other parties involved with the project. The EP must report to ESKOM only.

The EP has the authority to stop works if, in his/her opinion, there is a serious threat to or impact on the environment. This authority is to be limited to emergency situations where consultation with the engineer or applicant is not immediately possible. In all such work stoppage situations the EP is to inform the engineer and applicant of the reasons for the stoppage as soon as possible.

Upon failure by the Contractor or his employee to show adequate consideration to the environmental aspects of this contract, the EP may recommend to the engineer to have the contractor's representative or any employee(s) removed from the site or work suspended until the matter is remedied. No extension of time will be considered in the case of such suspensions and all costs will be borne by the Contractor.

The EP should visit the site frequently in order to sufficiently monitor the project progress to ensure compliance to the EMP throughout the various phases of the project life cycle. This would vary depending on the project cycle phase.

All contractor teams involved in work on the project are to be briefed on their obligations in terms of environmental controls and methodologies as outlined in this EMP prior to work commencing. The briefing will usually take the form of an on-site talk and, where appropriate, demonstration by the EP. The education / awareness programme should be aimed at all levels of personnel within the contractor teams.

4.1 *METHOD STATEMENTS*

The Contractor will be required to provide method statements for specific sensitive actions on request of the authorities or EP. A method statement describes the scope of the intended work in a step by step description to ensure that the EP and Engineer understand the Contractors intentions. This will enable them to assist in devising any mitigation measures, which would minimise environmental impact during these tasks. For each instance where it is requested that the Contractor submit a method statement to the satisfaction of the EP, the format should clearly indicate the following:

- **What:** a brief description of the work to be undertaken;
- **How:** a detailed description of the process of work, methods and materials;
- **Where:** a description/sketch map of the locality of work (if applicable); and
- **When:** the sequencing of actions with due commencement dates and completion date estimates.

Work may not commence until the method statement has been approved by the EP. All method statements will form part of the EMP documentation and are subject to all terms and conditions contained within the EMP main document.

Method statements for the following activities are required as a minimum:

- Site clearing
- Site layout and establishment
- Storage and use of hazardous substances
- Solid waste control system
- Fire control and emergency procedures

4.2 *RECORD KEEPING*

All records related to the implementation of this EMP (e.g. method statements, audit inspection protocols, incident reports etc.) must be kept together in an office where it is safe and can be retrieved easily. These records should be kept for two years and should, at any time, be available for scrutiny by any relevant authorities.

4.3 *PHOTOGRAPHS*

It is recommended that photographs are taken of the site prior to, during and immediately after construction as a visual reference. These photographs should be stored with other records related to this EMP.

An Environmental Completion Statement is a report by the EP to the relevant authorities confirming completion of the project and compliance with the EMP conditions.

The Environmental Management Programme (EMP) is presented in this section under the following headings:

- Planning Phase;
- Construction Phase;
- Operational Phase;
- Decommissioning; and
- Monitoring.

5.1

PLANNING PHASE

In order to ensure compliance with Eskom's environmental policy as well as environmental legislation requirements, the following actions are applicable to the planning phase for the substation.

PLANNING PHASE							
Activity		Objective	Actions to be Undertaken to Mitigate Environmental Impact		Parameters for monitoring	Responsibility	Frequency / Timing
#	Description of Activity		#	Commitment / Actions Required / Key Controls			
1.	Design and Planning	Notify all registered Interested and Affected Parties of Environmental Authorisation	1.1	Notify all registered I&APs and key stakeholders of the opportunity to appeal against the Environmental Authorisation.	Notices sent to relevant parties on file List of those to whom it was sent on file	ERM	Within 5 days from the issuing of the Environmental Authorisation
		Ensure compliance with legal and other permitting requirements	1.2	Ensure that relevant legal requirements have been met (See Section 7).	Relevant documentation on record	Eskom	Prior to commencement of operation
		Implement layout and design alternatives recommended by the BAR to minimise impact on vegetation and dust emissions	1.3	Ensure that the Substation is constructed so that it complies with the relevant local authorities' specifications.	Remain within the proposed footprint	Eskom	Prior to design sign-off
		Schedule site preparations	1.4	Minimise dust emissions and minimise traffic congestion by ensuring construction activities are staggered and vehicular movements are kept to a minimum.	Design signoff	Eskom and Contractor	Prior to commencement of operation
2.	Notification of commencement	Ensure that DEA are notified of commencement date	2.1	Notify DEA prior to commencement of construction.	Proof of communication and list of those to whom it was sent to	Eskom (Environmental Practitioner)	14-days in advance of commencement of construction.
3.	Method Statements	Approve method statements	3.1	The following method statements are required as a minimum: <ul style="list-style-type: none"> • Site clearing • Site layout and establishment • Solid waste control system • Fire control and emergency procedures These method statements should be approved and signed off by the EP.	Method statement signoff	Eskom	Prior to commencement of operation

5.2 CONSTRUCTION PHASE

In order to ensure compliance with Eskom's environmental policy as well as environmental legislation requirements, the following actions are applicable to the construction phase of the substation.

CONSTRUCTION PHASE							
Activity		Objective	Actions to be undertaken to Mitigate Environmental Impact		Parameters for Monitoring	Responsibility	Frequency / Timing
#	Description of Activity		#	Commitment / Actions Required / Key Controls			
1.	Compliance with EMP	Confirm Eskom's and its Contractor's commitment to adherence to EMP	1.1	Ensure that approved EMP is available on the construction site.	Copy of signed EMP on construction site	Contractor and Eskom	Prior to construction
			1.2	Ensure that equipment is in place to meet EMP requirements.	Checklist of EMP requirements	Contractor	Prior to construction
			1.3	Signed commitment from Contractors to compliance with EMP.	Copy of signed EMP is available on site	Contractor	Prior to construction
2.	Restriction of working areas	<p>It is important that activities are conducted within a limited area to facilitate control and to minimise impacts on the natural environment.</p> <p>This is especially important in the context of an international border.</p>	2.1	<p>The Contractor shall ensure that all plant, labour and materials remain within the boundaries of the working area. All areas outside the working area shall be considered as 'no go' areas. Work areas and access routes must be clearly demarcated to minimise environmental impact. Demarcation can take the form of danger tape.</p> <p>All staff, vehicles and construction material are to be restricted to the working area.</p> <p>Vehicles, if parked on site, must be confined to a clearly demarcated area. Surface contamination which may occur as a result of oil leaks from vehicle sumps must be avoided. This can be achieved by providing a sump tray for each vehicle or sand that is later removed. The contaminated sand must be disposed of at a licensed hazardous disposal site.</p>	<p>Clearly defined boundaries are in place.</p> <p>No unauthorized off-site clearance</p> <p>Site boundaries not extended or breached</p>	Contractor and Eskom	Site preparation and during construction
			2.2	All construction personnel involved in site preparation shall be trained to observe the defined site boundaries. Due to the proximity of an international border between South Africa and Namibia, all staff should receive training in relation to laws governing border control.	Work areas and routes are not extended or breached		
3.	Site clearance	Protect natural vegetation	3.1	<p>No vegetation clearing shall take place without written approval of the method statement by the EP.</p> <ul style="list-style-type: none"> That contractors on site do not harvest, cut or destroy any succulent, bulb bush, shrub or tree. That extreme care be taken that no cooking fires are made. Any runaway fires could spread to surrounding areas. That when making new tracks, the policy should be one track in and the same track out. The idea is to make the least impact on the environment. 	Method statement approved prior to clearing	Contractor	Vegetation clearing only to take place subsequent to approval of Method Statement
			3.2	Before clearing of vegetation, the Contractor shall ensure that all litter and non-organic material is removed from the area to be cleared.	Litter and non-organic matter removed.		

CONSTRUCTION PHASE							
Activity		Objective	Actions to be undertaken to Mitigate Environmental Impact		Parameters for Monitoring	Responsibility	Frequency / Timing
#	Description of Activity		#	Commitment / Actions Required / Key Controls			
			3.3	Vegetation clearing shall take place in a phased manner in order to retain vegetation cover for as long as possible.	At discretion of EP	Contractor	During vegetation clearing
4.	Concrete Works	Prevent contamination of soil and groundwater. The Contractor is advised that cement and concrete are regarded as hazardous to the natural environment given the high pH of the material, and the chemicals contained therein.	4.1	<ul style="list-style-type: none"> Excess or spilled concrete should be confined within the works area and then removed to a waste site. Concrete shall be mixed on mortar boards, and not directly on the ground. The visible remains of the batch plant and concrete, either solid, or from washings, shall be physically removed immediately and disposed of as waste at a licenced landfill site. All aggregate shall also be removed. 	Waste documentation	Contractor	During construction
5.	Archaeology and heritage	Protection of heritage resources	5.1	<ul style="list-style-type: none"> If any archaeological material (e.g. fossils, bones, artefacts etc) is found, the contractor shall stop work immediately and inform the Environmental Practitioner (EP). The EP shall inform South African Heritage Resource Agency (SAHRA) and arrange for a palaeontologist/archaeologist to inspect, and if necessary excavate, the material, subject to acquiring the requisite approval from SAHRA. The Contractor shall not recommence working in that area until written permission has been received from the EP. 	Incident Report	Contractor and Eskom	During construction
6.	Air Quality	Prevent any changes to air quality	6.1	<ul style="list-style-type: none"> No burning of waste material (e.g. vegetation from clearing operations) is allowed; Drive at moderate speeds on access roads in order to minimise or avoid dust pollution (see Dust Control for additional measures). 	Incident Report	Contractor	During installation and construction activities
7.	Fire protection	Fire prevention	7.1	<ul style="list-style-type: none"> No fires are allowed outside the construction area and adequate fire fighting equipment must be available on site and in good working order (at least one all purpose 2.5 kg extinguisher). Welding, gas cutting or cutting of metal will only be permitted inside working areas. 	Adequate fire fighting equipment in place	Contractor	During construction

CONSTRUCTION PHASE							
Activity		Objective	Actions to be undertaken to Mitigate Environmental Impact		Parameters for Monitoring	Responsibility	Frequency / Timing
#	Description of Activity		#	Commitment / Actions Required / Key Controls			
8.	Refuse and waste (refers to all solid waste, including construction debris wrapping materials, timber, cans etc, waste and surplus food, food-wrappers, etc.	Limit the potential for site pollution and the accumulation of waste materials on site.	8.1	<ul style="list-style-type: none"> Minimise, reduce, reuse and recycle wastes. All waste should be collected by the relevant municipality or waste removal contractor. All waste must be removed off site and dispose of at a licensed landfill site. 	During construction	Contractor	No waste and/or refuse are to be stored on site for longer than 2 months.
			8.2	<ul style="list-style-type: none"> Eskom employees and contractors are responsible for cleaning-up at the end of construction. The Contractor shall not dispose of any waste and/or construction debris by burning or burying. Waste bins and skips must be used and the Contractor must ensure that all waste is deposited in bins/skips for removal to an appropriate landfill site. The bins shall be provided with lids to prevent contents blowing out. Bins/skips shall not be used for any purpose other than waste collection and shall be emptied on a regular basis. 			
9.	Sanitation	Provision of suitable sanitary arrangements for workers	9.1	<ul style="list-style-type: none"> Temporary ablution facilities (i.e. chemical toilets) must be made available and used. A minimum of one toilet shall be provided per 15 persons at each working area or as stipulated by local authority or other relevant legislation. Toilets shall be of a neat construction and shall be provided with doors and locks and shall be secured to prevent them blowing over. Sanitation provision and servicing shall be to the satisfaction of the EP. 	Suitable sanitary arrangements	Contractor and Eskom	During construction phase

CONSTRUCTION PHASE							
Activity		Objective	Actions to be undertaken to Mitigate Environmental Impact		Parameters for Monitoring	Responsibility	Frequency / Timing
#	Description of Activity		#	Commitment / Actions Required / Key Controls			
10.	Socio-cultural issues	Minimise impacts on socio-cultural aspects	10.1	<ul style="list-style-type: none"> • A method statement should be drawn up in the case of an emergency (veld fire, damaged powerline, vegetation problems etc.). Eskom contact names and telephone numbers must be available on site; • Property owners or occupiers must be treated with respect and courtesy at all times; • The culture and lifestyles of the communities living in close proximity to the substation must be respected; • Tribal graves, archaeological sites and sites of historical interest in close proximity to the substation are to be treated with respect and protected. • No firewood is to be collected except with the written consent of the landowner; and • A register must be maintained of all complaints or queries received as well as action taken. 	At discretion of EP	Contractor and Eskom	During construction
11.	Dust Control	Limit fugitive dust emissions	11.1	<ul style="list-style-type: none"> • The Contractor will take appropriate measures to minimise the generation of dust as a result of construction works, to the satisfaction of the EP. Such measures may include wetting of surfaces and the use of sawdust. • Any complaints received from stakeholders must be reported to the EP and measures must be taken to limit dust. 	Visible fugitive dust	Contractor and Eskom	During construction
12.	Land management	Minimise impacts on the land	12.1	<ul style="list-style-type: none"> • All fauna (including domestic livestock) within and around the site shall be protected. Birds and animals will not be caught or killed by any means, including poisoning, trapping, shooting or setting of snares. • Fences or gates of property owners must not be damaged. The condition of Eskom gates and locks must be regularly monitored to ensure they are secure. The access gates to the site must always be closed and locked when daily construction activities are completed; • Soil erosion must be prevented at all times along the access road and in the substation site; • Bush clearing in the servitude or around the substation must be in accordance to Eskom's Bush Clearing Standard (Reference - EPC 32-247); and • No bush clearing to be undertaken without the knowledge of the Mier Municipality (property owner). 	At discretion of EP	Contractor and Eskom	Prior to and during construction

CONSTRUCTION PHASE							
Activity		Objective	Actions to be undertaken to Mitigate Environmental Impact		Parameters for Monitoring	Responsibility	Frequency / Timing
#	Description of Activity		#	Commitment / Actions Required / Key Controls			
13.	Access	Prevent establishment of new access tracks wherever possible and ensure that property owners have unrestricted access to their properties.	13.1	<ul style="list-style-type: none"> Use existing access roads/tracks, particularly in sensitive vegetation. No driving through watercourses, sensitive vegetation etc. Should additional access tracks be required, the access must be agreed upon with the relevant property owner in conjunction with the contractor. A written agreement must be in place, <i>prior</i> to any construction of the said access route. 	Deviation from existing access routes	Contractor and Eskom	Prior to and during construction
14.	Oil spill management	Prevent potential oil spills	14.1	<ul style="list-style-type: none"> Fuels, oils, hydraulic fluids etc. must be stored in properly contained areas so as to minimize accidental spillage. No hazardous or toxic chemicals or substances should be stored where there could be accidental leakage into the subsurface. Contamination which may occur as a result of oil leaks from vehicle sumps must be avoided. This can be achieved by providing a sump tray for each vehicle or sand that is later removed. The contaminated sand must be disposed of at a licensed hazardous disposal site. All spills must be reported to the EP within 24 hours of the spill. The contractor should be in possession of a mobile oil spill kit and/or a wheely bin should be available on site. A mobile kit can be acquired from Drizit or Enviroserv Waste Management (See Section 6 for contact details). The Oil Spill Clean-up and Rehabilitation under the Waste Management Procedure (Ref.No: 32-245) must be implemented (refer to the Waste Management Procedure). 	At discretion of EP	Contractor and Eskom	During site clearing and installation activities

CONSTRUCTION PHASE							
Activity		Objective	Actions to be undertaken to Mitigate Environmental Impact		Parameters for Monitoring	Responsibility	Frequency / Timing
#	Description of Activity		#	Commitment / Actions Required / Key Controls			
15.	Fauna	Prevent and minimise impacts to fauna	15.1	<ul style="list-style-type: none"> • Demarcate working areas, restrict access to them and confine construction activities to these areas to prevent accidental injury and harm to animals. • Notify landowners to move their pets/ domestic animals etc. away from construction areas. • There shall be no pilfering of domestic animals. • Before clearing of vegetation, the Contractor shall ensure that any movable fauna, such as tortoises, are removed from the site to a suitable habitat, prior to clearing activities. • Consult EP before removing any nests or breeding areas. • Drive slowly (not more than 15 km/h) on access road to prevent mortalities. 	At discretion of EP	Contractor and Eskom	Prior to construction
16.	Noise pollution	Avoid disturbing the local community.	16.1	<ul style="list-style-type: none"> • Equipment and construction vehicles used on-site must be in good condition and serviced regularly. • All noise generating activities must be scheduled between 7am – 7pm Mondays to Fridays. • Any complaints received from neighbours must be reported to the EP and measures must be taken to limit noise. 	Operation of installation equipment and vehicle operation	Contractor and Eskom	During construction
17.	Site Clean Up and Rehabilitation	To restore any degradation caused by the installation activities.	17.1	<ul style="list-style-type: none"> • The Contractor must ensure that all structures, equipment, materials and facilities used or created on-site for or during construction activities are removed once the project has been completed. The construction site shall be cleared and cleaned to the satisfaction of the EP. • All installation equipment and excess aggregate, gravel, stone, concrete, bricks, temporary fencing and the like will be removed from the site upon completion of the work. • No discarded materials of any nature shall be buried. 	At discretion of EP	Contractor and Eskom	Site rehabilitation to be completed within three months of installation or by a date stipulated by the EP.

5.3 OPERATIONAL PHASE

In order to ensure compliance with Eskom's environmental policy as well as environmental legislation requirements, the following generic and specific requirements are applicable during the operational phase of the substation.

OPERATIONAL PHASE							
Activity		Objective	Actions to be undertaken to Mitigate Environmental Impact		Parameters for Monitoring	Responsibility	Frequency / Timing
#	Description of Activity		#	Commitment / Actions Required / Key Controls			
1.	Substation operations	Prevent contamination of soil and groundwater	1.1	Routine inspection should be undertaken of all substation facilities that have the ability to contaminate soil and/or groundwater.	Inspection records	Eskom	Monthly
2.	Waste handling and management	Ensure responsible waste handling and management	2.1	All wastes should be collected by the appointed waste sub-contractor. No waste should be disposed of around the site.	Relevant documentation for waste disposal is prepared and filed	Eskom	Throughout operation
3.	Oil spill management	Prevent potential oil spills during the operation of the proposed 132/66 kV substation including transformer maintenance.	3.1	<ul style="list-style-type: none"> Fuels, oils, hydraulic fluids etc. must be stored in properly contained areas so as to minimize accidental spillage. No hazardous or toxic chemicals or substances should be stored where there could be accidental leakage into subterranean water supplies. Accommodation must be made for oil leaks that may occur from vehicle sumps. This can be achieved by providing a sump tray for each vehicle or sand that is later removed from site. The contaminated sand will have to be disposed of at a licensed hazardous disposal site. All spills must be reported to the EP within 24 hours of the spill. The substation manager should be in possession of a mobile oil spill kit and/or a wheely bin should be available on site. A mobile kit can be acquired from Drizit at Tel. 021 531 5332 and 083 281 1691 or Enviroserv Waste Management at Tel. 0800 147 112 and 083 281 1691. The Oil Spill Clean-up and Rehabilitation under the Waste Management Procedure (Ref.No: 32-245) needs to be implemented (refer to Eskom's Waste Management Procedure). 	At discretion of EP	Eskom and Contractor	During site clearing and installation activities

OPERATIONAL PHASE							
Activity		Objective	Actions to be undertaken to Mitigate Environmental Impact		Parameters for Monitoring	Responsibility	Frequency / Timing
#	Description of Activity		#	Commitment / Actions Required / Key Controls			
4.	Socio-cultural issues	Minimise impacts on socio-cultural aspects during the operation of the project	4.1	<ul style="list-style-type: none"> Property owners or occupiers must be treated with respect and courtesy at all times; The culture and lifestyles of the communities living in close proximity to the substation must be respected; Vehicles must be driven carefully in hazardous road conditions (sharp bends, narrow roads, bad weather, children playing on or near the road, domestic animals on or near the road etc.). Vehicle movement should be kept to a minimum during rain to avoid damage to the access road; Tribal graves, archaeological sites and sites of historical interest in close proximity to the substation are to be treated with respect and protected. No firewood is to be collected except with the written consent of the landowner; and A register must be maintained of all complaints or queries received as well as action taken. 	At discretion of EP	Eskom	Throughout operation
5.	Land management	Minimise impacts on the land during operation.	5.1	<ul style="list-style-type: none"> Bush clearing in the servitude or around the substation must be in accordance to Eskom's Bush Clearing Standard (Reference – EPC 32-247) Maintenance of erosion control measures along the access road must be maintained. 	At discretion of EP	Eskom	Throughout operation

5.4 *DECOMMISSIONING PHASE*

A detailed decommissioning and rehabilitation plan should be developed prior to decommissioning of the substation. This plan should include, but should not be limited to, conditions regarding removal of infrastructure, management of waste and/or contaminated soil, dust suppression, groundwater monitoring and re-vegetation and landscaping.

The following table provides relevant contact details for the substation development.

Table 6.1 *Relevant contact persons*

Name	Contact person	Contact number
Environmental Contacts		
Eskom Environmental Contact Persons	Barbara van Geems	021 980 3242
Environmental Practitioner	Donald Matjuda	021 980 3364
Emergency Numbers		
Eskom Control	N/A	080-121-2433/915-2440
Oil Spill Contact Numbers		
Oil Spill Contacts	Enviroserv Waste Management	0800 147 112 and 083 281 1691
	Drizit	021 531 5332 and 083 281 1691

A growing awareness of the environment and an increase in the number of environmental laws and regulations, present company management with a daunting task of monitoring, interpreting and implementing systems to produce a workable plan to comply with legal requirements. The list below was compiled to ensure that the person responsible for maintenance of the substation is aware of their legal responsibilities and liabilities. Complying with these laws and regulations will minimise the risks in terms of legal, financial (claims) and rehabilitation costs. Non compliance to environmental law is a criminal offence and if prosecuted Eskom will be liable for any environmental damage incurred.

ACT NAME	ACT NO	NOTES/REMARKS
National Environmental Management: Air Quality Act	39 of 2004	<p>Control all forms of air pollution.</p> <ul style="list-style-type: none"> • <i>Smoke control zones</i> • <i>Dust control during construction</i> • <i>Fumes emitted by vehicles</i> • <i>Air pollution from waste</i>
Conservation of Agricultural Resources Act	43 of 1983	<p>Control of utilisation and protection of wetlands; soil conservation; control and prevention of veld fires; control of weeds and invader plants.</p>
National Environmental Management Act (NEMA), as amended	107 of 1998	<p>Controls for the effective protection and utilisation of the environment, littering, waste disposal, noise and various other activities, which may have a detrimental effect on the environment.</p> <ul style="list-style-type: none"> • <i>Waste management</i> • <i>Application of waste disposal permit</i> • <i>Noise control regulations</i>
Environmental Impact Assessment Regulations	R385 and R386 of 2006	<p>Control for the effective implementation of Environmental Impact Assessments outlining the process, roles and responsibilities of the decision-making authority and Environmental Assessment Practitioner (EAP). It also controls and provides guidelines on Environmental Management Plans.</p>

Environmental Impact Assessment Regulations	R543, R544, and R547 of 2010	These are the amendments to the 2006 Regulations which control for the effective implementation of Environmental Impact Assessments outlining the process, roles and responsibilities of the decision-making authority and Environmental Assessment Practitioner (EAP). It also controls and provides guidelines on Environmental Management Programmes
Fencing Act	31 of 1963	Prohibition of damage to a property owner's gates and fences <ul style="list-style-type: none"> • <i>Climbing or crawling over or through fences without permission</i> • <i>Closing gates</i>
Forest Act	122 of 1984	Control of veld, forest and mountain fires and the protection of biota and ecosystems. <ul style="list-style-type: none"> • <i>Protected trees</i> • <i>Fire control areas</i> • <i>Fire belts and maintenance</i>
Hazardous Substance Act	15 of 1973	Sale of Group I,II,III and letting, use, operation, application and installation of Group III hazardous substances.
Health Act	63 of 1977	Control of health aspects of waste disposal and water treatment. <ul style="list-style-type: none"> • <i>Regulates, rubbish, night soil, sewage, or other waste</i> • <i>Regulations relating to nuisances</i>
Game Theft Act	105 of 1991	Regulates ownership of game, combat theft and unlawful hunting, catching and taking into possession of game.
National Heritage Resources Act	25 of 1999	Control for the protection of natural and historical monuments, relics and antiques. <ul style="list-style-type: none"> • <i>Notifying of authorities in discovering of above</i>
National Water Act	36 of 1998	All aspects relating to pollution

		of surface and ground water.
Cape Nature Conservation Ordinance	19 of 1974	Endangered plants and wild animals. Protected fauna and flora
Immigration Act	13 of 2002	Controls migration of people across international borders.