

# ENVIRONMENTAL MANAGEMENT PROGRAMME

**PROPOSED RETROFITTING OF THE EXISTING ELECTROSTATIC PRECIPITATORS (ESPs) WITH FABRIC FILTER PLANTS (FFPs) AND UPGRADE OF DUST HANDLING PLANT (DHP) AT KRIEL POWER STATION, UNITS 1, 2, 3, 4, 5 AND 6, EMALAHLENI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE**

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<p>Prepared by:</p> <p>WANDIMA ENVIRONMENTAL SERVICES P. O. Box 1072 NELSPRUIT 1200 Tel: (013) 752 5452 Fax: (013) 752 6877 E-mail: <a href="mailto:admin@wandima.co.za">admin@wandima.co.za</a></p>	<p>Prepared for:</p> <p>ESKOM HOLDINGS SOC LTD 1 Maxwell Drive, Sunninghill JOHANNESBURG 2000 Tel: 011 800 3501 Fax: 086 660 6092 E-mail: <a href="mailto:Deidre.herbst@eskom.co.za">Deidre.herbst@eskom.co.za</a></p>
 <p><b>WANDIMA</b> ENVIRONMENTAL SERVICES PEOPLE • PLANET • PROSPERITY</p>	

## ENVIRONMENTAL MANAGEMENT PROGRAMME

### 1. Introduction

Eskom Holdings SOC Ltd is a South African utility that generates, transmits and distributes electricity. Eskom supplies about 95% of the country's electricity. Kriel Power Station is a 3000MW installed capacity base load coal fired power station, consisting of 6x500MW units. The planning and design of Kriel Power Station began in the early seventies. Construction also started in the early seventies and the station began operating at full capacity in late 1979.

The station's Atmospheric Emission Licence (AEL), (Atmospheric Emission Licence No: 17/4/AEL/MP312/11/09), issued after consideration of the February 2015 Department of Environmental Affairs' decision on Eskom's application for postponement of compliance to the April 2015 and April 2020 particulate emissions limits, as contemplated in Section 43 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), requires Kriel Power Station to conform to a maximum release rate of a monthly average of 125mg/Nm<sup>3</sup> from the 1<sup>st</sup> of April 2015 to the 31<sup>st</sup> of March 2020, and further to 50mg/Nm<sup>3</sup> daily by the 1<sup>st</sup> of April 2020, for particulate emissions. All six units are currently operating with Electrostatic Precipitator (ESP) technology for particulate matter abatement. The current design, the use of Electrostatic Precipitators (ESPs) at Kriel Power Station will not be able to consistently meet the more stringent particulate emission limits, and the need exists to replace the installed particulate capturing systems with more efficient and effective particulate control systems. The replacement systems selected by Eskom is Fabric Filter Plants (FFPs). The purpose is to consistently meet the particulate emission licence limit as set out in the station's Atmospheric Emission Licence.

During construction phase, the following major alterations and additions will be made to the power station:

- A Pipe Rack for Ash Conveying Air pipes will be added;
- The Conveying pipe layout will be changed on top of the Silo;
- The DHP will be upgraded to accommodate new and larger pressure vessels to be installed beneath each of the FFP hoppers. The vessels will be installed on the existing concrete slab under the footprint of the FFP casing.
- New FFP that will be within the footprint of the currently installed ESPs. The FFP casing will be slightly higher than the existing ESP, increasing from 22.8m to 26.7m;
- New Conveying Air Compression House and Substation will be built between the silo and precipitators; and
- A new Cleaning Air Equipment building will be constructed next to boiler 6. It will be 61m x 17m x 13.7m (h) and will be a steel frame concrete building with corrugated iron roof.

The Environmental Assessment Practitioner (EAP), Wandima Environmental Services (Environmental Consultants) was appointed to undertake the applicable EIA processes in terms of Chapter 5 of the National Environmental Management Act (Act 107 of 1998) in order to proceed with the proposed construction activities listed in the EIA Regulations as published in Government Notices No's. R984 and 985 of December, 2014. As partial requirement, the services of an Environmental Control Officer (ECO) may be required to monitor compliance with the conditions set by the authorisation. For this reason the tasks and responsibilities of all role players are also included.

Details of EAP

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### **WANDIMA ENVIRONMENTAL SERVICES**

MG Dlamini: PGD in Water Resource Management, B.Sc. Hydrology

Tel: 013 752 5452

Fax: 013 752 6877

Email: [admin@wandima.co.za](mailto:admin@wandima.co.za)

Applicant

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### **ESKOM HOLDING SOC LTD**

Tel: 011 800 3501

Fax: 086 660 6092

Email: [Deidre.herbst@eskom.co.za](mailto:Deidre.herbst@eskom.co.za)

## **2. Location**

The project is situated at Kriel Power Station which is located between the towns of Kriel and Ogies about 4 km from Matla Power Station within the jurisdiction of Emalahleni Local Municipality, in Mpumalanga. The project site is located at the following GPS Coordinates: 26° 15' 15.18"S, 29° 10' 45.17"E.

## **3. Activity**

In terms of these regulations, the activity that is triggered by the proposed development is listed as follows:

### **Listing Notice 1, R983 of December, 2014:**

**Activity 34 (i):** The expansion or changes to existing facilities for any process or activity where such expansion or changes will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the release of emissions or pollution, excluding-

- (i) where the facility, process or activity is included in the list of waste management activities published in terms of Section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies.

*The proposed retrofitting of the existing Electrostatic Precipitators (ESPs) with Fabric Filter Plants (FFPs) and Upgrade of Dust Handling Plant (DHP) at Kriel Power Station.*

The change in air quality abatement technology will result in the need for Eskom to change the terms of their Air Quality Permit.

## **4. Terms of Reference**

Wandima Environmental Services were appointed by Eskom to undertake EIA process and compile the EMPr for the authority decision making.

The applicant is responsible for compliance with the provisions for Duty of Care and Remediation of Environmental Damage contained in Section 28 of the National Environmental Management Act (Act 107 of 1998).

## 5. Objectives

The Environmental Management Programme (EMPr) will form the basic tool for reducing the magnitude of impacts and suggesting practical measures to attain this. It is also used to measure compliance by the applicant. It is this tool that gives guidance during monitoring, auditing and taking corrective actions during its implementation, thereby ensuring continuous monitoring of the environment.

## 6. Key sustainability principles emphasized include:

- Development must not irreversibly degrade the natural, built, socio-economic and governance resources on which it is based.
- Current actions should not cause irreversible damage to natural and other resources, as this potentially prevents the realisation of future sustainable options.
- Where there is uncertainty about the impact of activities on the environment, caution should be in favour of the environment.
- Land use and environmental planning need to be integrated.
- Immediate and long-term actions need to be identified and planned for, so that urgent needs can be met while still progressing towards longer-term sustainable solutions.

An EMPr is implemented throughout the project life-cycle, i.e. during pre-construction, construction, operation and decommissioning, in order to minimize negative impacts and enhance positive ones. An effective EMPr will be a practical working document that sets out the requirements and the goals required in mitigation. The main terms of the EMPr will be detailed to achieve the following:

- To define measures to be taken during pre-construction, construction, and operation and decommissioning/closure;
- To define the actions needed to implement those measures;
- To describe how these will be achieved;
- To allocate responsibilities;
- To provide time frames.

## 7. Implementation Responsibilities of the EMPr

### 7.1 The Applicant

Eskom is responsible for ensuring that the activity is implemented according to the requirements of the EMPr. The applicant must ensure that relevant professionals are appointed to perform functions as required by the authorities and legislation. The applicant will have the following responsibilities:

- To ensure there is sufficient allocation of resources to the professional role players to perform their tasks in terms of the EMPr;
- In the event that the Environment is negatively affected, the applicant will be responsible for rehabilitation and restoring the affected areas to an acceptable level;
- The applicant must include the EMPr with all tender and contractual documents in order to ensure that all parties involved are bound to the terms of the EMPr;
- The applicant must provide the contractor with a copy of the EMPr and any other relevant documentation or supporting documents.

## 7.2 The Contractor

The contractor is bound to the terms and conditions of the EMPr by way of the contract with the applicant. The contractor must be familiar with the terms of the EMPr before commencement of the activities on site and must request clarification on any issues that are unclear. The main responsibilities of the contractor are as follows:

- The contractor must comply with all the terms and conditions of the EMPr and must ensure that all sub contractors are initiated with the EMPr and comply with the terms of the EMPr;
- The contractor must attend a site inspection and orientation session with the ECO to identify and be informed of the sensitive elements of the site and take cognizance of the boundaries of the construction area. The ECO must point out any particular site-specific elements of importance;
- The contractor must ensure that the construction crew attends an environmental briefing and training session presented by the ECO prior to commencing activity on site;
- The contractor must adhere to all verbal and written recommendations made by the Environmental Control Officer (ECO) or other responsible persons (project manager or site engineer) in order to comply with the EMPr.
- It is recommended that the contractor employs an environmental officer for the Kriel Project

## 7.3 Services and Duties of the Environment Compliance Officer (ECO)

The applicant must appoint an appropriate qualified Environmental Control Officer (ECO), who must monitor compliance with the environmental management programme. The main responsibilities and duties of the ECO are as follows:

- The priority of the ECO is to ensure that the site environment is not negatively affected by the proposed activities and that minimal environmental damage is done during construction and adequate measures are implemented to ensure that future operations and maintenance does not significantly impact on the environment
- The ECO will oversee the environmental aspects of the development and ensure compliance with the EMPr
- The ECO shall liaise with relevant authorities and keep records of all correspondence with internal and external interested and affected parties
- To ensure that the proponent, construction team, the operational and maintenance workers are acquainted with their responsibilities
- To ensure compliance with regulatory authorities requirements
- To respond to changes in the project implementation not considered during the assessment phase, and respond to unforeseen events
- To verify environmental performance through information on impacts as they occur
- To establish proper communication channels and provide feedback for communication with the applicant.
- The ECO will train contractors on EMPr potential deviations.

## 7.4 Mandate and Reporting Duties of the ECO

One of the main responsibilities of the ECO is reporting to the competent authority which will be in a form of monthly audit reports. These reports will consist of descriptions of the general state of the site and will include specific reference to non-compliance and corrective measures to address non-compliance and significant impacts. Site inspections will therefore form the basis for the ECO to compile these reports. In order to perform these duties efficiently, the ECO has the right:

- To enter the site and undertake monitoring and auditing at any time;
- To recommend appointment of the necessary specialists to the client in order to monitor- or take corrective measures to address significant impacts.

An Environmental Log sheet will be kept to keep record of any non-compliance, incidents and impacts that have significant impacts on the environment.

### 7.5 Liaising duties of the ECO

In order to fulfil his/her duties the ECO will have to participate at all levels of the project. An integral part of this will be liaising with the following institutions/persons:

- Competent and relevant authorities;
- The applicant and contractor;
- All internal and external Interested and Affected Parties;

### 7.6 Appointment duties of the ECO

The EMPr as compiled by the Environmental Consultant will be used by the ECO as basis for environmental monitoring and compliance auditing. These duties are termed as follows in the EMPr:

- The contractor must attend a site inspection with the ECO to be orientated with the sensitive aspects of the site and take cognizance of the boundaries of the construction area. The ECO must point out any site-specific aspects of importance on the site;
- The ECO must form part of the project team and participate in management team meetings, as and when required ;
- The ECO shall liaise with relevant authorities and keep record of all correspondence with internal and external interested and affected parties regarding environmental issues;
- The ECO must monitor the emergence alien/invasive species and weeds on a monthly basis. If such species are recorded, the ECO must instruct the responsible person to remove or control these species according to the most effective methods as given in relevant literature;
- The ECO must arrange an environmental briefing and training session with the contractor working on FFP and his crew prior to commencement of construction activities.
- The ECO must monitor the implementation of the project monthly and conduct audit inspections at least once a month. A report must be submitted at project forum as projects, uses progress or management forums.

### 7.7 Environmental Incidents

In order for the EMPr to be efficient in case of major environmental incidents, the following criteria should be adhered to:

- To report to authorities within 24 hours of occurrence;
- Investigate the cause of the incident and compile an environmental incident report;
- Take corrective measures to mitigate the incident;
- Rehabilitate any residual damage to the environment;
- Introduce alternative operating procedures to prevent a recurrence of the incident and lessons learnt.

## 8. Constraints and Availability of Resources

The relevant basic documentation (including copies of the Authorisation and EMPr) as well as correspondence must be made available to the ECO in order to compile the necessary documentation for the environmental monitoring. Any constraints should be recorded.

## 9. Legal Requirements

Legislation and guidelines that will be considered during the Environmental Monitoring process are as follows:

- Constitution of the Republic of South Africa (No. 108, 1996)
- National Environmental Management: Air Quality Act (No.39 of 2004)
- SANS Code of Practice 10103 (2008)
- Environmental Impact Assessment Regulations, 2014
- National Water Act (No. 36, 1998)
- National Environmental Management: Biodiversity Act(No. 10, 2004)

- Labour Relations Act 66-1995
- Environment Conservation Act (No 73, 1989)
- National Roads Act (No. 7, 1998)
- National Heritage Resources Act (No. 25, 1999)
- Occupational Health and Safety Act (No. 85, 1993)
- Promotion of Access to Information Act (No. 2, 2000)
- National Environment Management: Waste Act, 2008 (No 59 of 2008)
- Electricity Regulation Act (No. 4, 2006) National Environment Management: Waste Act, 2008 (No 59 of 2008)

## **10. Summary / Mitigation Plan-Table**

The EMPr and authorization should be used as legal documents as well as the environmental auditing format.

The EMPr for this project is included with Tables 1-7. These tables list the key activities and relate these activities with resulting environmental impacts identified during the EIA process as well as the conditions included with the authorization granted by the competent authority. Mitigation measures are also included with the aim of reducing the magnitude of negative impacts and to enhance potential positive impacts.

**Table 1: Managing of Impacts on Soil**

Relevant Activities		<ul style="list-style-type: none"> <li>▪ Construction of services infrastructure;</li> <li>▪ Construction camp; Personnel discipline;</li> <li>▪ Materials Stockpiles.</li> </ul>			
Environmental Statement					
EMP Ref:	Environmental Impact/Aspect	Mitigation	Phase	Monitoring	Responsibility
T1.1	Degrading of soil structure	a) Deficiency of backfill material will not be made up by excavation within the remainder of the development area or private properties. Where backfill material is deficient, it must be made up by importation from an approved borrow pit.	Construction	Weekly	Contractor ECO
T1.2	Pollution of soil	a) Avoid contamination of soil with oil, grease, diesel, petrol, waste or any other foreign matter, which may impact on the capability of the soil as a growth medium. b) All equipment to be inspected daily for oil or fuel leaks before it is operated. Leakages must be repaired on mobile equipment or containment trays placed underneath immobile equipment until such leakages have been repaired. c) Surfaces where plant/equipment is stored/parked should be paved with a reinforced concrete slab with 200mm elevated edges. d) Contaminated soil has to be: <ul style="list-style-type: none"> <li>○ Removed up to depth 300mm below the saturation mark;</li> <li>○ Disposed at permitted landfill site.</li> </ul>	Construction	Continuous	Contractor  ECO

**Table 2: Managing of Construction Impacts and General Environmental Pollution**

Relevant Activities		<ul style="list-style-type: none"> <li>▪ Construction of services infrastructure;</li> <li>▪ Construction camp: Personnel discipline;</li> <li>▪ Materials Stockpiles.</li> </ul>			
Environmental Statement					
EMP Ref:	Environmental Impact/Aspect	Mitigation	Phase	Monitoring	Responsibility
T2.1	Construction disturbances and waste disposal	a) Construction methods must be respectful of the environment – no unnecessary excavations or untidiness. b) Concrete mixing will be done on pre-designed slabs underlined by PVC lining, on an area previously disturbed. Alternatively, maintain one mixing site and transport the concrete to the construction site. c) Any concrete spillage must be cleaned immediately. d) Littering on site and the surroundings areas is prohibited. Clearly marked litterbins must be provided on site. The contractor's representative must monitor the presence of litter on the work sites as well as the construction campsite. All bins must be cleaned. e) Waste must be disposed, as soon as possible and not be allowed to stand on to decay, resulting in bad odours and attracting vermin. f) All waste removed from site must be disposed at the municipal/permitted waste disposal site. g) The contractor must ensure that all temporary structures, materials, waste and facilities used for construction activities are removed upon completion of the project. h) The contractor must clean up and restore all disturbed areas and implement rehabilitation measures as required by ECO.	Construction	Weekly	Contractor



T2.3	Noise pollution	<p>a) Noise control measures must be implemented. All noise levels must be controlled at the source.</p> <p>b) Interested &amp; Affected Parties must be informed about impending excessive noise.</p> <p>c) Generators and pumps must be housed in casings to help reduce any noises in operation.</p> <p>d) No loud music or excessive noise generated by employees is allowed on site and in construction working areas.</p> <p>e) Employers must do a risk assessment if employees could be exposed to loud noise.</p> <p>f) Employers provide employees with information, instruction and training on noise pollution:</p> <ul style="list-style-type: none"> <li>• Explain significant findings of the risk assessment, what they mean and the steps to reduce risks</li> <li>• Keep up to date on safe working practices to minimize exposure</li> <li>• Inform workers how to check, look after and use hearing protection</li> <li>• Explain how to report noise problems</li> </ul> <p>g) Use hearing protection at 85dB and above (ear plugs, disposable earplugs and ear defenders).</p> <p>h) In the event that noise related complaints are received short term (24-hour) ambient noise measurements should be conducted as part of investigating the complaints. The results of the measurements should be used to inform any follow up interventions.</p> <p>The following procedure should be adopted for all noise surveys:</p> <ul style="list-style-type: none"> <li>• Any surveys should be designed and conducted by a trained specialist.</li> <li>• Sampling should be carried out using a Type 1 sound level meter (SLM) that meets all appropriate International Electrotechnical Commission (IEC) standards and is subject to annual calibration by an accredited laboratory.</li> <li>• The acoustic sensitivity of the SLM should be tested with a portable acoustic calibrator before and after each sampling session.</li> <li>• Samples of at least 24 hours in duration and sufficient for statistical analysis should be taken with the use of portable SLM's capable of logging data continuously over the time period. Samples representative of the day- and night-time acoustic climate should be taken.</li> </ul> <p>The following acoustic indices should be recorded and reported:</p> <ul style="list-style-type: none"> <li>○ <math>L_{Aeq}(T)</math> (the A-weighted equivalent sound pressure level, where T indicates the time over which the noise is averaged, calculated or measured in dBA.</li> <li>○ <math>L_{A1eq}(T)</math> the impulse corrected A-weighted equivalent sound pressure, where T indicates the time over which the noise is averaged, calculated or measured in dBA.</li> <li>○ Statistical noise level <math>L_{A90}</math></li> <li>○ <math>L_{Amin}</math> and <math>L_{Amax}</math> (the A-weighted maximum and minimum sound pressure level recorded during the measurement period.</li> <li>○ Octave band or 3<sup>rd</sup> octave band frequency spectra.</li> </ul> <p>i) A detailed log and record should be kept. Records should include site details, weather conditions during sampling and observations made regarding the acoustic climate of each site.</p>	Construction	Quarterly	Contractor/Applicant
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**Table 3: Managing Visual Impacts**

Relevant Activities		<ul style="list-style-type: none"> <li>▪ Visual impacts</li> </ul>			
Environmental Statement					
EMP Ref:	Environmental Impact/Aspect	Mitigation	Phase	Monitoring	Responsibility
T3.1	Planning & Design	a) Alignment of structures should be compatible with the natural contours. b) Built structures should, as far as is practicable, not break the horizon. c) Make use of existing access roads where possible	Planning		Applicant
T3.2	Construction aspects	a) The contractor must ensure that the site is kept tidy at all times, that sufficient refuse bins are provided, and that they are emptied regularly.	Construction	Daily	Contractor
T5.3	Operational aspects	a) Rehabilitate all disturbed areas. b) Mitigate the potential for additional dust clouds originating from ground works, by wetting the surface and to cover exposed soil areas, either by paving or rehabilitating it with planting as soon as possible.	Operational	Quarterly	Applicant

**Table 4: Managing of Fire Hazards, Safety and Security**

Relevant Activities		<ul style="list-style-type: none"> <li>▪ Construction camps</li> <li>▪ Personnel discipline</li> <li>▪ Security</li> <li>▪ Safety</li> </ul>			
Environmental Statement					
EMP Ref:	Environmental Impact/Aspect	Mitigation	Phase	Monitoring	Responsibility
T4.1	Fire precautions	a) Take adequate precautions to ensure that fires are not started as a result of Works on site: the Contractor will be held liable for any damage to property adjoining the Site as a result of any fire caused by one of his employees or machinery. b) Establish and maintain fire breaks around the Work Sites as and when specified by the Project Management Team and as required by applicable legislation and the local authority. c) Do not permit any fires or open flames, especially during the dry season. d) Ensure that the Work Site, and the contractor's camp are equipped with adequate fire fighting equipment. This includes at least rubber beaters when working in veld areas, and at least one fire extinguisher of the appropriate type irrespective of the site affected vehicles on site should be equipped with fire fighting equipment (Dry Chemical). e) Take immediate steps to extinguish any fire, which may break out on the construction site. f) No open fires are permitted on site.	Planning & Construction	Daily	Contractor
T4.2	Security	a) The contractor's representative or environmental officer must inform all adjacent landowners/farm-owner of any after-hour construction activities and any other activity that could cause a nuisance. Normal authorised working hours are between 07h00 and 17h00 Monday to Friday. Arrangements are to be made with the Local Authority for after-hours work (18h00 – 06h00). b) Contractor staff in the construction camp will not be allowed to cause a nuisance to any neighbouring homesteads or dwellings. In the event of a complaint received from the adjacent land owners, the privilege to reside on the property will be cancelled immediately.	Construction	Daily	Contractor
T4.3	Safety	a) Best practice methods must always be employed and appropriate regulations adhere to. b) No open trenches are permitted without the use of demarcation tape. c) Speed limits must be enforced in all areas, including public roads and private property to avoid potential accidents.	Construction	Daily	Contractor ECO

		<p>d) There must be a First Aid Kit onsite.</p> <p>e) Regular auditing of safety requirements must be undertaken in order to monitor and control the problems before they become unmanageable.</p> <p>f) A record must be kept of all incidents on site.</p> <p>g) Personnel must be trained in basic site safety procedures.</p> <p>h) Secure storage of materials on site particularly hazardous material e.g. chemicals and fuels.</p> <p>i) Adequate signage on and off the site about potential hazards must be provided.</p> <p>j) Controlled accesses will be constructed to manage the movement of vehicles and public in and out of the construction area.</p> <p>k) Appropriate notification signs must be erected along the construction area warning the public of the dangers around the construction site.</p> <p>l) Members of the general public must not be allowed near the construction site.</p> <p>m) Do not store any fuel or chemicals under trees.</p> <p>n) Do not permit any smoking within 3m of any fuel or chemical storage area, or refuelling area.</p> <p>o) The contractor must keep a First Aid kit and the telephone numbers of local emergency services in prominent positions at the staff quarters and the site office. All personnel must be made aware of these locations. Team leaders should undergo training in First Aid.</p> <p>p) The contractor on site during the construction phase must provide safety and security arrangements that should ensure that:</p> <ul style="list-style-type: none"> <li>o The handling of equipment and material is supervised:</li> <li>o Construction vehicles are maintained and controlled by competent personnel</li> <li>o All excavated areas are clearly marked and that barrier tape is placed around them</li> </ul>			
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**Table 5: Managing of Construction Camp/Personnel**

<b>Relevant Activities</b>		<ul style="list-style-type: none"> <li>▪ Construction camps</li> <li>▪ Personnel discipline</li> <li>▪ Security</li> <li>▪ Safety</li> </ul>			
<b>Environmental Statement</b>					
<b>EMP Ref:</b>	<b>Environmental Impact/Aspect</b>	<b>Mitigation</b>	<b>Phase</b>	<b>Monitoring</b>	<b>Responsibility</b>
T5.1	Social disturbances	<p>a) Prior to establishing the construction camp, if applicable, the contractor shall produce a plan showing the positions of all structures, lay-down yards and other infrastructure for approval by the ECO.</p> <p>b) Fires will only be allowed in facilities or equipment specially constructed for this purpose. If required by applicable legislation, a firebreak shall be cleared around the perimeter of the camp, storage facility and office sites.</p> <p>c) Construction &amp; maintenance activities must be of such a nature as not to disturb the livelihood of adjacent property owners.</p> <p>d) A designated place for food preparation and eating must be established at the construction site.</p> <p>e) Dry chemical toilets must be made available at a ratio of 1 toilet per 15 staff, within the campsite and construction site perimeter and must be cleaned and serviced as requested by the service provider.</p> <p>f) Workers movements must be limited to the construction area only and must be enforced in terms of the contracts of appointment.</p> <p>g) Any environmental complaints must be addressed with the ECO and Site Manager accordingly and a record must be kept thereof.</p> <p>h) The applicant must ensure that measures are in place to prevent/mitigate disruption of services as result of construction.</p>	Construction	Daily	Contractor ECO

		i) Residents have to be notified 7 days in advance of planned disruptions to services.			
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**Table 6: Site Clean-Up and Rehabilitation**

Relevant Activities		<ul style="list-style-type: none"> <li>▪ Lack or delay of rehabilitation may negatively impact on the aesthetic nature of the area and also cause long-term environmental damage.</li> </ul>			
Environmental Statement					
Ref:	Environmental Impact/Aspect	Mitigation	Phase	Monitoring	Responsibility
T6.1	Rehabilitation of environmental damage	a) The contractor must ensure that all temporary structures, materials, waste and facilities used for construction activities are removed upon completion of the project. b) Upon completion of the construction period, the ECO will confirm that any/all temporary access roads are returned to a state no worse than prior to construction commencing. c) Once heavy machinery has cleared the bulk of these material stockpiles, the disturbed areas will be levelled and cleared of any stockpile material manually.	Post-construction	Post-Construction	Contractor
T6.2	Compliance	a) ECO to do inspections and audit rehabilitation once construction is done.	Post-construction	Once	ECO

**Table 7: Compliance with conditions of the authorisation and monitoring**

Relevant Activities		<ul style="list-style-type: none"> <li>▪ All Aspects of EMPr</li> <li>▪ Compliance</li> <li>▪ Monitoring</li> </ul>			
Environmental Statement					
EMP Ref:	Environmental Impact/Aspect	Mitigation	Phase	Responsibility	
T7.1	Compliance to EMPr and authorisation	a) ECO to be employed in order to initiate the applicant and contractor as well as personnel on the subject of the EMPr and authorisation and compliance thereto.	Planning	ECO	
T7.2	Monitoring	a) Monitoring for any environmental impacts during the operational phase is recommended until a satisfactory standard of compliance is attained.	Construction Operational	Applicant	