



EXPANSION OF THE KOMSBERG MAIN TRANSMISSION SUBSTATION AND ASSOCIATED INFRASTRUCTURE NEAR SUTHERLAND, WITH THE KAROO HOOGLAND LOCAL MUNICIPALITY IN THE NORTHERN CAPE

MONTHLY MONITORING REPORT

DATED: 29 OCTOBER 2019

DEA REF: 14/12/16/3/3/1/1482



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PROJECT INFORMATION

REPORT TITLE: Monitoring Report

DATE: OCTOBER 2019

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PROJECT TITLE: Expansion of the Komsberg Main Transmission Substation (MTS) and Associated Infrastructure near Sutherland within the Karoo Hoogland Local Municipality in the Northern Cape Province.

CLIENT: Eskom SOC Ltd

ENVIRONMENTAL CONSULTANTS: Eagles Multi Skills Academy

DEA REF. NO.: 14/12/16/3/3/1/1482

REPORT NO: 06

REPORT COMPILATION RESPONSIBILITIES

REPORT COMPILED BY:

A handwritten signature in black ink, appearing to read 'Mulalo Edson Ramurembiwa', written over a horizontal line.

Mulalo Edson Ramurembiwa

Environmental Control Officer



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EXECUTIVE SUMMARY

In line with the requirements of the Environmental Authorisation (EA) and the Environmental Management Programme (EMPr) for expansion of the existing Komsberg Main Transmission Substation (MTS) and Associated Infrastructure near Sutherland within the Karoo Hoogland Local Municipality in the Northern Cape Province. The Environmental Control Officer (ECO) shall ensure implementation of the requirements of the EA and compliance with the requirements of the EMPr. This report presents observations made by the ECO including construction progress, Incidents, Non-Conformance Reports (NCR's) issued and Deviations.

Currently there is no NCR issued by the ECO, however Eskom issued the contractor and NCR for contravening "water use registration and authorisation in terms of the national water act, 1998 (Act 36 of 1998): For taking of water from groundwater – Farm Standvastigheid 210/RE, Sutherland road, in quaternary catchment J11D, Western Cape" by abstracting water from unauthorised source (dam). Two (2) insignificant or minor hydrocarbon spills, and one (1) moderate hydrocarbon spill were reported during October reporting period. Total of 3 chemical spills were reported. No pre-warning issued during the reporting period.

Inspections/audit were conducted on the following activities: Bulk earthworks including breaking of rocks and layer works at Section D of 400kV terrace, crushing of stones, final layer works/wearing course at section A and B, shuttering and concrete works on section A and B retaining wall, breaking of rocks/layers works on permanent access road and removal of concrete rubble to Standvastigheid 210/RE.



1. INTRODUCTION

This report serves as a report back on the compliance of the Construction on the expansion of the existing Komsberg Main Transmission Substation (MTS) and Associated Infrastructure near Sutherland within the Karoo Hoogland Local Municipality in the Northern Cape Province under Environmental Authorisation (EA) (DEA Ref: 14/12/16/3/3/1/1482) and the Environmental Management Programme (EMPr) (dated January 2016) compiled for the development.

On 12th of May 2016 the Department of Environmental Affairs granted Eskom Holdings SOC Limited (hereafter referred to as “Eskom”) an Environmental Authorisation (EA).

Eagle Multi Skills Academy/Consulting was appointed by Eskom Holdings SOC Limited to accomplish the duties of the Independent Environmental Control Officer (ECO) responsible for environmental compliance monitoring against the EA, EMPr and relevant legislations during the construction phase of the project until rehabilitation to fulfil Condition 20 of the Environmental Authorisation.

The ECO is obligated to monitor and report on compliance of activities undertaken by the contractor, to report on any non-conformances, record incidents if any, recommend corrective action required, and details of those non-conformances. This report will be submitted to the authority (Department of Environmental Affairs) and the Applicant/holder of the Authorisation as well as the Contractor for their records and to act upon the non-compliance or issue raised as required. The report will reflect the observations and findings observed by the ECO during the reporting month.

2. SCOPE OF THE REPORT

The scope of the monthly monitoring report is to measure and record the compliance of the project by Contractors and Sub-contractors against the requirements/objectives of the EMPr, condition 21 of the EA, WUL (General condition 6 (2) of the general Authorisation), permits and licences issued for the construction on the expansion of the Komsberg Main Transmission Substation (MTS) and associated Infrastructure for the reporting month.



3. ENVIRONMENTAL INDUCTION, AWARENESS AND TRAINING

All employees before resuming construction have undergone environmental awareness training detailing:

- » What is meant by “Environment”
- » Why the environment needs to be protected and conserved
- » How construction activities can impact on the environment, and
- » The Do’s and Don’ts on site.

Eleven (11) new employees on site receive environmental induction on EMPr, EA, legal and other requirements as well as the role of ECO on the project.

Different environmental topics as per environmental calendar are discussed with all employees on site. No topic was discussed as part of the monthly environmental theme:

Any other significant topics are chosen and discussed through tool box talk to remind and refresh employees about environmental compliance as well as the significance of protecting the environment, sustainability and conserving the environment. The following environmental topics were discussed:

- » Dust Survey Awareness conducted on the 01/10/2019.
- » Housekeeping conducted on the 03/10/2019.
- » Rehabilitation Method Statement (creation of berm) conducted on the 12/10/2019.
- » Littering of waste conducted on the 13/10/2019.
- » Premium cement MSDS conducted on the 17/10/2019
- » Unleaded 95 Petrol MSDS conducted on the 18/10/2019.
- » Use of drip trays conducted on the 19/10/2019.



4. INSPECTION FINDINGS

These are findings observed during inspections of the construction site for the reporting month. See attached photographic inspection evidence on Appendix A.

Table 1: Inspection findings.

EMPr Section	Findings	Suggested Corrective Action and Actual Corrective Action.	status
Objective 3	Littering of waste around the working area.	Toolbox talk regarding litter must be conducted.	Open
Objective 17	Oil spill from leaking concrete truck (HW59LGGP)	The leaks must be fixed and the proof of repair must be submitted as proof.	Open
Objective 16	Waste bin not marked for the purpose.	All waste bins must be clearly marked and regular maintenance of signage is required.	Open
Objective 16	Diesel/Oil spill and property damage occurred in a private property as a result of incident from tipper truck.	The proof of final cleaned up of the spill, damaged fence as well as water pipes must be submitted as proof of closure.	Open
Water use registration and authorization.	Abstraction of construction water from unauthorized source (dam).	A full investigation must be conducted of what happened including the Root cause analyzing technique and who is the responsible person.	Open
Objective 17	Unattended concrete waste (not cleaned or properly disposed).	Concrete or spill cement must be cleaned up as soon as possible and disposed of at a suitably licensed waste disposal site.	Open
Objective 2	The number of people on site does not meet the toilet ratio as required by the EMPr.	The total number of employees on site (including both genders) must be regularly checked to see if they still match the toilet ratio.	Open
Objective 16	Hydraulic pipe burst from the excavator (119).	Routine maintenance and servicing of plant must be conducted to minimize incidents.	Open
Objective 17	Drive unit was placed without drip tray underneath.	Drip trays must be used to all small plant. A tool box talk must be conducted to all employees.	Open

5. CONSTRUCTION PROGRESS

This section outlines construction activities recorded during the reporting month as well as planned construction activities.



5.1. Construction Progress to Date

- During the inspection the following activities was in progress:
 1. Bulk earth work including breaking of rocks and stockpiling and layer works at section D of 400kV terrace.
 2. Crushing of stones.
 3. Construction of subsoil drainage and mine halls.
 4. Shuttering and concrete works at section A and B retaining wall.
 5. Final layer works/wearing course at section A, B and C of 132kV terrace.
 6. Concrete rubble removal.
 7. Layer works on permanent access road.



Photo: Breaking of rocks and layers works at section D 400kV terrace.



Photo: subsoil drainage mine hall in progress.



Photo: Water retaining wall at section A and concrete works at retaining wall B.



Photo: Final layer at section C.

Photo: Final layer at section B.



Photo: Final layer at Section A.



Photo: Removal of concrete rubble in progress.



Photo: Layer works on permanent access road.



6. NON-COMPLIANCES, INCIDENTS AND DEVIATIONS

This section provides a description of Non Compliance Report (NCR's) and Incidents noted during the reporting month, summary of open NCR's and Incident as well as the distribution of the non-compliances and observations raised during inspections.

6.1. Description of Incidents, Non-compliances and Deviations

There was one (1) NCR's issued by Eskom to the contractor for contravening "water use registration and authorisation in terms of the national water act, 1998 (Act 36 of 1998): For taking of water from groundwater – Farm Standvastigheid 210/RE, Sutherland road, in quaternary catchment J11D, Western Cape" by abstracting water from unauthorised source (dam).or opened during the reporting month. No pre-warning was issued for the reporting month, however the findings on the report form part of the daily inspections for the reporting month. All findings on the report should be properly addressed to avoid reoccurrence as it will lead to Non-Compliance.

6.2. Distribution of Non- compliances, incidents and Deviations

Table 2: Distribution of Environmental NCR's, Incidents and Deviations

Status	NCR's		Incidents		Deviations	
	Month	Project to Date (PTD)	Month	Project To date (PTD)	Months	Project to date (PTD)
Open	0	0	0	0	9	9
Closed	0	0	3	37	0	31
In Progress	0	0	0	0	0	0
Total	0	0	3	37	9	40

Currently there is one (1) NCR issued by Eskom to the contractor, Three (3) Incidents (two minor or insignificant oil spills and one (1) moderate oil spill).



7. PROJECT AUTHORISATION AND PERMITS

#	License name	License Number	Date issued	Expiry Date	Regulatory	Purpose
1.	Environmental Authorisation	14/12/16/3/3/1/1482	12/05/2016	Construction life cycle	DEA	Expansion of the Komsberg Main Transmission Substation (MTS) and Associated Infrastructure near Sutherland within the Karoo Hoogland Local Municipality in the Northern Cape Province.
2.	Fauna	0423/2019	03/06/2019	03/06/2020	NC DENC	Permit for ordinary capture use of prohibited hunting methods.
3	Water use registration and Authorisation	4/5/6/J11D/Standvastigh eid 210/RE, Sutherland RD	17/04/2019	Year (Annum) until reaching the volume	Breede Gouritz catchment Management Agency	Taking of ground water for construction.
4.	Waste Water Treatment Works	B33/2/800/15	04/05/1987	N/A	Department of Water and Sanitation	Purification or treatment of water.
5.	Flora	0044/2019	28/06/2019	28/06/2020	NC DENC	Flora harvesting
6.	G:S:B landfill permit	6/2/7/J100/D 15/Z1/P286	04/12/1997	N/A	Department of environmental Affairs	General waste disposal facility.
7.	H:H landfill permit	12/2/7G203/Y214/P176	30/07/1997	N/A	Department of environmental Affairs	H:H waste management facility

8. OBSERVATIONS

This section highlights observations noted during the reporting period.



8.1. Construction Camp Site

The following were observed as issues of concern during the reporting:

1. Poor house keepings within the working area.
2. Evidence of cigarette buds in different working areas that is outside the designated smoking area.



Photo: Poor housekeeping.

8.2. Flora

Endangered/protected/threatened species that are on the development foot print were identified and marked during site walk down or search and rescue. Most of those species are Protected according to Schedule 2 of the Northern Cape Nature Conservation Act, 2009 (Act No. 9 of 2009). Permits will be required from NC DENC (Northern Cape Department of Environment and Nature Conservation) to remove or translocate protected plant species.



The permit for harvesting of protected plant species is in place (permit number: Flora 0044/2019) Different types of endangered/protected plant species were sampled and transplanted to the adjacent area within the property boundary (outside the development foot print). Report back as part of the condition 9 (additional permit condition) of the flora permit (Permit number: 0044/2019) was compiled on 04/07/2019 and was sent to submitted to NC DENC on (27 August 2019).

It is recommended that all other relevant conditions of the permit issued on 28/06/2019 (Permit number: 0044/2019) in terms of Northern Cape Nature Conservation Act, 2009 (Act No. 9 of 2009) must be adhered to. This permit is valid for the period of one year/twelve month (until 28/06/2020).

It is also recommended that all areas of development must be clearly marked on-site to eliminate unnecessary clearing or trampling of flora and also to minimise impacts on flora and ecological processes.

Search and rescue was conducted specific for the area where a berm wall will be constructed. Identified protected geophytes species were relocated to the adjacent area.



Photo: Relocated geophytes species (*Pelargonium triste*).



8.3. Livestock, game and other fauna

No incident of fauna reported or noticed during the reporting month. Employees, visitors and/or subcontractors should be made well aware of the consequences of any damage to private property and/or loss of livestock, game and/or killing of other fauna.

Any fauna identified or directly threatened by construction activities and might be of danger or threat to employees must be reported and removed to the safe environment by suitably qualified personnel. As per the EMPr protected plant species in any area to be cleared should be identified and rescued. The extent of the development footprint area is very limited and furthermore restricted to an area already transformed by the existing infrastructure.

The conditions of the permit issued on 03/06/2019 (Permit number: Fauna 0423/2019) in terms of Northern Cape Nature Conservation Act, 2009 (Act No. 9 of 2009) must be adhered to. This permit is valid for the period of one year/twelve month (until 03/06/2020).

The ECO recommend a regular awareness on conservation of fauna to all employees on site and the role each play on the ecosystem.



8.4. Fencing

It was noted during the inspection that there is a security controlled access at the main entrance, fence, and the site offices and laydown area is secured. New boundary fence has been constructed and completed. It is very important that construction of fence comply with the Fencing Act No.31 of 1963.

It must be noted that the previously damaged fence by delivery truck for excavator must be properly fixed by replacing the damaged wire and posts before the completion or end of project (Earthwork contract) as it was agreed with the landowner.

8.5. Material Handling, Use and Storage

Poor or bad housekeeping was observed at the laydown area where materials are not properly/neatly stacked and stored.

8.6. Hazardous Substances Storage

During the inspection it was observed that the bund for hazardous chemical store has been constructed and completed. It is recommended that the temporary storage of hazardous chemical substances shall meet the minimum requirements for Hazardous Substances Act (Act No. 15 of 1973) and SANS 10228, must have control access, bund capacity as well as a dedicated person to control ingoing and outgoing chemicals.

Lack of control access, chemical inventory not updated were observed during different site inspection.

8.7. Workshop Equipment Maintenance and Storage

The construction of bund for servicing or repair of construction vehicle area is in place. Construction of bund for oil water separator to collect all contaminant in the servicing from reaching the surrounding environment is in place.

8.8. Waste Management

Waste on site is monitored and audited on site as per the requirements of National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) as amended in the government gazette notice 614 of 2016.



A provision has been made for temporary storage of waste in order to manage all types of waste on site. Integrated waste management approach is encouraged on site. An effort must be made for waste minimisation, reduction and recycling.

Wastes generated on site are mostly general and construction waste, hazardous waste (i.e. fuel, chemicals), and liquid waste (including grey water and sewage). In order to manage the wastes effectively, guidelines for the assessment, classification, and management of wastes, along with construction principles for minimising construction wastes must be implemented.



Photo: Mortar mixing board (best practice).

General Waste

General waste is taken to a licensed Landfill site at Laingsburg which is registered under Laingsburg Municipality (permit number 6/2/7/J100/D15/Z1/P286) issued under Environment Conservation Act, 1989 (Act 73 of 1989). A copy of the license is available on site file. 40 refuse plastic bags were disposed for the reporting month.



Reuse, reuse and recycling of waste

Integrated waste management approach is encouraged on site. An effort must be on site to minimise, reuse and recycling waste. 3400 kg of unprocessed off cuts steel was recycled for the reporting month.

722 m³ of concrete rubble was donated to Mr Franchois Conradie (Owner of Farm Standvastigheid 210/RE) to be used for erosion control in the cultivation land, the agreement letter between was created and signed by both parties.

Hazardous Waste

Hazardous waste generated on site are temporarily stored inside the hazardous waste kip and Whilie bins at the waste management area in the lay down area. Hazardous waste will be managed by Drizit environmental services and to be disposed at a registered landfill in Cape Town (Vissershok) as it is the closest registered hazardous landfill site. 10m³ of asbestos materials from old building that was demolished were disposed at Vissershok on (18/09/19) and reported for this reporting month.

Drizit was subcontracted to remove asbestos from old buildings as well as the fluorescent tubes. All asbestos waste and fluorescent tube removed was handled and taken by Drizit for disposal at the registered asbestos landfill site. Proper waste manifest for (asbestos and fluorescent tubes) disposed on **11 July 2019** with the accurate quantities from landfill disposal site (Vissershok) has not yet received.

8.9. Toilets / Ablutions

Boland Toilet Services is the appointed service provider for servicing abluion facilities (portable chemical toilets) and septic tank. Services of the mobile chemical toilets is done once a week at site camp while the servicing of septic tank is done as and when required. The number of employees on site and the number of toilet available both for males and females does not meet the requirement of the EMPr of 1:15 ratio.

Sewage Waste

Mobile chemical toilets and septic tank on site are serviced by Boland Toilet Services. The sewage waste is taken to a licensed Waste Water Treatment Plant (Witzenberg) in Ceres registered under Witzenberg Municipality, permit number B33/2/800/15. A copy of licence is available on site file. Overflowing of septic tank connected to Eskom site offices was



observed during the inspection, this is due to lack of monitoring of the capacity of septic tank to avoid overflow. **9880** litres of sewage waste was disposed for the reporting month.

8.10. Water Management

Water used for construction is sourced from a borehole at Standvastigheid 210/RE with GPS coordinate (S32°56'01.9"E20°35'38.8"), Water use registration and Authorisation in terms of the National Water Act, 1998 (Act No 36. Of 1998): for taking of water from ground water is in place, though the purpose for use is defined as taking of underground water for the construction of wind farm which is the different activity to that of the expansion of the existing Komsberg Main Transmission Substation for IPP's (Independent power producer). The query was logged with the Breede Gouritz Catchment Management Agency (BGCMA) Official and he indicated that the borehole was registered for any construction use despite the project/development name. The borehole has been registered and the registration certificate is available on site.

The limit for maximum volume per annum/capacity is 40 000m³. General condition 6 (2) of the General Authorisation indicate that (the volume of water taken must be measured and recorded at the end of each month and the volume taken should be submitted to Breede Gouritz Catchment Management Agency (BGCMA) at the email address provided on the water use authorisation). This condition must be complied with by the user. There is a proof that the volume are sent to the Breede Gouritz Catchment Management Agency (BGCMA) on a monthly basis.

It is recommended that a water meter must be installed in order to measure the accurate quantity used in order to comply with the WUL.

3543 m³ or 3 543 000 litres of construction water was used for the reporting month. To date **17 894 m³** of water were used. Water used for drinking are purchased from the supplier (OK foods in Laingsburg and Boelhouer plaas in Matjiesfontein water) and **3760 litres** of drinking water was used for the reporting month.

Water at the substation has been tested by Integral Laboratories that is SANAS approved and it was found that the sample analysed taken from the borehole at the Komsberg Substation have total coliforms of 16 that is greater than (<10) which is required by SANAS 241: 2015. The lab confirms that water at Komsberg Substation is not suitable for human consumption. Water at the substation cannot be used for consumption or drinking purpose.



8.11. Erosion and Sediment Control

No issues noted or signs of sedimentation observed during the inspections. However all areas susceptible to erosion shall be protected by installing necessary temporary and/or permanent drainage works as soon as possible and by taking suitable measures to prevent surface water concentration into nearby roadways.

8.12. Access Roads, Access Control and Gate Installation

There were no issues recorded regarding access roads, access control and gates. However regular maintenance of road must be done. Dust suppressant must be applied and regularly monitored on all exposed areas, stockpiles and gravel roads as required to minimise/control airborne dust.

8.13. Dust and other air emission

During inspection it was observed that more dust is generated during crushing of stones at the crushing areas, on the haul or access road as well as the heavy plant parking area. During construction there must be a measure for control of dust in specified places or areas, either in general or by specified machinery or in specified instances as well as steps that must be taken to prevent nuisance by dust or other measures aimed at the control of dust as per the National Environmental Management: Air Quality Act (Act No. 39 of 2004).



Photo: Dust generated as a result of construction activities.

No evidence of schedule or regular dust suppression conducted on site. It is also recommended that dust-generating activities or earthworks as well as crushing areas need to be rescheduled or the frequency of application of dust control/suppressant increased



especially during periods of high winds and if excessive visible dust is blowing towards where other employees are working or to the nearby residences outside the site in order to achieve the objective of the EMPr.

8.14. Import Materials

Any fill material required on site must be sourced from a licensed commercial site suitable/permitted source, quarry or borrow pit. Where possible, material from foundation excavations must be used as fill on-site. G6 (import materials) used as final layer or wearing course are source from approved quarry registered under Swartbult Trust IT 4336/96, Zandrivier: permit number 02/2015 and Elandvlei sand mine: permit ML19/96 and when there is a need other import materials will be also sourced from approved quarry at Brewelskloof (ERF 3604, Worcester, Western Cape) registered by Afrimat Aggregates PTY (Ltd) previously known as Prima Klipbrekers PTY (Ltd) under Mineral and Petroleum Development Act, No 28 of 2002. 4598, 16 m³ of import materials used for wearing course from Swartbult Trust IT 4336/96 was delivered on site for the reporting month.



Photo: Location of imported material for wearing course where it is stockpiled.

8.15. Labour and Social Issues and their Control

Local employment were created to 24 unskilled workers from Matjiesfontein (which fall under ward 2 of Laingsburg Municipality under Central Karoo District Municipality) which is approximately 30km from the construction/development site. Although limited, employment opportunities could be created during the construction phase, specifically for semi-skilled and unskilled workers. Use should be made of local labour as far as possible.



8.16. Accidental leaks and Spillages

The contractor shall be strongly advised to make every effort to prevent spills and leakages on site. Regular maintenance and inspections of construction vehicle is essential to prevent unnecessary oil spills. Two (2) minor hydrocarbon spills, and one (1) moderate hydrocarbon spill were reported during October reporting period. Total of 3 chemical spills were reported. All spills were clean up. It is recommended that all spills must be assessed to determine the significance of the spill, reported to ECO and cleaned immediately.



Photo: Hydraulic pipe bust from excavator (119).





Photo: Multiple oil spill from concrete truck (HW 59 LG GP).



Photo: Diesel/oil spill as a result of motor vehicle accident.



Incident or spillage date

No.	Date	Description of the incident	Quantity	Location	Reported by	Reported to	Action taken	Close-out date	Was a flash report completed?
1	04/10/2019	The concrete truck was leaking oil	0,1 ml	Section C Retaining wall	Avile	EO	The spillage was cleaned	04/10/2019	No
2	08/10/2019	Wellington Moyo, the driver of the 10-ton ISUZU tipper truck with registration number FB 62 KC GP was travelling on unnamed district road from Komsberg Substation to Laingsburg, on his way to load the Wearing Course material when he lost control of the	+ - 5lt	Unnamed district road from Komsberg substation to Laingsburg	Truck Driver (Dingani)	General Foreman (Aly)	The spillage was cleaned.	10/10/2019	Yes



		vehicle which overturned. Due to the impact, diesel and oil were spilled.							
3	17/10/2019	The excavator (119) operator was breaking the rock at 400 kV terrace and the hydraulic pipe burst.	1 lt	400 kV yard, Section D	Operator	EO	The pvc plastic and drip tray were placed underneath the machine to contain the oil		No

8.17. Drainage Lines and Periodic Streams

During the inspection no issues observed regarding impact of construction activities on the drainage line or streams. However a careful planning must be done during planning of temporary access road for construction purposes and not to impede or divert the flow of water.

8.18. Soil Degradation and Erosion

No issue observed regarding soil degradation and erosion noted during the reporting month. However, excavated topsoil stockpiled must be covered (during windy conditions) or vegetated until replaced during rehabilitation. The area identified as disturbed area must be restricted for construction activities.

Erosion control measures such as (reducing run-off on slopes, sand bags, logs, silt fences, storm water catch-pits, shade nets, or temporary mulching over stripped area as required) must be implemented to prevent erosion.



8.19. Heritage Resource

No archaeological sites/materials were observed during the reporting month within the development footprint. Although it is unlikely that archaeological remains will be found in situ especially during excavation, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during the development.

Employees must be made aware of the possibility of discovering heritage sites, if concentrations of historical and pre-colonial archaeological heritage material and/or human remains (including graves and burials) are potentially uncovered during construction, all work in the immediate area must be cease immediately and be reported to the ECO so that it will be reported to South African Heritage Resource Agency (SAHRA).

8.20. Visual Impacts

No Visual impacts observed during the reporting month. Movement of construction workers and vehicles to the immediate construction site and existing access roads/ tracks must be restricted. It is advisable that construction activities must be restricted to daylight hours whenever possible in order to reduce lighting impacts (Ref: EMPPr objective 14).



8.21. Noise Control

No excessive noise generated during working hours (daylight) were reported during this period. However, on-site construction activities should be limited to daylight hours as far as possible (Ref: EMPr objective 15) and construction noise to be managed in accordance with the Noise Control Regulations and SANS 10103.

It is recommended that all construction equipment, including vehicles, must be properly and appropriately maintained in order to minimize noise generation, e.g. silencers must be in good working in order to achieve the EMPr objectives.

8.22. Traffic Management

The construction phase of the project is most significant in terms of generating traffic impacts; resulting from the transport of equipments, materials and construction crews to the site and the return of the vehicles after delivery of materials.

The construction site is created with a single track road entering the substation to ensure safe entry and exit and to minimize the footprint as well as the least environmental impacts.

The movement of all vehicles within the site must be on designated roadways or tracks created for the purpose of construction, or where possible, on existing tracks.

8.23. Public/Land Owner's Complaint

No complaint received or recorded during this reporting month. A complaints register must be maintained, in which any complaints from the community or adjacent landowners will be logged. Complaints must be investigated and, if appropriate, acted upon.



8.24. Rehabilitation

All area that are badly damaged needs to be rehabilitated as soon as possible or as required, the rest of the area will be rehabilitation during the completion earth work contract and the rest of the area will be rehabilitated at the end of the construction phase before commissioning. Alien species that might have been introduced during construction phase must be monitored, controlled and removed.

Unnecessary removal of vegetation must be avoided as it adds stability to soil. All the disturbed area must be identified to restrict construction in such area and must be demarcated as a “no go” area for quick recovery.

No area require rehabilitation to date. However, ongoing rehabilitation on damaged areas must be done to achieve EMPr objectives.

9. Conclusion

Ensure that the site activities remain within the development footprint and do not impact negatively on the biophysical environment. All deviations noted during inspections must be properly addressed, managed and implemented throughout the project duration to prevent reoccurrence of the same findings.

All recommendations must be taken into considerations as it may have negative impact on the environment. The contractor must ensure that all condition/s of permits or any form of authorisation issued for the project are complied with.

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APPENDIX A: PHOTOGRAPHIC INSPECTION EVIDENCE



Photo: Waste bin not marked/labelled.





Photos: Littering of waste.



Photos: Unattended concrete waste (not properly cleaned or disposed).



Photos: Small plant place on the ground without drip tray.



Photos: Construction water abstracted from unauthorized source.