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EAGLES MSA CONSULTING (PTY) LTD

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: 30 SEPTEMBER 2019

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

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PROJECT INFORMATION

REPORT TITLE:	Monitoring Report
DATE:	SEPTEMBER 2019
REPORT STATUS:	Final
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:	05

REPORT COMPILATION RESPONSIBILITIES

REPORT COMPILED BY:

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 Proposed expansion of the 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 open NCR. Seven (7) minor hydrocarbon spills and two (2) moderate. Moderate hydrocarbon spills was flashed to Eskom, three (3) concrete spills occurred during concrete works at the retaining wall. Total of twelve (12) chemical spills were reported for the reporting month. All spills were clean-up and contaminated soil were disposed into hazardous waste skips. Two (2) pre-warning for environmental deviations was issued to the contractor during the reporting month.

During the current reporting month, inspections/audit were conducted on the following activities: Bulk earthworks including excavation at Section D of 400kV terrace, crushing of stones, layer works at section B, C, preparing road bed at section D of 132kV terrace, shuttering and concrete works on section A retaining wall and preparing road bed/layers works on permanent access road.

1. INTRODUCTION

This report serves as a report back on the compliance of the Construction on the expansion of Komsberg Main Transmission Substation (MTS) and Associated Infrastructure near Sutherland within the Karoo Hoogland Local Municipality in the Northern Cape Province with the 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 reflects 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. ENVIRONEMNTAL INDUCTION, AWARENESS AND TRAINING

All employees before resuming construction have undergo 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.

Four (4) new employees on site receive environmental induction on EMPr, EA, and role of ECO, legal and other requirement as stipulated.

Different environmental topics as per environmental calendar are discussed with all employees on site. The following topic was discussed as part of the monthly environmental theme:

» Arbor Month – significant to Eskom.

» World ozone day 2019 theme “32 years of healing”.

Any other significant topics including tool box talk are conducted 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:

» Snake awareness.

» Maintenance of smoking area.

» Use of drip trays and disciplinary action.

» Littering of waste.

» Emergency evacuation procedure.

» Ablution facilities.

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 17	Leaking diesel bowser.	Leaking machineries or equipments must be removed from working until the leaks are properly repaired/fixed.	Closed
Objective 17	Komatsu grader parked without drip tray.	Drip trays must be placed under stationery machineries.	Closed
Objective 17	Multiple hydraulic oil leaks from bulldozer.	Leaking machineries or equipment must be removed from working until the leaks are properly repaired/fixed.	Open
Objective 16	Littering of waste.	Littering of waste cannot be tolerated. It can cause pollution on the environment and hazard to livestock and game animals. Continuous awareness must be conducted.	Closed/ on going
Objective 17	Damaged drip tray used in stationary machine (Komatsu grader).	Employees must be encourage to report damaged drip trays, condition of drip trays must be inspected daily and damaged drip trays to be replaced or repair to mitigate or minimize soil contamination in case of accidental spill or leaks.	Closed
Objective 16	Poor housekeeping and uncontrolled access at the hazardous chemical store.	Culture of good housekeeping must be encouraged and more awareness must be conducted. Strict access control must be limited to a responsible person only.	Open (Appointment letter as proof required).
Objective 17	Ready concrete mixer truck leaking. The truck must be fixed prior coming back to site.	Leaking machineries or equipments must be removed from working until the leaks are properly repaired/fixed.	Open
Objective 17	Uncontrolled access at the hazardous chemical substance store.	Strict access control must be limited to a responsible person only.	Open (Repeat finding).
Objective 17	Leaking diesel bowser. The leaks must be fixed before the bowser can be used again.	Leaking machineries or equipments must be removed from working until the leaks are properly repaired/fixed.	Open (Repeat finding)

Objective 17	Generator placed on the ground without a drip tray underneath.	Small construction machineries (i.e. stumpers, generators etc.) must be stored in an appropriately sealed area.	Open
Objective 17	Poor hazardous substance oil spill management (drip trays and containers full of diesel not emptied).	Continuous and effective management spills on site must be exercised.	Open (repeat findings)

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 excavation and stockpiling of different soil layers for preparation of section D of 400kV terrace.
    2. Crushing of stones.
    3. Layer works at section B, C of 132kV terrace.
    4. Preparation of road bed at section D1 of 132kV terrace.
    5. Preparing road bed/layer works on permanent access road.
    6. Shuttering and concrete works at section A retaining wall.

Photo: Breaking of rock at section D.

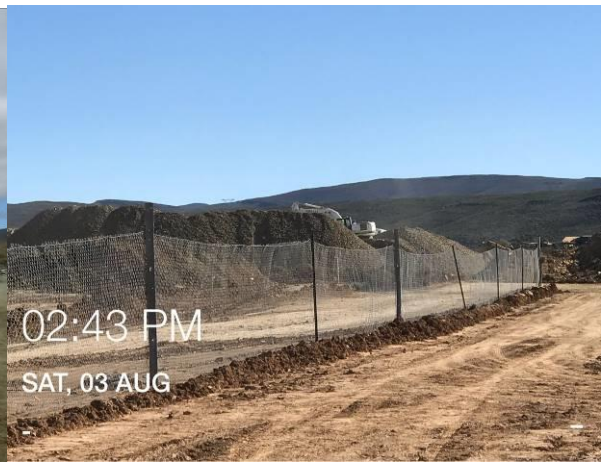

Photo: Crushing of stones.

Photo: Road bed on permanent road.

Photo: Road bed preparation at section D1.

Photo: Concrete work at the retaining wall.

Photo: Shuttering at the retaining wall.

Photo: Retaining wall in progress.

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 zero (0) Environmental NCR's issued or opened during the reporting month. However, two (2) pre-warning with total of eleven (11) deviations raised for the reporting month which seven (7) are still open. This was raised during inspections conducted by ECO for the reporting month. Open deviations 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	7	7
Closed	0	0	12	34	6	24
In Progress	0	0	0	0	0	0
Total	0	0	12	34	11	31

Currently there are zero (0) NCRs, Twelve (12) Incidents (nine oil spill and three (3) concrete spill), Seven (7) deviations remains open.

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/ Standvastigheid 210/RE,	17/04/2019	Year (Annum) until	Breede Gouritz catchment	Taking of ground water for construction.

		Sutherland RD		reaching the volume	Management Agency	
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. No proper oil spill management and plan in monitoring the conditions of drip trays at the refuelling area.

2. Regular plant maintenance required especially to excavators and packers.

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.

8.3. Livestock, game and other fauna

Four-striped grass mouse (Rhabdomys pumilio) was observed dead next to the servicing area that might have been died or killed due to human negligent. 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.

Photo: Dead four-striped grass mouse (Rhabdomys pumilio) observed next to the servicing area.

All fauna identified and might be of danger or threat to employees must be reported, captured and removed to the safe environment by the competent personnel. Unknown bird nest were observed at the edge of 132kV terrace and it was relocated by ECO to the safe surrounding environment outside the development footprint.

Photo: Robin bird nest at the terrace.

Photo: Relocated nest to safe environment.

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 tool box talk or 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 camp is secured. However old boundary fence is available on site though a new and permanent security shall be constructed. Construction of substation boundary fence has been completed. It is very important that construction of fence must comply with the Fencing Act No.31 of 1963.

Damage of fence at the adjacent property by the excavator delivery trucks was observed during site walk. The damage was later reported to the affected landowner and the fence was temporarily fixed.

It must be noted that the fence 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 progress.

Photo: Construction of bund for oil water separator at the servicing area.

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 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.

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. 20 refuse plastic bags were disposed for the reporting month.

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. Still awaiting the proof of disposal for the asbestos and fluorescent tubes taken on site on **11 July 2019.**

8.9. Toilets / Ablutions

Boland Toilet Services is the appointed service provider for servicing ablution 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 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. **10100** 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 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.

6 239 m³ or 6 239 000 litres of construction water was used for the reporting month. Water used for drinking are purchased from the supplier (OK foods) and **2710 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 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 fit for human consumption. Water at the substation is not used for consumption or drinking purpose.

8.11. Erosion and Sediment Control

No issue noted or signs of sedimentation. 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 crusher areas. 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 suppression implemented at the heavy machinery parking area.

It is also recommended that dust-generating activities or earthworks as well as crushing areas may 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 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. No import materials was sourced or delivered on site for the reporting month.

8.15. Labour and Social Issues and their Control

Local employment of 20 employees were created for unskilled workers at 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. Seven (7) minor hydrocarbon spills and two (2) moderate. Moderate hydrocarbon spills was flashed to Eskom, three (3) concrete spill from concrete works. Total of twelve (12) chemical spills were reported for the reporting month. 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: Oil spill (laydown area).

Photo: Oil spill at 132kV terrace (section A).

Photo: Concrete spill at 132kV terrace (section A) during concrete works at the retaining wall

Photo: Multiple diesel spill from ready mix concrete truck (HV74CDGP)

Photo: Leaking ready mix concrete truck (HS36GHGP).

Photo: Moderate oil spill due to hydraulic pipe burst from excavator (BWX 13).

Photo: Oil spill at the parking area.

Photo: Diesel spill at the refuelling area.

Photo: Hydraulic oil spill from packer attached to excavator number (80).

Photo: Another hydraulic oil spill from excavator (BXW 13).

Incident or spillage date

23	26/08/2019	The operator was pumping diesel	1 lt	400 kV	Operator	EO	The spillage was cleaned
24	05/09/2019	The peaker was leaking hydraulic oil	1 ml	Laydown area	Observed by EO and ECO	Observed by EO and ECO	The spillage was cleaned
25	10/09/2019	The grader GR 12 was leaking oil	1 ml	Retaining wall	Safety Officer	EO	The spillage was cleaned
26	13/09/2019	The truck driver failed to stop the concrete when the wheelbarrow was full then the concrete spilled in the ground		Retaining wall	Avile	EO	The spillage was cleaned
27	13/09/2019	The employees were removing PVC plastic that they are using when pouring concrete and it was attached to the concrete which resulted in spillage		Retaining wall	Observed by EO and ECO	Observed by EO and ECO	The spillage was cleaned
28	13/09/2019	The concrete was too fast and it was spilling through sides		Retaining wall	Observed by EO	Observed by EO	The spillage was cleaned

		of the shooter					
29	13/09/2019	The concrete truck was leaking oil	2 ml	Retaining wall	Avile	EO	The spillage was cleaned
30	18/09/2019	The concrete truck was leaking oil	0,1 ml	Retaining wall	Observed by EO and ECO	Observed by EO and ECO	The spillage was cleaned
31	19/09/2019	Excavator 13 hydraulic oil pipe burst	3 lt	400 kV yard Section D	Operator	ECO	The spillage was cleaned
32	24/09/2019	Excavator 80 peaker leaking hydraulic oil	1 ml	400 kV yard Section D	Operator	EO	
33	24/09/2019	Diesel pump fell and spilled	0,1 ml	Laydown	Shuping	EO	The spillage was cleaned
34	24/09/2019	Excavator was leaking hydraulic oil	0,1 ml	Parking	ECO	EO	The spillage was cleaned

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: EMPr 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 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: Multiple hydraulic oil leaks from the bulldozer.

Photo: Komatsu grader (stationary) parked without drip tray.

Photo: Littering of waste at the parking area.

Photo: Poor housekeeping and uncontrolled access at the HCS storage.

Photo: Leaking diesel bowser.

Photo: generator on the ground with drip tray

Photo: Diesel bowser leaking.

Photo: Uncontrolled access at the HCS storage

Photo: Poor housekeeping and oil spill management.

Photo: Leaking ready mix concrete truck (HS36GHGP).