



**ESKOM DAGBREEK 380 METER 66kV BY-PASS POWERLINE
PROJECT, WESTERN CAPE PROVINCE**

**ESKOM
CONTRACT NO. 4600062551**

ENVIRONMENTAL CONTROL OFFICER REPORT NO.3

JANUARY 2019

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TITLE:

ECO DUTIES FOR CONSTRUCTION OF A 380 METER 66KV BY-PASS POWERLINE IN THE WESTERN CAPE PROVINCE -DAGBREEK

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SYNOPSIS

The project entails the provision of ECO duties for the construction of 380-meter 66kV By-Pass Powerline project in the Western Cape

KEY WORDS:

Environmental Control Officer, Environmental Management Programme

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QUALITY VERIFICATION

This report has been prepared under the controls established by a quality management system that meets the requirements of ISO 9001: 2015 which has been independently certified by DEKRA Certification.



Verification	Capacity	Name	Signature	Date
By Author	Environmental Scientist	A Mpokopi		04/02/2019
Checked by:	Senior Environmental Scientist	T Heydenrych		04/02/2019
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1 INTRODUCTION

JG Afrika (Pty) Ltd was appointed by Eskom Holdings SOC Limited to perform Environmental Control Officer (ECO) duties for the construction of a 380-meter 66kV By-Pass Powerline in the Western Cape Province in terms of the Environmental Authorisation and approved Environmental Management Programme (EMP). The Contract commenced in November 2018 and construction is expected to be completed by February 2019.

The ECO will monitor construction activities for the duration of the contract in terms of the approved EMP, and EA, the key findings of which will be recorded in the Environmental Site Reports and distributed to all parties concerned. In addition, the ECO will undertake ongoing bi-monthly audits by completing a compliance table and checklist (**Section 2.2**) with associated site photographs (**Section 2.3**).

1.1 Project administrative details

Site Visit No.	3	
Site Visit Conducted on	30 January 2019	
Next Visit	7 and 19 February 2019	
ECO	JG Afrika	Aseza Mpokopi
Engineers/Client	Eskom	Wesley Martin
Resident Engineer (RE) / Project Coordinator (PC)	Eskom	Sibulele Mdingi
Site Agent / Contractor	Roshcon	Ricka Ordman
Contractor Environmental Officer	Roshcon	Ricka Ordman
Contract Period	4 months	End date – February 2019
Environmental Awareness Training	The Contractor's Environmental Officer undertook environmental training on 05 November 2018 and a refresher training was undertaken on 9 January 2019.	
Applicable authorisations / licenses	Environmental Authorisation (Reference 14/12/16/3/3/1/183), including an Environmental Management Programme	
Site Visit frequency	Bi-Monthly	
Report Distribution	Wesley Martin	MartinWD@eskom.co.za
	Sibulele Mdingi	MdingiS@eskom.co.za
	Ricka Ordman	ordmanf@eskom.co.za
Penalties/ Fines	None	

2 COMPLIANCE MONITORING

2.1 Summary of activities on site

The site re-opened on 9 January 2019. Construction of two structures, one wooden structure and one structure for mono-poles had been completed and backfilled. Construction of the two remaining structures had commenced and the Contractor was testing the strength of compaction on one structure across the railway line on the day of the site visit. The working area was neat, clean and tidy on the day of the site visit.

Two anchored chemical toilets were provided at the working area and drinking water for all construction staff was provided. Topsoil is being separated from subsoil at the working areas.

2.2 Key actions required by Contractor

- A temporary site closure checklist which was required to be completed by the DEO on the day the site closed in December 2018 has not been received by the ECO and must still be provided by the DEO.

It should be noted that no Method Statements have been submitted for this project. However, the ECO is mindful that the project is of relatively short duration, is ending in February 2019 and the site has been well managed without any incidents, the continued requests for Method Statements will not add value to the project. **As such, the requirement for Method Statements has been removed, but Eskom must understand that this remains a non-compliance in terms of the EMP.**

2.3 Compliance Table¹

CONDITION	PREVIOUS AUDIT	CURRENT AUDIT	COMMENTS / ACTIONS REQUIRED
	12.12.18	30.01.19	
1. SITE ESTABLISHMENT			
The construction site office and storage areas for material and equipment must be fenced off	C	C	All materials are stored at Soetondal substation site camp except for pole structures which are stored in the working area.
Vehicles should be serviced at designated areas onsite with appropriate spill management procedures in place	C	C	No vehicles serviced on site.
Provide and maintain sufficient ablution facilities, one toilet for every fifteen workers	C	C	Two anchored chemical toilets were provided on site.
No open fires are allowed on site other than at designated facilities for cooking etc.	C	C	
Establish eating areas with adequate refuse facilities	N/A	N/A	
Contractor must provide drinking water	C	C	A 25-litre container of drinking water was provided and kept inside a construction vehicle.
Emergency contact details must be provided on site and displayed in a visible area	C	C	Emergency contact details are provided in the environmental file kept in the construction vehicle.
Methods Statements (MS's) must be discussed and required MS's submitted to the Project Coordinator and ECO for review and approval prior to commencement of construction activities	N/A	NC	MS's have not been submitted by the Contractor.

¹ Legend:

C = Compliant	PC = Partially compliant	NC = Non-compliant	N/A = Not applicable
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CONDITION	PREVIOUS AUDIT 12.12.18	CURRENT AUDIT 30.01.19	COMMENTS / ACTIONS REQUIRED
2. REMOVAL OF VEGETATION			
Vegetation removal shall be limited to the required radius for construction of a specific pylon	C	C	
Indigenous vegetation which does not interfere with the safe operation of the powerline should be left undisturbed	C	C	
Existing access roads must be used as far as possible and the creation of new access tracks for powerline construction should be minimised	C	C	Contractor is using an existing access road.
Branches and other debris resulting from pruning processes should not be left in areas where it will pose a risk to infrastructure	N/A	N/A	
Alien vegetation in the servitude shall be managed in terms of the relevant regulations	N/A	N/A	
3. TOPSOIL			
The top 200mm layer of topsoil must be removed and stockpiled not higher than 2 metres	C	C	Topsoil is being separated from subsoil at the working areas. The Contractor must ensure that construction vehicles / activities do not impact on these stockpiles.
Removed topsoil must be appropriately stockpiled and demarcated away from construction activities and systematically returned on areas removed from on completion of construction activities	C	C	
4. MATERIALS HANDLING AND STORAGE			
Appropriately secure all materials inside the approved working area	C	C	All materials are stored at Soetondal substation site camp except for pole structures which are stored in the working area.
All hazardous substances on site must be adequately stored in bunded areas, recorded and labelled	N/A	N/A	
All hazardous substances on site should be disposed of at a registered hazardous waste disposal facility and disposal slips retained on site for record keeping	N/A	N/A	
Oil contaminated waste (soil, cloths used to clean small spills, spill kits, content of drip trays, etc.) must be disposed of at a registered hazardous waste disposal facility. Persons who remove hazardous waste must be appropriately qualified and authorised	N/A	N/A	
5. MAINTENANCE AND SPILLS MANAGEMENT			
5.1 Maintenance			
Leaking equipment shall be repaired immediately or removed from the site	C	C	No leaking equipment were seen on site.

CONDITION	PREVIOUS	CURRENT	COMMENTS / ACTIONS REQUIRED
	AUDIT 12.12.18	AUDIT 30.01.19	
No maintenance activities shall be allowed within 20 m of any watercourse	C	C	
Washing of equipment may only be done in the wash bay area	C	C	
5.2 Accidental Leaks and Spills			
Hydrocarbon spills shall be isolated, and the spillage contained before being removed. A bio-remediation contractor must be appointed to rehabilitate large oil spills	C	C	No spills were seen on the day of the site visit.
Supply absorbent material to absorb/breakdown spills	C	C	
Hydrocarbon contaminated material and/or soil shall be collected and safely disposed of at a hazardous landfill site.	C	C	
6. WASTE MANAGEMENT			
6.1 Hydrocarbon and Hazardous Waste			
All hazardous waste shall be disposed of at a licensed hazardous landfill site. Temporary storage of hazardous waste should be in a bunded area or enclosed container.	C	C	No hazardous waste generated on site.
6.2 Solid Waste			
Littering or illegal dumping of any waste material is prohibited	C	C	No waste bins were provided on the day of the site visit. However, the DEO indicated that any waste generated will be stored inside the construction vehicle and emptied in waste bins provided at Soetondal site camp.
No waste material (including hazardous waste) or litter shall be burnt or buried on site - waste shall be disposed at a licensed disposal facility	C	C	
Waste separation should be encouraged for recycling purposes	C	C	
For all waste that is disposed of, Eskom shall obtain waste manifests and disposal certificates, which shall be recorded and reported to the ECO on a monthly basis.	C	C	
6.3 Water and Wastewater			
Abstraction of water from watercourses for construction purposes will not be allowed	C	C	Treated effluent for construction use is obtained from the Stellenbosch wastewater treatment plant, when required.
Surface or groundwater shall not be polluted by construction activities	C	C	

CONDITION	PREVIOUS	CURRENT	COMMENTS / ACTIONS REQUIRED
	AUDIT 12.12.18	AUDIT 30.01.19	
Stormwater runoff must be managed efficiently so as to avoid stormwater damage and erosion to adjacent properties	C	C	
Any hydrocarbon contaminated runoff shall be stored in a conservancy tank for disposal at an approved site	C	C	
Stockpiling of construction material and soils should be such that pollution of water resources is prevented and that the materials will be retained in a storm event	C	C	
No wastewater shall be disposed of directly or indirectly into the municipal storm water system or into any watercourses	C	C	
7. EROSION AND SEDIMENTATION CONTROL			
Access roads and site surfaces must be monitored for deterioration and possible erosion	C	C	
If erosion occurs, rehabilitation must immediately be done	C	C	
Stabilised areas shall be demarcated, and traffic and movement over stabilised areas shall be restricted	C	C	
8. FIRE CONTROL			
No burning of vegetation and waste shall be allowed on site	C	C	
Basic firefighting equipment shall be supplied to all working areas, workshop areas and stores. A designated smoking area shall be provided at all working areas	C	C	Fire extinguishers are provided in the working areas.
Welding, gas cutting or cutting of metal will only be allowed inside the working/demarcated areas and with appropriate firefighting equipment at hand	C	C	
9. PROTECTION OF NATURAL FEATURES, FLORA AND FAUNA			
No natural water sources may be used for the purposes of swimming, personal washing and the washing of machinery or clothes	C	C	
Contractor shall not deface, paint, damage or mark any natural features outside the site	C	C	
Animals or birds shall not be fed, disturbed, hunted or trapped	C	C	
Anti-collision devices such as bird flappers must be installed on the bypass powerlines (380 m)	C	C	The DEO indicated that anti-collision devices will be installed on completion of stringing activities.

CONDITION	PREVIOUS AUDIT 12.12.18	CURRENT AUDIT 30.01.19	COMMENTS / ACTIONS REQUIRED
For any archaeological evidence unearthed within the site, work at that specific section must be immediately stopped and Heritage Western Cape contacted to inspect findings	C	C	
10. DUST CONTROL			
Speed limits must be strictly adhered to in order to limit the levels of dust pollution	C	C	
Undertake adequate wind and dust control measures	C	C	
11. SITE CLOSURE AND REHABILITATION			
After construction, all temporary access roads should be rehabilitated	N/A	N/A	
All disturbed or cleared areas on site must be ripped and rehabilitated and replanted with suitable, indigenous grass to prevent erosion where necessary	N/A	N/A	
All construction related structures, equipment, materials, waste, rubble, notice boards and temporary fences must be removed with minimum damage to the surrounding area	N/A	N/A	

2.4 Compliance Rating

A scoring has been included as required by Eskom Holdings SOC Limited. The following table provides a summary of the score received for the current Dagbreek ECO site visit. The scoring system is based on the number of compliances, partial compliances and non-compliances. Should partial compliances and non-compliances be observed on site, this would affect the overall compliance percentage.

Description	JG Afrika Scoring		
	Scoring	ECO Audit (12-12-2018)	ECO Audit (30-01-2019)
Number of conditions audited		42	43
Available Points		84	86
Compliance (C)	2	84	84
Partial Compliance (PC)	1	0	0
Non Compliance (NC)	-1	0	-1
Overall compliance percentage		100.00%	96.51%
Notes:			
Number of conditions audited	Should remain constant for comparison - if changes made, this must be noted		
Not applicable conditions (n/a)	Not included into the scoring - explanations provided in Comments column		
Overall Compliance percentage	Only includes conditions that are Compliant .		

There is one non-compliance for January 2019, for the outstanding Methods Statements (MSs) which have not been submitted to the ECO, as such the overall compliance percentage dropped to 96.51% from 100%.

2.5 Site Visit Photographs – 30/01/2019



Figure 1: View of completed and backfilled wooden structures near the R44 road.



Figure 2: Location of the second excavation.



Figure 3: Completed and backfilled mono-pole structure.



Figure 4: Topsoil stockpile separated from subsoil. Contractor must ensure that construction vehicles do not drive over it.



Figure 5: Monopole structure across the railway line being compacted.



Figure 6: Two anchored chemical toilets on site.