

ENVIRONMENTAL AUDIT REPORT FOR THE PROPOSED Eskom Holdings (SOC) Limited BATTERY ENERGY STORAGE SYSTEM (BESS) ELANDSKOP SUBSTATION



REPORT Number: 7 for May 2023

DEA REFERENCE NO. 14/12/16/3/3/1/2114/AM2



Prepared for: Eskom Holdings SOC Limited

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Submitted by:



I. DETAILS OF THE ENVIRONMENTAL AUDIT REPORT AUTHOR

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QUALIFICATIONS	BSc Enviro. Man (UWC); Proj. Man Diploma (UP); Environmental Law (UNW); Business Comms (UNISA)
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II. DECLARATION OF THE AUTHOR

I ...**Siphos Zulu**....., on behalf of Senkosi Environmental, as the appointed independent environmental practitioner (“EAP”) hereby declare that I:

- act/ed as the independent EAP in this application;
- regard the information contained in this report to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2014 and any specific environmental management Act;
- have and will not have no vested interest in the proposed activity proceeding;
- have disclosed, to the applicant and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2014 and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the application was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- have ensured that the comments of all interested and affected parties were considered, recorded and submitted to the competent authority in respect of the application;

- have kept a register of all interested and affected parties that participated in the public participation process;
- have provided the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not; and
- I am aware that a false declaration is an offence in terms of the EIA regulations.



Signature of the Environmental Assessment Practitioner:

Name of company: Senkosi Environmental

Date: 12/05/2023

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1. INTRODUCTION

Senkosi Environmental Consulting, is the appointed independent Environmental Control Officer (ECO) for the proposed Eskom Holdings (Soc) Limited Battery Energy Storage System (Bess) Elandskop Substation. The project is located within Msunduzi and Mpendle Local Municipalities, KwaZulu-Natal province conducted the seventh audit on the 12th of May 2023. This environmental audit report is prepared in compliance with Section 34 of the EIA regulations 2014 (as amended), promulgated under the National Environmental Management Act, 1998 (Act 107 of 1998). The report presents audit findings which was conducted against the Environmental Authorization (EA) issued by the Department of Forestry, Fisheries and Environment (DFFE) and the approved Environmental Management Programme (EMPr).

Section 34(2) of the 2014 EIA Regulations (as amended) [L01] requires an environmental audit report, “compiled by an independent person ... to provide verifiable findings, in a structured and systematic manner, on

- a) the level of performance against and compliance of an organisation or project with the provisions of the requisite environmental authorization (EA) and Environmental Management Programme (EMPr) and, where applicable, the closure plan; and
- b) the ability of the measures contained in the EMPr, and where applicable the closure plan, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.”

1.1 Objective and Scope of this Environmental Audit

The EMPr for the facility was revised in April 2019 to comply with condition 23 of **DEA Ref: 14/12/16/3/3/1/2114/AM2** which requires an Environmental Management Plan (EMP) to be compiled, or an existing operational environmental management system to be amended to include the operations of the authorised activity. In accordance with Appendix 7 of 2014 EIA Regulations (as amended) [L01] the purpose of conducting an EMPr audit is to:

- (a) report on-
 - (i) the level of compliance with the conditions of the environmental authorization and the EMPr; and
 - (ii) the extent to which the avoidance, management and mitigation measures provided for in the EMPr achieve the objectives and outcomes of the EMPr;
- (b) identify and assess any new impacts and risks as a result of undertaking the activity;
- (c) evaluate the effectiveness of the EMPr;
- (d) identify shortcomings in the EMPr; and
- (e) identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr.

1.2 Credentials of the Independent Environmental Auditors

Senkosi Environmental is a Level 1 B-BBEE, South African environmental consulting company that has been in existence for 16 years. We pride ourselves in professional advisory services and product delivery to our clients. The service lines offered by Senkosi Environmental include:

- Environmental Screening Assessments.
- Environmental and Social Impact Authorizations.
- Environmental Auditing and Compliance.
- Monitoring of Air, Water, Waste, Soil and Sediment.
- Sustainability management and reporting.
- Advisory Services.
- Climate Change and Air Quality
- Due Diligence Investigations.
- Products and supplies; and
- Safety Equipment.

1.3 Requirements for Environmental Auditors

The National Environmental Management Act (NEMA) and the 2014 EIA Regulations (as amended) [L01] requires an independent person with the relevant environmental auditing expertise to conduct the assessment and prepare the environmental report. The environmental auditor is required to have the following skills, attributes and abilities:

Independent and Objective

The environmental auditor should have the ability to unravel the real concerns behind stated issues, have the ability to separate issues from personalities, cultural perspectives and emotions, have empathy towards all viewpoints and prevent vociferous viewpoints from being the only ones that are heard. The environmental auditor is to remain independent and perform work in an objective manner, even if this results in views and findings that are not favourable to the holder of the authorization.

Expertise in conducting environmental impact assessments

The environmental auditor should be knowledgeable of and be able to conduct investigations of the environment likely to be significantly affected by the authorized activity, investigate potential impact consequences for or impacts on the environment and evaluate potential alternatives.

Comply with the Act, the Regulations and other applicable legislation

The environmental auditor should have knowledge of the environmental legislation (Acts, Regulations and guidelines) that have relevance to the authorized activity. All relevant matters to be taken into consideration when preparing the environmental audit report.

Communicate and Disclose Information

The environmental auditor is required to disclose to the holder of the authorization and the competent authority all material information in their possession that reasonably has or may have the potential of influencing any decision to be taken in respect to the authorized activity; or that may influence the objectivity of the environmental audit report. The environmental audit report must provide verifiable findings, in a structured and systematic manner and be made

available to interested and affected parties (including organs of state in all spheres of government that may have jurisdiction over any aspect of the activity) as required by the competent authority.

1.4 Environmental Audit Team

The environmental audit team to conduct the assessment and who prepared the audit report are:

Mr Siphosenkosi Zulu is a Registered Environmental Assessment Practitioner (EAPASA), environmental compliance and sustainability practitioner with 20 years of experience. Siphosenkosi specialises in Strategic Environmental, Social, Economic and Sustainable Development projects. Audits conducted in the past include the Water license audit at Kusile Power station, the Construction of a 114km line in Free State, Virginia and the PDP construction in Northern Cape, Limpopo, KZN and Mpumalanga province. Siphosenkosi has obtained numerous Environmental Authorizations and Water use licenses in his career. For more information, a CV is attached with more details of his capabilities and expertise.

1.4.1 CVs and Declarations of Independence

Comprehensive CV for the environmental auditors is attached in **Annex B**.

1.5 Environmental Audit Methodology

Senkosi Environmental performed an independent assessment of the Elandskop BESS compliance against the EA and the 2020 EMPr conditions. Preparations of the Audit was initiated by communicating with the EO on site. Proposed tentative dates of schedule was adopted to be used as a guide to audit dates throughout the construction project phase.

The team arrived at 10:56, this was due to the traffic encountered owing to the N3 road construction. Audit meeting was held to discuss the audit of the day. The Eskom EO was not available to attend the audit meeting since her resignation there was no replacement. However, Tractionel EO attended the audit session. The attendance register was completed by all members attending the audit session. See attached appendix showing the attendance register. The key delivery milestones for the Environmental Audit are presented below:

Table 1: Schedule and action dates

Engagement Milestones	Delivery Date
Initiation of Communication for Audit Plan	22 November 2022
Site visit and initial list of audit findings	12 May 2023
Draft Audit Report submitted to client	16 May 2023
Receipt of comments & review of draft report from Client	17 May 2023
Final Audit Report	17 May 2023
Report Close out	18 May 2023

2. SITE CONSTRUCTION ACTIVITIES ON AUDIT WEEK

- Building of the last platform for the batteries. The batteries are said to be expected on Monday, 15 May 2023.
- Assembling of cable Rags;
- Excavation for the water channel.
- Back filling of the control room building.
- The walls are almost completed.
- Earth bolts were installed.

3. SUMMARY OF MAIN FINDINGS

The environmental audit for the month of May was conducted on the 12th of May 2023. During the audit, few non-compliance and compliance points were noted. Some non-compliance issues included; the mixture or waste (wood, steel scrap, etc) at the back the site offices still not removed. This is after a warning given to the developer for lengthy period but to no positive response. This matter should be escalated either by a fine or some strict measure. Construction bricks were delivered outside the Eskom Substation site without any prior approval or authorisation. An oil spill of a small size was observed right inside the area where platforms or foundations were being built, necessary steps were taken to handle this. A report is attached for perusal. A leak from one of the ablution facilities was observed and an investigation was ordered. A report concerning this issue will be received in the June audit on 9 June 2023. Measures to contain it were implemented.

However, there were more compliance points observed than non-compliance. Among the compliance points is; proper demarcation of 'No Go' areas; placement of drinking water in areas where the water sign is placed; maintenance of good access control at the gate; "No Fire" area signage; demarcated smoking area zones clearly marked. More compliance points can be seen in the table attached with the report.

3.1. Non-Compliances

The recorded non-compliances were as follows:

- ✓ Good housekeeping was adhered to: i.e. there was no maintenance of the garden as it is required by the EA and EMPr conditions;
- ✓ Inappropriate waste management was identified on site (the grass, steel, and wooden waste at the back of the site was still not disposed, since the beginning of the construction phase);
- ✓ Construction bricks were delivered outside of the precinct without any prior authorisation. An NCR was issued by the EO on site, a copy to be submitted to the ECO.
- ✓ An oil spill of insignificant size was observed, an incidence report will be forwarded to the ECO.

3.2. COMPLIANCES

- ✓ Training regarding Environmental Awareness was conducted on 11 May 2023 by the ECO;
- ✓ Drinking water was placed at the drinking water signage as required;
- ✓ Topsoil was properly covered and in compliance;
- ✓ Cement mixing was contained within the area with plastic to avoid soil contamination; used packages kept in the hazardous bin for proper disposal;
- ✓ Waste bin was placed at the dining area;
- ✓ The access control to the tools and equipment was well maintained and locked with key at the supervisor's disposal;
- ✓ The "No go areas" were clearly marked including smoking area well demarcated.

4. COMPLIANCE MONITORING

The compliance monitoring was done in line with the approved EMPr and EA. A summary of percentages is given at the end of the report showing compliance.

Table 2: Compliance Rating

Rating	Description	Abbreviation	Colour Code
Compliance	Fully Complying	C	
Opportunity for Improvement (to comply)	Complying with fraction of the conditions	OFI	
Non-Compliance	Not Complying to any of the conditions	NC	
Not Applicable	Conditions that are not applicable at the time of inspection	N/A	

Table 3: Compliance to the EA Conditions

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
Scope of Authorization							
1. The holder of the authorization is responsible for ensuring compliance with the conditions contained in the Environmental Authorization. Including any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant, or person rendering a service to the holder of the authorization.					An environmental officer has been appointed to monitor and enforce compliance on site on a day-to-day basis.	Applicant	17 October 2022
2. The activities authorized may only be carried out at the property as described on page 4 of the EA					Construction bricks and water drainage culverts were delivered outside the precinct. A copy of the	Applicant	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	O/I	NC	N/A			
					NCR issued to the responsible contractor is attached.		
3. Any changes to, or deviations from, the project description set out in this authorization must be approved, in writing, by the Department before such changes or deviations may be affected.					There is no deviation from the project description.	Applicant	12 May 2023
4. The holder of an EA must apply for an amendment of the EA with the Competent Authority (CA) of any alienation, transfer and change of ownership rights in the property on which the activity is to take place.					A letter from DFFE approving the change of name of property ownership for the application was presented. Ms. Tshililo Nekhalale has been appointed the new property representative.	Applicant	22 Nov 2022

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
5. This activity must commence within a period of five (5) years from the date of issue of this environmental authorization. If commencement of the activity does not occur within that period, the authorization lapses and a new application for environmental authorization must be made for the activity to be undertaken.					The activity commenced on 4 November 2022 and the EA was issued on 19 June 2020. Therefore, the activity commenced within a period of five (5) years from the date of issue of this environmental authorization.	Applicant	4 November 2022.
6. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.					The commencement of the activity was on the 4 th of November 2022. A letter was sent to the DFFE.	Applicant	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	O/I	NC	N/A			
7. The holder of the EA must notify interested and affected party (I&AP), in writing and within twelve (14) calendar days of the date of the EA of the decision to authorize the activity. The notification must comply with the said conditions.	C	O/I	NC	N/A	The I&APs were notified about the decision to authorize the activity within 14 days of the issue of the EA. The EA was issued on the 19 th of June 2020 and the I&APs were notified on 24 June 2020.	Applicant	24 June 2020
8. The notification referred to must- 8.1 Specify the date on which the authorisation was issued; 8.2 Inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;	C	O/I	NC	N/A	The letter did not inform the I&AP about the reasons of the decision as stipulated in the National Appeal Regulations 2014.	Applicant	24 June 2020

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	O/I	NC	N/A			
8.3 Advise the interested and affected party that a copy of the authorisation will be furnished on request and 8.4 Give the reasons of the competent authority for the decision.							
Commencement of the Activity							
9. The authorised activity must not commence until the period of the submission of appeals has lapsed as per the National Appeal Regulations, 2014. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any provision or condition attached thereto.					No appeal has been lodged.	Applicant	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.							
10. The Environmental Management Programme (EMPr) submitted as part of the Application for EA is hereby approved. This EMPr must be implemented and strictly adhered to.					The contractor failed to clean the waste pile behind the site.	Applicant	12 May 2023
Frequency and process of updating the EMPr							
11. The EMPr must be updated where the findings of the environmental audit reports, contemplated in conditions 23 below, indicate insufficient mitigation of environmental					There is no plan to amend of the EMPr.	ECO	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFl	NC	N/A			
impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation of EMPr.							
12. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.					The EMPr has not been updated.	ECO	12 May 2023
13. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulations 34 of GNR 982, The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior					The EMPr has not been updated.	ECO	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	O/I	NC	N/A			
to submission of the updated EMPr to the Department for approval.							
Monitoring							
14. The applicant must appoint an independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.					An ECO was appointed, and the appointment letter was sent to DFFE. The weekly reports are submitted to the ECO by the EO on any incidents and transgressions.	Applicant	03 August 2022 12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
<p>14.1 The ECO must be appointed before commencement for any authorised activities.</p> <p>14.2 Once appointment, the name and contact details of the ECO must be submitted to the Director: Compliance monitoring of the Department at Directorcompliance@environment.go.za</p> <p>14.3 The ECO must keep record of all activities on site, problems identified, transgressions noted and a task scheduled of tasks undertaken by the ECO.</p> <p>14.4 The ECO must remain employed until all rehabilitation, as required for implementation due to construction damage, are completed and the site ready for operation.</p>							

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
Recording and Reporting to the Department							
15. All documentation e.g., audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the Director Monitoring of the Department at Directorcompliance@environment.gov.za.					The ECO submits the reports on monthly basis.	ECO	12 May 2023
16. The holder of the environmental authorisation must for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the					Audit reports are done and submitted to the Authority on monthly basis.	Applicant	12 May 2023

ENVIRONMENTAL AUDIT REPORT FOR THE PROPOSED ESKOM HOLDINGS (SOC) LIMITED BATTERY ENERGY STORAGE SYSTEM (BESS) ELANDSKOP SUBSTATION

May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
Director: Compliance Monitoring of the Department at Directocompliance@environment.gov.za							
17. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMP, taking into account the processes for such auditing as prescribed in Regulation 34 of GNR 982.					The audits are conducted monthly as required by the EA. Delays experienced between November and January were reported the Department (DFFE) on 24 January 2023 via a letter.	ECO	12 May 2023
18. The holder of the EA must, in addition, submit an Environmental Audit Report to the Department within 30 days of completion of the construction phase (i.e., within 30 days of site handover) and a final environmental audit					The construction activities are still underway.	ECO	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
report within 30 days of completion of rehabilitation activities.							
19. The environmental audit reports must be compiled in accordance with Appendix 7 of the 2014 EIA Regulations, as amended and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as requirements of the approved EMPr.					The audit reports are compiled as per Appendix 7 of the EIA regulations, 2014 (as amended)		12 May 2023
20. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.					The reports are kept on site: <ul style="list-style-type: none"> • The weekly inspection • Environmental legal audit Monthly 	Tractionel EO Eskom EO	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
					These are conducted by Tractionel and audited by Eskom EO. Audit reports by the ECO audit are placed on site to be accessed by anyone.		
Operation of the Activity							
Site Closure and Decommissioning							
21. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.					Not applicable	Applicant	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
Specific EA Conditions							
22. The holder of the EA must, prior to commencement of construction, inform this Department on the preferred technology or technology mixture of the BESS.					A letter informing the Department of the preferred technology was submitted on 13 October 2022 to the department.	Applicant	13 October 2022
23. The holder of the EA must ensure that the volume of dangerous goods on site does not exceed 500m ³					The diesel bowser storing dangerous fuel is monitored to be kept at 300 liters and is always kept at the capacity of 300 liters.	Applicant	12 May 2023
24. Vegetation clearing must be limited to the required footprint for actual construction works and operational activities.					Vegetation clearing was only limited to the required footprint.	Applicant	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.							
25. No exotic plants must be used for rehabilitation purposes. Only indigenous plants occurring within a ten (10) kilometer radius of the development site must be utilized.					Not applicable. The rehabilitation process has not yet been undertaken.	Contractor	12 May 2023
26. Should any potential human remains be encountered during construction, work in the immediate vicinity of the find must be stopped and the KwaZulu-Natal AMAFA and Research Institute and SAPS must be notified.					No human remains have been identified.	Applicant/ Contractor	12 May 2023
27. No heritage material will be removed or relocated without confirmation from KwaZulu-Natal AMAFA and Research					No human remains have been identified.	Applicant/ Contractor	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
Institute as well as an accredited heritage professional specialist.							
28. A horticultural specialist must be appointed to identify and relocate sensitive plant species prior to any site works.					The horticulturalist was not used but a Botanist.	Applicant	12 May 2023
29. An ongoing Alien invasive Management Plan must be compiled and implemented prior to construction activities.					Complied with prior construction phase.	Applicant	12 May 2023
30. A Landscape Plan must be submitted to the Msunduzi Municipality: Environmental Management Unit for comment and approval prior to site works commencing.					A letter was sent to Msunduzi Municipality, and it was approved. The letter from the municipality was obtained.	Applicant	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
31. A species relocation plan must be compiled and submitted to the Msunduzi Municipality: Environmental Management Unit for comment and approval prior to site works commencing.					A letter was sent to Msunduzi LM and was approved.	Applicant	12 May 2023
32. A storm water management plan must be submitted to Msunduzi Municipality: Environmental Management Unit as well as the Msunduzi Roads and Drainage Management Unit for comment and approval prior to any site works					The stormwater management plan was submitted and approved by the Msunduzi Municipality.	Applicant	23 November 2022

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
commencing. The Storm Water Management Plan must address the impacts associated with the increase in hardened surface area and must address quantity and quality of the storm water discharged from the site and incorporate on-site storm water attenuation measures to ensure the proposed development is flood neutral. Post development storm water discharge volumes must not exceed pre-development volumes.							
33. Once the final technology alternative is selected, a detailed fire management and protection plan must be compiled and submitted to the relevant Municipality for consideration prior to undertaking any construction activities.					The letter of approval from the Municipality was ultimately obtained on 29 March 2023.	Applicant	12 May 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
GENERAL CONDITIONS							
34. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMP, must be made available for inspection and copying:							
34.1 At the site of the authorised activity.							
34.2 To anyone on request; and							
34.3 Where the holder of the environmental authorisation has a website, on such publicly accessible website.							
					Copies are available on site and the Eskom website.	Applicant	12 May 2023

Table 4: Compliance to the EMPr

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFl	NC	NA			
General Construction Activities							
1. Environmental signage must be displayed on site including “no smoking,” “fire hazards,” etc.					Proper signage was available and properly displayed on site.	ECO	12 May 2023
2. Emergency numbers must be clearly displayed					Emergency numbers are clearly displayed but advise was made for a bigger font and paper to be used.	ECO	12 May 2023
3. Access fuel and other equipment stores must be strictly controlled					Access fuel and other equipment stores are strictly controlled. Example the stores’ access always locked and the bowser is always kept empty on site. It is used to bring fuel to the machinery and after filling them, it is kept empty.	ECO	12 May 2023
Clearing of the Site							

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFI	NC	NA			
4. The contractor must ensure that all employees, including sub-contractors and their employees, attend on-site Environmental Awareness Training prior to commencing work on site					Training attendance register was seen on site during the audit.	Contractor	12 May 2023
5. Follow-up Environmental Awareness Training must be conducted for new subcontractors or crews prior to commencing work or for specific activities that may potentially impact the environment, or if work is being undertaken in sensitive environments					Not applicable, no work had a potential impact on environment conducted and there is no sensitive environmental area.	Contractor/ ECO	12 May 2023
6. The contractor must maintain accurate records of any training undertaken.					Training Awareness records are kept and monitored on site.	Contractor	12 May 2023
7. The appointed Contractor must do an initial alien plant clearance and three follow up clearances.					Alien plant clearance was undertaken and appropriately disposed.	Contractor / ECO	12 May 2023

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFl	NC	NA			
8. Site clearing must be limited to only the area designated for the specified works.					Site clearance was only undertaken within the designated site area.	Contractor / ECO	12 May 2023
9. Training must cover all areas of EMPr and procedures to be followed, the sensitivity of the site and importance of adhering to “no go areas”					New personnel were trained on environmental awareness by the ECO on 11 May 2023.	ECO	12 May 2023
10. The ECO must monitor the contractor’s compliance with the requirement to provide sufficient environmental awareness training to all site staff.					The attendance registers of the conducted training was shown as evidence.	ECO	12 May 2023
11. “No-go” areas prior to earthworks commencing must be demarcated with danger tapes of protection for the duration of the construction phase.					The ‘no-go’ areas are clearly barricaded.	Contractor/ ECO	12 May 2023

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFl	NC	NA			
12. No unauthorized entry, stockpiling, dumping or storage of equipment in “no-go” areas, or outside the site boundary is permitted.					Access to the site is controlled by a security guard at the gate. All activities are kept within the site boundary.	Contractor/ ECO	12 May 2023
Earthworks							
13. No unauthorized entry, stockpiling, dumping or storage of equipment in “no-go” areas, or outside the site boundary is permitted.					Entry is strictly guarded by a security personnel.	Contractor /ECO	12 May 2023
14. All construction activities, plant, labour, and materials must be restricted within the site boundary					Construction bricks were delivered outside the boundary without any prior provision. An NCR was issued towards the responsible contractor.	Contractor /ECO	12 May 2023
15. Demarcation must remain in place for the duration of the work on site					All areas were demarcated as required.	Contractor /ECO	12 May 2023

ENVIRONMENTAL AUDIT REPORT FOR THE PROPOSED ESKOM HOLDINGS (SOC) LIMITED BATTERY ENERGY STORAGE SYSTEM (BESS) ELANDSKOP SUBSTATION

May 2023

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFl	NC	NA			
16. Rehabilitation of disturbed areas must be undertaken within a month after construction activities have concluded.					Note yet applicable, rehabilitation phase not yet commenced.	Contractor /ECO	12 May 2023
17. The earthworks operation must be carried out by a suitably qualified contractor.					The qualifications of the Contractor were seen and submitted to the ECO earlier	Contractor/ ECO	12 May 2023
Storage, mixing, and disposal of cement and concrete							
18. No mixing of concrete or cement directly on the ground is permitted. The mixing of concrete must only be done on a mixing tray or on impermeable sheeting.					Most mixed concrete is delivered by a truck, in a ready state. Any other small amount is mixed on an impermeable sheet separating cement from direct contact with the ground.	Contractor/ ECO	12 May 2023
19. Both used and unused cement bags must be stored in weatherproof containers so as not to be affected by rain or runoff.					Cement bags kept in a weather prof container bin were seen during the audit visit.	Contractor/ ECO	12 May 2023

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFI	NC	NA			
20. Contaminated soil resulting from concrete or cement spills must be removed immediately after the spillage has occurred and placed on the appropriate rubble stockpile.					A minor Oil leak from a TLB that was observed on site. Proper procedure was followed and an incident report was written.	Contractor/ ECO	12 May 2023
21. Clean stormwater must be kept away from areas where it could be contaminated and must be directed to the stormwater drainage system					Clean stormwater is kept away from areas where it could be contaminated and must be directed to the stormwater drainage system	Contractor	12 May 2023
Soil Erosion							
22. Vegetation must not be removed unnecessarily					No vegetation was removed unnecessarily.	Contractor /ECO	12 May 2023
23. Soil erosion measures must be placed on sensitive areas like banks, slopes and towards the site boundary.					There is no more need to put sandbags because the platform is now elevated and no slope anymore.	Contractor/ ECO	12 May 2023

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFl	NC	NA			
24. All stockpiles must be covered with suitable material to prevent loss of sediment via wind/water.					The topsoil was covered and it therefore complied with the condition.	Contractor / ECO	12 May 2023
25. Topsoil (top 300mm layer minimum) must be removed prior to the construction by earthmoving equipment. Topsoil must be stored in heaps of not higher than 2m in a way that prevents damming. Stored topsoil must not be compacted.					The topsoil heaps were not higher than 2m.	Contractor /ECO	12 May 2023
26. Topsoil must not be used as fill material for backfilling of excavations on site.					Topsoil was not used as fill material for backfilling of excavations on site.	Contractor/ ECO	12 May 2023
27. Disturbed sites must be rehabilitated as soon as construction is complete and not left until the end of the project to be rehabilitated.					Not applicable as the rehabilitation process has not commenced.	Contractor /ECO	12 May 2023
Ground water and Surface water pollution							

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFl	NC	NA			
28. An adequate number of chemical toilets for the staff must be provided and serviced regularly. The positioning of the toilets must be authorized by the ECO.					Sufficient toilets were provided, and proof of service was provided. The contractor was advised to make comments on the receipts and it was complied with.	Contractor	12 May 2023
29. Spills that result in the contamination of ground and/or surface water must be reported immediately to the ECO.					A Minor Oil spillage was observed on 11 May 2023. The incidence report was written and the ECO was on site, therefore informed. Proper contaminated ground removal and rehabilitation procedure was followed.	Contractor	12 May 2023
30. Spills must be managed in the following manner: <ul style="list-style-type: none"> • Stop the spill • Contain the spill • Report significant spills to DWS and the Local Municipality Water and Sanitation Department. 					No significant spillages were recorded, only small spill was observed and handled.	Contractor	12 May 2023

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFl	NC	NA			
<ul style="list-style-type: none"> Remove spilled material for treatment/disposal. Determine any possible impact to soils, groundwater, storm water, etc. Undertake any necessary remedial actions Document the spill Employees involved in spill control must be using PPE 							
Cleaning on-site							
31. A chemical spill kit must be always present onsite and once used it must be disposed of at a registered hazardous landfill site.					A chemical spill kit was present on site.	Contractor	12 May 2023
Generation of general and domestic waste							
32. Refuse bins must be provided for domestic waste (lunch litter) and placed in designated eating areas					Bin was placed at the dining area.	Contractor	12 May 2023

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFl	NC	NA			
and any other areas were deemed necessary to control littering.							
33. Refuse bins must not overflow and must be emptied regularly. No littering is permitted on site.					Refuse bins were not overflowing on the day of the audit. Refuse bins are emptied on frequent basis prior being full.	Contractor	12 May 2023
34. Building rubble must be kept separate from other construction waste.					The construction rubble was disposed of at the New England landfill site. Proof of disposal was provided.no building rubble was found on site yet again on audit day.	Contractor	12 May 2023
35. All waste must be disposed of at approved landfill sites, no burning or burying is permitted.					Waste was disposed of at the New England landfill site.	Contractor	12 May 2023
Visual Quality							

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
	C	OFl	NC	NA			
36. The site must be well maintained and neat.					A mixture of waste including wood, steel, conductor cables, was observed on site, still not removed over seven (7) months since construction begun. This was despite several warnings given for compliance.	Contractor	12 May 2023
Public safety and health							
37. First aid kits must be available on site as well as an incident records file					The first aid kit was available on site during the audit session.	Contractor	12 May 2023
38. Interaction with objecting parties at the site must be well documented. A complaints register must be readily available on site. Interaction with external parties must be courteous.					A register was updated regarding a complaint from an interested party. However no complain was registered as of the day of the audit expect for the prior complaint.	Contractor	12 May 2023

5. PHOTOGRAPHIC EVIDENCE OF THE FINDINGS



Figure 1: Toilet leak observed to be further investigated if its water or worse



Figure 2: Designated smoking area well labelled



Figure 3: "No open flame" signage and cages well secured



Figure 4: Mix waste not collected at the back of the site office since start of construction



Figure 5: Drinking water placed for the working team



Figure 6: Site Garden not maintained



Figure 7: Evidence of lack of general waste good management and no good house keeping



Figure 8: More evidence of lack of good housekeeping, and waste management



Figure 9: Shows bricks delivered outside the precinct of the Elandskop Substation



Figure 10: Evidence of storm water drainage kept clean and clear of blockage material



Figure 11: Hazardous waste in a separate bin



Figure 12: Showing the minor oil spill observed from a TBL on side

6. RECOMMENDATIONS

- It is recommended that the contractor or developer be liable for a fine in line with the EMPr recommendations for the non-waste management that has been onsite since the commencement of construction phase.
- The ECO will write a warning letter to the developer to this effect. The recurring non-compliances shall be addressed before the next audit will be on 9 June 2023, to assess compliance.

7. PERCENTAGE COMPLIANCE STATUS

Percentage compliance status indicates that **compliance** is **72.22 %** while **non-compliance** is **8.33 %** **not applicable** is **19.44%** and **opportunity for improvement** is **0%** for the month of May 2023.

Table 5: Rating compliance in percentages.

Rating	Description	Abbreviation	Number	%
Compliance	Fully Complying	C	52	72.22
Opportunity for Improvement (to comply)	Complying with fraction of the conditions	OFI	0	0
Non-Compliance	Not Complying to any of the conditions	NC	6	8.33
Not Applicable	Conditions that are not applicable at the time of inspection	N/A	14	19.44
Total aspects EMPr and EIA conditions			72	99.99

8. CONCLUSION

The site was found to be in a relatively satisfactory condition on the day of the audit on 12 May 2023. Both the contractor and applicant have the responsibility to ensure that the identified non-compliances are rectified before the next audit report which is set to take place on the 9th of June 2023. The Developer has no representative EO site since March 2023. This is in contravention with the EA and EMPr conditions that the EO for the Developer be on site.

9. APPENDICES

- 9A Appendix A: Incidence Report
- 9 B Appendix B: Attendance register for the audit team
- 9 C Appendix C: Attendance register for the trained members on 11 May 2023.
- 9 D Appendix D: Incidence Report for minor Spillage
- 9 E Appendix E: Non-Compliance Report (NRC)
- 9F Appendix E: Curriculum Vitae

