

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



**REPORT Number: 9 for July, 14<sup>th</sup> 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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**II. DECLARATION OF THE AUTHOR**

I **Siphon 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.



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Signature of the Environmental Assessment Practitioner:

Name of company: Senkosi Environmental

Date: 14/07/2023

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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 ninth audit on the 14<sup>th</sup> of July 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 were 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 was on site and commenced the meeting at 10:05, the meeting discussed the approach of the audit for the day. The Audit was preceded by a compliance inspection session that took place on 13 July 2023. The aim of the compliance inspection was to peruse the previous reports and assess the level of compliance and improvement and report on that status. A separate report on this is attached on this report as an annexure. The Eskom EO was still not available to attend the audit meeting since her resignation there was no replacement for her. However, Tractionel EO attended the audit session to ensure the smooth running of the audit. Attendance register was completed by attendees, see attached appendix. The audit approach has been amended to allow focus on the current phase. This means previous phases such as the pre-construction phase are not audited as current, but referred to as not application given the current phase. This is done in order to put the proper focus on the current phase, the construction phase. The same will be applied during rehabilitation phase. This approach aims to eliminate any possible redundancy that may arise.

The key delivery milestones for the Environmental Audit are presented below:

**Table 1: Schedule and action dates**

<b>Engagement Milestones</b>	<b>Delivery Date</b>
Initiation of Communication for Audit Plan	22 November 2022
Site visit and initial list of audit findings	14 July 2023
Draft Audit Report submitted to client	16 July 2023
Receipt of comments & review of draft report from Client	17 July 2023
Final Audit Report	18 July 2023
Report Close out	18 July 2023

## **2. SITE CONSTRUCTION ACTIVITIES ON AUDIT WEEK**

- Batteries started arriving on site except one to be delivered on 18 July 2023.
- Control room is still under construction.
- Bund walls for transformers under construction.
- Assembling of cable Rags continued;
- Waste resulting from new delivered battery was continuously managed.

## **3. SUMMARY OF MAIN FINDINGS**

The environmental audit for the month of July was conducted on the 14<sup>h</sup> of July 2023. During the audit, few non-compliance and compliance areas 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 was given to the developer but to no positive response. An NCR will be raised to this effect. The hazardous waste was still not collected for disposal form site. This was said to be due to the service provider not collecting these. A stern warning was made to the Contractor to ensure compliance in this regard. Building rubble was observed on the ground without collected in skips, this is not allowed as it contaminates the ground soul with the cement remnants. An instruction was given for skips to be secured and keep the building rubble contained therein. A report concerning what appeared like a leak from the ablution, was not yet received, however the Tractionel EO recommitted to submit same.

Nevertheless, there were more compliance points observed than non-compliance. Among the compliance points are; well-maintained landscape, well cut grass (except for the waste outside the back office) proper demarcation of 'No Go' areas; plastic or hard surface separating cement mixing from the soil; maintenance of good access control at the gate; "No Fire" area signage; demarcated smoking area zones clearly marked; frequent general waste management disposal resulting from the new battery delivery. Hazardous material such as gas bottles



were securely kept in locked up cages and in adequate containers. More compliance points are discussed in the table attached.

### **3.1. Non-Compliances**

The recorded non-compliances were as follows:

- ✓ Building Rubble remnants were found on the site without being secured in Skips;
- ✓ 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);
- ✓ The hazardous waste is still on site not yet disposed, pending some document requirements from the land ill site to illustrate proper registration a hazardous landfill.

### **3.2. COMPLIANCES**

- ✓ The general waste receipts had no tonnages owing to the apparent non-functional way bridge at the landfill.
- ✓ Good landscape and garden maintenance was well managed;
- ✓ Topsoil was properly covered and in compliance;
- ✓ Cement mixing was contained within the area with plastic to avoid soil contamination;
- ✓ Used cement packages kept in the hazardous bin for proper disposal;
- ✓ 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**

<b>Rating</b>	<b>Description</b>	<b>Abbreviation</b>	<b>Colour Code</b>
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			
<b>Scope of Authorization</b>							
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 was not on site for three months ago.	Applicant	14 July 2023
2. The activities authorized may only be carried out at the property as described on page 4 of the EA					Water Tank for construction purposes was located outside the precinct.	Applicant	14 July 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
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	14 July 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
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 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	Applicant	4 Nov 2022

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
the authorization lapses and a new application for environmental authorization must be made for the activity to be undertaken.					date of issue of this environmental authorization.		
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 <sup>th</sup> of November 2022. A letter was sent to the DFFE.	Applicant	14 July 2023
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.					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 <sup>th</sup> of June 2020 and the I&APs were notified on 24 June 2020.	Applicant	24 June 2020

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
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; 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.					The condition is not applicable in this phase.	Applicant	14 July 2023
<b>Commencement of the Activity</b>							
9. The authorised activity must not commence until the period of the submission of appeals has lapsed as per the National Appeal					No appeal has been lodged.	Applicant	14 July 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
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. 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/Applicant failed to clean the waste pile behind the site. An NCR will be raised to address the waste management issue behind the office.	Applicant	14 July 2023
<b>Frequency and process of updating the EMPr</b>							

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
11. The EMPr must be updated where the findings of the environmental audit reports, contemplated in conditions 23 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation of EMPr.					There is no plan to amend the EMPr.	ECO	14 July 2023
12. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.					The EMPr has not been updated.	ECO	14 July 2023
13. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per					The EMPr has not been updated.	ECO	14 July 2023



COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
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 to submission of the updated EMPr to the Department for approval.							
<b>Monitoring</b>							
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.	Applicant	03 August 2022  14 July 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 <a href="mailto:Directorcompliance@environment.gov.za">Directorcompliance@environment.gov.za</a></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>					<p>The weekly reports are viewed by ECO from the EO for incidents and transgressions.</p>		

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
					ECO is appointed until Rehabilitation is completed.		
<b>Recording and Reporting to the Department</b>							
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	14 July 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
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 Director: Compliance Monitoring of the Department at Directocompliance@environment.gov.za					Audit reports are done and submitted to the Authority on monthly basis.	Applicant	14 July 2023
17. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GNR 982.					Monthly reports are submitted to the relevant unit at DFFE.	ECO	14 July 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
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 report within 30 days of completion of rehabilitation activities.					The construction activities are still underway.	ECO	14 July 2023
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)		14 July 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
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.	C				The reports are kept on site: <ul style="list-style-type: none"> <li>• The weekly inspection</li> <li>• Environmental legal audit Monthly</li> </ul> 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.	Tractionel EO Eskom EO	14 July 2023
<b>Operation of the Activity</b>							
<b>Site Closure and Decommissioning</b>							

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	O/I	NC	N/A			
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, activity is on course.	Applicant	14 July 2023
<b>Specific EA Conditions</b>							
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.					Not relevant in current phase.	Applicant	14 July 2023.

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	O/I	NC	N/A			
23. The holder of the EA must ensure that the volume of dangerous goods on site does not exceed 500m <sup>3</sup>					The diesel bower storing dangerous fuel is not in use anymore since the yellow plant has left the site.	Applicant	14 July 2023
24. Vegetation clearing must be limited to the required footprint for actual construction works and operational activities. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.					Vegetation clearing not applicable in this phase.	Applicant	14 July 2023
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 not yet undertaken.	Contractor	14 July 2023
26. Should any potential human remains be encountered during					No human remains have been identified.	Applicant/	14 July 2023



COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	O/I	NC	N/A			
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.						Contractor	
27. No heritage material will be removed or relocated without confirmation from KwaZulu-Natal AMAFA and Research Institute as well as an accredited heritage professional specialist.					No human remains have been identified.	Applicant/ Contractor	14 July 2023
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. However, not applicable in this phase.	Applicant	14 July 2023
29. An ongoing Alien invasive Management Plan must be compiled and implemented prior to construction activities.					Complied with prior construction phase, but not applicable no more, due to the construction phase.	Applicant	14 July 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
30. A Landscape Plan must be submitted to the Msunduzi Municipality: Environmental Management Unit for comment and approval prior to site works commencing.					Requirement no more applicable due to the current construction phase.	Applicant	14 July 2023
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.					Not applicable due to current phase.	Applicant	14 July 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 commencing. The Storm Water Management Plan must address the impacts associated					Not applicable due to current phase.	Applicant	14 July 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
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.					Not applicable due to current phase.	Applicant	14 July 2023

COMPLIANCE TO EA CONDITIONS							
EA Condition	Compliance				Recommendation/ Comments	Responsible Person	Action Date
	C	OFI	NC	N/A			
<b>GENERAL CONDITIONS</b>							
<p>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:</p> <p>34.1 At the site of the authorised activity.</p> <p>34.2 To anyone on request; and</p> <p>34.3 Where the holder of the environmental authorisation has a website, on such publicly accessible website.</p>					<p>Copies available on site and the Eskom website excluded compliance and monitoring reports. Applicant to correct.</p>	Applicant	14 July 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			
<b>General Construction Activities</b>							
1. Environmental signage must be displayed on site including “no smoking,” “fire hazards,” etc.					Proper signage was available and properly displayed on site.	ECO	14 July 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	14 July 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 for the machinery and after filling them, it is kept empty.	ECO	14 July 2023

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance			Recommendation/Comments	Responsible Person	Action Date	
<b>Clearing of the Site</b>							
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	14 July 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	14 July 2023
6. The contractor must maintain accurate records of any training undertaken.					Training Awareness records are kept and monitored on site. Training on the World Environment Day was held on 7 <sup>th</sup> June 2023.	Contractor	14 July 2023
7. The appointed Contractor must do an initial alien plant clearance and three follow up clearances.					Not applicable due to current phase.	Contractor/ECO	14 July 2023

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

**July 2023**

<b>COMPLIANCE TO THE EMPR CONDITIONS</b>							
<b>EMPr Condition</b>	<b>Compliance</b>				<b>Recommendation/Comments</b>	<b>Responsible Person</b>	<b>Action Date</b>
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	14 July 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	14 July 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 register of the latest training on 14 <sup>th</sup> July was evident.	ECO	14 July 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	14 July 2023
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	14 July 2023

COMPLIANCE TO THE EMPR CONDITIONS						
EMPr Condition	Compliance			Recommendation/Comments	Responsible Person	Action Date
<b>Earthworks</b>						
13. All construction activities, plant, labour, and materials must be restricted within the site boundary.				The water storage Bowser for the construction activity was stored outside the precinct.	Contractor/ECO	14 July 2023
14. Demarcation must remain in place for the duration of the work on site				Most relevant areas for demarcated complied as required.	Contractor/ECO	14 July 2023
15. 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	14 July 2023
16. 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	14 July 2023
<b>Storage, mixing, and disposal of cement and concrete</b>						
17. 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				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	Contractor/ ECO	14 July 2023



COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance			Recommendation/Comments	Responsible Person	Action Date	
sheeting.				contact with the ground.			
18. Both used and unused cement bags must be stored in weatherproof containers so as not to be affected by rain or runoff.				Cement bags are kept in a weather prof container bin were seen during the audit visit. These were not collected from site. It has now become a concern.	Contractor/ ECO	14 July 2023	
19. Contaminated soil resulting from concrete or cement spills must be removed immediately after the spillage has occurred and placed on the appropriate rubble stockpile.				No skips were provided for rubble waste. A possible soil contamination may have been effected.	Contractor/ ECO	14 July 2023	
20. 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	14 July 2023	
Soil Erosion							
21. Vegetation must not be removed unnecessarily				No vegetation was removed unnecessarily.	Contractor /ECO	14 July 2023	

COMPLIANCE TO THE EMPr CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
22. 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	14 July 2023
23. All stockpiles must be covered with suitable material to prevent loss of sediment via wind/water.					The topsoil was covered and complied with the condition.	Contractor/ECO	14 July 2023
24. 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 heap was kept to required height of 2m and less.	Contractor /ECO	14 July 2023
25. 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	14 July 2023
26. 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	14 July 2023

COMPLIANCE TO THE EMPR CONDITIONS					
EMPr Condition	Compliance		Recommendation/Comments	Responsible Person	Action Date
<b>Ground water and Surface water pollution</b>					
27. 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 14 July 2023
28. Spills that result in the contamination of ground and/or surface water must be reported immediately to the ECO.				There was no witnessed incidence during July month audit.	Contractor 14 July 2023
29. Spills must be managed in the following manner: <ul style="list-style-type: none"> <li>• Stop the spill</li> <li>• Contain the spill</li> <li>• Report significant spills to DWS and the Local Municipality Water and Sanitation Department.</li> <li>• Remove spilled material for treatment/disposal.</li> <li>• Determine any possible impact to soils, groundwater, storm water, etc.</li> </ul>				No spill was observed or recorded for July month audit.	Contractor 14 July 2023

COMPLIANCE TO THE EMPR CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
<ul style="list-style-type: none"> <li>Undertake any necessary remedial actions</li> <li>Document the spill</li> <li>Employees involved in spill control must be using PPE</li> </ul>							
Cleaning on-site							
30. 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	14 July 2023
Generation of general and domestic waste							
31. Refuse bins must be provided for domestic waste (lunch litter) and placed in designated eating areas and any other areas were deemed necessary to control littering.					Bin was placed at the dining area.	Contractor	14 July 2023
32. Refuse bins must not overflow and must be emptied regularly. No littering is permitted on site.					Refuse bins were well managed and emptied on frequently.	Contractor	14 July 2023

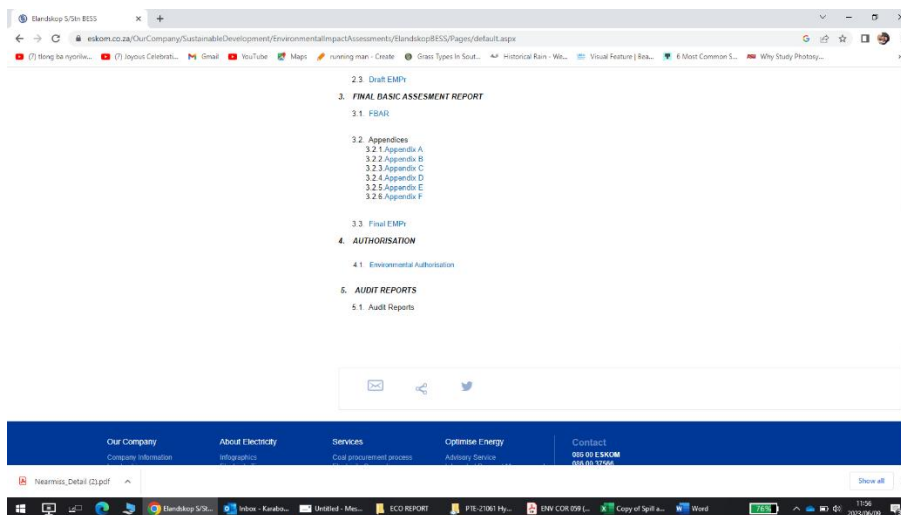
COMPLIANCE TO THE EMPr CONDITIONS							
EMPr Condition	Compliance				Recommendation/Comments	Responsible Person	Action Date
33. Building rubble must be kept separate from other construction waste.					The construction/building rubble was found on site not separated in a skip. There is a need for a skip to remove building rubble.	Contractor	14 July 2023
34. 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	14 July 2023
Visual Quality							
35. The site must be well maintained and neat.					The site is well maintained except for the long waste at the back of the office.	Contractor	14 July 2023
Public safety and health							
36. 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. A minor injury was reported, the report to be sent to the ECO for record purposes.	Contractor	14 July 2023
37. Interaction with objecting parties at the site must be well documented. A complaints register must					On the 6 <sup>th</sup> July there was a visit by Heart of Africa representatives and a meeting was but no minutes	Contractor	14 July 2023

COMPLIANCE TO THE EMPr CONDITIONS						
EMPr Condition	Compliance			Recommendation/Comments	Responsible Person	Action Date
be readily available on site. Interaction with external parties must be courteous.				were captured. Nonetheless, an attendance register was filled in and will be shared with the ECO.		

## 5. PHOTOGRAPHIC EVIDENCE OF THE FINDINGS



*Figure 1: Building rubble not separated and not inside Skips posing soil contamination risk*



*Figure 2: Audit reports not kept on Eskom website*



*Figure 3: Mixed waste not collected at the back of the site office since start of construction*





Figure 4: Gas Bottles and other chemicals are safely secured in safe cages



Figure 5: Site Garden and landscape well maintained



Figure 6: Evidence of proper allocated laydown site



*Figure 7: No go areas properly demarcated*



*Figure 8: Water Tank used for construction purposes parked outside authorised area*



Figure 9: Evidence of contaminated water still on site not disposed off

## 6. RECOMMENDATIONS

- The Building rubble must be contained in a skip to avoid contamination of soil.

- The ECO will raise an NCR should the outstanding issues not resolved by next audit 15 August 2023.

## **7. PERCENTAGE COMPLIANCE STATUS**

Percentage compliance status indicates that **compliance** is **50 %** while **non-compliance** is **9.72 %** **not applicable** is **38.89 %** and **opportunity for improvement** is **1.39 %** for the month of July 2023.

*Table 5: Rating compliance in percentages.*

<b>Rating</b>	<b>Description</b>	<b>Abbreviation</b>	<b>Number</b>	<b>%</b>
Compliance	Fully Complying	C	<b>36</b>	<b>50%</b>
Opportunity for Improvement (to comply)	Complying with fraction of the conditions	OFI	<b>1</b>	<b>1.39%</b>
Non-Compliance	Not Complying to any of the conditions	NC	<b>7</b>	<b>9.72%</b>
Not Applicable	Conditions that are not applicable at the time of inspection	N/A	<b>28</b>	<b>38.89%</b>
<b>Total aspects EMPr and EIA conditions</b>			<b>72</b>	<b>100%</b>

## **8. CONCLUSION**

The site was found to be in a satisfactory condition on the day of the audit on 14 July 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 15<sup>th</sup> of August 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: Attendance register for the audit team 13 & 14 July 2023
- 9 B Appendix B: Attendance register for the trained members on 14 July 2023.
- 9 C Appendix C: Incidence Report for Ablution mis-incidence.
- 9 D Appendix D: Appendix E: Curriculum Vitae

