



Ecological & Environmental Specialists



MONTHLY ENVIRONMENTAL COMPLIANCE AUDIT REPORT for the PROPOSED ESTABLISHMENT OF THE Pongola Battery Energy Storage System, within the jurisdiction of the Uphongolo Local Municipality (KwaZulu-Natal)

December 2023

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DECLARATION

I, Rofhiwa Mukhudi declare that:

- I act as the independent ECO in this project;
- I will perform the work relating to the project objectively, even if this results in views and findings that are not favourable to the proponent;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the ECO work relevant to this project, including knowledge of the Act (NEMA), regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations, and all other applicable legislation.
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken concerning the application by the competent authority; and the objectivity of any report, plan, or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this report are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of Section 24F of the Act.



Rofhiwa Mukhudi

Pongola BESS ECO

SJM Ecological & Environmental Specialists

December 2023

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1. PURPOSE

SJM Ecological & Environmental Specialists as an independent environmental consultant has been appointed by Eskom Holdings SOC Limited to carry out the environmental monitoring & Auditing for the construction of a Battery Energy Storage System (BESS) at Pongola within the Uphongola Local Municipality (KwaZulu-Natal Province)

Eskom Holdings SOC Limited has identified distributed storage as an alternative to support renewable energy expansion in South Africa. Electricity generation from renewable sources is limited by the intermittency and variability of wind and solar resources, i.e. when wind blows and sun shines. Energy storage allows for the storing of electricity for later use even when the renewable resource is unavailable. The process involves the conversion of electrical energy into another form of energy such as chemical or kinetic energy, store it temporarily and then converted back to electrical energy, therefore giving the utility considerable flexibility and control.

The Distribution Battery Energy Storage project will directly contribute towards the following three (3) Eskom's strategic objectives:

- Ensure reliable supply of electricity to all South Africans;
- Securing adequate future electricity supply at the optimal cost of renewable energy for South Africa; and
- Directly and indirectly supporting the socio-economic development objectives of South Africa.

Eskom will be faced with massive loan recalls and contract penalties if this project does not go-ahead. The World Bank and co-financiers approved distributed battery energy storage and Solar PV as an alternative to support renewable energy expansion in South Africa and to replace the terminated Kiwano CSP 100MW project. The Kiwano CSP (Concentrating Solar Power) plant project has been deemed too expensive to consider at this stage.

This progress report is for construction phase of the BESS for the Month of December 2023.

1.1. EXPERTISE OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

The Environmental regulation - Government Notice 982 of 2014, specifically requires practitioners involved in the EIA process to list their qualifications and expertise in the report. An Environmental Assessment Practitioner (ECO) appointed in terms of Regulation 12 (1) or 12 (2) of Government Notice 982 of 2014 is required to:

- Be independent
- Have expertise in conducting environmental impact assessments including knowledge of the Act, these regulations and any guidelines that have relevance to the proposed activity
- Perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- Comply with the Act, these regulations and all other applicable legislation
- Take into account, to the extent possible, the matters listed in Regulation 18 of Government Notice 982 of 2014 when preparing the application and
- Disclose to the applicant and the competent authority all material information in the possession of the ECO that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority in terms of these regulations or the objectivity of any report, plan or document to be prepared by the EAP in terms of these regulations for submission to the competent authority.
- The table below lists the ECO involved in this project.

1.2. Details of the ECO

| | |
|------------------|--|
| Name | Mukhudi Rofhiwa |
| Company | SJM ECOLOGICAL & ENVIRONMENTAL SPECIALISTS PTY LTD |
| Physical Address | Unit 56 Seoul43 Mulder Street, Centurion 0157 |
| Postal Address | Unit 56 Seoul43 Mulder Street, Centurion 0157 |
| Telephone Number | 012 681 4037 |
| Cell | 072 655 1332 |
| E-mail | mukhudiholdings@gmail.com |
| Role in Project | Environmental Control Officer |

Mukhudi Rofhiwa is a qualified and experienced Environmental Control officer with 10 years of experience on various environmental monitoring projects that include construction projects.

1.3. Detail of Client

| | |
|------------------|--|
| Name | Whitney Gabriel (Representative of Proponent) |
| Company | Eskom Holdings SOC Limited |
| Physical Address | Eskom Holdings SOC Limited I KZN Operations Un. |
| Telephone number | +27 31 710 5159 |
| Cell | +27 81 371 3317 |
| Email | GabrieWD@eskom.co.za |
| Role in Project | Eskom environmental Officer |

2. PROJECT DESCRIPTION

2.1. Environmental Monitoring

SJM Ecological & Environmental Specialists as an independent environmental consultant has been appointed by Eskom Holdings SOC Limited to carry out the environmental monitoring & Auditing for the construction of a Battery Energy Storage System (BESS) at Pongola within the Uphongola Local Municipality (KwaZulu-Natal Province)

2.2. Persons Responsible for the Implementation of the EMPR

The following persons will be responsible for the implementation of the EA & EMPR:

- Eskom Project Manager (PM)
- Environmental Control Officer (ECO)
- Main Contractor (C)
- Sub-contractors

2.3 LEGISLATIVE REQUIREMENTS

The BESS development project will be guided and governed by Legislative Acts and guidelines such as those shown in table 1 below.

Table 1: Environmental statutory requirements

| ACT | ACT NO | REMARKS |
|---|-------------|---|
| Atmospheric pollution prevention Act | 45 of 1965 | Controls all forms of air pollution. -Smoke control zones -Dust control -Air pollution from waste |
| National Forest Act | 84 of 1998 | Provides measures for the protection of certain forests and trees |
| Advertising on roads and ribbon development Act | 21 of | Prohibits the depositing or leaving of certain articles or materials near certain roads -Structures near roads -Waste near roads |
| Conservation of Agricultural Resources Act | 43 of 1983 | Controls the utilisation and protection of wetlands, soil conservation, control and prevention of veld fires, control of weeds and invasive plants. |
| Agricultural Pests Act | 36 of 1983 | Provides control to prevent and combat agricultural pests, including importation of exotic plants and animals |
| National Veld and Forest Fire Act | 101 of 1998 | Deals with the establishment of fire protection Associations, responsibilities for the preparation and maintenance of fire breaks |
| National Environmental Management Act | 107 of 1998 | Provides for cooperative environmental governance by establishing principles for decision making on matters affecting the environment. |
| Environment Conservation Act | 73 of 1989 | Provides control for the effective protection and utilisation of the environment, littering, waste disposal, noise and various other activities, which may have a detrimental effect on the environment -Provides for waste management |

| ACT | ACT NO | REMARKS |
|------------------------------------|------------|---|
| Fencing Act | 31 of 1963 | Prohibits damage to a property owners gates and fences Prohibits climbing or crawling over or through fences without permission |
| Hazardous Substances Act | 15 of 1973 | Sale of group I, II, III and letting, use, operation, application and installation of group III hazardous substances. Transportation of hazardous substances. |
| Health Act | 63 of 1977 | Control of health aspects of waste disposal and water treatment Regulates, rubbish, sewage |
| National Roads Act | 54 of 1971 | Prohibits disposal of waste near National roads |
| Occupational Health and Safety Act | 85 of 1993 | Protects workers from exposure to hazardous substances and working conditions |
| National Heritage Resources Act | 25 of 1999 | Controls for the protection of natural and historical resources. |
| National Water Act | 36 of 1998 | Provides for all aspects relating to pollution of surface |

2.3. Areas of Inspection

- Access to site (Access and control)
- Ablution Facilities (chemical toilets)
- Use of PPE
- Waste management
- House Keeping
- Spills of oil, fuel and cement.
- Soil and ground water pollution
- Vegetation management
- Fauna (killing and hunting of animals is strictly prohibited on site)
- Soil erosion control
- Critical Biodiversity Area

2.4. December 2023 site status

2.5. Outstanding matters

- No outstanding matters were raised during this reporting period.

2.6. Daily Pre- warnings and NCR

- No Warning were issued during this reporting period

2.7. Urgent Matters

- There were no urgent matters in this reporting period.

3. ENVIRONMENTAL PARAMETERS

3.1. Oil drip trays on site

Oil drip trays are being utilized on site to avoid soil and ground water contamination. The contractor must apply this in all stationary plants that have oil leaking problems.



3.2. Concrete residual on site

The contractor must remove concrete residual on site before the change the soil condition behind the OM building as construction vehicles drive over it.



3.3. Waste management on site

The picture below shows the site skip bin overflowing with waste, the contractor must make sure this skip is emptied with immediate effect.



15 Dec 2023 07:20:25
Zululand District Municipality
KwaZulu-Natal

3.4. Alien invasive species management

Management of alien invasive plant species must be implemented continuously on the topsoil stockpiles stored on site since the topsoil is still going to be used during rehabilitation phase of the project. The picture below doesn't show signs of alien invasive management.



3.5. Mobile toilets on sites

Mobile toilets are now reduced to accommodate the number of people who are currently on site. The toilets are still being serviced weekly and kept clean.



15 Dec 2023 07:20:43
Zululand District Municipality
KwaZulu-Natal

3.8 Complaints

No Environmental complaints were recorded during the month December 2023.

3.9 Rehabilitation

The project has not reached the rehabilitation phase.

3.10 Incidents

- No Incidents were reported in this reporting period.

3.11 Compliance summary

For the purposes of this audit, the description of the **compliance performance** methodology is briefly explained as follows:

- **Compliant** - Means that the Contractor has fully complied with all EA and EMPr requirements (and specifications and to the satisfaction of the ECO).
- **Partial compliance** - Is applicable in areas where the Contractor has partially complied and is aware but has not fully complied with the EA and EMPr conditions.
- **Non-compliance** - Will imply that the Contractor is not complying with the requirements of the EA and EMPr at all, and is not making any efforts/no evidence to remediate the situation.
- **N/A** – Not Applicable, when the activity has not commenced or could not be determined by the auditors at the time the audit was undertaken.

The following colour coding was used to indicate areas of Compliant, Partial Compliance, Non-compliance, and Not Applicable:

| COMPLIANCE POINTS ANALYSIS | | | |
|-------------------------------|----------------------------|-------------------------------------|------------|
| 0 | 1 | 2 | |
| Not complying | Partially complying | Compliant | |
| STATISTICS OF SITE COMPLIANCE | | | |
| Audit date: | Total points of the report | Compliance points of the contractor | Percentage |
| 15 December 2023 | 220 | 212 | 96% |

The contractors still show substantial improvement in terms of compliance to the conditions of the EA and the EMPr, The December 2023 audit score has dropped by **1%** from **97%** in October to **96%**. The Emp'r, EA, licenses and other environmental documents are present onsite and the contractor familiarize himself with them.

4 Conclusion

The contractor and all the sub-contractor must comply with all the legal documents on site to avoid any legal contraventions and follow their working procedures on their method statement.

5 Recommendations during construction phase

- It is the responsibility of the Project Manager and Contractor to ensure compliance with all the environmental specifications in the EA, EMP'r document as well as the relevant legislation.
- All the waste generated should be taken to the registered landfill and a proof of such disposal must be submitted to the ECO.
- Induction and training should be conducted every morning before commencing activities on site.
- All the protected trees removed should be recorded.
- All the mobile chemical toilets should be serviced twice a week.
- All the supervisors should conduct daily toolbox talk every morning.
- Site is to be cleared and rehabilitated back to its original state.
- Limit damage to existing access roads; i.e.
 - Minimise damage to environment due to excavation and rehabilitation of access roads; and
 - Minimise loss of topsoil and enhancement of erosion.
 - When required, speed limits shall be indicated and speed control measures applied on the road.

