



ECC-43-314-REP-13-D

ENVIRONMENTAL COMPLIANCE REPORT FOR THE OMBEPO 10MW AC WIND FARM WITH AMENDMENTS

!KARAS REGION, NAMIBIA

RENEWAL ENVIRONMENTAL CLEARANCE CERTIFICATE



NOVEMBER 2020

TITLE AND APPROVAL PAGE

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DEFINITIONS AND ABBREVIATIONS

| | |
|--------|---|
| DEA | Department of Environmental Affairs |
| ECB | Electric Control Board |
| ECC | Environmental Compliance Consultancy |
| ECO | Environmental Control Officer |
| EIA | Environmental Impact Assessment |
| EMA | Environmental Management Act |
| EMF | Electromotive Force |
| EMP | Environmental Management Plan |
| ICNIRP | Commission of Non-Ionizing Radiation Protection |
| IEEE | Institute of Electrical and Electronics Engineers |
| MEFT | Ministry of Environment forestry, and Tourism |
| MSDS | Material Safety Data Sheets |
| LTC | Lüderitz Town Council |
| PV | Photovoltaics |

1 INTRODUCTION

1.1 PROJECT INTRODUCTION

Since 2010, InnoSun Energy Holding (Pty) Ltd, a Namibian registered company, has been developing a portfolio of utility-scale solar photovoltaic (PV) parks and wind farms to be connected to the Namibian electricity grid. Several sites have been identified, secured, and are currently operating. InnoSun Energy Holding (Pty) Ltd has created and owns special purpose companies for the development of each of the identified sites in different parts of Namibia.

Ombepo Energy (Pty) Ltd (herein referred to as the proponent), which is 95% owned by InnoSun Energy Holding (Pty) Ltd and 5% by Lüderitz Town Council (LTC) operates a 10MW wind farm on a Seal site within the Lüderitz Townlands, !Karas Region.

The wind farm constructed mid - 2016 comprises of three (3) turbines of 2MW each with 80 m hub height. The project is vital to the energy security, sustainable and renewable green energy development for Namibia with potential to produce the entire electricity consumption for the Town of Lüderitz which stands at approximately 7MW, when the wind turbines are spinning at full speed.

An Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) reports compiled by Risk-Based Solutions cc were submitted in August 2015, in order to support the application for an environmental clearance certificate for a 10MW wind Farm. An environmental clearance certificate for a 10MW wind farm valid for a period of three (3) years was issued by the Environmental Commissioner in October 2015 (APPENDIX B).

In terms of the Environmental Management Act. No. 7 of 2007 a renewal application for the project's environmental compliance certificate is required. As part of this application an environmental compliance review of the works undertaken on site and compliance with the Environmental Management Plan (EMP) is to be submitted to the Ministry of Environment, Forestry and Tourism (MEFT)

However, as part of the project new refinancing model and shareholding restructuring, the proponent proposes the wind farm to be divided into two (2) separate projects comprising 6MW and 4MW owned by Ombepo Energy (Pty) Ltd and Ombepo Energy Two (Pty) Ltd, respectively. These two projects will each require separate Generation License and ECC

The project is fully constructed. No new impacts are expected in the operation of the infrastructure as this is a passive system. The overall environmental risk of the passive operating site is extremely low. Renewal of this environmental clearance certificate should be granted, and the requirement for ongoing renewals for this constructed site should be reviewed. Due to the fact that construction is complete and there are no new impacts from the operations of the wind farm, and that there is no change from year to year the requirement to renew the environmental clearance certificate seems futile.

DISCLAIMER

Due to the low risk of a passive wind farm operating site, this report has been compiled by means of a desktop study, including the revision of relevant reports and all records made available by the proponent. ECC did not conduct any field verification and therefore rely on the proponent's integrity to uphold conditions specified in the EMP.

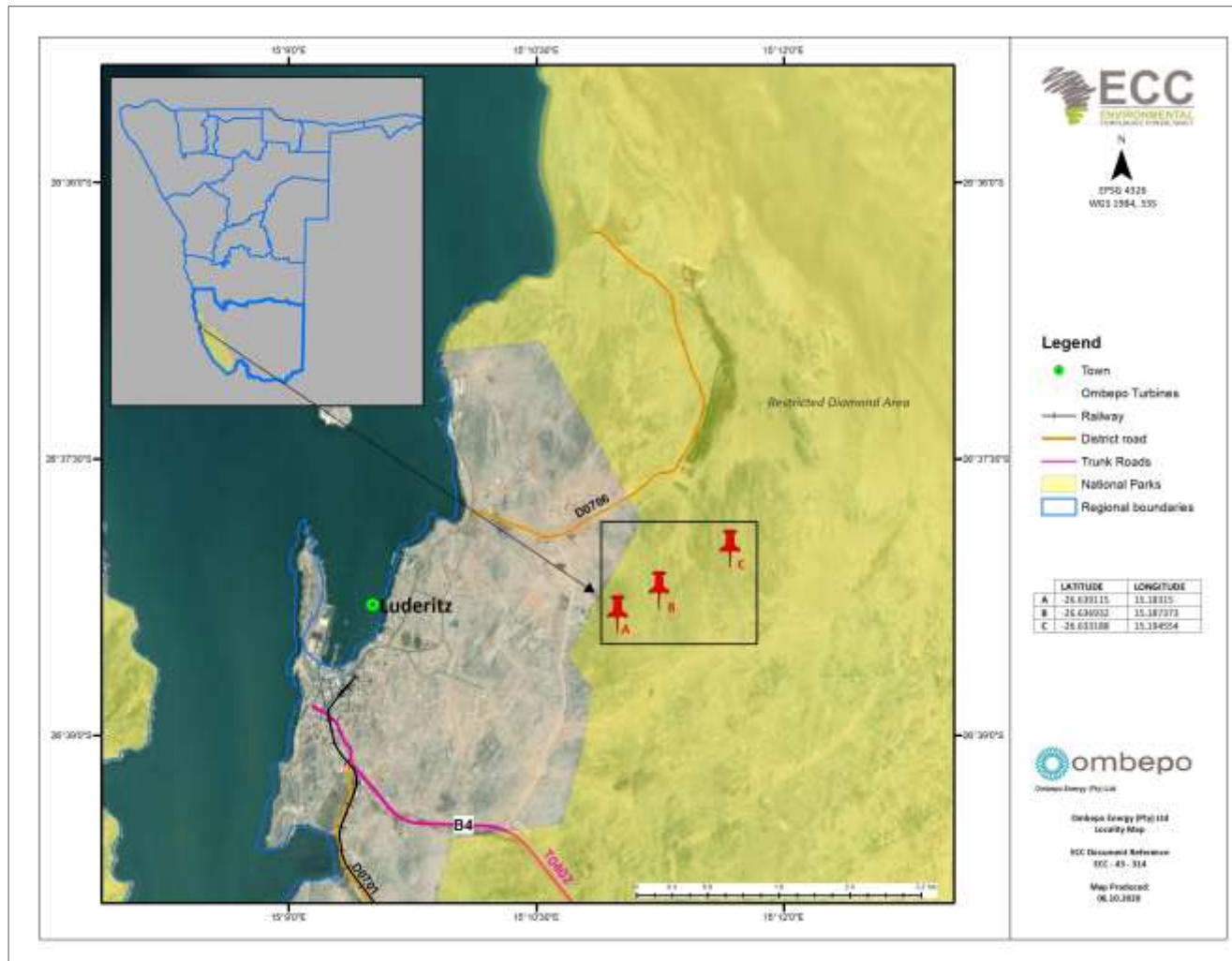


FIGURE 1 - SATELLITE IMAGE INDICATING THE LOCATION OF OMBEPO WIND FARM

1.2 PURPOSE OF REPORT

Environmental Compliance Consultancy (ECC) have been appointed by the proponent to apply for their renewal of an environmental clearance certificate with amendments for the Ombepo wind farm project. The purpose of this environmental compliance report is to document the findings of an environmental compliance audit covering the period from October 2015 to October 2018 which accompanies the renewal application.

1.3 PROPOSED RENEWAL AND ACTIVITIES

The proponent proposes the following changes that should be considered with this environmental clearance certificate renewal.

- Separating the current 10MW ECC provision into two (2) separate 6MW and 4MW Wind Farms i.e. Ombepo Energy (Pty) Ltd and Ombepo Energy Two (Pty) Ltd

1.4 ENVIRONMENTAL CONSULTANCY

Environmental Compliance Consultancy (ECC), a Namibian consultancy registration number 2013/11401, has prepared this report on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients in Namibia in the public and private sector. ECC is independent to the proponent and has no vested or financial interest in the proposed project, except for fair remuneration for professional services rendered.

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2 BACKGROUND OF THE PROJECT

Ombepo Energy (Pty) Ltd is a Namibian registered company which believes in a renewable power generation in Namibia. The company has developed a 10MW wind farm generation facility within the Lüderitz townlands. The project is important to the energy security, sustainable and renewable green energy development for Namibia, which will significantly reduce the national carbon footprint, and create a market for carbon credits and trading in the country. Ombepo Energy (Pty) Ltd was granted a Generation License No. G-149-010615-25 by the Electricity Control Board (ECB) within the provisions of the Electricity Act, 2007, (Act No. 4 of 2007).

The Ombepo wind energy project falls within the schedule of listed activities that are subject to a full Environmental Assessment (EA) covering Scoping, EIA and EMP in line with the national environmental assessment process. The EMP is the binding document to which a clearance certificate is granted to a proponent to carry out a proposed activity. This document is subjected to periodically auditing as the project activities transition from the earliest construction stage to the operation stage. The EMP is audited in order to monitor the progress of the project and ensure that all measures stipulated in the document are met and effectively adhered to as required by the Department of Environmental Affairs (DEA). In an event where the project activities alter, the EMP is required to be amended accordingly.

The project was granted an environmental approval valid for a period of three (3) years in October 2015 (attached).

The following is the summary of the activities associated with the preconstruction, construction, operational and rehabilitation stages of the wind farm that could potentially have an impact on man and the environment:

Pre-construction and construction Phases

- Access roads preparation;
- Site/Turbine Locations levelling and preparation;
- Access roads upgrading/construction;
- Foundation preparation;
- Turbines Installations and Mounting;
- Underground Trenching/Overhead Cable;
- Electrical Equipment Installation;
- Testing;
- Fencing around each Turbine;

Operational Phase

- Commissioning – wind energy generation and maintenance (for 25 years);

Decommissioning and closure Phase

- Decommissioning (After 25 Years) / Upgrade of Facility.

3 ENVIRONMENTAL COMPLIANCE AUDIT

3.1 SITE INSPECTION

Due to the low risk of a passive operating solar plant, Environmental Compliance Consultancy (ECC) has not undertaken a site inspection for this project. This report was conducted through a series of desktop assessments, revision of relevant reports, and verification of owner documentation, and all records made available to ECC. The findings of this inspection are included in 1 - 3.

3.2 ANNUAL COMPLIANCE AUDIT

During the reporting period (2015-2018) the project has transitioned from the pre-construction phase, construction phase to the operation phase. The project activities have been carried out in compliance with the approved EMP granted in terms of the Environmental Management Act, No. 7 of 2007.

In addition to the compliance audit, the EMP will be revised to identify gaps in order to recommend additional best practice measures that were not captured in the previous EMP.

3.3 COMPLIANCE AUDIT FINDINGS

The section outlines the findings of the environmental audit completed for the project. It addresses obligations in terms of the key acts that govern the activities on the site, the commitments made in the EMP, and presents the findings and recommended corrective actions where applicable (TABLE 1 - 3).

TABLE 1 – PRE-CONSTRUCTION AND CONSTRUCTION PHASE EMP AUDIT

| ACTIVITY/PROCESS | ASPECT | IMPACT | PRE-CONSTARCTION AND CONSTRUCTION PHASE MANAGEMENT ACTIONS | COMPLIANCE | COMMENTS OR RECOMMENDATIONS |
|-------------------|-------------------------------|--|---|-------------|--|
| 1) All activities | – Management and Monitoring | – Social and Environmental Performance | <ul style="list-style-type: none"> – Ensure that all aspects related to the EMP are implemented during the preconstruction and construction phase. – Hold regular site meetings/inspections. Make provision in the minutes of the meetings for reporting on all aspects of the EMP related to the construction of the wind farm. | – Compliant | <ul style="list-style-type: none"> – All activities were undertaken in accordance to the EMP from the preconstruction to the construction phase. – Site meeting and inspections have been conducted regularly. |
| 2) All activities | – Consultation and Disclosure | – Social and Environmental Performance | <ul style="list-style-type: none"> – Maintain open and direct lines of communication between the Employer (Ombepo Energy (Pty) Ltd, Contractor and I&APs with regards to environmental matters. – Consult with project affected communities in a structured and culturally appropriate manner. Consultation should be “free” (of external manipulation, interference or coercion, and intimidation), “prior” (timely disclosure of information) and “informed” (relevant, understandable and accessible information). – Adequately incorporate project affected communities’ concerns. | – Compliant | – No evidence of non – compliance. |
| 3) All activities | – Grievance Mechanism | – Social and Environmental Performance | <ul style="list-style-type: none"> – Ensure a mechanism for receiving and resolving any concerns and grievances related to the project’s social and environmental performance during the construction phase. – Address concerns promptly and transparently and in a | – Compliant | – No evidence of non – compliance. |

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| | | | culturally appropriate manner. | | |
| 4) All activities | <ul style="list-style-type: none"> Training including awareness and inductions | <ul style="list-style-type: none"> Social and Environmental Performance | <ul style="list-style-type: none"> Train employees and contractors in matters related to the project's social and environmental performance, Namibia's regulatory requirements. Ensure adequate environmental awareness training for all senior site personnel. Give environmental induction presentations to all site personnel prior to work commencement. | <ul style="list-style-type: none"> Compliant | <ul style="list-style-type: none"> Employees and contractors have been trained with matters regarding the project's social and environmental performance as well as Namibia's regulatory requirements. All site personnel have been provided with environmental awareness and training. |

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| <p>5) All activities</p> | <ul style="list-style-type: none"> Labour and Working Conditions | <ul style="list-style-type: none"> Social and Environmental Performance | <ul style="list-style-type: none"> Establish, maintain and improve the worker-management relationship. Base the employment relationship on equal opportunity and fair treatment and no discrimination to be allowed. Comply with Namibia’s labour and employment laws and prevent unacceptable forms of labour, i.e. harmful child and forced labour. Promote safe and healthy working conditions and the protection and promotion of worker health. Prepare a Human Resources Policy and document and communicate the Working Conditions and Terms of Employment. Respect Collective Agreements and the right of workers to organize and bargain collectively. Prepare a Retrenchment Plan. Implement a Grievance Mechanism. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non – compliance. |
| <p>6) All activities</p> | <ul style="list-style-type: none"> Employment and procurement opportunities | <ul style="list-style-type: none"> Socio-economic | <ul style="list-style-type: none"> Ensure local recruitment (of registered contractors or qualified and certified personnel, registered and certified with the appropriate statutory authority as per Electricity Control Board (ECB) licensee duty) and procurement to maximize benefit to region. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non – compliance. |
| <p>7) All activities</p> | <ul style="list-style-type: none"> Occupational Health and Safety | <ul style="list-style-type: none"> Social and Environmental Performance | <ul style="list-style-type: none"> Prepare and submit an Emergency Preparedness and Response Plan. Adhere to all Namibian Health and Safety Regulations. Occupational Health and Safety Training to be provided to all employees. Ensure that qualified first aid can be provided at all times. Provide and ensure the active use of Personal Protective Equipment (PPE). | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non – compliance. |

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| 8) All activities | – Community Health and Safety | – Social and Environmental Performance | – Prevent communicable disease (e.g sexually transmitted diseases (STDs) such as HIV/AIDS transmission): provide surveillance and active screening and treatment of employees; prevent illness among employees in local communities (through health awareness and education initiatives); ensure ready access to medical treatment, confidentiality and appropriate care, particularly with respect to migrant workers; and promote immunization. | – Compliant | – No evidence of non – compliance. |
| 9) All activities | – Unauthorized public access | – Community Safety | – Use gates on the access road(s) and the entire wind farm site must be fenced off. – Wind farm should not be accessible to anyone from the public. – Notice or information boards relating public safety hazards and emergency contact details should be put up at the gate(s) and at the wind farm. – Create a viewpoint area, possibly including an information centre, for the public/tourists if required. | – Compliant | – No evidence of non – compliance. |
| 10) All activities | – Construction of wind farm | – Change in land use from “conservation” to “industrial”. | – Restrict construction activities to demarcated areas; all other areas will be regarded as “no go” zones in order to minimize the impact on the surrounding land; – Adhere to the regulations, rules, procedures, current and future regional and local land use plans. | – Compliant | – No evidence of non – compliance. |
| 11) Wind farm layout planning | – Wind farm layout | – Visual | – Minimize the presence of secondary structures: minimize number of access roads and bury intra-project power lines. – Adhere to the regulations, rules, procedures, current and future regional and local land use plans. | – Compliant | – No evidence of non – compliance. |

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| <p>12) Wind farm sitting and layout</p> | <p>– Electromagnetic interference (aviation radar and telecommunications)</p> | <p>– Community Health and Safety</p> | <p>– Aviation radar:</p> <ul style="list-style-type: none"> ○ Consider the designs of the components; ○ Investigate the use of radar-absorbent surface treatments (to minimize electrical disturbance); ○ Consider the geometric layout and location of the wind farm in relation to air traffic routes; ○ Consider radar design alterations, i.e. relocation of the affected radar, radar blanking of the affected area, or the use of alternative radar systems to cover the affected area. <p>– Telecommunication systems:</p> <ul style="list-style-type: none"> ○ Avoid direct physical interference of point-to-point communication systems; ○ Modify the existing aerial; ○ Install a directional antenna; ○ Boost the signal by installing an amplifier. <p>– Television broadcasts:</p> <ul style="list-style-type: none"> ○ Site the wind farm away from the line-of-sight of the broadcaster transmitter; ○ Make use of more non-metallic material in the construction of the wind farm | <p>– Compliant</p> | <p>– All actions and mitigation measures have been adhered to as practically possible.</p> <p>– No evidence of non – compliance.</p> |
| <p>Wind farm sitting and layout (Cont.)</p> | <p>– Configuration of wind farm</p> | <p>– Species (birds and bats) injury, disturbance (and potential alteration of behaviour), or mortality.</p> | <p>– Wind farm turbines to be grouped (rather than spreading widely).</p> | <p>– Compliant</p> | <p>– No evidence of non – compliance.</p> |
| | <p>– Aircraft navigation safety (potential collision or the alteration of flight</p> | <p>– Community Safety</p> | <p>– Consult the air traffic authorities so that the installation of the wind farm will conform to air traffic safety regulations regarding wind farm if any regulations exist.</p> | <p>– Compliant</p> | <p>– No evidence of non – compliance.</p> |

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| | paths) | | | | |
| 14) All activities | <ul style="list-style-type: none"> - Construction camp - I assumed that it will only be a (tented) temporary camp and that no building etc. will be constructed. | <ul style="list-style-type: none"> - Disturbance of fauna and flora and habitat alteration | <ul style="list-style-type: none"> - The planning and design to ensure minimum impact to the environment. - No trees or natural vegetation may be removed for the making of fires. - No animal may be injured, fed, trapped, hunted or harmed in any way. - No off-road driving will be allowed. - No trespassing on adjoining properties is allowed and no livestock, game or vegetation are to be interfered with. | <p>- Compliant</p> | <ul style="list-style-type: none"> - All actions and mitigation measures have been adhered to as practically possible. |
| All activities (14) Cont. | | <ul style="list-style-type: none"> - Pollution of biophysical environment (air, soil and water) | <ul style="list-style-type: none"> - No fires will be allowed, unless a specific area has been identified and set aside by the ER for the cooking of food. - Vehicle maintenance/servicing/washing not to be allowed anywhere on site/at the camp. - Portable toilets to be provided and used at the camp. - Sanitary wastewater to be released into a French drain system. - Use bio-degradable detergents on site. - Enforce proper waste (hazardous and non-hazardous) management practices (as per Waste Management Plan) - waste and litter to be disposed of in scavenger and weatherproof bins and the refuse to be collected by the contractor and disposed of at least once a week. | <p>- Compliant</p> | <ul style="list-style-type: none"> - All actions and mitigation measures have been adhered to as practically possible in accordance with the EMP. |

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| | | <ul style="list-style-type: none"> - Occupational Health and Safety | <ul style="list-style-type: none"> - No fires will be allowed, unless a specific area has been identified and set aside by the ER for the cooking of food. - Ensure that employees are trained in the use of appropriate firefighting equipment and ensure that such equipment is on hand at all times. - Comply with all safety regulations regarding electricity supply. - Supply potable water for human consumption and other domestic uses; conduct chemical testing of water samples on a monthly basis (if applicable). - Make suitable arrangements, as far as practicable, for the maintenance of health, the prevention and overcoming of outbreaks of disease and of adequate first aid services. - Ensure that security arrangements are in place. | <p>- Compliant</p> | <ul style="list-style-type: none"> - All actions and mitigation measures have been adhered to as practically possible in accordance with the EMP. |
| <p>15) Site preparation</p> | <ul style="list-style-type: none"> - Clearing of areas for construction | <ul style="list-style-type: none"> - Disturbance of fauna and flora and habitat alteration | <ul style="list-style-type: none"> - Restrict construction activities to previously demarcated areas; all other areas will be regarded as "no go" zones in order to minimize the impact on the surrounding land. - Minimize the removal of native plant species; no vegetation may be removed/damaged without direct instruction. - No off-road driving will be allowed. - No animal may be injured, fed, trapped, hunted or harmed in any way. | <p>- Compliant</p> | <ul style="list-style-type: none"> - No evidence of non-compliance. |

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| | | – Soil erosion | <ul style="list-style-type: none"> – Sediment mobilization and transport: reduce or prevent soil erosion (schedule activities to avoid heavy rainfall periods; contour and minimize length and steepness of slopes; mulching to stabilize exposed areas; re-vegetate areas promptly; and design channels and ditches for post-construction flow). – Structural (slope) stability: provide effective short-term measures for slope stabilization, sediment and subsidence control until long-term measures (during operations) can be implemented; provide adequate drainage systems to minimize and control infiltration. | – Compliant | – No evidence of non-compliance. |
| | | – Possible loss of the seed bank in the topsoil | – The upper layer of soil (10-20 cm), where alluvial, to be stripped and stockpiled separately (1-2 m high piles to allow for proper aeration). Install drainage to protect the topsoil pile from (water) erosion and cover it to protect it from (wind) erosion. | | |
| 16) Infrastructure construction | – Increased traffic, presence and movement of machinery, and the establishment of soil stockpiles | – Air quality (dust or Particulate Matter (PM) pollution) | <ul style="list-style-type: none"> – Minimize the area in which the movement of construction machines will take place to reduce the effects of dust pollution. – Minimize dust from material handling sources (e.g. conveyors and bins) by using covers and/or control equipment (e.g. water suppression). – Minimize dust from open area sources, including storage piles, by using control measures (install enclosures and covers, and increase the moisture content). – Avoid the excavation, handling and transport of erodible materials under high wind conditions or when a visible dust plume is present. | – Compliant | – All actions and mitigation measures have been adhered to as practically possible in accordance with the EMP. |

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| Infrastructure construction (16) cont. | <ul style="list-style-type: none"> Increased traffic/vehicle movement | <ul style="list-style-type: none"> Air quality (dust or Particulate Matter (PM) pollution) | <ul style="list-style-type: none"> Maintain the road surface to preserve surface characteristics (e.g. texture and roughness). Use dust control/suppression methods, such as applying water or non-toxic chemicals to minimize dust (oil and oil by-products is not a recommended measure to control road dust). | <p>– Compliant</p> | <ul style="list-style-type: none"> All actions and mitigation measures have been adhered to as practically possible in accordance with the EMP. |
| | <ul style="list-style-type: none"> Increased traffic, presence and movement of machinery (exhaust from diesel engines) | <ul style="list-style-type: none"> Air quality & Occupational and Community Health and Safety | <ul style="list-style-type: none"> Fleet owners/operators to implement manufacturer recommended engine maintenance programs (to control vehicle emissions: Carbon Monoxide (CO), Nitrogen Oxide (NOx), Sulphur Dioxide (SO₂), Particulate Matter (PM) and Volatile Organic Compounds (VOCs)). | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non-compliance. |
| | <ul style="list-style-type: none"> Increased traffic, movement of machinery | <ul style="list-style-type: none"> Occupational and Community Safety | <ul style="list-style-type: none"> Adopt best transport safety practices by implementing the following measures: emphasize safety aspects among drivers; improve driving skills and require licensing of drivers; adopt limits for trip duration; avoid dangerous routes and times of day; and use speed control devices. Regularly maintain vehicles and use manufacturer approved parts. Use locally sourced materials (where possible) to minimize transport distances. Employ safe traffic control measures, including the use of traffic and safety warning signs and flag persons to warn of dangerous conditions. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non-compliance. |

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| <p>17) Assembly of wind farm components</p> | <ul style="list-style-type: none"> - Working at heights | <ul style="list-style-type: none"> - Occupational Safety | <ul style="list-style-type: none"> - Test integrity of structure(s) before work commences. - Implement a fall protection program (including training in climbing techniques and the use of fall protection measures; inspection, maintenance, and replacement of fall protection equipment; and rescue of fall-arrested workers). - Establish criteria for use of 100% fall protection (the system should be fitting for the wind farm structure and movements (ascent, descent, and moving from point to point)). - Install fixtures on tower components to facilitate the use of fall protection systems. - Provide an adequate work-positioning device system to workers (with connectors on positioning systems compatible with the wind farm components to which they are attached). - Ensure proper rating and maintenance of hoisting equipment and training of hoist operators. - Use safety belts of not less than 15.8 mm two in one nylon or material of equivalent strength; replace rope safety belts before signs of aging or fraying of fibres become evident. - Workers to use a second (backup) safety strap when operating power tools at height. - Remove signs/other obstructions from poles/structures before work commences. - Use approved tool bags for lowering/raising tools/materials to workers on elevated structures. - Avoid conducting tower installation during poor weather conditions (especially where there is a risk lightning (strikes) | <p>- Compliant</p> | <ul style="list-style-type: none"> - No evidence of non-compliance. |
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| <p>18) Power transmission and distribution</p> | <ul style="list-style-type: none"> Underground cables (Wind farm to transformer station; transmission lines) | <ul style="list-style-type: none"> Habitat alteration & Occupational and Community Health | <ul style="list-style-type: none"> Restrict excavation activities to previously demarcated areas; all other areas will be regarded as "no go" zones in order to minimize the impact on the surrounding land. Ensure that all excavations are properly performed and in accordance with Occupational, Health and Safety (OH&S) regulations. Restrict trench excavation to a pace that matches cable installation and backfill. No more than 300 m of open trench to exist at any time. | <p style="background-color: green; color: white; text-align: center;">Compliant</p> | |
| <p>19) Power transmission and distribution</p> | <ul style="list-style-type: none"> Habitat alteration | <ul style="list-style-type: none"> Bird and bat collisions and electrocutions | <ul style="list-style-type: none"> Align transmission corridors to avoid critical habitats. Maintain 1.5 m spacing between or cover energized components and grounded hardware. Consider the installation of underground transmission and distribution lines (sensitive areas). Install visibility enhancement object (marker balls, bird deterrents, or diverters). | <p style="background-color: green; color: white; text-align: center;">Compliant</p> | <ul style="list-style-type: none"> All actions and mitigation measures have been adhered to as practically possible in accordance with the EMP. |
| <p>20) Power transmission and distribution</p> | <ul style="list-style-type: none"> Electric Magnetic and Fields (EMF) | <ul style="list-style-type: none"> Occupational and Community Health | <ul style="list-style-type: none"> Ensure that average and peak exposure levels remain below the reference levels developed by the Commission of Non-Ionizing Radiation Protection (ICNIRP). Reduce the EMF (from power lines, substations, or transformers) by applying engineering techniques (if levels are expected or confirmed above the recommended levels): shielding with specific metal alloys; burying transmission lines; increasing the height of the transmission towers; or modifications to size, spacing and configuration of conductors. | <p style="background-color: green; color: white; text-align: center;">Compliant</p> | <ul style="list-style-type: none"> No evidence of non-compliance. |

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| <p>21) Power transmission and distribution</p> | <ul style="list-style-type: none"> – Hazardous materials management | <ul style="list-style-type: none"> – Pollution of biophysical environment (soil and water) | <ul style="list-style-type: none"> – Minimize the use of SF6 (greenhouse gas). – The use of PCBs has largely been discontinued (see IFC EHS Guidelines for Electric Power Transmission and Distribution for the management of PCBs should it be used). – All activities, Hazardous materials management. | <p>– Compliant</p> | <ul style="list-style-type: none"> – No evidence of non-compliance. |
| <p>22) Power transmission and distribution</p> | <ul style="list-style-type: none"> – Live power lines | <ul style="list-style-type: none"> – Occupational Health and Safety | <ul style="list-style-type: none"> – Allow only trained/certified employees to install, maintain, and repair electrical equipment. – Deactivate and properly ground live power distribution lines before work is conducted on, or close to, distribution lines. – Ensure that live-wire work is conducted by qualified workers and in accordance to the specific safety and insulation standards. – Do not approach an exposed energized or conductive part (even if the worker is trained) unless: the person is properly insulated from the energized part (e.g. gloves) and vice versa; the worker is properly isolated and insulated from any other conductive part (live-line work). – Implement a Health and Safety Plan, detailing specific training, safety measures, personal safety devices and other precautions, where maintenance and operation is required within minimum setback distances. | <p>– Compliant</p> | <ul style="list-style-type: none"> – No evidence of non-compliance. |
| <p>23) Power transmission and distribution</p> | <ul style="list-style-type: none"> – Working at heights on poles/structures | <ul style="list-style-type: none"> – Occupational Health and Safety | <ul style="list-style-type: none"> – See Assembly of wind farm components, working at heights. | <p>– Compliant</p> | <ul style="list-style-type: none"> – No evidence of non-compliance. |

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| <p>24) Power transmission and distribution</p> | <ul style="list-style-type: none"> – EMF | <ul style="list-style-type: none"> – Occupational Health and Safety | <ul style="list-style-type: none"> – Prepare and implement an EMF Safety Program containing information on: potential exposure levels in the workplace and the use of personal monitors; training of workers to identify EMF levels and hazards; the identification and establishment of safety zones (areas acceptable for public exposure vs. those with expected elevated EMF levels and that only properly trained workers may access); action plans dealing with potential or confirmed exposure of levels that exceed those developed by the ICNIRP and Institute of Electrical and Electronics Engineers (IEEE). | <p>– Compliant</p> | <ul style="list-style-type: none"> – No evidence of non-compliance. |
| <p>25) Power transmission and distribution</p> | <ul style="list-style-type: none"> – Electrocutation | <ul style="list-style-type: none"> – Community Health and Safety | <ul style="list-style-type: none"> – Use signs, barriers, and education to prevent public contact with potentially dangerous equipment. – Ground conducting objects installed near power lines. | <p>– Compliant</p> | <ul style="list-style-type: none"> – No evidence of non-compliance. |
| <p>26) All activities</p> | <ul style="list-style-type: none"> – Water Management | <ul style="list-style-type: none"> – Resource use / depletion of natural resources | <ul style="list-style-type: none"> – Implement a water conservation program, promoting the continuous reduction in water consumption and achieving savings in water pumping, treatment and disposal costs, commensurate with the magnitude and cost of water use. | <p>– Compliant</p> | <ul style="list-style-type: none"> – All actions and mitigation measures have been adhered to as practically possible in accordance with the EMP. |

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| <p>27) All activities</p> | <ul style="list-style-type: none"> - Hazardous materials management - Maybe this can come out; important, but more to do with overall hazardous materials management | <ul style="list-style-type: none"> - Social and Environmental Performance | <ul style="list-style-type: none"> - Establish hazardous materials management priorities (based on hazard analysis of risky operations). - Avoid, or minimize the use of hazardous materials. - Prevent uncontrolled releases of hazardous materials to the environment or uncontrolled reactions that may result in fire or explosion. - Make use of engineering controls (containment, automatic alarms and shut-off systems); implement management controls (procedures, inspections and training, communication and drills) to address residual risks not prevented or controlled through engineering controls. | <p>- Compliant</p> | <ul style="list-style-type: none"> - No evidence of non-compliance. |
| <p>28) All activities</p> | <ul style="list-style-type: none"> - Hazardous materials management (of mainly fuels and lubricating and hydraulic oils for construction and operating vehicles and equipment; substation transformer insulating oil; other chemicals used during Wind farm construction, including | <ul style="list-style-type: none"> - Pollution of biophysical environment (soil and water) | <ul style="list-style-type: none"> - Implement prevention and control measures for the use, handling and storage of hazardous materials: <ul style="list-style-type: none"> o <u>Materials transfer</u>: regularly inspect, maintain and repair fittings/pipes/hoses; make use of drip trays/other drip containment measures at connection/possible overflow points; o <u>Overfill protection</u>: use trained filling operators; install gauges on tanks to measure the volume inside; make use of dripless hose connections (vehicle tanks) and fixed connections (storage tanks); use a catch basin/drip tray around the fill pipe to collect spills; o <u>Reaction, fire, and explosion prevention</u>: hazardous materials to be stored in marked containers and separate (from non-hazardous materials); incompatible hazardous materials (acids, bases, flammables, oxidizers, reactive chemicals) to be stored in separate areas and with containment facilities separating material storage; smoking or working with open flames not to be permitted in the presence of these | <p>- Compliant</p> | <ul style="list-style-type: none"> - No evidence of non-compliance. |

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| | concrete admixture chemicals such a surface-active agents, plasticizers and form release oil (mineral); equipment coolants and maintenance chemicals such as solvent cleaners and paints) | | <p>substances; limit access to hazardous waste storage areas and clearly label and demarcate the area; conduct regular inspections of the areas and document the findings; prepare and implement spill response and emergency plans; train employees in the use of appropriate firefighting equipment and ensure that such equipment is on hand at all times.</p> <ul style="list-style-type: none"> – Train workers on the correct transfer and handling of fuels and chemicals and the response to spills. – Immediately report and clean up any accidental hydrocarbon spill: Spill-Sorb, Drizzat Pads, Enretech Powder or Peat Moss can be used to clean up small spills; in case of larger spills, the spill together with the polluted soil should be removed and disposed of at e.g. a biological remediation site. | | |
| 29) All activities | – Hazardous materials management | – Occupational Health and Safety | <ul style="list-style-type: none"> – Implement hazard communication and training programs (including information on Material Safety Data Sheets (MSDS)) to make employees aware of workplace chemical hazards and how to respond to these. – Provide and ensure the active use of Personal Protective Equipment (PPE). | – Compliant | – No evidence of non-compliance. |
| 30) All activities | – Waste management: solid | – Air quality | – Avoid the open burning of waste (whether hazardous, or non-hazardous). | – Compliant | |

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| <p>31) All activities</p> | <ul style="list-style-type: none"> - Waste management: non-hazardous and hazardous | <ul style="list-style-type: none"> - Pollution of biophysical environment | <ul style="list-style-type: none"> - Prepare and submit a Waste Management Plan before construction commences. The generation of waste should be avoided or minimized as far as practicable; where it cannot be avoided, but has been minimized, waste should be recovered and reused; where waste cannot be recovered/reused, it should be treated, destroyed and disposed of in an environmentally sound manner. - Institute and maintain good housekeeping and operating practices; littering is not allowed. - Non-hazardous and hazardous waste to be collected and stored separately: - Non-hazardous waste to be transported to and disposed at an approved waste disposal site. - Hazardous waste: recycle petroleum (fuels and lubricants) waste products and collect and recycle batteries and print cartridges. The remainder to be transported to a recognized hazardous waste disposal site. | <p>- Compliant</p> | <ul style="list-style-type: none"> - No evidence of non-compliance. |
| <p>32) All activities</p> | <ul style="list-style-type: none"> - Waste management: sanitary | <ul style="list-style-type: none"> - Pollution of biophysical environment | <ul style="list-style-type: none"> - Portable toilets (1 toilet per 30 employees; preferred 1:15) to be provided on the site; contents to be collected by an approved contractor and disposed of at an approved sewage site. | <p>- Compliant</p> | <ul style="list-style-type: none"> - No evidence of non-compliance. |
| <p>33) All activities</p> | <ul style="list-style-type: none"> - Wastewater management - Wastewater treatment | <ul style="list-style-type: none"> - Pollution of biophysical environment | <ul style="list-style-type: none"> - Ensure that the discharge of process wastewater and/or sanitary wastewater and/or wastewater from utility operations and/or storm water to land conform to the regulatory requirements. | <p>- Compliant</p> | <ul style="list-style-type: none"> - No evidence of non-compliance. |

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| <p>34) All activities</p> | <ul style="list-style-type: none"> Wastewater management - storm water management | <ul style="list-style-type: none"> Soil erosion | <ul style="list-style-type: none"> Regular inspection and maintenance of permanent erosion and runoff control features. | <ul style="list-style-type: none"> Compliant | <ul style="list-style-type: none"> No evidence of non-compliance. |
| <p>35) Rehabilitation</p> | <ul style="list-style-type: none"> Rehabilitation | <ul style="list-style-type: none"> Social and Environmental Performance | <ul style="list-style-type: none"> Remove all equipment, waste, temporary structures, etc. from the camp and work sites. Reshape all disturbed areas to their original contours. Cover disturbed areas with previously collected topsoil and spread evenly. Manually rip disturbed areas, where compaction has taken place, and cover the areas with previously collected topsoil. Replant any previously removed native plant species in disturbed areas; Adhere to the regulations, rules, procedures, current and future regional and local land use plans. | <ul style="list-style-type: none"> N/A | <ul style="list-style-type: none"> This phase will be implemented as a joint collaboration between the proponent, the local authorities, and other key stakeholders. Specific activities will be contained in a detailed decommissioning and closure plan |

TABLE 2 - OPERATION PHASE EMP AUDIT

| ACTIVITY/PROCESS | ASPECT | IMPACT | MANAGEMENT ACTIONS | COMPLIANCE | COMMENTS OR RECOMMENDATIONS |
|-------------------|--------------------------------------|--|---|-------------|---|
| 1) All activities | – Management and Monitoring | – Social and Environmental Performance | – Ensure that all aspects related to the EMP are implemented during the operations phase. Adhere to the regulations, rules, and procedures as well as current and future regional and local and use plans. | – Compliant | – All aspects related to the EMP have been implemented during the operational activities and it will continue as such. Therefore, no evidence of non-compliance have been recorded. |
| 2) All activities | – Consultation and Disclosure (EP 5) | – Social and Environmental Performance | – Consult with project affected communities in a structured and culturally appropriate manner throughout the operations phase. Consultation should be “free” (of external manipulation, interference or coercion, and intimidation), “prior” (timely disclosure of information) and “informed” (relevant, understandable and accessible information). – Adequately incorporate project affected communities’ concerns. | – Compliant | – Effective communication and transparency with affected communities have been maintained and will continue as such. |
| 3) All activities | – Grievance Mechanism (EP 6) | – Social and Environmental Performance | – Ensure a mechanism for receiving and resolving any concerns and grievances related to the project’s social and environmental performance during the operations phase. – Address concerns promptly and transparently and in a culturally appropriate manner. | – Compliant | – Effective communication and transparency have been maintained. Therefore, no complaints received during the period, and a complaint register is available in the event |

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| | | | | | a complaint is received in the future. |
| 4) All activities | <ul style="list-style-type: none"> – Training including awareness and inductions | <ul style="list-style-type: none"> – Social and Environmental Performance | <ul style="list-style-type: none"> – Train employees and contractors in matters related to the project’s social and environmental performance, Namibia’s regulatory requirements, and the requirements of the IFC Performance Standards. – Ensure adequate environmental awareness training for all personnel. – Give environmental induction presentations to all new personnel prior to work commencement. | <ul style="list-style-type: none"> – Compliant | <ul style="list-style-type: none"> – Employees and contractors have been trained with matters regarding the project’s social and environmental performance as well as Namibia’s regulatory requirements and will continue as such. – All site personnel have been provided with environmental awareness and training and will continue as such. |

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| <p>5) All activities</p> | <ul style="list-style-type: none"> Labour and Working Conditions | <ul style="list-style-type: none"> Social and Environmental Performance | <ul style="list-style-type: none"> Establish, maintain and improve the worker-management relationship. Base the employment relationship on equal opportunity and fair treatment and no discrimination to be allowed. Comply with Namibia’s labour and employment laws and prevent unacceptable forms of labour, i.e. harmful child and forced labour. Promote safe and healthy working conditions and the protection and promotion of worker health. Document and communicate the Working Conditions and Terms of Employment. Respect Collective Agreements and the right of workers to organize and bargain collectively. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non – compliance. Workers management relationship has been managed successfully and Namibian labour regulations have been adhered to. The work environment has been conducive for all project personnel and will continue as such. |
| <p>6) All activities</p> | <ul style="list-style-type: none"> Employment and procurement opportunities | <ul style="list-style-type: none"> Socio-economic | <ul style="list-style-type: none"> Ensure local recruitment (of registered contractors or qualified and certified personnel, registered and certified with the appropriate statutory authority as per Electricity Control Board (ECB) licensee duty) and procurement to maximize benefit to region. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non – compliance. |
| <p>7) All activities</p> | <ul style="list-style-type: none"> Occupational Health and Safety | <ul style="list-style-type: none"> Social and Environmental Performance | <ul style="list-style-type: none"> Adhere to all Namibian Health and Safety Regulations. Occupational Health and Safety Training to be provided to all employees. Ensure that qualified first aid can be provided at all times. Provide and ensure the active use of Personal Protective Equipment (PPE). | <p>– Compliant</p> | <ul style="list-style-type: none"> The National health and safety regulations have been adhered to. Employees have been trained on occupational health and safety and will be done so in the future as the project progress. |

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| 8) All activities | – Community Health and Safety | – Social and Environmental Performance | – Prevent communicable disease (e.g sexually transmitted diseases (STDs) such as HIV/AIDS transmission): provide surveillance and active screening and treatment of employees; prevent illness among employees in local communities (through health awareness and education initiatives); ensure ready access to medical treatment, confidentiality and appropriate care, particularly with respect to migrant workers; and promote immunization. | – Compliant | – No evidence of non – compliance recorded. |
| 9) All activities | – Unauthorized public access | – Community Safety | – Use gates on the access road(s) and the entire site must be fenced off. – Wind farm should not be accessible to anyone from the public. – Notice or information boards relating public safety hazards and emergency contact details should be put up at the gate(s) and at the wind farm. – Create a viewpoint area, possibly including an information centre, for the public/tourists. | – Compliant | – No evidence of non – compliance have been recorded. |
| 10) All activities | – Increased traffic/vehicle movement | – Air quality (dust or Particulate Matter (PM) pollution) | – Maintain the road surface to preserve surface characteristics (e.g. texture and roughness). – Use dust control/suppression methods, such as applying water or non-toxic chemicals to minimize dust (oil and oil by- products is not a recommended measure to control road dust). | – Compliant | – No evidence of non – compliance. – All activities are done in accordance with the EMP and will continue as such. |
| 11) All activities | – Increased traffic/vehicle movement (exhaust from diesel engines) | – Air quality & Occupational Health and Safety | – Fleet owners/operators to implement manufacturer recommended engine maintenance programs (to control vehicle emissions: Carbon Monoxide (CO), Nitrogen Oxide (NOx), Sulphur Dioxide (SO2), Particulate Matter (PM) and Volatile Organic Compounds (VOCs)). | – Compliant | – No evidence of non – compliance. |

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| <p>12) All activities</p> | <ul style="list-style-type: none"> Increased traffic/vehicle movement | <ul style="list-style-type: none"> Occupational and Community Safety | <ul style="list-style-type: none"> Adopt best transport safety practices by implementing the following measures: emphasize safety aspects among drivers; improve driving skills and require licensing of drivers; adopt limits for trip duration; avoid dangerous routes and times of day; and use speed control devices. Regularly maintain vehicles and use manufacturer approved parts. Use locally sourced materials (where possible) to minimize transport distances. Employ safe traffic control measures, including the use of traffic and safety warning signs and flag persons to warn of dangerous conditions. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non-compliance. All activities are done in accordance with the EMP and will continue as such. |
| <p>13) All activities</p> | <ul style="list-style-type: none"> Storm water management | <ul style="list-style-type: none"> Attraction of species (birds and bats) to the area due to open water and subsequent injury, disturbance, or mortality of species | <ul style="list-style-type: none"> Implement appropriate storm water management measures so as to avoid the presence of open water in the area. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non-compliance. |
| <p>14) Operational wind farm</p> | <ul style="list-style-type: none"> Wind farm components | <ul style="list-style-type: none"> Species injury, disturbance (and potential alteration of behavior), or mortality | <ul style="list-style-type: none"> Implement monitoring programmes to study the potential impact(s) of the wind farm on birds and bats. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non-compliance. |
| | <ul style="list-style-type: none"> Hazardous waste management | <ul style="list-style-type: none"> Pollution of biophysical environment (soil and water) | <ul style="list-style-type: none"> Wind farm to be equipped with oil absorption and collection systems. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non-compliance. |

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| | <ul style="list-style-type: none"> – Electromagnetic interference (television broadcasts) | <ul style="list-style-type: none"> – Community and Health Safety | <ul style="list-style-type: none"> – Install a higher quality or directional antenna or relocate/direct the antenna towards an alternative broadcast transmitter; or install an amplifier; or construct a new repeater station if a wide area is affected. | <ul style="list-style-type: none"> – Compliant | <ul style="list-style-type: none"> – No evidence of non-compliance. |
| 15) General maintenance | <ul style="list-style-type: none"> – Cleaning of panels to prevent dust and insect build-up | <ul style="list-style-type: none"> – Resource use / depletion of natural resources | <ul style="list-style-type: none"> – Ensure all wash water is recycled. Ensure there are no leaks from all taps, pipes and fittings. | <ul style="list-style-type: none"> – Compliant | <ul style="list-style-type: none"> – No evidence of non-compliance. |
| | <ul style="list-style-type: none"> – Periodic painting of tower structures | <ul style="list-style-type: none"> – Pollution of biophysical environment (soil and water) | <ul style="list-style-type: none"> – Conform to ISO 12944:1998 Paints and varnishes - Corrosion protection of steel structures by protective paint systems- Part 4: Types of surface and surface preparation. | <ul style="list-style-type: none"> – Compliant | <ul style="list-style-type: none"> – No evidence of non-compliance. |
| | <ul style="list-style-type: none"> – Working at heights | <ul style="list-style-type: none"> – Occupational Safety | <ul style="list-style-type: none"> – Test integrity of structure(s) before work commences. – Implement a fall protection program (including training in climbing techniques and the use of fall protection measures; inspection, maintenance, and replacement of fall protection equipment; and rescue of fall-arrested workers). – Establish criteria for use of 100% fall protection (the system should be fitting for the tower structure and movements (ascent, descent, and moving from point to point)). – Install fixtures on tower components to facilitate the use of fall protection systems. – Provide an adequate work-positioning device system to workers (with connectors on positioning systems compatible with the tower components to which they are attached). – Ensure proper rating and maintenance of hoisting equipment and training of hoist operators. | <ul style="list-style-type: none"> – Compliant | <ul style="list-style-type: none"> – All activities done in accordance with the EMP and will continue as such. |
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| <p>General Wind Farm maintenance (15) Cont.</p> | | | <ul style="list-style-type: none"> - Material of equivalent strength; replace rope safety belts before signs of aging or fraying of fibres become evident. - Workers to use a second (backup) safety strap when operating power tools at height. - Remove signs/other obstructions from poles/structures before work commences. - Use approved tool bags for lowering/ raising tools/materials to workers on elevated structures. - Avoid conducting maintenance during poor weather conditions (especially where there is a risk lightning strikes). | <p>- Compliant</p> | <ul style="list-style-type: none"> - All activities are done in accordance with the EMP and will continue as such. |
| <p>16) Power Transmission and distribution</p> | <ul style="list-style-type: none"> - Electric and Magnetic Fields (EMF) | <ul style="list-style-type: none"> - Occupational and Community Health | <ul style="list-style-type: none"> - Ensure that average and peak exposure levels remain below the reference levels developed by the Commission of Non-Ionizing Radiation Protection (ICNIRP). - Reduce the EMF (from power lines, substations, or transformers) by applying engineering techniques (if levels are expected or confirmed above the recommended levels): shielding with specific metal alloys; burying transmission lines; increasing the height of the transmission towers; or modifications to size, spacing and configuration of conductors. | <p>- Compliant</p> | <ul style="list-style-type: none"> - All activities are done in accordance with the EMP and will continue as such. |

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| <p>17) Power transmission and distribution</p> | <ul style="list-style-type: none"> – Hazardous materials management (insulating oils / gases (Polychlorinated Biphenyls (PCB) and Sulphur hexafluoride ((SF6) and fuels) | <ul style="list-style-type: none"> – Pollution of biophysical environment (soil and water) | <ul style="list-style-type: none"> – Minimize the use of SF6 (greenhouse gas). – The use of PCBs has largely been discontinued (see IFC EHS Guidelines for Electric Power Transmission and Distribution for the management of PCBs should it be used). – All activities, Hazardous materials management. – Wood preservatives? Needed? | <p>– Compliant</p> | <ul style="list-style-type: none"> – All activities are done in accordance with the EMP and will continue as such. |
| <p>18) Power transmission and distribution</p> | <ul style="list-style-type: none"> – Live power lines | <ul style="list-style-type: none"> – Occupational Health and Safety | <ul style="list-style-type: none"> – Allow only trained/certified employees to install, maintain, and repair electrical equipment. – Deactivate and properly ground live power distribution lines before work is conducted on, or close to, distribution lines. – Ensure that live-wire work is conducted by qualified workers and in accordance to the specific safety and insulation standards. – Do not approach an exposed energized or conductive part (even if the worker is trained) unless: the person is properly insulated from the energized part (e.g. gloves) and vice versa; the worker is properly isolated and insulated from any other conductive part (live-line work). – Implement a Health and Safety Plan, detailing specific training, safety measures, personal safety devices and other precautions, where maintenance and operation is required within minimum setback distances | <p>– Compliant</p> | <ul style="list-style-type: none"> – All activities are done in accordance with the EMP and will continue as such. |

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| 19) Power transmission and distribution | <ul style="list-style-type: none"> Working at heights on poles/structures | Occupational Health and Safety | <ul style="list-style-type: none"> See General park maintenance, working at heights. | <ul style="list-style-type: none"> Compliant | <ul style="list-style-type: none"> No evidence of non-compliance. |
| 20) Power transmission and distribution | <ul style="list-style-type: none"> EMF | Occupational Health and Safety | <ul style="list-style-type: none"> Prepare and implement an EMF Safety Program containing information on: potential exposure levels in the workplace and the use of personal monitors; training of workers to identify EMF levels and hazards; the identification and establishment of safety zones (areas acceptable for public exposure vs. those with expected elevated EMF levels and that only properly trained workers may access); action plans dealing with potential or confirmed exposure of levels that exceed those developed by the ICNIRP and Institute of Electrical and Electronics Engineers (IEEE). | <ul style="list-style-type: none"> Compliant | <ul style="list-style-type: none"> All activities are done in accordance with the EMP and will continue as such. |
| 21) Power transmission and distribution | <ul style="list-style-type: none"> Electrocution | Community Health and Safety | <ul style="list-style-type: none"> Use signs, barriers, and education to prevent public contact with potentially dangerous equipment. Ground conducting objects installed near power lines. | <ul style="list-style-type: none"> Compliant | <ul style="list-style-type: none"> All activities are done in accordance with the EMP and will continue as such. |
| 22) All activities | <ul style="list-style-type: none"> Water Management | Resource use / depletion of natural resources | <ul style="list-style-type: none"> Implement a water conservation program, promoting the continuous reduction in water consumption and achieving savings in water pumping, treatment and disposal costs, commensurate with the magnitude and cost of water use. | <ul style="list-style-type: none"> Compliant | <ul style="list-style-type: none"> All activities are done in accordance with the EMP and will continue as such. |

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| 23) All activities | – Hazardous materials management | – Pollution of biophysical environment (soil and water) | <ul style="list-style-type: none"> – Implement prevention and control measures for the use, handling and storage of hazardous materials. – Train workers on the correct transfer and handling of fuels and chemicals and the response to spills. – Immediately report and clean up any accidental hydrocarbon spill: Spill-Sorb, Drizzat Pads, Enretech Powder or Peat Moss can be used to clean up small spills; in case of larger spills, the spill together with the polluted soil should be removed and disposed of at e.g. a biological remediation site. | – Compliant | – No evidence of non-compliance. |
| | | – Occupational Health and Safety | <ul style="list-style-type: none"> – Implement hazard communication and training programs (including information on Material Safety Data Sheets (MSDS)) to make employees aware of workplace chemical hazards and how to respond to these. – Provide and ensure the active use of Personal Protective Equipment (PPE). | | |
| 24) All activities | – Waste management: solid | – Air quality | <ul style="list-style-type: none"> – Avoid the open burning of waste (whether hazardous, or non-hazardous). | – Compliant | – No evidence of non-compliance. |
| 25) All activities | – Waste management: non-hazardous and hazardous | – Pollution of biophysical environment | <ul style="list-style-type: none"> – As per Waste Management Plan. – Institute and maintain good housekeeping and operating practices; littering is not allowed. – Non-hazardous and hazardous waste to be collected and stored separately: – Non-hazardous waste to be transported to and disposed off at an approved waste disposal site. – Hazardous waste: recycle petroleum (fuels and lubricants) waste products and collect and recycle batteries and print cartridges. The remainder to be transported to a recognized hazardous waste disposal site, with prior permission from the site operator / owner. | – Compliant | – No evidence of non-compliance. |

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| <p>26) All activities</p> | <ul style="list-style-type: none"> Waste management: sanitary | <ul style="list-style-type: none"> Pollution biophysical environment | <ul style="list-style-type: none"> Portable toilets (1 toilet per 30 employees; preferred 1:15) to be provided on the site; contents to be collected by an approved contractor and disposed of at an approved sewage site. Unless there will be a sewage plant? | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non – compliance. Flashing toilets with French Drain have been constructed, situated at the office Block. All operational activities related to wastewater management were undertaken in accordance with the EMP and will continue as such. |
| <p>27) All activities</p> | <ul style="list-style-type: none"> Wastewater management | <ul style="list-style-type: none"> Pollution biophysical environment | <ul style="list-style-type: none"> Ensure that the discharge of process wastewater and/or sanitary wastewater and/or wastewater from utility operations and/or storm water to land conform to the regulatory requirements. | <p>– Compliant</p> | <ul style="list-style-type: none"> No evidence of non – compliance. All operational activities related to wastewater management were undertaken in accordance to the EMP and will continue as such. |

TABLE 3 - DECOMMISSIONING AND CLOSURE PHASE EMP AUDIT

| ACTIVITY/PROCESS | ASPECT | IMPACT | MANAGEMENT ACTIONS | COMPLIANCE | COMMENTS OR RECOMMENDATIONS |
|--------------------------------|---------------------------|---|--|------------|--|
| 1) Decommissioning and Closure | – Decommissioning | – Social and Environmental Performance & Visual | <ul style="list-style-type: none"> – Isolate (electrically) the wind farm from the substation. – Disassemble the steel tower sections and cut off at the top of the foundation concrete; rehabilitate the hardstand area. – Remove all above-ground substation infrastructure and re-use, recycle or dispose of it. – Conduct a site contamination assessment; remove any contaminated material and dispose of at an appropriate disposal facility. – Break up foundations in the substation and remove for disposal. – Dig up below-ground substation infrastructure and remove. – Conduct a validation survey to ensure that all contaminated material at the substation has been removed; remove any contaminated material and dispose of at an appropriate disposal facility. – Rehabilitate access tracks not required for ongoing land use activities. – Remove all other equipment, waste, etc. from the area. – Reshape all disturbed areas to their original contours. – Cover disturbed areas with previously collected topsoil and spread evenly. – Manually rip disturbed areas, where compaction has taken place, and cover the areas with previously collected topsoil. – Replant any previously removed native plant species in disturbed areas. | – N/A | <ul style="list-style-type: none"> – No decommission occurred. – This phase will be implemented as a joint collaboration between the proponent, the local authorities, and other key stakeholders. – Specific activities will be contained in a detailed decommissioning and closure plan |
| 2) Closure | – Loss of jobs and income | – Socio-economic | <ul style="list-style-type: none"> – Implement a skills training programme during the operations phase. | – N/A | – No decommission occurred. |

4 CONCLUSION AND RECOMMENDATIONS

The Ombepo 10MW Wind Farm project activities have been carried out in general compliance with the relevant requirements of the granted licence in accordance with the approved EMP. To date, there has not been significant impacts resulting from the project activities. It is recommended that the proponent continue to adhere to all environmental legislation and company standards to ensure that best practical environmental protection continues as the project activities progress.

On this basis, Environmental Compliance Consultancy is of the professional opinion that the proponent has been able to demonstrate compliance to the approved EMP and that the renewal for environmental clearance certificate (ECC) should be granted to the proponent for the activities at the Ombepo 10MW Wind Farm.

4.1 NEXT STEPS

The proponent would like to continue with operation activities on the wind farm. However, as part of the project new refinancing model and shareholding restructuring, the proponent proposes the wind farm to be divided into two (2) separate projects comprising 6MW and 4MW owned by Ombepo Energy (Pty) Ltd and Ombepo Energy Two (Pty) Ltd, respectively. These two projects will each require separate Generation License and ECC

APPENDIX A: HEALTH SAFETY ENVIRONMENT REPORTS

APPENDIX B: ENVIRONMENTAL CLEARANCE CERTIFICATE



REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT AND TOURISM

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Windhoek
Date: 06 October 2015

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

Managing Director
Ombepo Energy (Pty) Ltd
P.O. Box 86524
Windhoek

Dear Sir/Madam

SUBJECT: ENVIRONMENTAL CLEARANCE FOR THE PROPOSED 10 MW WIND FARM ON SEAL SITE AT LÜDERITZ, KARAS REGION

The Environmental Impact Assessment and Environmental Management Plan submitted are sufficient as it made provisions of the environmental management concerning the project's activities. From this perspective regular environmental monitoring and evaluations on environmental performance should be conducted. Targets for improvements should be established and monitored throughout this process.

This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project. From this perspective, I issue this clearance with the following conditions: results of the twelve (12) months environmental (Avian) monitoring must be implemented before possible future development of the Penguin site wind farm.

On the basis of the above, this letter serves as an environmental clearance for the project to commence. However, this clearance letter does not in anyway hold the Ministry of Environment and Tourism accountable for misleading information, nor any adverse effects that may arise from this project's activities. Instead, full accountability rests with Ombepo Energy (Pty) Ltd and his/ her consultants.

This environmental clearance is valid for a period of 3 (three) years, from the date of issue unless withdrawn by this office.

Yours sincerely,


Teofilus Nghitila
ENVIRONMENTAL COMMISSIONER



All official correspondence must be addressed to the Permanent Secretary