



REPUBLIC OF NAMIBIA
MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

ENVIRONMENTAL CLEARANCE CERTIFICATE

ISSUED

In accordance with Section 37(2) of the Environmental
Management Act (Act No. 7 of 2007)

TO

Reconnaissance Energy Namibia (Pty) Ltd
P. O. Box 2393, Windhoek

TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY

Proposed 2D Seismic Survey covering the Areas of Interest (AOI) in
Petroleum Exploration License (PEL) No. 73,
Kavango West and Kavango East Regions Respectively

Issued on the date: 2021-07-02

Expires on this date: 2024-07-02



(See conditions printed over leaf)

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CONDITIONS OF APPROVAL

1. This environmental clearance is valid for a period of 3 (three) years, from the date of issue unless withdrawn by this office
2. This certificate does not in any way hold the Ministry of Environment and Tourism accountable for misleading information, nor any adverse effects that may arise from these activities. Instead, full accountability rests with the proponent and its consultants
3. This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project
4. Mitigation measures stipulated in the approved Environmental Management Plan (EMP) must be adhered to, particularly with respect to management of ecological aspects.
5. This Environmental Clearance Certificate is issued jointly with the Record of Decision as per Section 37 (2) (c) (d) of the Environmental management Act, No. 7 of 2007, and conditions of authorisation under Section E of Record of Decision must be taken into considerations. .



REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM

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Cnr Robert Mugabe &
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Private Bag 13306
Windhoek
Namibia

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

RECORD OF DECISION

REF NUMBER: ECC 01491

DATE OF ISSUE: 02 July 2021

Reconnaissance Energy Namibia (Pty) Ltd
Cnr of Pasteur and Freud Street,
P.O. Box 2393
Windhoek, Namibia

Dear Sir/ Madam

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN ACCORDANCE WITH SECTION 37(2) OF THE ENVIRONMENTAL MANAGEMENT ACT, 2007 AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2012: PROPOSED 2D SEISMIC SURVEY COVERING THE AREAS OF INTEREST (AOI) IN PETROLEUM EXPLORATION LICENSE (PEL) NO. 73, KAVANGO BASIN, KAVANGO WEST AND EAST REGIONS, NORTHERN NAMIBIA

DECISION

Authorization is granted to the applicant to undertake the listed activities specified in Section B below with respect to the Preferred Alternative, described in the EMP, dated March 2021.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL CLEARANCE CERTIFICATE

Reconnaissance Energy Namibia (Pty) Ltd
Cnr of Pasteur and Freud Street,
P.O. Box 2393
Windhoek, Namibia

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as the "Proponent".

"Stop the poaching of our rhinos"

B. LIST OF ACTIVITIES AUTHOURISED

Listed Activities	Activity/ Project Description
Energy generation and distribution (a) the generation of electricity; (b) the transmission and supply of electricity; (c) refining of gas, oil and petroleum products; and (d) nuclear reaction, including production, enrichments, processing, reprocessing, storage or disposal of nuclear fuels, radioactive products and waste.	Undertake a 2D Seismic Survey covering the Areas of Interest (AOI) in Petroleum Exploration License (PEL) No. 73, Kavango Basin, Kavango West and East Regions, Northern Namibia

C. SITE DESCRIPTION AND LOCATION

From Grootfontein along the B8 tarred road to Rundu drive for 253 km (2.5 km before the turn-off from the B8 into the Town of Rundu). Turn right into the D3425 gravel road to Ncaute which is 55.4 km away, the proposed 2D Seismic survey will cover the Area of Interest and not the entire PEL 73, it will cover the Ncuncuni, Ncamagoro, Ndonga Linena, Ndiyona and Mashare Constituencies (Annexure A – proposed site map)

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Environmental Assessment Practitioner:
Risk-Based Solutions (RBS) CC
Cnr of Lazarett and Feld Street
P. O. Box 1839, WINDHOEK, NAMIBIA
Tel: +264 - 61- 306058. FaxMail: +264-886561821
Mobile: +264-811413229 /812772546. Email: smwiya@rbs.com.na

Global Office / URL: www.rbs.com.na

E. CONDITIONS OF AUTHORISATION

Scope of Authorisation

1. The holder is authorized to undertake the listed activities specified in Section B above in accordance with and restricted to the Preferred Alternative described in the Environmental Assessment Report dated March 2021 and on site described in Section C.
2. The holder must commence with the listed activity on site within a period of **three (3) years** from the date of issue of this Environmental Clearance Certificate.
3. The exploration activities should be concluded within the period of six **months** (6 months) from the date of commencement of the listed activity.
4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his / her behalf, including an agent, sub- contractor, employee, or any person rendering a service to the proponent.
5. Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Office of the Environmental Commissioner before such changes or deviations



- may be implemented. In assessing whether to grant such acceptance/ approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.
6. Compensation plan must apply in areas where properties and other infrastructures are damaged due to vibration.
 7. MEFT-DSS must be informed well in advance before actual seismic work is done to commence monitoring of collared elephants in the area to assess if any of the seismic activity has impact on their behavioral patterns.
 8. Consent must be obtained from the Directorate of Forestry before any vegetation is cleared for creation of the campsites, storing of equipment, and or widening of tracks takes place to guide on type of vegetation to be removed.
 9. Project is restricted to existing tracks; consent must be obtained from the MEFT should there be a need to expand the tracks to accommodate the survey trucks – such expansion/widening of roads must not exceed 3 meters.
 10. Communities in within the project area should be notified regularly as the survey activities progresses.

Management of activity

11. The draft Environmental management Plan report submitted as part of the application for the Environmental Clearance Certificate is hereby **approved** on condition that the following amendments are made to the EMP and must be implemented:
 - 11.1 Assessment must be undertaken for infrastructure in proximity with targeted roads, and which might be affected by the activity due to vibration.

Monitoring

12. The Proponent must appoint a suitably experienced environmental control officer, or site agent where appropriate, before the commencement of any development activities to ensure compliance with the provision of the EMP and the conditions contained in this Environmental Authorisation.
13. A copy of the Environmental Clearance Certificate, EMP, Environmental Audit Reports and compliance monitoring reports must be kept at the site of the authorized activity during the development activities whereafter it must be kept at the office of the applicant and must be made available to anyone on request.
14. Access to the site referred to in Section C above must be granted, and the environmental reports mentioned above must be produced, to any authorized official representing the Office of the Environmental Commissioner who requests to see it for the purposes of assessing and/ or monitoring compliance with the conditions contained herein.
15. The project requires proper coordinated monitoring efforts by numerous competent authorities to ensure full compliance with the ECC conditions and EMP.

Specific Conditions

16. An integrated waste management approach, which is based on waste minimization and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a licensed landfill in terms of the applicable legislation.
17. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the National Heritage Council of Namibia. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from National Heritage Council.
18. Employment opportunities must be afforded to the local community (as far as possible) during all phases of the proposed development.
19. No-go buffer zones to protect the environment and migratory sensitive area must be adhered to.



20. No-go buffer zones to protect the environment and migratory sensitive area must be adhered to.
21. The survey is strictly to be conducted during the day only (07 :00 to 17:00), night time operations must be avoided due to movements of wild animals

F. GENERAL MATTERS

1. Notwithstanding this Environmental Clearance Certificate, the proponent must comply with any other statutory requirements that may be applicable when undertaking the listed activity.
2. Non-compliance with a condition of this Environmental Clearance Certificate or EMP may render the Proponent liable to criminal prosecution.
3. If the holder does not commence with a listed activity within the period referred to in Condition 2, this Environmental Clearance Certificate shall lapse for that activity, and a new application for Environmental Authorisation must be submitted to the Office of the Environmental Commissioner, an application for amendment in this regard must be made to the to the Office of the Environmental Commissioner prior to the expiry date of the Environmental Clearance Certificate.
4. The holder must submit an application for amendment of the Environmental Clearance Certificate to the Office of the Environmental Commissioner where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected or updated. If a new holder is proposed, an application for transfer in terms of Regulation 20 of the EIA must be submitted.

G. DISCLAIMER

1. The Office of the Environmental Commissioner, Relevant Stakeholder or any other public authority appointed in terms of the conditions of this Environmental Clearance Certificate shall not be responsible for any damages or losses suffered by the holder, developer or his/ her successor in any instance where construction or operation subsequent to construction in temporally or permanently stopped for reasons of non – compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.
2. Furthermore, this clearance letter does not in any way hold the Ministry of Environment, Forestry and Tourism accountable for misleading information, nor any adverse effects that may arise from these activities. Instead, full accountability rests with Proponent

Your interest in the future of our environment is appreciated

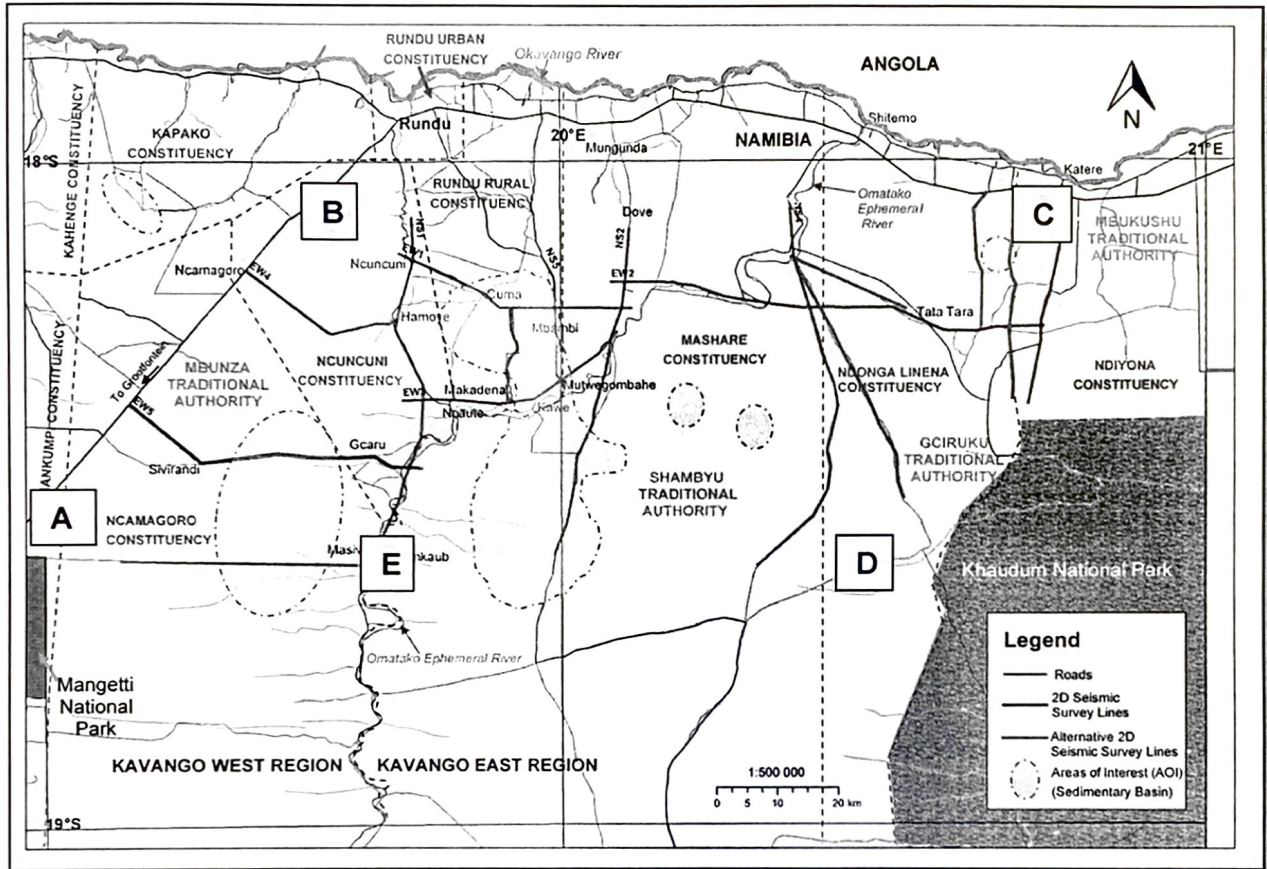
Yours sincerely,


Timoteus Mufeti
ENVIRONMENTAL COMMISSIONER



APPENDIX A: (Project layout)

APPENDIX A: (Project layout)



Points	Latitude	Longitude
A	-18.556648°	19.153989°
B	-18.041846°	19.645838°
C	-18.036479°	20.696806°
D	-18.623989°	20.470201°
E	-18.608937°	19.707811°



APPENDIX B: (Reasons for the decision)

In reaching its decision, the Office of the Environmental Commissioner considered, inter alia, the following:

1. Application for environmental clearance certificate was made in a prescribed form and complied with Section 32, of which the application was submitted to the competent authority (Ministry of Mines and Energy) and received by Office of the Environmental Commissioner of 23 March 2021
2. Project categorization as in terms of Section 34 and 35 of the Environmental management Act was carefully considered as the Areas of Interest (AOI) within PEL 73 falls within Kavango Zambezi Trans frontier Conservation Area (KAZA TFCA). KAZA TFCA is a multiple land use international transboundary conservation initiative with a common vision of promoting and supporting sustainable livelihoods through coexistence and utilization of multiple resource and resources areas for the greater benefits of the local communities of the member states. The key multiple surface resource areas found within the area include National parks, game reserves, forest reserves, conservancies, game/wildlife management areas, and communal lands, all categorized as sensitive. Therefore, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity hence it was recommended for **full** Environmental Impact Assessment to be undertaken, and the following were to be taken into considerations:
 - 2.1 Cumulative impact assessment on the habitats, fauna, and flora species, ecosystem functions, services, use values and non-use use, physiography and geological resources, water, and water supply infrastructure vulnerability within the proposed survey area were taken into consideration.
 - 2.2 The extent and duration of the effects was assessed, and since the project is confined in existing roads, impacts on fauna and flora will be minimal, impacts will be monitored at the onset of the project and mitigated accordingly.
 - 2.3 The degree to which the impacts can be reversed.

Severity of potential negative environmental impacts of the proposed 2D seismic survey activities on the receiving environment presumes to be relatively of low magnitude, temporally duration, localized extent, and low probability of occurrence, and will be monitored jointly with the Ministry of Mines and Energy.
 - 2.4 The degree to which the impacts may cause irreplaceable loss of resources were considered and found to be relatively low, especial on vegetation removal since the project will be confined in existing roads.
 - 2.5 The degree to which the negative impacts can be mitigated.

Through the effective implementation and monitoring of the recommended mitigation measures, the overall likely negative impacts of the proposed 2D ground seismic survey activities on the receiving environment (physical, socioeconomic, and biological) will likely to be low and localized with negligible significant impact.



3. Public Participation

The Office of the Environmental Commissioner is in satisfactory with the level of consultation undertaken. Comments and objections received were reviewed and assessed accordingly, and most objections raised by several I&AP's were assessed as either being allegations; non-substantive; being addressed in the EIA and EMP reports or being irrelevant to this application.

4. Alternatives

Alternatives sites were considered and satisfactory assessed in the EIA and EMP reports with respect to the proposed activity.

- a) Targeted areas of interest are site specific and related to the Regional and local geology and petroleum system of the area.
 - b) Survey operations will be undertaken along existing tracks and roads.
 - c) Alternative roads and tracks will be identified and assessed by relevant Ministries accordingly.
 - d) Comparative assessments on energy sources were undertaken, and explorer 860 recommended.
 - e) Wireless geophones and recorders will be used instead of cable systems.
 - f) Proposed survey area falls within the sparsely populated communal land with less volume of traffic.
5. Based on the findings of the impact assessment process as described in the EIA Report Vol. 2 of 3, Table 3.1–3.21 provides detailed specific mitigations measures to be implemented by the Proponent with respect to the proposed 2D seismic survey operations. The Environmental Management Plan (EMP) is the base upon which an Environmental Clearance Certificate (ECC) is issued and will be fully monitored jointly with line ministries and all relevant stakeholders.



APPENDIX C: (Review Checklist)

Proposed 2D Seismic Survey covering the Areas of Interest (AOI) in Petroleum Exploration License (PEL) No. 73, Kavango Basin, Kavango West and East Regions, Northern Namibia

Review Checklist

1. The Objectives and Physical Characteristics of the Project

Are all the main components of the project described

Addressed *The proponent intends to undertake 450 km long 2D seismic survey along several line within the PEL 73 area of interest, in addition to a larger exploration effort for oil and gas in the Kavango Region (Detailed info on Pages 1 - 39, vol. 1 of 3))*

Is the location of each Project component identified, using maps, plans and diagrams as necessary?

Addressed *Pages 3, 2, 8, 10 - 13 (vol. 1 of 3)*

For linear projects, are the routes corridor, the vertical and horizontal alignment and any tunnelling and earthworks described?

Addressed *Pages 3, 2, 8, 10 - 13 (vol. 1 of 3)*

Are any developments likely to occur as a consequence of the Project identified?

Addressed *Depending on the outcome of the seismic survey, further exploration may be undertaken (Page xviii vol. 1 of 3)*

Are any other existing or planned developments with which the Project could have cumulative effects identified?

Addressed *Communal farming activities*

2. The Size of the Project

Is the area of land occupied by each of the permanent project components quantified and shown on a scaled map?

Addressed *Page 8 (vol. 1 of 3)*

Is the size of any structures or other works developed as part of the Project identified?

Addressed *450 km long survey lines (vol. 1 of 3)*

3. Production Process and Resources Used

Are the environmental implications of the sourcing of raw materials discussed?

Addressed *Pages 44 - 57 (vol. 1 of 3)*

Is efficiency in use of energy and raw materials discussed?

Addressed *Pages 44 - 57 (vol. 1 of 3)*

Are any hazardous materials used, stored, handled or produced by the Project identified and quantified?

Addressed *Page 75 (vol. 2 of 3)*

Are the transports of raw materials to the Project and the number of traffic movements involved discussed? (including road, rail and sea transport)

Addressed *Pages 63 - 80 (vol. 2 of 3)*

Are the access arrangements and the number of traffic movements involved in bringing workers and visitors to the Project estimated?

Addressed *Pages 63 - 80 (vol. 2 of 3)*

Is the housing and provision of services for any temporary or permanent employees for the Project discussed? (Relevant for Projects requiring migration of a substantial new workforce into the area for either construction or the long term)

Addressed *Pages 63 - 80 (vol. 2 of 3)*

4. Residues and Emissions

Are the types and quantities of solid waste generated by the Project identified? (Including construction or demolition wastes, surplus spoil, process wastes, by-products, surplus or reject products, hazardous wastes, household or commercial wastes, agricultural or forestry wastes, site cleanup wastes, mining wastes, decommissioning wastes)

Addressed *Pages 63 - 80 (vol. 2 of 3)*

Are the composition and toxicity or other hazards of all solid wastes produced by the Project discussed?

Addressed *Pages 63 - 80 (vol. 2 of 3)*

Are the methods for collecting, storing, treating, transporting and finally disposing of these solid wastes described?



described?

Addressed Pages 63 - 80 (vol. 2 of 3) and the EMP

Are the locations for final disposal of all solid wastes discussed?

Addressed Pages 63 - 80 (vol. 2 of 3) and in the EMP

Are the types and quantities of liquid effluents generated by the Project identified? (Including site drainage and run-off, process wastes, cooling water, treated effluents, sewage)

Addressed Pages 63 - 80 (vol. 2 of 3)

Are the composition and toxicity or other hazards of all liquid effluents produced by the Project discussed?

Addressed Pages 63 - 80 (vol. 2 of 3)

Are the methods for collecting, storing, treating, transporting and finally disposing of these liquid effluents

Addressed Pages 63 - 80 (vol. 2 of 3) and the EMP

Is the process by which the Project was developed described and are alternatives considered during this process described?

Addressed Page 193 (vol. 2 of 3)

Is the baseline situation in the No Project situation described?

Addressed Page 193 (vol. 2 of 3)

Are the alternatives realistic and genuine alternatives to the Project?

Addressed Page 193 (vol. 2 of 3)

Are the main reasons for choice of the Proposed Project explained, including any environmental reasons for the choice?

Addressed Pages 4 - 6 (vol. 1 of 3)

Are the main environmental effects of the alternatives compared with those of the proposed Project?

Addressed Page 193 (vol. 2 of 3)

5. Aspects of Environment

Are the existing land uses of the land to be occupied by the Project and the surrounding area described and are any people living on or using the land identified? (including residential, commercial, industrial, agricultural, recreational and amenity land uses and any buildings, structures or other property)

Addressed Pages 75 - 91 (vol. 1 of 3), and 96 - 191 (vol. 2 of 3)

Are the topography, geology and soils of the land to be occupied by the Project and the surrounding area described?

Addressed Pages 75 - 91 (vol. 1 of 3), and 96 - 191 (vol. 2 of 3)

Are any significant features of the topography or geology of the area described and are the conditions and use of soils described? (including soil quality stability and erosion, agricultural use and agricultural land quality)

Addressed Pages 75 - 91 (vol. 1 of 3), and 96 - 191 (vol. 2 of 3)

Are the fauna and flora and habitats of the land to be occupied by the Project and the surrounding area described and illustrated on appropriate maps?

Addressed Pages 76 - 78 (vol. 1 of 3), and 112 - 133 (vol. 2 of 3)

Are species populations and characteristics of Habitats that may be affected by the Project described and are any designated or protected species or areas defined?

Addressed Pages 76 - 78 (vol. 1 of 3), and 112 - 133 (vol. 2 of 3)

Is the water environment of the area described? (including running and static surface waters, groundwaters, estuaries, coastal waters and the sea and including run off and drainage.)

Addressed Pages 83 - 87 (vol. 1 of 3), and 96 - 191 (vol. 2 of 3)

Are the hydrology, water quality and use of any water resources that may be affected by the Project described? (including use for water supply, fisheries, angling, bathing, amenity, navigation, effluent disposal)

Addressed Pages 75 - 91 (vol. 1 of 3), and 154 - 168 (vol. 2 of 3)

Are local climatic and meteorological conditions and existing air quality in the area described?

Addressed Pages 75 (vol. 1 of 3), and 95 (vol. 2 of 3)

Are any material assets in the area that may be affected by the Project described? (including buildings, other structures, mineral resources, water resources)

Addressed Pages 75 - 91 (vol. 1 of 3), and 96 - 191 (vol. 2 of 3)

Are any locations or features of archaeological, historic, architectural or other community or cultural importance in the area that may be bisected the Project described, including any designated or protected sites?

Addressed Pages 102 - 103 (vol. 1 of 3), and 168 - 169 (vol. 2 of 3)

Is the landscape or townscape of the area that may be affected by the Project described, including any designated or protected landscapes and any important views or viewpoints?



Addressed Pages 75 - 91 (vol. 1 of 3), and 96 - 191 (vol. 2 of 3)

Are demographic, social and socio-economic conditions (e.g. employment) in the area described?

Addressed Pages 75 - 91 (vol. 1 of 3), and 96 - 191 (vol. 2 of 3)

Are any future changes in any of the above aspects of the environment, that may occur in the absence of the project, described? (the so- called Moving Baseline or No Project situation)

Addressed

6. Data Collection and Survey Methods

Has the study area been defined widely enough to include all the area likely to be significantly affected by the Project?

Addressed Pages 93 - 113 (vol. 1 of 3), and 51 - 62 (vol. 2 of 3)

Have all relevant national and local agencies been contacted to collect information on the baseline environment?

Addressed Annexure 3, Page 234 (vol. 2 of 3)

Have sources of data and information on the existing environment been adequately referenced?

Addressed

Were the methods used appropriate for the purpose?

Addressed

7. Scoping of Effects

Is the process by which the scope of the Environmental Studies was defined described?

Addressed

Is it evident that a systematic approach to scoping was adopted?

Addressed

Is it evident that full consultation was carried out during scoping?

Addressed Annexure 3, Page 234 (vol. 2 of 3)

Are the comments and views of consultees presented?

Addressed Annexure 3, Page 234 (vol. 2 of 3)

8. Prediction of Direct Effects

Are direct, primary effects on land uses, people and property described and where appropriate quantified?

Addressed Pages 193 - 222 (vol. 2 of 3)

Are direct, primary effects on geological features and characteristics of soils described and where appropriate quantified?

Addressed Pages 193 - 222 (vol. 2 of 3)

Are direct, primary effects on fauna and flora and habitats described and where appropriate quantified?

Addressed Pages 193 - 222 (vol. 2 of 3), and Annexure 2

Are direct, primary effects on the hydrology and water quality of water features described and where appropriate quantified?

Addressed Pages 193 - 222 (vol. 2 of 3)

Are direct, primary effects on uses of the water environment described and where appropriate quantified?

Addressed Pages 193 - 222 (vol. 2 of 3)

Are direct, primary effects on the acoustic environment (noise or vibration) described and where appropriate quantified?

Addressed Pages 193 - 222 (vol. 2 of 3)

Are direct, primary effects on locations or features of cultural importance described?

Addressed Pages 193 - 222 (vol. 2 of 3)

Are direct, primary effects on the quality of the landscape and on views and viewpoints described and where appropriate illustrated?

Addressed Pages 193 - 222 (vol. 2 of 3)

Are direct, primary effects on demography, social and socio-economic condition in the area described and where appropriate quantified?

Addressed Pages 193 - 222 (vol. 2 of 3)

Prediction of Secondary, Temporary, Short Term, Long Term, Accidental, Indirect, Cumulative Effects

Are secondary effects on any of the above aspects of the environment caused by primary effects on other aspects described and where appropriate quantified? (e.g. effects on fauna, flora or habitats caused by soil, air or water pollution or noise; effects on uses of water caused by changes in hydrology or water quality; effects on archaeological remains caused by desiccation of soils)

Addressed Pages 193 - 222 (vol. 2 of 3)

Prediction of Secondary, Temporary, Short Term, Long Term, Accidental, Indirect, Cumulative Effects



Are temporary, short-term effects caused during construction or during time limited phases of project operation or decommissioning described?

Addressed Pages 193 - 222 (vol. 2 of 3)

Prediction of Secondary, Temporary, Short Term, Long Term, Accidental, Indirect, Cumulative Effects
Are effects which could result from accidents, abnormal events or exposure of the Project to natural or manmade disasters described and where appropriate quantified?

Addressed Pages 193 - 222 (vol. 2 of 3)

Prediction of Secondary, Temporary, Short Term, Long Term, Accidental, Indirect, Cumulative Effects
Are effects on the environment caused by activities ancillary to the main project described? (ancillary activities are part of the project but usually take place distant from the main Project location e.g. construction of access routes and infrastructure, traffic movements, sourcing of aggregates or other raw materials, generation and supply of power, disposal of effluents or wastes)

Addressed Pages 193 - 222 (vol. 2 of 3)

Prediction of Secondary, Temporary, Short Term, Long Term, Accidental, Indirect, Cumulative Effects
Are indirect effects on the environment caused by consequential development described? (consequential development is other projects, not part of the main Project, stimulated to take place by implementation of the Project e.g. to provide new goods or services needed for the Project, to house new populations or businesses stimulated by the Project)

Addressed Pages 193 - 222 (vol. 2 of 3)

Prediction of Secondary, Temporary, Short Term, Long Term, Accidental, Indirect, Cumulative Effects
Are the geographic extent, duration, frequency, reversibility and probability of occurrence of each effect identified as appropriate?

Addressed Pages 193 - 222 (vol. 2 of 3)

9. Prediction of Effects on Human Health and Sustainable Development Issues

Are primary and secondary effects on human health and welfare described and where appropriate quantified? (e.g. health effects caused by release of toxic substances to the environment, health risks arising from major hazards associated with the Project, effects caused by changes in disease vectors caused by the project, changes in living conditions, effects on vulnerable groups)

Addressed Pages 193 - 222 (vol. 2 of 3)

Are impacts on issues such as biodiversity, global climate change and sustainable development discussed where appropriate?

Addressed Pages 193 - 222 (vol. 2 of 3)

Evaluation of the Significance of Effects Is the significance or importance of each predicted effect discussed in terms of its compliance with legal requirement and the number, importance and sensitivity of people, resources or other receptors affected?

Addressed Pages 81 - 95 (vol. 2 of 3)

10. Evaluation of the Significance of Effects

Where effects are evaluated against legal standards or requirements are appropriate local, national or international standards used and relevant guidance followed?

Addressed Pages 81 - 95 (vol. 2 of 3)

Are positive effects on the environment described as well as negative effects?

Addressed Pages 193 - 222 (vol. 2 of 3)

Is the significance of each effect clearly explained?

Addressed Pages 193 - 222 (vol. 2 of 3)

11. Impact Assessment Methods

Are methods used to predict effects described and are the reasons for their choice, any difficulties encountered and uncertainties in the results discussed?

Addressed

Is the basis for evaluating the significance or importance of impacts clearly described?

Addressed Pages 193 - 222 (vol. 2 of 3)

Are impacts described on the basis that all proposed mitigation has been implemented i.e. are residual impacts described?

Addressed Pages 193 - 222 (vol. 2 of 3)

Is the level of treatment of each effect appropriate to its importance for the development consent decision?

Does the discussion focus on the key issues and avoid irrelevant or unnecessary information?

Addressed Pages 193 - 222 (vol. 2 of 3)



Is appropriate emphasis given to the most severe, adverse effects of the Project with lesser emphasis given to less significant effects

Addressed Pages 193 - 222 (vol. 2 of 3)

12. Description of mitigation

Are any measures which the developer proposes to implement to mitigate effects clearly described and their effect on the magnitude and significance of impacts clearly explained?

Addressed EMP, vol. 3 of 3

If the effect of mitigation measures on the magnitude and significance of impacts is uncertain is this explained?

Addressed EMP, vol. 3 of 3

Is it clear whether the Developer has made a binding commitment to implement the proposed mitigation or that the mitigation measures are just suggestions or recommendations?

Addressed EMP, vol. 3 of 3

Are the Developer's reasons for choosing the proposed mitigation explained?

Addressed EMP, vol. 3 of 3

Are responsibilities for implementation of mitigation including funding clearly defined?

Addressed EMP, vol. 3 of 3

Where mitigation of significant adverse effects is not practicable or the developer has chosen not to propose any mitigation are the reasons for this clearly explained?

Addressed EMP, vol. 3 of 3

Is it evident that the EIA Team and the Developer have considered the full range of possible approaches to mitigation including measures to reduce or avoid impacts by alternative strategies or locations, changes to the project design and layout, changes to methods and processes, "end of pipe" treatment, changes to implementation plans and management practices, measures to repair or remedy impacts and measures to compensate impacts?

Addressed EMP, vol. 3 of 3

Are arrangements proposed to monitor and manage residual impacts?

Addressed EMP, vol. 3 of 3

Are any negative effects of the proposed mitigation described?

Addressed EMP, vol. 3 of 3

13. Non technical summary

Does the Environmental information include a Non-Technical Summary?

Addressed Volumes 1 - 3 of 3

Does the Summary provide a concise but comprehensive description of the Project, its environment, the effects of the Project on the environment and the proposed mitigation?

Addressed Volumes 1 - 3 of 3

Does the Summary highlight any significant uncertainties about the Project and its environmental effects?

Addressed Volumes 1 - 3 of 3

Does the Summary explain the development consent process for the Project and the role of EIA in this process?

Addressed Volumes 1 - 3 of 3

Does the Summary provide an overview of the approach to the assessment?

Addressed Volumes 1 - 3 of 3

Is the Summary written in non-technical language, avoiding technical terms, detailed data and scientific discussion?

Addressed Volumes 1 - 3 of 3

Would it be comprehensible to a lay member

Addressed Volumes 1 - 3 of 3



Previous Recommendations

14. The application and assessment have met the minimum requirements and provisions of EMA
15. The received comments and objections to the applications have been reviewed and assessed. The raised
16. objections by a number of IAP's are assessed as either being allegations; non-substantive; being addressed in the EIA and EMP reports or being irrelevant to this application.
17. The project require proper monitoring by numerous competent authorities to ensure full compliance with the ECC conditions and EMP.

18. It is recommended for this project to be issued with ECC with attached conditions.

19. As indicated in the earlier submission, the assessment has adequately provided measures to manage impacts associated with the proposed development, hence this application can be evaluated further.

20. This project has been associated with public outcry related among others to impacts on the environment in particular on fauna and flora such as destruction of pristine environment and operating on a highly sensitive wildlife area as well as destruction of Okavango Delta and pollution of water courses, socio economic impacts such as cultural and heritage disruptions and issue of economic benefits.
21. Consultations with I&APs has been undertaken extensively. Additionally, I&APs had opportunity to raise concerns on project through the ECC APP online system. Records revealed that concerns raised at these platforms are similar to those that have been circulating on social media, some of which are considered localized and some insignificant.

22. However, the assessment has adequately identified impacts associated with this level of exploration, equally, mitigation measures have been identified to manage a number of impacts that are considered high intending to enhance positive ones and reduce negative ones. Information provided revealed that negative impacts after mitigation are low and benefits associated with this project outweigh the impacts.
23. Based on the above, its is recommended for this application to be evaluated further in the review process and possible issuance of the ECC.

24. Wide consultations were undertaken in and around the project area. Though the project attracted wide range of comments, most comments didn't highlight negative impacts which may be caused by the project. So far impacts identified are more on Fauna and flora i.e removal of trees, especially along the targeted roads.
25. impacts on reptiles and insects. Noise and Vibrations are some of the concerns raised.
26. The EMP proposed possible mitigation measures and recommended minimum cutting down of trees when widen up the proposed roads. though some trees will be removed, more small scale commercial farmers using the road will benefit. In cases where some infrastructure might be affected due to vibration, compensation policy will apply. The application is recommended to be issued with an ECC with conditions, especially operation time, Compensation, selective removal of trees and cautions to other road users

27. The assessment adequately addresses all key aspects in respect to potential environmental impacts associated with the proposed seismic survey in certain sections (areas of interests) of the Petroleum License 73, in the Kavango East Region. Although, there are several comments and objections submitted (these are limited to those logged-in on the EA Online System platform, and those seen by reviewer one), these objections focus more on the EAP's persona and not address objectively the potential concerns relating to the proposed activity and the associated impacts.
28. Therefore, further verification of this observation is recommended taking into account comment / inputs submitted to other reviewers along the review channel. Further, an environmental clearance certificate for the proposed 2D seismic survey is recommended.

