mineral resources
& energy

Department:
Mineral Resources and Energy
REPUBLIC OF SOUTH AFRICA

ENVIRONMENTAL AUTHORISATION

ENVIRONMENTAL AUTHORISATON IN TERMS OF REGULATION 24 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT OF 1998: ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014

IN RESPECT OF

THE PROPOSED EXPLORATION ACTIVITIES IN OFFSHORE BLOCK 1, OFF THE WEST COAST, SOUTH AFRICA

APPLICATION DETAILS

Application Reference Number	12/3/362
Holder of Environmental Authorisation	Tosaco Energy (Pty) Ltd
Location of the Activity	Block 1, Off the West Coast, South Africa
Size of the exploration right application area	19 909.31 km^2
Size of the area targeted for 3D seismic surveys	134 562 ha

This authorisation does not negate the holder of the authorisation of the responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the proposed activity.

DECISION ON ENVIRONMENTAL AUTHORISATION

The Department is satisfied with the information made available to it, and subject to compliance with the conditions of this Environmental Authorisation, that the applicant should be authorised to undertake the proposed activities as specified below.

ACTIVITY (S) AUTHORISED

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment Regulations, 2014 ("EIA Regulations"), the Department hereby grants the environmental authorisation to **Tosaco Energy (Pty) Ltd** to undertake the list of activities specified in Section 3 below and as described in the Environmental Impact Assessment Report (EIAR) dated 15 October 2021.

The granting of this environmental authorisation is subject to compliance with conditions specified under section 6 below.

1. DETAILS OF THE HOLDER OF THIS ENVIRONMENTAL AUTHORISATION

Tosaco Energy (Pty) Ltd
P.O. Box 1
Gallo Manor
2052

Contact Person:	Mr Lawrence Mulaudzi
Tel:	+27 10 001 5550
Email:	lawrence@kilicap.co.za

2. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Environmental Impact Management Services (Pty) Ltd
Regus Business Centre, 14 Stewart Drive
Berea
East London
5214

Contact Person: Mr Gideon Petrus Kriel
Tel: +27(0) 43 783 9826
Email: gp@eims.co.za

3. LIST OF ACTIVITIES AUTHORISED

The following activity as listed under EIA Regulations, 2014: Government Notice No. R984 of 04 December 2014 is authorised:

Activity Number: 18

Listed Activity: Any activity including the operation of that activity which requires an exploration right as contemplated in section 79 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including:

(a) associated infrastructure, structures and earthworks; or

(b) the primary processing of a petroleum resource including winning, extraction, classifying, concentrating or water removal; but excluding the secondary processing of a petroleum resource, including the beneficiating or refining of gas, oil or petroleum products in which case activity 5 in this Notice applies.

The holder of this authorisation is authorised to conduct the following activities within the area described under section 4 below:

- Reprocessing of approximately 5000 km of existing 2D seismic data previously acquired in the block;
- Reprocessing of approximately 750 km^2 of 3D seismic data previously acquired in the block; and
- Acquisition of 3D seismic data over an area of approximately 134 562 ha based on the outcome of existing data analysis.

4. LOCATION OF THE APPLICATION AREA

The application area is located in Block 1 off the West Coast of South Africa. The area stretches from Alexander Bay and extend along the western coastline to Hondeklip Bay and approximately 250 km off the coast of the Northern Cape. Block 1 is approximately 19 909.31 km^2 in extent and is adjacent to the Namaqualand Magisterial District.

5. CONDITIONS OF THE ENVIRONMENTAL AUTHORISATION

5.1 SCOPE OF AUTHORISATION

5.1.1 The holder is authorised to undertake the exploration activities as specified in section 3 above.

5.1.2 The authorised activities must only be carried out within the application area specified under section 4 above.

5.1.3 The holder of this environmental authorisation is responsible for ensuring compliance with the conditions of this environmental authorisation.

5.1.4 Any person(s) acting on behalf of the holder, inclusive of contractor(s), subcontractor(s), consultant (s), and employees are also subject to the conditions of this authorisation. This condition however does not exonerate the holder from its accountability and responsibility to ensure compliance with the conditions of this environmental authorisation.

5.1.5 Any changes to, or deviations from, and amendments to the proposed activities and conditions of this authorisation must be approved in writing by this Department before such changes, deviations or amendments are effected. The Department reserves the right to request the submission of information deemed necessary to assess and evaluate the significance and impacts of such changes, deviations and amendments. Any changes, deviations and amendments may be subject to the provisions of Chapter 5 of the EIA Regulations, 2014 pertaining to the amendments of the environmental authorisation.

5.1.6 The holder of this authorisation must apply for an amendment of this authorisation in the case of a change of ownership or transfer of rights and obligations.

5.2 NOTIFICATION AND APPEAL OF AUTHORISATION

5.2.1 The holder must, in writing, within fourteen days of the date of this authorisation, notify all registered interested and affected parties (I&APs) of the outcome of the application.

5.2.2 The notification contemplated above must, amongst other issues:

5.2.2.1 Stipulate the date of the decision, and the date of issue of the environmental authorisation.

5.2.2.2 Provide reasons for the decision.

5.2.2.3 Inform registered I&APs of the appeals pprocedure provided for in terms of the National Environmental Management Act, 1998: National Appeals Regulations (GN R 993 of 08 December 2014).

5.2.2.4 Draw the attention of the I&APs to the manner in which they may access the decision, including obtaining the copy of the authorisation.

5.3 COMMENCEMENT OF THE ACTIVITY(S)

5.3.1 This authorisation will only be effective in the event that an application for exploration right is granted in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002). None of the activities listed in this authorisation may therefore commence without an exploration right.

5.3.2 The authorised activities shall not commence within 20 days of the date of this authorisation, pending potential lodgement of appeal(s).

5.3.3 Where an appeal is lodged against the decision by any party, the authorisation or any provision or condition thereof will be suspended in accordance with section 43(7) of the National Environmental Management Act, 1998; and as such you may not commence with any activity, until a decision on the appeal has been taken.

5.3.4 The authorised activities must commence within a period of 5 years from the date of issue of this environmental authorisation. If commencement of the authorised activities does not occur within the said period, the authorisation lapses, unless an extension is granted in terms of Regulation 30 of the EIA Regulations, 2014. If the authorisation lapses and the holder still intends undertaking the authorised activity(s), a new application for environmental authorisation in terms of the EIA Regulations, 2014 must be obtained.

5.4 MANAGEMENT, MONITORING AND AUDITING OF OPERATIONS INCLUDING REPORTING REQUIREMENTS

5.4.1 The EMPR submitted with the EIA report is hereby approved. It is hence mandatory for the holder to implement all the recommendations and management measures stipulated in the EMPR throughout all phases of the proposed activities.

5.4.2 Any non-compliance with the EMPR constitutes non-compliance with this authorisation, and any non-compliance with this authorisation may result in its suspension and may render the holder guilty of an offence in terms of section 49A of NEMA and may, if convicted be liable for penalty as contemplated in terms of section 49B (1).

5.4.3 Should there be changes in the operation and management of the authorised activities, the EMPR must be amended to accommodate those changes and be submitted to the competent authority for consideration and approval before implementation takes place.

5.4.4 The holder of the authorisation must undertake necessary measures to ensure that operators, contractors and subcontractors have full awareness of the recommendations on the EMPR before commencing with any authorized activity.

5.4.5 The EMPR must be included in all contractual documentation entered thereto between the holder and contractor(s).

5.4.6 A copy of the EMPR must be kept onboard survey vessel(s) at all times.

5.4.7 The holder must, before the commencement of the authorised activity, appoint the following:

5.4.7.1 An independent and experienced Environmental Control Officer (ECO) who will ensure that the conditions of this authorisation and recommendations of the EMPR are implemented and adhered to.

5.4.7.2 Independent, qualified and experienced Marine Mammal Observers (MMO), Passive Acoustic Monitoring (PAM) Operators and Fisheries Liaison Officer (FLO) to monitor the interaction between marine mammals and survey operations, and with other marine users for the duration activity.

5.4.8 The holder of this authorisation must submit daily and monthly environmental monitoring reports during seismic survey operations. Furthermore, the holder must within 60 days of completion of the 3D seismic survey, submit a survey closure report.

5.4.9 The holder is required to submit an environmental audit report every 5 years, which must be carried out by an independent auditor to satisfy the requirements of this EA and the approved EMPR, in line with Appendix 7 of the EIA Regulations, 2014.

5.5 SPECIFIC CONDITIONS

5.5.1 The holder or appointed ECO must, 30 days before the commencement of the seismic surveys, distribute notifications to all key and registered stakeholders including the Agency informing them of the operational plans. The said notifications must include amongst other issues the following:

5.5.1.1 Commencement date, including survey and support vessel(s) mobilization date and anticipated duration of the survey;

5.5.1.2 Details of seismic survey and support vessels;

5.5.1.3 Sketch plans showing the operational area(s) including survey grids;

5.5.1.4 Details of the ECO; FLO, MMO, PAM Operators and contact persons for reporting environmental issues associated with the planned activities; and

5.5.1.5 Invitation of stakeholders to confirm if they should be included in the distribution list for daily MMO, and PAM reports.

5.5.2 The holder of the EA, must ensure that any potential impact on the environment is avoided, minimized and prevented. In this regard, all mitigation measures specified in the EIR and EMPR aimed at protecting marine ecosystem, fisheries and tourism sectors during the undertaking of the proposed seismic survey activities must be implemented.

5.5.3 Recommendations made in the EMPR with respect to the commencement and completion period of the survey must be adhered to.

5.5.4 The National Environmental Management: Protected Areas Act, 2003 prohibits any exploration activities within the Marine Protected Areas, National Parks and Nature Reserves. The holder must ensure that none of the authorised activities take place within the protected areas. Furthermore, a recommended 5km buffer zone around the Marine Protected Areas must be implemented during survey data acquisition.

5.5.5 Implementation of a 24-hour Passive Acoustic Monitoring (PAM) is required during seismic survey operations. In the event that visual observation is not possible and PAM systems or devices are down, operations must be temporary suspended in order to prevent any potential impacts to marine mammals.

5.5.6 The holder must submit Shipboard Oil Pollution Emergency Plan (SOPEP), developed in accordance with MARPOL, and National Oil Spill Continency Plan. SOPEP, which includes Emergency Response and Medical Evacuation Plans, must take into consideration all resources that may be required in case of an oil spill incident or any emergency incident. The said plan must be submitted to the Petroleum Agency SA 30 days before the mobilisation of the seismic survey vessel.

5.5.7 Illegal dumping of waste or any equipment aboard the vessels is prohibited. In the event of loss of any equipment that presents risks to the navigational activities, other marine users and environment, measures to retrieve lost equipment must be undertaken, and such incidents must be reported to the Petroleum Agency SA and South African National Hydrographic Office within 12 hours of occurrence.

5.5.8 During demobilisation process, the holder must ensure that the survey area is left as it was prior to the operations and all stakeholders are informed of the completion of the survey. The holder remains accountable and liable for any residual or latent risks that may occur or identified at completion of the surveys and in this regard, will be require to implement necessary measures to address such risks.

5.5.9 All recommended mitigation measures included in the EIR/ EMPR dated 15 October 2021 are deemed to be conditions of the EA and must therefore be adhered to.

6. GENERAL

6.1 A copy of the EA and the EMPR must be kept onboard the seismic survey vessel to ensure appropriate implementation of the mitigation measures.

6.2 The Department shall not be responsible for any damages or losses suffered by the holder in an instance where the operation is temporarily stopped for reasons of non- compliance with the conditions as set out herein.

6.3 In view of the above, and having taken into consideration environmental management principles as set out in section 2 of NEMA, and information presented in the EA application and EIR, and subject to compliance with conditions of the EA, this Department is satisfied that the proposed activities will not be in conflict with the objectives of the Integrated Environmental Management set out in Chapter 5 of NEMA and will not result to any detrimental risks to the environment and public. The EA is accordingly granted.

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MR TSELISO MAQUBELA

DEPUTY DIRECTOR-GENERAL: MINERAL AND PETROLEUM REGULATION

DATE OF THE EA: 03-03-2022

Appendix 1: Reasons for Decision

1. Information considered in making the decision

All the information presented to the Department was considered in making the decision. The said information includes amongst others:

1.1 The provisions of Chapter 5 of the NEMA which relates to the Integrated Environmental Management and section 2 NEMA principles; the EIA Regulations, 2014 and other relevant NEMA regulations and guidelines.

1.2 Environmental Authorisation Application dated 17 March 2021.

1.3 The information contained in the Final Scoping Report dated 05 May 2021.

1.4 Information contained in the Environmental Impact Assessment Report (EIAR) and EMPR dated 15 October 2021.

1.5 The results of the Public Participation Process submitted with the EIAR, which highlighted issues, objectives, concerns and comments raised by various Interested and Affected Parties (I&APs) and responses by the EAP.

1.6 The information contained in the following specialist reports:

- 1.6.1 Marine Faunal Assessment prepared by Pisces Environmental Services (Pty) Ltd.
- 1.6.2 Fisheries Specialist Study prepared by CapMarine (Pty) Ltd.

2. Submission of the Environmental Impact Assessment Report and Environmental Management Programme

2.1 Regulation 23(1) (a) and (b) requires the applicant to submit:

- a) an environmental impact assessment report (EIAR) inclusive of any specialist reports, and an EMPR within 106 days from the date of the acceptance of the scoping report, which must have been subjected to a public consultation process of at least 30 days; or
- b) a notification in writing that the EIR and an EMPR will be submitted within 156 of the acceptance of the scoping report by the competent authority.

2.2 The applicant requested a 35-day extension for the submission of the EIR and EMPR in accordance with Regulation 3(7) of the EIA Regulations. The extension was granted for the applicant to provide I& APs a further opportunity to comment on the project as some I& APs needed time to consult with relevant experts in order to submit informed comments. The EIAR, inclusive of specialist reports, and an EMPR were received by the Agency on 15 October 2021. The said reports were subjected to a public consultation process of 30 days and included comments received from I& APs.

3. Consideration of the EIAR and EMPR

Regulation 18 requires the competent authority to take into consideration section 24O and 24(4) of the Act when considering the application for EA, the need for and desirability of undertaking the proposed activity, and any guideline published in terms of section 24J of the Act. Furthermore, Regulation 23(3) provides that the EIAR must contain all information set out in Appendix 3 and must address the requirements as determined in the regulations pertaining to the financial provisions for rehabilitation, closure and post closure of operations; and Regulation 23(4) requires the EMPR to contain all information set out in Appendix 4 of the EIA Regulations,

The EIAR and EMPR were assessed taking into consideration the aforementioned requirements, and the key significant issues that resulted in the Department' s decision are set out as follows:

3.1 The motivation for the need and desirability of the proposed development is in line with the requirements of the EIA Regulations, 2014 and it addressed key issues raised in the Needs and Desirability Guideline.

3.2 The public consultation process undertaken by the EAP which includes notifying and registering interested and affected parties, advertising the proposed project, subjecting Scoping and EIR reports to a 30-day commenting period, consulting with various interested and affected parties and addressing comments received, was in line with the requirements of EIA Regulations, 2014 and related guidelines.

3.3 The environmental attributes of the application area, potential impacts associated with the proposed seismic survey were identified and assessed.

3.4 The profile and details of the EAP with respect to the qualifications and experience in environmental impact assessments and related projects has given confidence in the EAP' s ability and competence to carry out the EIA process.

3.5 Project Alternatives: The location, layout, technology, and no-go alternatives were identified. However due to the nature of proposed exploration operations, no in-depth assessments were carried out particularly on the location and technology as targeted area has to be explored to identify prospective areas; and 3D seismic survey is considered as a suitable technology to achieve the intended early phase exploration objectives.

3.6 The EIAR dated 15 October 2021 identified and considered application legislation and guidelines during the environmental impact assessment process.

4. Key Findings

Careful consideration of information submitted to the Department have thus resulted in the following conclusions:

4.1 All fundamental and procedural requirements prescribed in the applicable legislation have been satisfied.

4.2 The proposed exploration method i.e. 3D seismic survey is a widely used exploration technology during early phase of exploration world-wide. The said technology is currently used in South Africa and is generally regarded as non -intrusive in nature, except the potential impacts it poses on fisheries and marine fauna. However, the majority of the impacts associated with the planned exploration activities on fisheries and marine fauna have been assessed to be of low to very low significance with mitigation.

4.3 The identification and assessment of potential impacts of the activity, including cumulative impacts, was adequately undertaken, and the proposed mitigation and management measures are aligned with potential impacts. Furthermore, the implementation of mitigation measures in all phases of the proposed exploration activities will ensure that the planned activities will not result in any detrimental impact to the environment.

4.4 The public consultation process undertaken adhered to the minimum requirements as prescribed under Chapter 6 ' Public Participation' of the EIA Regulations, 2014 and related guidelines. In this regard, objections and concerns related to the proposed activities were addressed in the EIAR and EMPR. It is therefore our view that the EAP has complied with the requirements as outlined in Chapter 6 of the EIA Regulations, 2014.

5. Conclusion

In view of the above, and having taken into consideration environmental management principles as set out in section 2 of NEMA, this Department is satisfied that the proposed activities will not be in conflict with the objectives of the Integrated Environmental Management set out in Chapter 5 of the National Environmental Management Act, 1998 and will not result to any detrimental risks to the environment and public. The authorisation is accordingly granted.

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MR TSELISO MAQUBELA
DEPUTY DIRECTOR-GENERAL: MINERAL AND PETROLEUM REGULATION
DATE OF THE EA: 03 -03- 2022