



## **mineral resources**

Department:  
Mineral Resources  
**REPUBLIC OF SOUTH AFRICA**

Enquiries: Ms Sinazo Mnyaka

EAP Reg No.: 2022/5486

Email Address: [mnyakas@petroleumagencysa.com](mailto:mnyakas@petroleumagencysa.com)

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### **By E-MAIL**

The Project Development Manager  
TGS Geophysical Company (UK) Limited  
TGS, Dukes Court Street  
Woking, GU21 5BH  
United Kingdom

Attention : Mr Jevon Hilder  
Cell : +44 7788 315682  
Tell : +44 1483 742644  
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**ENVIRONMENTAL AUTHORISATION IN TERMS OF SECTION 24 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AS AMENDED, READ WITH REGULATION 19 OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 AS AMENDED, FOR THE PROPOSED 3D SEISMIC SURVEY ACTIVITIES LOCATED BETWEEN APPROXIMATELY 120 KM OFFSHORE OF ST HELENA BAY, EXTENDING NORTH ALONG THE WESTERN COASTLINE TO APPROXIMATELY 230 KM OFFSHORE OF HONDEKLIP BAY, OFF THE WEST COAST OF SOUTH AFRICA.**

I, Mr Jacob Mbele, in terms of the powers delegated to me, in terms of regulation 24 of the National Environmental Management Act, 1998 (Act 107 of 1998): Environmental Impact Assessment Regulations, 2014 (hereafter referred to as 'EIA Regulations') decided to grant an environmental authorisation (hereafter referred to as the authorisation) in respect of the application lodged on 06 September 2022. Herewith attached, is the copy of the authorisation and reasons for the decision to grant.

You are instructed in terms of regulation 4(2) of the EIA Regulations to notify all interested and affected parties (I&APs), in writing, within fourteen (14) days of the date of the decision, of the outcomes of your application. You are also required to inform I&APs of the procedure to submit appeals against the decision as contained in the National Environmental Management Act, 1998 (Act 107 of 1998): National Appeals Regulations, 2014 (hereafter referred to as 'Appeals Regulations').

Should you wish to appeal the decision or any aspect thereof, you must submit an appeal in the prescribed form and in accordance with Chapter 2 of the Appeals Regulation, within twenty (20) days from the date of notification of the decision. The said must be submitted to the Minister of Forestry, Fisheries, and the Environment, and copies sent to the Department of Mineral Resources and Energy (Head Office) and the Petroleum Agency SA by one of the following means:

**1) Department of Forestry, Fisheries, and the Environment**

Appeals and Legal Review Directorate

Attention : Director: Appeals and Legal Review

Email : [appeal@dfre.gov.za](mailto:appeal@dfre.gov.za)

Post : Private Bag x 447, Pretoria, 0001

By Hand : Environmental House, Corner Steve Biko and Soutspansberg Street, Acardia, Pretoria, 0083

**2) Copy(s) of the lodged appeal(s) to the Petroleum Agency SA**

Attention : The Chief Executive Officer

Email : [EAappeals@petroleumagencyrsa.com](mailto:EAappeals@petroleumagencyrsa.com)

Post : Private Bag x 5111, Tygervalley, 7536

By Hand : Heron Place, Second Floor, Heron Close, Century City, Cape Town

**3) Copy(s) of the lodged appeal(s) to the Department of Mineral Resources and Energy**

Legal Services Directorate

Attention : Director: Legal Services

Email : [Pieter.Alberts@dmre.gov.za](mailto:Pieter.Alberts@dmre.gov.za)

Facsimile : 086 710 0877

Post : Private Bag x 59, Arcadia, 0007

By Hand : Trevenna Campus, Building 2C, c/o Meintjes and Francis Baard Street, Sunnyside

The authorised activities shall not commence within twenty (20) days of the date of signature of this authorisation. Please note that should the Minister of Forestry, Fisheries, and the Environment receive appeals against this authorisation or conditions thereof, this authorisation will be suspended in accordance with section 43(7) of NEMA pending the decision on such appeals.

Yours sincerely,



MR JACOB MBELE

DIRECTOR-GENERAL

DATE: 17/4/2023



## **mineral resources**

Department:  
Mineral Resources  
**REPUBLIC OF SOUTH AFRICA**

Enquiries: Ms Sinazo Mnyaka

EAP Reg No.: 2022/5486

Email Address: [mnyakas@petroleumagencysa.com](mailto:mnyakas@petroleumagencysa.com)

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**ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL  
MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AS AMENDED (“NEMA”) AND ENVIRONMENTAL  
IMPACT ASSESSMENT REGULATIONS, 2014 AS AMENDED**

**IN RESPECT OF  
THE PROPOSED 3D SEISMIC SURVEY ACTIVITIES OFFSHORE, OFF THE WEST COAST, SOUTH  
AFRICA**

### **APPLICATION DETAILS**

<b>Application Reference Number</b>	12/1/040
<b>Holder of Environmental Authorisation</b>	TGS Geophysical Company (UK) Limited
<b>Location of the Activity</b>	The EA application area is located between approximately 120 km offshore of St Helena Bay, extending north along the western coastline to approximately 230 km offshore of Hondeklip Bay. It covers several petroleum license blocks.
<b>Size of the Environmental Authorisation application area</b>	Approximately 5 740 000 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 THE AUTHORISATION

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### ACRONYMS

AGENCY	: Petroleum Agency SA
BAR	: Basic Assessment Report
DEPARTMENT	: Department of Mineral Resources and Energy
ECO	: Environmental Control Officer
EA	: Environmental Authorisation
EIA	: Environmental Impact Assessment
EIA REGULATIONS	: EIA Regulations, 2014, as amended
EMPr	: Environmental Management Programme
I&APs	: Interested and Affected Parties
MPRDA	: Mineral and Petroleum Resource Development Act, 2002 (Act 28 of 2002), as amended
NEMA	: National Environmental Management Act, 1998 (Act 107 of 1998), as amended

The Department is satisfied with the information made available to it, and subject to compliance with the conditions of this authorisation, that the applicant should be authorised to undertake NEMA EIA listed activities specified below. Details regarding the basis on which the Department reached this decision are set out in Annexure 1 of this authorisation.

### 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 authorisation to **TGS Geophysical Company (UK) Limited** to undertake NEMA EIA listed activities specified in section 3 below and as described in the BAR/EMPr submitted on **06 December 2022**.

The granting of this authorisation is subject to compliance with conditions specified under section 5 below.

## 1. DETAILS OF THE HOLDER OF THIS ENVIRONMENTAL AUTHORISATION

TGS Geophysical Company (UK) Limited  
TGS, Dukes Court Street  
Woking, GU21 5BH  
United Kingdom

Contact Person : Mr Jevon Hilder  
Tel : +44 1483 742644  
Cell : +44 7788 315682  
Email : [jevon.hilder@tgs.com](mailto:jevon.hilder@tgs.com)

## 2. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Environmental Impact Management Services (Pty) Ltd  
PO Box 2083  
Pinegowrie  
2123

Contact Person : Mr Liam Whitlow  
Tel : +27(0) 11 789 7170  
Email : [liam@eims.co.za](mailto:liam@eims.co.za)

## 3. LIST OF ACTIVITIES AUTHORISED

The following activity as listed under the EIA Regulations, 2014: Government Notice No. R983 of 04 December 2014, is authorised:

### Listing Notice 1

**Activity Number** : 21(b)  
**Listed Activity** : Any activity including the operation of that activity which requires a reconnaissance permit in terms of section 74 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), as well as any other applicable activity as contained in this Listing Notice or

TGS Geophysical Company (UK) Limited-12/1/040  
in Listing Notice 3 of 2014, required to exercise the reconnaissance  
permit, excluding:

- (a) any desktop study; and
- (b) any aerial survey.

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

- Acquisition of 3D seismic survey data, which involves generation of high-level, low frequency sound pulses by an acoustic instrument towed behind a survey vessel below the sea surface. The sounds are directed towards the seabed and the seismic signal is reflected by the geological interfaces below the seafloor. The reflected signals are received by an array of receivers or sets of hydrophones towed behind the vessel in a single streamer (2D) or in multiple streamers (3D) and are fed back to the recording instruments on board.
- The survey would involve a seismic sound source and multiple hydrophone streamers, which would be approximately 8 000 m long and 2 000 m wide. The streamers would be towed at a depth of 8 m below the surface and would not be visible, except for the tail-buoy at the terminal end of the cable.
- The array has an operating pressure of 2 000 pounds per square inch. The sound source would be towed behind the vessel at a depth of between 5 – 25 m below the surface. As the survey vessel would be restricted in maneuverability, other vessels should remain clear of it. Therefore, a support vessel usually assists in the operation of keeping other vessels at a safe distance.
- Each triggering of a sound source is termed a seismic pulse, and these are discharged at intervals of 6 – 20 seconds (depending on water depth and other environmental characteristics). Each seismic pulse is usually only between 5 and 30 milliseconds in duration, despite peak levels within each pulse being high, the total energy delivered into the water is low.
- Seismic sources have an energy frequency range of 5-300 Hz, with the optimal frequency required for deep penetration seismic work being 50-80 Hz. Sound levels from individual sound sources used today in the seismic industry range from 200 to 255 dB re 1  $\mu$ Pa at 1 m, for small to large individual seismic sources, respectively.
- For sound source arrays, sound levels range from 235 dB re 1  $\mu$ Pa at 1 m for a small array (500 cubic inches) to 260 dB re 1  $\mu$ Pa at 1 m for large arrays (7 900 cubic inches). Most of the produced energy is below 250 Hz, with 90% of the energy between 70 to 140 Hz, although pulses do contain some higher frequencies up to 16 kHz. It must be noted, however, that the sound level specifications for sound source arrays refer to sound levels in the vertical direction directly beneath the sound source array, generally near its centre, with nominal sound levels in the horizontal direction being ~10-20 dB lower.

- The seismic vessel travels along a transect of a prescribed grid within the application area chosen to cross any known or suspected geological structure in the area at a speed of between four and six knots during acquisition of data. The survey vessel length is approximately 100 m.

#### 4. LOCATION OF THE APPLICATION AREA

The EA application area is located in the Northern and Western Cape Provinces approximately 120 km offshore of St Helena Bay extending north along the western coastline to approximately 230 km offshore of Hondeklip Bay. It covers several petroleum license blocks. The area is approximately 5 740 000 hectares in extent and is adjacent to the Namaqualand and West Coast District Municipalities. The application area coordinates are listed in Table 1 below.

Table 1: Coordinates of the application area

Point	Latitude	Longitude	Point	Latitude	Longitude
1	32°59'53.46"S	16°35'02.75"E	6	30°40'16.36"S	13°20'38.26"E
2	32°59'57.95"S	13°53'17.25"E	7	30°32'53.92"S	13°35'15.39"E
3	32°39'06.43"S	13°53'26.20"E	8	30°15'21.82"S	14°04'05.31"E
4	32°09'29.22"S	13°58'04.38"E	9	30°15'27.76"S	14°52'28.65"E
5	31°31'44.64"S	13°39'01.12"E			

#### 5. CONDITIONS OF THE AUTHORISATION

##### 5.1 SCOPE OF AUTHORISATION

- 5.1.1 The holder is authorised to undertake activities specified in section 3 above.
- 5.1.2 The authorised activities must only be carried out within the application area specified in section 4.
- 5.1.3 The holder of this authorisation is responsible for ensuring compliance with the conditions of this 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 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 this authorisation.

## **5.2 NOTIFICATION AND APPEAL OF AUTHORISATION**

5.2.1 The holder must, in writing, within fourteen (14) days of the date of this authorisation, notify all 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 authorisation.

5.2.2.2 Provide reasons for the decision.

5.2.2.3 Inform I&APs of the appeals procedure 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 reconnaissance permit 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 a reconnaissance permit.

5.3.2 The authorised activities shall not commence within twenty (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, this 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(s) is taken.

5.3.4 The authorised activities must commence within a period of one (1) year from the date of issue of this 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 intends undertaking the authorised activity(s), a new 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 BAR/EMPr 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 approval before implementation commences.

5.4.4 The holder of this authorisation must undertake the necessary measures, to ensure that operators, contractors, subcontractors, and any person(s) acting on behalf of the holder, has full awareness of the recommendations of the EMPr before commencing with any authorised 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 always be kept onboard survey vessel(s).

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 interactions 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 sixty (60) days of completion of the 3D seismic survey, submit a survey closure report, completed by the ECO.

## 5.5 SPECIFIC CONDITIONS

- 5.5.1 The holder or appointed ECO must, thirty (30) days before the commencement of the seismic surveys, distribute notifications to the I&APs including the Agency informing them of the operational plans. The said notifications must include the following:
- 5.5.1.1 Commencement date, including survey and support vessel(s) mobilisation date, and anticipated duration of the survey.
  - 5.5.1.2 Details of the 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 details for reporting environmental issues associated with the planned activities.
  - 5.5.1.5 Invitation to I&APs to confirm if they should be included in the distribution list for daily MMO, PAM and FLO reports.
- 5.5.2 Avoid operating during periods of peak fishing efforts and migratory season of cetaceans and their aggregates on the summer feeding grounds between St Helena Bay and Dassen Island.
- 5.5.3 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 these areas. Furthermore, a 5 km buffer zone must be implemented around all Marine Protected Areas during seismic survey data acquisition.
- 5.5.4 Marine Mammal Observers must be equipped with infra-red cameras.
- 5.5.5 Passive Acoustic Monitoring is mandatory where visual observations are not possible due adverse weather conditions or at night. If PAM system is not functional, operations must temporarily be suspended to prevent any potential impacts to marine mammals.
- 5.5.6 The holder must submit a Shipboard Oil Pollution Emergency Plan (SOPEP) in accordance with MARPOL 73/78 Annex I and the National Oil Spill Contingency Plan (NOSCP).
- 5.5.7 In addition to SOPEP, Emergency Response and Medical Evacuation Plan must be submitted. The said plans must take into consideration all resources that may be required in case of an oil spill incident or any emergency incident. The plans must be submitted to the Petroleum Agency

- SA (hereafter referred to as the ' Agency') thirty (30) days before the mobilisation of the seismic survey vessel.
- 5.5.8 Ensure that 'turtle-friendly' tail buoys are used by the survey contractor or existing tail buoys are fitted with either exclusion or deflector 'turtle guards'.
  - 5.5.9 Ensure that solid streamers are used instead of fluid-filled streamers to avoid leaks.
  - 5.5.10 Maintain a pre-acquisition watch of sixty (60) minutes before any instances of seismic source testing, to confirm that there are no penguins or feeding aggregations of diving seabirds, shoaling large pelagic fish, turtles, seals, or cetaceans within 500 m of the seismic source, and implement a "soft- start" procedure as defined in the approved BAR/EMPr. If only a single lowest power seismic source is tested, the pre-acquisition watch period can be reduced to thirty (30) minutes.
  - 5.5.11 Line changes and break in acquisition must follow the procedures defined in the approved BAR/EMPr and must be synchronized with "soft-start" procedures as defined in the approved BAR/EMPr.
  - 5.5.12 Terminate seismic source on detection and/or observation of mortality or injuries of marine life within the 500m mitigation zone.
  - 5.5.13 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 the environment, measures to retrieve lost equipment must be undertaken, and such incidents must be reported to the Agency and South African National Hydrographic Office within twelve (12) hours of occurrence.
  - 5.5.14 During the demobilisation process, the holder must ensure that the survey area is left as it was prior to the operations and all I&APs must be informed of the completion of the survey. The holder remains accountable and liable for any residual or latent risks that may occur or are identified at completion of the surveys. In this regard, necessary measures to address such risks are mandatory.
  - 5.5.15 Develop a community engagement protocol that is based on the San Code of Research Ethics. This should be done in consultation with the affected communities and must include a community strategy and grievance mechanism.
  - 5.5.16 All recommended mitigation measures included in the BAR/ EMPr dated 06 December 2022 are deemed to be conditions of this authorisation and must therefore be adhered to.

**6. GENERAL**

A copy of this authorisation and the EMPr must be kept onboard the seismic survey vessel to ensure appropriate implementation of the mitigation measures.

**7. DISCLAIMER**

The Department shall not be responsible for any damages or losses suffered by the holder in an instance where the operation is temporarily 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.

**8. RECOMMENDATION**

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 environmental authorisation application and BAR, and subject to compliance with conditions of this authorisation, 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 authorisation is accordingly granted.**



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**MR JACOB MBELE**

**DIRECTOR-GENERAL**

**DATE OF THE EA:** 17/11/2023

## APPENDIX 1: REASONS FOR DECISION

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### 1. Information Considered in Making the Decision

All the information presented to the Department was considered in making this 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 06 September 2022.
- 1.3 The information contained in the final BAR/EMPr, compiled by an independent Environmental Assessment Practitioner (EAP) registered with the Environmental Assessment Practitioner Association of South Africa (EAPASA) from Environmental Impact Management Services (Pty) Ltd, submitted to the Department on 06 December 2022.
- 1.4 The information contained in the following specialist reports received by the Department on 06 December 2022:
  - 1.4.1 Biodiversity and Ecosystem Services Assessment prepared by Pisces Environmental Services (Pty) Ltd.
  - 1.4.2 Fisheries Specialist Study prepared by Capricorn Marine Environmental (Pty) Ltd.
  - 1.4.3 Heritage Impact Assessment prepared by PGS Heritage (Pty) Ltd.
  - 1.4.4 Social Impact Assessment prepared by Equispectives Research & Consulting Services.
  - 1.4.5 Sound Transmission Loss Modelling prepared by SLR Consulting Australia (Pty) Ltd.
- 1.5 The results of the Public Participation Process submitted with the BAR/EMPr, which highlighted issues, objections, concerns, and comments raised by various I&APs and responses by the EAP.

### 2. Submission and Consideration of the Basic Assessment Report and Environmental Management Programme

- 2.1 In terms of regulation 19(1)(a) and (b) of the EIA Regulations, 2014, the applicant must, within ninety (90) days of receipt of the application by the competent authority, submit to the competent authority-

- (a) A basic assessment report, inclusive of specialist reports, an EMPr and where applicable a closure plan, which was subjected to a public participation process of at least thirty (30) days and which reflects the incorporation of comments received, including any comments of the competent authority; or
- (b) a notification, in writing, that the basic assessment report, inclusive of the specialist reports, and EMPr and where applicable a closure plan, will be submitted within one hundred and forty (140) days of receipt of the application by the competent authority, as significant changes were made or significant new information was added to the basic assessment report or EMPr or, where applicable, a closure plan, which changes or information was not contained in the report or plans consulted on during the initial public participation process contemplated in sub-regulation (1)(a) and that the revised reports or EMPr or, where applicable, a closure plan will be subjected to another public participation process of at least thirty (30) days.

2.2 An application for the authorisation was submitted on 06 September 2022 and acknowledged on 19 September 2022, informing the applicant to submit a BAR/EMPr on or before 06 December 2022. The BAR/EMPr was submitted to the Department on 06 December 2022.

### **3. Key Findings**

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

- 3.1 All fundamental and procedural requirements prescribed in the applicable legislation is satisfied.
- 3.2 The proposed 3D seismic survey is a widely used oil and gas exploration technology worldwide. The said technology is currently used in South Africa and is generally regarded as non-intrusive in nature. The technology poses potential impacts on fisheries and marine fauna. However, majority of the impacts were assessed to range between low to very low significance with mitigation.
- 3.3 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 3D seismic survey activities will ensure that the planned activities will not result in any detrimental impacts on the environment.

3.4 The motivation for the need and desirability of the proposed 3D seismic survey activity is in line with the requirements of the EIA Regulations, 2014 and it addressed key issues in the Need and Desirability Guideline.

3.5 Project Alternatives: The location, layout, scheduling, technology, and no-go alternatives were identified and briefly assessed. However due to the nature of proposed exploration operations, no in-depth assessments were carried out. The preferred location was selected based on its high likelihood of containing significant hydrocarbon reserves. The preferred 3D seismic survey is considered a suitable technology to achieve the intended objective of the proposed project. In addition, seismic survey technology is currently the only commercially available technology to achieve the desired objectives of the project. The no-go alternative was not preferred due to the positive impacts that might be derived from undertaking the planned project. The layout and scheduling alternatives were assessed in consideration of sensitive areas and periods of peak fishing activity and marine fauna movements. The layout and scheduling of the proposed project will therefore consider the aforementioned aspects.

3.6 The Public Participation Process (PPP) complied with chapter 6 of the EIA Regulations, 2014 and related guidelines. The PPP included the following:

- (a) Identification and notification of I&APs inclusive of authorities, fisheries, and non-governmental organizations.
- (b) Notifications in English, Afrikaans and isiXhosa were distributed to pre-identified I&APs through registered mail, fax, email, and SMS.
- (c) Site notices written in English, Afrikaans and isiXhosa were placed at 100 onshore locations along the west coast from 16 to 20 August 2022.
- (d) Newspaper advertisements were published in five newspapers i.e., Cape Times (English and IsiXhosa), Sentinel News (English and Afrikaans), Weslander (English and Afrikaans), Ons Kontrei and Die Platterlander (English and Afrikaans) between 19 and 26 August 2022.
- (e) Radio advertisements were published in four radio stations i.e., KFM (English), Radio NFM (English and Afrikaans), Radio West Coast (English and isiXhosa) and Radio Namaqualand (English and Afrikaans) between 26 August to 03 September 2022.



- (f) Initial series of public meetings were held in Cape Town, Hout Bay, Saldanha Bay, Lamberts Bay, Hondeklip Bay and Port Nolloth between 29 August and 03 September 2022.
- (g) A second series of public meeting were held in the same locations between 31 October and 05 November 2022, including a virtual meeting held on MS Teams on 10 November 2022.
- (h) Comments and issues raised by I&APs were adequately addressed in the BAR/EMPr.

#### 4. 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 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. This environmental authorisation is accordingly granted.



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MR JACOB MBELE

DIRECTOR-GENERAL

DATE OF THE EA: 17/4/2023