

20 April 2023

Dear Sir/Madam,

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) FOR PROPOSED OFFSHORE EXPLORATION WELL DRILLING IN BLOCK 5/6/7, SOUTH-WEST COAST, SOUTH AFRICA (DMRE REF: TEEPSA 12/3/224)**NOTIFICATION OF ENVIRONMENTAL AUTHORISATION**

Our previous correspondence of 15 December 2022 regarding the above-mentioned project refers.

On behalf of TotalEnergies EP South Africa Block 567 (Pty) Ltd (TEEPSA), notice is hereby given that on **17 April 2023** the Department of Mineral Resources and Energy (DMRE) **granted an Environmental Authorisation** for the above-mentioned project in terms of the National Environment Management Act, 1998 (No. 107 of 1998) (NEMA) and the Environmental Impact Assessment (EIA) Regulations 2014. This provides TEEPSA with authorisation to, *inter alia*, drill up to five exploration wells within the area of interest in Block 5/6/7.

A copy of the Environmental Authorisation is attached (refer to Attachment A) and can also be downloaded from the SLR website (<https://www.slrconsulting.com/en/public-documents/TEEPSA-567>) and data free website (<https://slrpublicdocs.datafree.co/en/public-documents/TEEPSA-567>). The Environmental Authorisation outlines, amongst others, the decision, the activities authorised, conditions of authorisation, reasons for the decision and the appeal process in terms of the National Appeals Regulations 2014.

Your attention is drawn to your **right to lodge a formal appeal** with the Appeal Administrator. In terms of Section 4(1) of the National Appeals Regulations 2014 (as amended), an appellant must, **within twenty (20) days** from the date that the notification of the decision was sent to the registered Interested and Affected Parties (I&APs) (i.e. 20 days from 20 April 2023):

- Submit the appeal to the Appeal Administrator; and
- Submit a copy of the appeal to the Applicant (i.e., TEEPSA), registered I&APs, and any Organs of State with interest in this matter (e.g., DMRE and PASA). A copy of the I&AP database is available from SLR on request.



SLR Consulting (South Africa) Proprietary Limited

Registered Address: Suite 1 - Building D, Monte Circle,
178 Montecasino Boulevard, Fourways, Johannesburg, Gauteng, 2191
Postal Address: PO Box 1596, Cramerville, 2060, South Africa

Reg. No: 2007/005517/07

Vat No: 4630242198

Johannesburg Office: Physical Address: Suite 1 - Building D, Monte Circle,
178 Montecasino Boulevard, Fourways, Johannesburg, Gauteng, 2191
Postal Address: PO Box 1596, Cramerville, 2060 Tel: +27 11 467 0945

Cape Town Office: Physical / Postal Address: 5th Floor, Letterstedt House,
Newlands on Main, Cnr Main and Campground Roads,
Newlands, Cape Town, Western Cape, 7700
Tel: +27 21 461 1118

In terms of Regulation 4(2) of the National Appeal Regulations 2014 *“an appeal submission must be:*

- a. *submitted in writing in the form obtainable from the Appeal Administrator; and*
- b. *accompanied by:*
 - i. *a statement setting out the grounds of appeal; and*
 - ii. *supporting documentation, which is referred to in the appeal submission, and a statement, including supporting documentation, by the Appellant to confirm compliance with Regulation 4(1) of these Regulations”.*

The prescribed appeal form and assistance regarding the appeal process is obtainable from the Appeal Administrator. **Appeals must be submitted to the Appeals Administrator by means of one of the following methods:**

Department of Forestry, Fisheries and the Environment: Appeals and Legal Review Directorate

Attention: Director: Appeals and Legal Review
 Email: appeals@dffe.gov.za
 By post: Private Bag X 447, Pretoria, 0001
 By hand: Environmental House, Corner Steve Biko and Soutpansberg Street, Arcadia, Pretoria, 0083

You are also requested to submit a copy of the appeal and any supporting documents to the following stakeholders:

Department of Mineral Resources and Energy

Attention: Director: Legal Services
 Email: Pieter.Alberts@dmre.gov.za
 Facsimile: 086 710 0877
 Post: Private Bag X 59, Arcadia, 0007
 By Hand: Trevenna Campus Building 2C, c/o Meintjies and Francis Baard Street, Sunnyside, 0007

Petroleum Agency of South Africa

Attention: The Chief Executive Officer
 Email: EAappeals@petroleumagency.com
 Post: Private Bag X 5111, Tygervalley, 7536
 By Hand: Heron Place, Second Floor, Heron Close, Century City, Cape Town

TotalEnergies EP South Africa Block 567 (Pty) Ltd

Attention: Appeals Coordinator
 E-mail: ep-appeals567-TEEPSA@totalenergies.com
 By Post: 27 Willie Van Schoor Drive, Tygervalley Chambers 2, 3rd Floor, Tygervalley, 7530
 By Hand: 27 Willie Van Schoor Drive, Tygervalley Chambers 2, 3rd Floor, Tygervalley, 7530

We thank you for your interest in this matter. Please do not hesitate to contact the undersigned should you have any queries in this regard.

Your sincerely,

TEEPSA-567 Stakeholder Engagement Team

ATTACHMENT A: ENVIRONMENTAL AUTHORISATION



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Enquiries: Ms Sinazo Mnyaka

EAP Reg No.: 2022/5486

Email Address: mnyakas@petroleumagencysa.com

By E-MAIL

TotalEnergies EP South Africa Block 567(Pty) Ltd

27 Willie Van Schoor Drive

Tygervalley Chambers 2, 3rd Floor

Tygervalley, Cape Town

7530

Attention : Mr Eduard Groenewald
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Email : eduard.groenewald@totalenergies.com

ENVIRONMENTAL AUTHORISATION IN TERMS OF SECTION 24 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AS AMENDED, READ WITH REGULATION 23 OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 AS AMENDED, FOR THE PROPOSED EXPLORATION WELL DRILLING IN BLOCK 5/6/7 OFF THE SOUTH-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 20 May 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

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@petroleumagencyssa.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

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 from the date that the notification of the decision of this authorisation was sent to I&APs. 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,



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MR JACOB MBELE

DIRECTOR-GENERAL

DATE: 17/4/2023

APPENDIX 1: REASONS FOR DECISION

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 Authorisation Application dated 20 May 2022.
- 1.3 Final Scoping Report submitted, evaluated, and accepted in accordance with Regulations 21 and 22 and appendix 2 of the EIA Regulations.
- 1.4 The information contained in the final ESIA report and EMPr, compiled by an independent Environmental Assessment Practitioner (EAP) registered with the Environmental Assessment Practitioner Association of South Africa (EAPASA) from SLR Consulting (South Africa) (Pty) Ltd, submitted to the Department on 15 December 2022.
- 1.5 The information contained in the following technical and specialist reports received by the Department on 15 December 2022:
 - 1.5.1 Drilling Discharges Modelling prepared by H-Expertise Services S.A.S.
 - 1.5.2 Oil Spill Modelling prepared by H-Expertise Services S.A.S.
 - 1.5.3 Underwater Noise Modelling and Zones of Impact Assessment prepared SLR Consulting (South Africa) (Pty) Ltd.
 - 1.5.4 Marine Ecology Impact Assessment prepared by PISCES Environmental Services (Pty) Ltd.
 - 1.5.5 Fisheries Impact Assessment prepared by Capricon Marine Environmental.
 - 1.5.6 Social-Economic Impact Assessment prepared by SLR Consulting (South Africa) (Pty) Ltd.
 - 1.5.7 Cultural Heritage Impact Assessment prepared by Prof MJR Boswell.
 - 1.5.8 Climate Change and Air Emissions Impact Assessment prepared by Airshed Planning Professionals.
- 1.6 The results of the Public Participation Process submitted with the ESIA, which highlighted issues, objections, concerns, and comments raised by various I&APs and responses by the EAP.

2. Submission and Consideration of the ESIA Report and EMPr

2.1 Regulation 23(1) (a) and (b) of the EIA Regulations requires the applicant to submit within 106 days of the acceptance of the scoping report to the competent authority -

(a) An Environmental Impact Assessment report inclusive of any specialist reports and an EMPr, which must have been subjected to a public participation process of at least 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 reports and an EMPr, will be submitted within 156 days of receipt of the application by the competent authority, as significant changes have been made or significant new information has been added to the environmental impact assessment report or EMPr, which changes or information was not contained in the reports consulted on during the initial public participation process contemplated in sub-regulation (1) (a) , and that the revised environmental impact assessment report or EMPr will be subjected to another public participation process of at least 30 days.

2.2 The ESIA and the EMPr inclusive of the specialist studies were submitted within the prescribed submission date i.e., 15 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 Most of the potential impacts associated with normal drilling operations range from negligible to low significance with mitigation. The impact of unplanned event such as blow-out range from high to very high, however the occurrence of such events is very unlikely, and the holder has strategies in place to deal with such should it occur.

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.

3.4 The motivation for the need and desirability of the proposed drilling operations 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 site/location, timing/scheduling, design and 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 holder has an existing exploration right over Block 5/6/7 and preferred location within the Block was selected based on its high likelihood of containing significant hydrocarbon reserves. The operations are scheduled to avoid the Austral Winter, where the likelihood of shoreline oiling for a blow-out is highest. If the operations cover this period, the spill response plan will be enhanced. The design and technology alternatives are dependent on the nature of the proposed activity, which requires specific method, material and paths that are suitable for the deepwater marine environment. These includes a selected type of drilling unit, drilling fluid, leaving, or removing wellhead based on assessed risks and paths to be taken by the helicopter to avoid environmental sensitivities. The no-go alternative was not preferred due to the positive impacts that might be derived from undertaking the planned project.

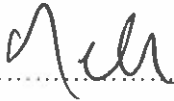
3.6 The Public Participation Process (PPP) complied with chapter 6 of the EIA Regulations, 2014 and related guidelines. The PPP included the following:

- (a) Publishing of draft ESIA for comments from 24 October to 7 December 2022.
- (b) Publishing the ESIA, supporting specialist reports and the non-technical summary (in English, Afrikaans, and isiXhosa) on SLR website, data free website and at various public venues.
- (c) Notifying pre-identified I&APs about the availability of the draft ESIA in English, Afrikaans, and isiXhosa through email, whatsapp and SMS on 24 October 2022. The notification also indicated the availability of the non-technical summary and contained an invitation to public meetings.
- (d) Publishing newspaper advertisements in four regional newspapers and 15 local newspapers in different languages namely English, Afrikaans and isiXhosa from 24 to 28 October 2022.
- (e) Publishing radio advertisements multiple times in ten radio stations in different languages namely English, Afrikaans and isiXhosa from 26 October to 04 November 2022.
- (f) Notifying selected traditional and indigenous leaders about a focus group meeting held on 31 October 2022. Follow-up reminders were emailed to these stakeholders on 31 October 2022 (morning) prior to the meeting.
- (g) Holding public meetings in Hout Bay, Saldanha Bay, St Helena Bay, Struisbaai, Hawston, Hermanus, Kleinmond and Mitchells Plain between 01 and 11 November 2022.

- (h) Holding a virtual meeting on MS Teams on 07 November 2022. The link to the online public meeting was email on 7 November 2022 to those stakeholders that registered to attend the online meeting.
- (i) Addressing comments and issues raised by I&APs in the ESIA report.

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



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Enquiries: Ms Sinazo Mnyaka

EAP Reg No.: 2022/5486

Email Address: mnyakas@petroleumagencysa.com

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 EXPLORATION WELL DRILLING IN BLOCK 5/6/7 OFF THE SOUTH-WEST COAST
OF SOUTH AFRICA

APPLICATION DETAILS

Application Reference Number	12/3/224
Holder of Environmental Authorisation	TotalEnergies EP South Africa Block 567 (Pty) Ltd
Location of the Activity	Block 5/6/7 located off the southwest coast of South Africa
Size of the Environmental Authorisation application area	Approximately 65 468.59 km ²

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

ACRONYMS

AGENCY	: Petroleum Agency SA
DEPARTMENT	: Department of Mineral Resources and Energy
ECO	: Environmental Control Officer
EA	: Environmental Authorisation
ESIA	: Environmental and Social Impact Assessment
EIA REGULATIONS	: EIA Regulations, 2014, as amended
EMPr	: Environmental Management Programme
I&APs	: Interested and Affected Parties
MPRDA	: Mineral and Petroleum Resources 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 **TotalEnergies EP South Africa Block 567 (Pty) Ltd** to undertake NEMA EIA listed activities specified in section 3 below and as described in the ESIA and EMPr submitted on **15 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

TotalEnergies EP South Africa Block 567(Pty) Ltd
 27 Willie Van Schoor Drive
 Tygervalley Chambers 2, 3rd Floor

Tyger Valley, Cape Town
7530

Attention : Mr Eduard Groenewald
Cell : +27(0) 79 995 1915
Tell : +27(0) 21 003 4077
Email : eduard.groenewald@totalenergies.com

2. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

SLR Consulting (South Africa) (Pty) Ltd
5th Floor, Letterstedt House
Newlands on Main
Corner of Main and Campground Roads
Newlands, Cape Town
7700

Contact Person : Mr Jeremy Blood
Tel : +27(0) 21 461 1118/9
Cell : +27(0) 83 310 2037
Email : jblood@slrconsulting.com

3. LIST OF ACTIVITIES AUTHORISED

The following activities listed in table 1 below are authorised.

Table 1: Authorised listed activities.

Activity No.	Activity Description	Description of Activity in relation to the Proposed Exploration Activities
GN No. R983: Listing Notice 1 (as amended by GN No. R327 of 2017, R706 of 2018 and R517 of 2021)		
14	"The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined	The proposed drilling operation would make use of infrastructure which would handle and potentially store oil, gas and/or fuel (diesel). Information on the anticipated

	capacity of 80 m ³ or more but not exceeding 500 m ³ ."	handling volumes and storage capacity for these substances is currently not available; thus, this activity is included to provide for a situation where storage capacity exceeds 80 m ³ but falls below 500 m ³ .
17	"Development (i) in the sea ... in respect of (e) infrastructure or structures with a development footprint of 50 m ² or more..."	Wells may be abandoned on the seafloor with an over-trawlable cap, if deemed safe to do so based on a risk assessment. A single cap measures approximately 5.2 x 5.2 m (27 m ²); thus, the cumulative footprint for 5 wells would be greater than 50 m ² .
19A	"The infilling or depositing of any material of more than 5 m ³ into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles, or rock of more than 5 cubic metres from: (iii) the sea. ..."	The proposed well drilling would result in various forms of disturbance to the seafloor and would result in more than 5 m ³ of sediment being disturbed and moved.
GN No. R984: Listing Notice 2 (as amended by GN No. 325 of 2017 and R517 of 2021)		
4	"The development and related operation of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 m ³ ."	The proposed drilling operation would make use of infrastructure which would handle and potentially store oil, gas and/or fuel (diesel). Information on the anticipated handling volumes and storage capacity for these substances is currently not available; thus, this activity is included to provide for a situation where storage capacity exceeds 500 m ³ .

6	"The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, ..."	Should TEEPSA decide to incinerate waste on the drilling unit and support vessels (if considered to be "installations") an Atmospheric Emission Licence will be required in terms of the National Environmental Management: Air Quality Act, 2004.
7	"The construction of facilities or infrastructure for the bulk transportation of dangerous goods: (i) in gas form, outside an industrial complex, using pipelines, exceeding 1 000 m in length, with a throughput capacity of more than 700 tons per day; (ii) in liquid form, outside an industrial complex, using pipelines, exceeding 1 000 m in length, with a throughput capacity more than 50 m ³ per day;"	The proposed project will make use of drilling infrastructure (e.g., pipes, casings, etc.) which would extract oil and/or gas for testing on the drilling unit. Due to the anticipated depth of the proposed wells of maximum 3 570 m below the seafloor, this infrastructure would exceed 1 000 m in length. The designed throughput capacity of this infrastructure could also exceed the thresholds specified in the listed activity. Most of the facilities proposed for exploration are temporary (except for the casings inside the well bore and possibly the wellhead which may be abandoned on the seafloor).
14	"The development and related operation of – (ii) an anchored platform; or (iii) any other structure or infrastructure on or along the seabed, ... "	The proposed drilling operations would result in the placement of equipment (i.e., a wellhead) on the seabed. During well abandonment the wellhead(s) may be left on the seafloor, unless site-specific risk assessments conclude there is a danger or risk to other marine users in which case wellheads would be removed.

18	"Any activity including the operation of that activity which requires an Exploration Right in terms of Section 79 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity as contained in this Listing Notice, in Listing Notice 1 of 2014 or in Listing Notice 3 of 2014, required to exercise the exploration right..."	TEEPSA is proposing to drill up to 5 exploration wells. Since the activity (namely drilling) requires an Exploration Right (although TEEPSA already holds an Exploration Right for Block 5/6/7) and drilling was not previously authorised, this activity is deemed applicable.
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The holder of this authorisation is authorised to conduct the following activities within the area described under section 4 below:

- Drilling of up to five exploration wells within the area of interest in Block 5/6/7.
- The area of interest is approximately 10 000 km² in extent and is located offshore roughly between Cape Town and Cape Agulhas, approximately 60km from its closest point and 170 km at its furthest, in water depths between 700 m and 3 200 m.
- The drilling is planned to commence between the fourth quarter of 2023 and second quarter of 2024. It is expected that the drilling and testing activity would take about three to four months per well.
- A semi-submersible drilling unit or a drillship will be used for drilling as these are suitable for deep-water marine environment. The unit will be supported by up to three vessels. A helicopter will be used for transfers between the drilling unit and Cape Town Airport. The logistic base will be in the Port of Cape Town or Saldanha.
- Final drilling site selection will depend on the seismic and pre-drilling survey data analysis and geological target. A Remote Operating Vehicle (ROV) will be used to identify seafloor obstacles and sensitive features and finalise the well positions.
- Drilling will be done in two stages i.e., riserless and risered drilling stages. The riserless is the initial stage, which involves drilling of a 36- or 42-inch hole to a depth of 70 m using seawater. A conductor pipe will be run into the hole and be cemented into place, after which a low-pressure wellhead will be placed on top of the conductor. Deeper sections of the hole will be drilled to a diameter of 26 inches to a depth of about 1 070 m. All cuttings and Water Based Muds (WBMs) from this stage will be discharged directly onto the seafloor. The risered stage will be followed with the lowering of a Blow-Out Preventer (BOP) and installing it on the wellhead, to seal the well to prevent any uncontrolled release of fluids from the well. A lower marine riser package is installed on top of the BOP which isolates the drilling fluid and cuttings from the environment

creating a closed loop system. Drilling is continued by lowering the drill string through the riser, BOP and casing and rotating the drill string. If the WBMs do not provide the necessary characteristics, a lower toxicity non-aqueous drilling fluid (NADF) will be used, and cuttings will be treated to reduce oil content before being discharged overboard. The exact target drilling depth is not confirmed but a depth of 3 570 m is assumed.

- Once the target depth is reached, the well will be logged and possibly tested. Well logging involves the evaluation of the physical and chemical properties of the rocks in the sub-surface, and their component minerals, including water, oil, and gas to confirm the presence of hydrocarbons and the petrophysical characteristics of rocks. A Vertical Seismic Profiling (VSP) will be used to generate a high-resolution seismic image and for forward planning of drill bit during drilling.
- The well will be tested to determine the economic potential of any discoveries before it is abandoned or suspended. One test will be done for each well and if the resource is discovered two more tests will be done per appraisal well. Each test would take up to seven days to complete (5 days of build-up and 2 days of flowing and flaring).
- Once drilling and logging are completed, the exploration wells will be sealed with cement plugs, tested for integrity, and abandoned according to best practices.
- Demobilisation entails leaving a wellhead fitted with an over-trawlable abandonment cap if it is deemed safe to do so. Monitoring gauges for monitoring pressure and temperature will be installed under the over-trawlable cap on wells that will be used in the future for appraisal or production purposes. A ROV will be used for a final clearance survey before the drilling unit and supply vessels demobilise from the offshore license area.

4. LOCATION OF THE APPLICATION AREA

The EA Application area is located in Block 5/6/7 off the southwest Coast in Western Cape Province. The area of interest for the proposed drilling is approximately 10 000 km² and is located roughly between Cape Town and Cape Agulhas, about 60 km from the coast at its closest point and 170 km at its furthest, in water depths ranging between 700 m and 3 200m. Block 5/6/7 and the area of interest coordinates are presented in table 2 below.

Table 2: Block 5/6/7 and area of interest coordinates

No.	Longitude (0) (E)	Latitude (0) (S)	No.	Longitude (0) (E)	Latitude (0) (S)
Licence Block 5/6/7					
1	-33° 0' 0.000"	16° 0' 0.000"	16	-35° 46' 4.995"	19° 17' 35.052"
2	-33° 0' 0.789"	17° 41' 3.900"	17	-35° 56' 6.000"	19° 17' 35.052"

TEEPSA 12-3-224

3	-33° 22' 37.000"	17° 41' 3.900"	18	-35° 56' 6.000"	19° 34' 44.400"
4	-33° 22' 37.000"	17° 49' 47.700"	19	-36° 7' 45.800"	19° 34' 44.400"
5	-33° 35' 49.300"	17° 49' 47.700"	20	-36° 7' 45.800"	20° 5' 38.000"
6	-33° 35' 49.300"	17° 58' 18.200"	21	-36° 37' 42.100"	20° 5' 38.000"
7	-34° 23' 14.600"	17° 58' 18.200"	22	-36° 37' 42.100"	18° 11' 54.000"
8	-34° 23' 14.600"	18° 4' 1.100"	23	-35° 59' 54.700"	18° 11' 54.000"
9	-34° 29' 47.500"	18° 4' 1.100"	24	-35° 59' 54.700"	17° 19' 40.560"
10	-34° 29' 47.500"	18° 32' 45.300"	25	-35° 34' 52.380"	17° 19' 40.560"
11	-34° 42' 23.300"	18° 32' 45.300"	26	-35° 34' 52.380"	16° 39' 1.440"
12	-34° 42' 23.300"	18° 47' 9.600"	27	-34° 57' 52.980"	16° 39' 1.440"
13	-35° 13' 12.000"	18° 47' 9.600"	28	-34° 57' 52.980"	16° 19' 52.280"
14	-35° 13' 12.000"	19° 6' 21.600"	29	-34° 11' 40.400"	16° 19' 52.280"
15	-35° 46' 4.995"	19° 6' 21.600"	30	-34° 11' 40.400"	16° 0' 0.000"
Area of Interest for Drilling					
A	17° 24' 58.677"	-34° 50' 28.457"	F	18° 51' 40.018"	-36° 11' 25.118"
B	17° 49' 17.691"	-34° 33' 9.202"	G	18° 37' 58.451"	-35° 59' 2.060"
C	19° 4' 51.809"	-35° 41' 35.009"	H	18° 33' 43.568"	-36° 2' 1.547"
D	19° 4' 51.603"	-35° 45' 23.906"	I	18° 8' 17.622"	-35° 38' 47.888"
E	19° 14' 38.208"	-35° 54' 26.869"	J	18° 12' 40.238"	-35° 35' 22.447"

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 registered 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 registered 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 The authorised activities shall not commence within twenty (20) days from the date that the notification of the decision of this authorisation was sent to I&APs, pending potential lodgement of appeal(s).
- 5.3.2 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.
- 5.3.3 The authorised activities must commence within a period of two (2) years 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 Environmental Management Programme (EMPr) submitted with the Environmental and Social Impact Assessment (ESIA) 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 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 drilling unit, helicopter, and supply vessel(s).
- 5.4.7 The holder must, before the commencement of the authorised activity, appoint Independent, qualified, and experienced Marine Mammal Observers (MMO) and Passive Acoustic Monitoring (PAM) Operators to monitor the interaction between marine species and drilling operations, recording meteorological conditions and advising the crew to continue and stop operations based on observations or detection of marine species safety during the VSP operations.
- 5.4.8 The holder of this authorisation must submit monthly environmental monitoring reports during drilling operations. Furthermore, the holder must within ninety (90) days of completion of drilling operations, submit a close-out report.

5.5 SPECIFIC CONDITIONS

- 5.5.1 The holder or appointed ECO must, within thirty (30) days before the commencement of drilling operations, distribute notifications to all I&APs 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 drilling unit and support vessel(s) mobilisation date(s) and anticipated duration of the drilling operations.
 - 5.5.1.2 Details of the drilling unit, helicopter, and support vessels.
 - 5.5.1.3 Sketch plans showing the area of interest.
 - 5.5.1.4 Details of the MMO and PAM Operators and contact persons for reporting environmental issues associated with the planned activities.
- 5.5.2 The holder must, within 60 days prior to the commencement of the proposed drilling operations, submit all specific management plans identified in the ESIA i.e., Shipboard Oil Pollution Emergency Plan; Emergency Response Plan; Blow-Out Contingency Plan; Oil Spill Contingency Plan; Stakeholder Engagement Plan; Waste, Emissions, Discharge Management Plan; Hazardous Substance Management Plan; Preventive Maintenance Plan; Ballast Water Management Plan; Biodiversity Management Plan and Corrective Action Plan.
- 5.5.3 The holder must undertake pre-drilling survey at each well site to confirm the presence or absence of any environmentally sensitive features. In the event that the survey identifies presence of archaeological sites or shipwrecks, the holder must notify the South African Heritage Resources Agency and the Petroleum Agency SA of the discovery.
- 5.5.4 If the operations are planned to cover the Austral winter period, the oil spill response plan must be enhanced to cover risks associated with shoreline oiling from blow-out.
- 5.5.5 Illegal dumping of waste or any equipment aboard the drilling unit and 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.
- 5.5.6 During the demobilisation process, the holder must ensure that the drilling area is left safe for other activities to take place and all I&APs must be informed of the completion of drilling operations. The holder remains accountable and liable for any residual or latent risks that may occur or are identified at completion of drilling. In this regard, the necessary measures to address such risks are mandatory.

5.5.7 All recommended mitigation measures included in the ESIA and EMPr dated 15 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 drilling, support vessels and helicopter 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 ESIA report, 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: 17/4/2023