



Rhino Oil and Gas Exploration South Africa (Pty) Ltd

APPLICATION FOR AN EXPLORATION RIGHT FOR PETROLEUM AND GAS
ON VARIOUS FARMS IN THE FREE STATE & KWAZULU-NATAL (350 ER)



BACKGROUND INFORMATION DOCUMENT

September 2019

INTRODUCTION

Rhino Oil and Gas Exploration South Africa (Pty) Ltd has lodged an application for an Exploration Right with the Petroleum Agency South Africa (PASA). The application (Ref: 350 ER), submitted in terms of Section 79 of the Minerals and Petroleum Resources Development Act, 2002 (No. 28 of 2002) (MPRDA), was accepted by PASA. Minerals included in the application are oil, gas, condensate, coal bed methane, helium and biogenic gas.

The Exploration Right (ER) application area is broad and encompasses parts of the Free State and northern KwaZulu-Natal (see Figure 1). Rhino Oil and Gas previously held a Technical Co-operation Permit (TCP 165) over this area.

In this application Rhino Oil & Gas has only applied for approval to undertake early-phase exploration for oil and gas which might be located within suitable geological strata. The initial exploration work programme would be restricted to desktop data review and the undertaking of an aerial survey. The sole purpose of the work would be to indicate the presence of any possible petroleum resource which could be investigated further.

No stimulation, pressure testing, hydraulic fracturing or water abstraction is included in the proposed exploration work.

ENVIRONMENTAL AUTHORISATION PROCESS

Under Section 79(4) of the MPRDA a requirement for obtaining an ER is that an applicant must comply with Chapter 5 of the National Environmental Management Act, 1998 (No. 107 of 1998) (NEMA). This requires that applicants obtain an Environmental Authorisation from the competent authority, being the Minister of Mineral Resources (or delegated authority).

The Environmental Impact Assessment Regulations 2014 (as amended in 2017) are applicable as the requirement for an ER as contemplated in the MPRDA triggers activity 18 in Listing Notice 2 (GN R984).

In order for PASA, as the delegated authority, to consider an application for Environmental Authorisation and make a recommendation to the Minister of Mineral Resources, a Scoping and Environmental Impact Assessment (S&EIA) process must be undertaken.

SLR Consulting (South Africa) (Pty) Ltd ("SLR") has been appointed by Rhino Oil and Gas as the Environmental Assessment Practitioner (EAP) to undertake the S&EIA process. The S&EIA

process will be subject to the timeframes prescribed in the Environmental Impact Assessment Regulations 2014.

PURPOSE OF THIS DOCUMENT

This document has been prepared by SLR to inform you about:

- the application made for an Exploration Right;
- the proposed exploration activities;
- the pending application for Environmental Authorisation;
- the S&EIA process being followed; and
- how you can register on the project database and participate in the S&EIA process.

MOTIVATION FOR EXPLORATION

Petroleum and gas products have a wide range of uses (e.g. energy, road building, chemical, plastic and synthetic material manufacture) and remain a key source of energy across the globe. Petroleum products are produced from the refining of oil and gas extracted from beneath the earth's surface.

Natural gas comprises mostly methane and while it is a hydrocarbon, it is a relatively cleaner form of energy than coal and diesel which it can displace. It can be used to generate electricity or provide heat for domestic and industrial purposes. Once extracted gas can be easily contained, transported and safely used in many applications. The type of downstream use is entirely dependent on the commercial scale of the resource.

Gas is identified in the draft Integrated Resources Plan 2018 as significant contributor to South Africa's energy mix in the period up to 2030. According to the IRP, gas should account for 16% of installed capacity, requiring 8 100 MW of new generation capacity. Very few local sources of gas have been identified and most gas will have to be imported. The discovery of local gas resources would benefit the local economy more than importing the gas from other countries would. Exploration is necessary to determine if there are oil or gas resources that can be exploited.

OTHER APPLICATIONS

Rhino Oil & Gas has previously made six other applications for onshore Exploration Rights in different areas of the Eastern Cape, KwaZulu-Natal and the Free State Provinces. Exploration Rights have been granted for some while other applications are in progress or have been withdrawn. Details of the status of these applications will be provided in the Scoping Report.

HOW TO RESPOND:

Responses to this document can be submitted by means of the attached registration and response form, by direct submission and/or through communication with SLR.

WHO TO CONTACT: Matthew Hemming/Edwynn Louw

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E-mail: 7201803400016@slrconsulting.com



BRIEF OVERVIEW OF PROPOSED EXPLORATION

ER APPLICATION

The application for Exploration Right lodged by Rhino Oil and Gas was accepted by PASA. Acceptance of the application only permits the applicant to continue with the necessary process and does not constitute authorisation. As per Section 10 of the MPRDA, PASA has published notice of the application in their foyer and in the provincial gazette.

Rhino Oil and Gas must comply with the requirements of Section 79(4) of the MPRDA before the Minister of Mineral Resources can make a decision on the Exploration Right.

RESTRICTION

The June 2018 restriction by the Minister in terms of Section 49(1) of the MPRDA on the granting of applications does not apply to the processing of existing rights and applications related thereto.

EXPLORATION RIGHT APPLICATION AREA

The Exploration Right application area extends from the Upper Tugela region of KwaZulu-Natal, north past Harrismith to just north of Warden in the Free State. The ER application area extends westward, from Harrismith, past Kestell to Bethlehem. In the north the ER application area extends from Warden past Reitz up to Lindley. The ER application area includes 4 268 farms over an area of approximately 773 259 ha (see Figure 1 and Attachment A). A list of the properties included in the ER application area is provided in Attachment B.

The ER application area excludes all properties where the granting of an ER is prohibited by Section 48 of the MPRDA. These include:

- Special Nature Reserves, National Parks, Nature Reserves, Protected Areas or Protected Environments (including World Heritage Sites, Marine Protected Areas, Specially Protected Forest Areas, Forest Nature Reserves and Forest Wilderness Areas);
- Land comprising a residential area;
- Any public road, railway or cemetery;
- Any land being used for public or government purposes or reserved in terms of any other law; or
- Areas identified by the Minister by notice in the Gazette in terms of Section 49.

EXPLORATION WORK PROGRAMME

The exploration work programme proposed by Rhino Oil and Gas is aimed at indicating if there is an oil or gas resource in the area that would warrant further exploration. The proposed exploration activities include the following:

- Data acquisition and processing through a comprehensive desk-top study.
- A full tensor gradiometry gravity survey.

No seismic surveys, well drilling, pressure testing, hydraulic fracturing or water abstraction is proposed in the exploration work programme.

FTG SURVEYS

A full tensor gradiometry gravity (FTG) survey is proposed. FTG is a type of geophysical survey carried out to image and map subsurface geology in order to focus future exploration objectives.

Such surveys would be flown in fixed wing aircraft and require no access to farms. The survey aircraft would undertake grid-based flights at slow speeds (~ 130 knots) and at an altitude of between 80 and 300 m above ground.

The grid pattern is not currently known, as this would ultimately be determined based on the findings of the initial exploration activities. It is likely that line spacing for the survey would be between 500 m and 2 km. The flight parameters, survey grid and timing can be adapted depending on relevant restrictions.



Figure 2: Typical survey plane

STAFF

Early phase exploration would create very few job opportunities as the work is contracted to specialist service providers.

TIMING

An ER is initially valid for three years. The exploration work programme would be undertaken within this time period.

LAND ACCESS

No access will be required to any of the properties within the exploration area for the current exploration work programme.

POSSIBLE FUTURE EXPLORATION

The current application is only to authorise the work as described above (and to be detailed in the Scoping and Environmental Impact Assessment Reports).

During the exploration period Rhino Oil and Gas would use the results of the exploration work programme to decide whether to exercise its exclusive right to apply for a renewal of the ER.

Any further exploration work to evaluate an identified resource or the future production of oil or gas would require further approval in terms of the MPRDA & NEMA. Such approvals will be subject to the relevant legal requirements which include further public consultation and environmental impact assessment. Approvals are also likely to be required under other legislation.

If the future work were to pose unacceptable environmental risk, as determined by the regulated assessment processes, then it is likely that the required approvals would not be granted by the competent authorities. In such cases the proposed work would not continue.

Rhino Oil and Gas maintains that it is not useful to speculate on the possible future direction of the project as the range of options is vast and the currently available information is very limited.

SCOPING AND EIA PROCESS

AIMS AND OBJECTIVES

The Scoping and EIA process aims to:

- provide information on the proposed project and associated alternatives;
- provide a reasonable opportunity for interested and affected parties (I&APs) to be involved in the process;
- ensure that all potential key environmental issues and impacts that would result from the proposed project are identified;
- provide information on the potentially affected environment;
- assess potential impacts of the proposed project alternative during the different phases of project development;
- present appropriate mitigation or optimisation measures to minimise potential impacts or enhance potential benefits, respectively; and
- allow for informed, transparent and accountable decision-making by the relevant authorities.

STEPS IN THE SCOPING AND EIA PROCESS

1. Pre Application Phase (Sept to Oct 2019)

- > Identify and notify directly affected landowners.
- > Identify and inform I&APs and regulatory authorities of the proposed project (via direct consultation, newspaper advertisements, site notices and BID).
- > Host stakeholder and information-sharing meetings.
- > Receive initial issues and responses from I&APs.
- > Submit application to PASA (i.t.o. NEMA).

2. Scoping Phase (Nov 19 to Jan 2020)

- > Continued consultation and receipt of responses.
- > Identify issues that require further investigation.
- > Define terms of reference for work to address potential impacts.
- > Compile Scoping Report.
- > Distribute Scoping Report for 30-day review and comment period.
- > Collect I&AP comments, update Scoping Report and submit to PASA for acceptance/rejection.

3. EIA Phase (Jan to Apr 2020)

- > Undertake relevant investigations.
- > Assess impacts of proposed project
- > Compile Environmental Impact Assessment Report (EIAR) and Environmental Management Programme (EMPr).
- > Distribute EIAR for 30-day review and comment period.
- > Collect I&AP comments, update EIAR and EMPr and submit to PASA for decision-making.

4. Decision and Appeal

- > PASA to review EIAR and make a recommendation to the Minister (or delegated authority) for a decision.
- > Notify I&APs of the decision and right to appeal in terms of Appeal Regulations.

POTENTIAL ENVIRONMENTAL IMPACTS

Relevant issues identified during the Scoping phase will be investigated as part of the EIA phase.

The undertaking of the exploration work programme, as proposed, is not anticipated to result in any material impacts. No, on-the-ground exploration activities are proposed and as a result there will not be any physical disturbances. The flying of the survey aeroplane could cause noise that could be considered a minor nuisance, but would be of very short duration at any one location.

A concern previously raised by the public in relation to ER applications is that even though early-phase exploration may have impacts of low significance, the granting of an exploration right would set in motion the development of a petroleum extraction project that would be extremely difficult to stop. Future exploration or production is likely to involve activities that could have much greater, potentially unacceptable environmental risk. Because the granting of this Exploration Right will set in a motion a process with an unknown outcome and risk, it should not be approved.

The applicable regulatory framework will be detailed in the Scoping Report. Under NEMA, an environmental authorisation would not be granted for the undertaking of activities resulting in impacts of unacceptable significance. In the MPRDA, mineral rights may only be granted if the proposed activities would not result in unacceptable pollution, ecological degradation or damage to the environment.

INVITATION TO REGISTER AND COMMENT

If you or your organisation wish to register as an I&AP on the project database and/or wish to raise any initial issues or concerns regarding the proposed project, please make use of the attached Registration and Response Form and forward it to SLR at your earliest convenience.

For comments to be included in the Scoping Report they must reach SLR by **no later than 21 October 2019**.

I&APs registered on the project's database will receive notification of further consultation opportunities, report review periods and the final authority decision.

INFORMATION-SHARING MEETINGS

You are invited to attend the following information-sharing meetings:

Date and Time	Venue
7 October 2019 @ 15:30	NG Kerk, Reitz West
8 October 2019 @ 09:00	Lindley Hotel
8 October 2019 @ 15:30	Danielsrus Farmers Union Hall, Bethlehem
9 October 2019 @ 09:00	Kestell Town Hall
9 October 2019 @ 15:30	Warden Farmers Union Hall
10 October 2019 @ 09:00	La La Nathi, Harrismith
10 October 2019 @ 15:30	Bergville Country Club Hall

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ON VARIOUS FARMS THE FREE STATE & KWAZULU-NATAL (350 ER)

REGISTRATION AND RESPONSE FORM

SEPTEMBER 2019

NAME				
FARM / PROPERTY or ORGANISATION				
POSTAL ADDRESS				
POSTAL CODE		FAX NUMBER		
TELEPHONE NUMBER		CELL PHONE NUMBER		
E-MAIL				
PREFERRED CORRESPONDENCE (circle)	POST	FAX	EMAIL	SMS
DATE		SIGNATURE		

DETAILS OF OTHER PEOPLE WHO OWN LAND IN THE AREA OR YOU FEEL SHOULD BE INFORMED:

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PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT:

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PLEASE WRITE YOUR COMMENTS AND QUESTIONS HERE:

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(use additional pages if required)

Please return completed form to SLR Consulting via:

Post: PO Box 1596, Cramerview 2060

Fax: (011) 467 0978

E-mail: 7201803400016@slrconsulting.com

