
		<b>MINUTES OF MEETING</b>	
EIMS Ref	1590	Project Name	THUNGELA LEPHALALE COAL BED METHANE PROJECT

## MEETING DETAILS

Meeting	PASA Pre-application Meeting		
Meeting Venue	PASA Offices, Cape Town	Date	2026/02/26
		Time	11H00 – 12H00

## MEETING ATTENDEES

Representative	Company	Email Address
Brian Whitfield	EIMS	<a href="mailto:brian@eims.co.za">brian@eims.co.za</a>
Phumla Ngesi	PASA	<a href="mailto:ngesip@petroleumagencysa.com">ngesip@petroleumagencysa.com</a>
Sharon Adams	PASA	<a href="mailto:sharona@petroleumagencysa.com">sharona@petroleumagencysa.com</a>
Sisanda Makohliso	PASA	<a href="mailto:Makhalisos@petroleumagencysa.com">Makhalisos@petroleumagencysa.com</a>
Sinazo Mnyaka	PASA	<a href="mailto:mnyakas@petroleumagencysa.com">mnyakas@petroleumagencysa.com</a>
Andre Meyer	Thungela Resources	<a href="mailto:Andre.meyer@thungela.com">Andre.meyer@thungela.com</a>
Leonore van Wyk	Thungela Resources	<a href="mailto:Leonore.vanwyk@thungela.com">Leonore.vanwyk@thungela.com</a>
Liezel Louw	Thungela Resources	<a href="mailto:Liezel.louw@thungela.com">Liezel.louw@thungela.com</a>

		<b>MINUTES OF MEETING</b>	
EIMS Ref	1590	Project Name	THUNGELA LEPHALALE COAL BED METHANE PROJECT

## MINUTES

Item No	Item
1.	<b>Introductions and meeting purpose:</b> Meeting opened by PASA. The Environmental Assessment Practitioner (EA) Brian Whitfield (EIMS) provided a presentation and discussion of the project and confirmed purpose as a pre-application engagement and knowledge-sharing session.
2.	<b>Project overview:</b> Thungela is applying for a Coal Bed Methane Production Right in Limpopo, covering ~134,155 ha (224 farms), with Phase 1 covering ~20,000 ha.
3.	<b>Development scope:</b> Phase 1 includes ~333 new production wells, gas gathering network, LNG processing plant, water treatment facility, and supporting infrastructure.
4.	<b>Project lifecycle:</b> Phase 1 planned for ~30 years, forming part of a multi-phase development approach.
5.	<b>Hydraulic fracturing:</b> Identified as a key and potentially contentious activity requiring careful assessment and stakeholder engagement.
6.	<b>Water management:</b> Produced water volumes are significant with reuse preferred where possible, alternatively discharge to Mogol River but this will be assessed during the EIA and Water Use Licence alongside consultations with DWS.
7.	<b>Environmental authorisation approach:</b> Agreed to apply for only the key NEMA listed activities (production right and hydraulic fracturing – Listing Notice 2 Activities 20 and 20A), while assessing all triggered activities comprehensively. This approach of applying only for these NEMA listed activities is supported by DFFE IQ clarification (intension of such activities).
8.	<b>Integrated licensing:</b> EA, Waste Licence, and Water Use Licence to run concurrently; coordination required across regulatory frameworks. Requirement for Waste Licencing to be confirmed.
9.	<b>Waste management:</b> Drill mud classification and handling must be properly assessed; include chemical additives and MSDS.
10.	<b>Public participation process (PPP):</b> Extensive PPP planned, including landowner-focused engagement, broader stakeholder outreach, multilingual communication, and newspaper and radio coverage.
11.	<b>PPP timeline adjustment:</b> Extension requested to submit EA application (to ~June/July) to allow meaningful consultation prior to submission of EA application.
12.	<b>Stakeholder engagement approach:</b> Prioritise directly affected landowners, then wider stakeholders; aim to exceed regulatory minimum requirements.
13.	<b>Specialist studies:</b> Comprehensive suite of studies planned (air quality, groundwater, seismicity, etc.); Council for Geoscience appointed for seismic risk assessment.
14.	<b>Regulatory overlaps:</b> Clarification needed regarding roles of NERSA (pipelines) and other authorities; uncertainty acknowledged.

## MINUTES OF MEETING

EIMS Ref	1590	Project Name	THUNGELA LEPHALALE COAL BED METHANE PROJECT
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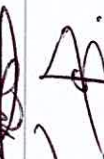


Item No	Item
15.	<b>Financial provisioning:</b> PASA recommended use of a specialist (e.g., well plugging expert) for financial provisioning and rehabilitation cost estimates.
16.	<b>Landowner consent:</b> Not required under MPRDA; however, strong emphasis placed on consultation with landowners.
17.	<b>Overlap with other rights:</b> PASA unable to confirm overlaps; applicant to independently verify with DMPR and other sources.
18.	<b>Environmental Management Programme (EMPr):</b> Will follow DFFE generic pipeline EMPr and supplement for site-specific infrastructure and impacts.
19.	<b>Next steps and close-out:</b> Agreement to proceed with EIA process, stakeholder consultation, and regulatory engagement; PASA requested updates and ongoing communication.

## APPENDICES

1. Attendance Register
2. Presentation

## Attendance Register

EIMS Ref	1590	Project Name	Thungela Lephalele Coal Bed Methane Project
Meeting	PASA Pre-application Meeting		
Meeting Venue	PASA Offices (Cape Town)		Date and Time
			23 February 2026 11H00 – 12H00

Name and Surname	Contact Details	Organisation	Signature
Brian Whitfield	082 688 9850 brian@eims.co.za	EIMS	
Sharon Adams	021 938 3500 sharon@petroleumagency.co.za	PASA	
Liesel Louw	061 266 2446 liesel.louw@thungela.com	Thungela Resources	
Leanne v. Wyk	leanne.vanwyk@thungela.com	Thungela	
Anelise Meyer	anelise.meyer@thungela.com	Thungela	
Gisanda Makohliso	082 478 3204 makohliso@petroleumagency.co.za	<del>Thungela</del> PASA	
Sivaro Mnyakel	060 983 2174 mnyakel@petroleumagency.co.za		
Phumla Ngesi	082 85 00274 ngesi@petroleumagency.co.za	PASA	



# THUNGELA RESOURCES LEPHALALE COAL BED METHANE PRODUCTION EIA

PRE-APPLICATION MEETING – PASA – 23 FEBRUARY 2026



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## AGENDA

- Introductions (Applicant, EAP, PASA)
- Project Description
- Application Area
- Listed Activities (NEMA, NEMWA, NEMAQA)
- Process to be followed
  - Indicative Timelines
  - Public Participation Strategy
- PASA Guidance and Discussion

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## PROJECT OVERVIEW

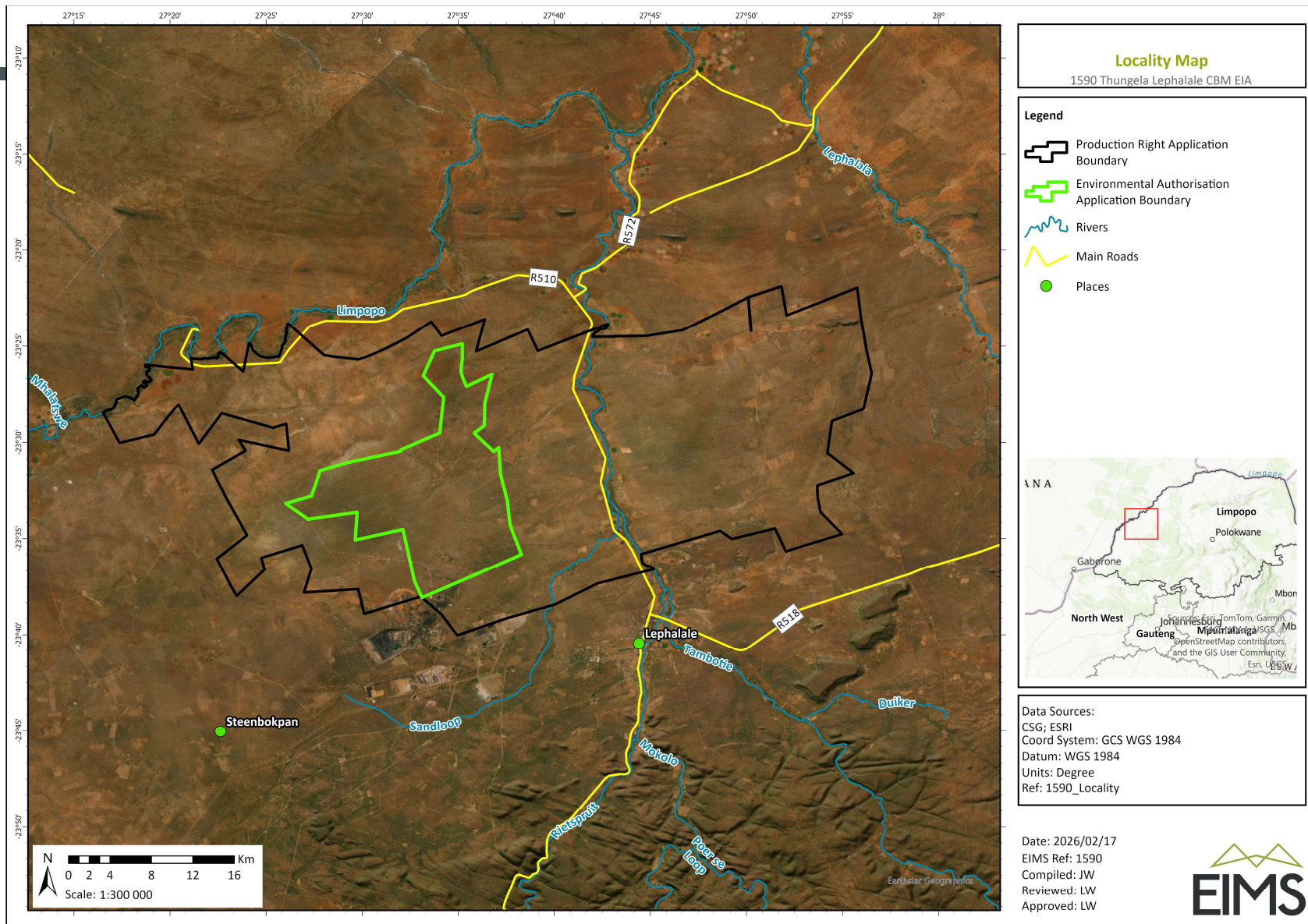
- **Applicant:** Thungela Operations Pty Ltd – Part of Thungela Resources Limited Group
- **Project Location:** The PR and the EA application area falls within the Lephalale Local Municipality and Waterberg District Municipality, Limpopo Province.
- **Application Extent:**
  - The full PR application area encompasses ~224 farms / farm portions and a total area of approximately 134 155 ha.
  - The first phase will comprise a smaller area within the broader PR area and will be the subject of this EIA and application for EA.
  - The EA application area encompasses ~20 farms and covers an area of approximately 20 443 ha.
- **Project Overview:**
  - Production Right application has been accepted on 6 January 2026.
  - The Applicant aims to extract the Coal Bed Methane (CBM) from the PR area in a phased manner.
  - At present a total of 3 phases are expected to reach the conceptual full field production (~134 155 ha).
  - This application only covers the first production phase and additional permitting or licensing will be required at a later stage for the remaining phases of the wellfield development should these be pursued.

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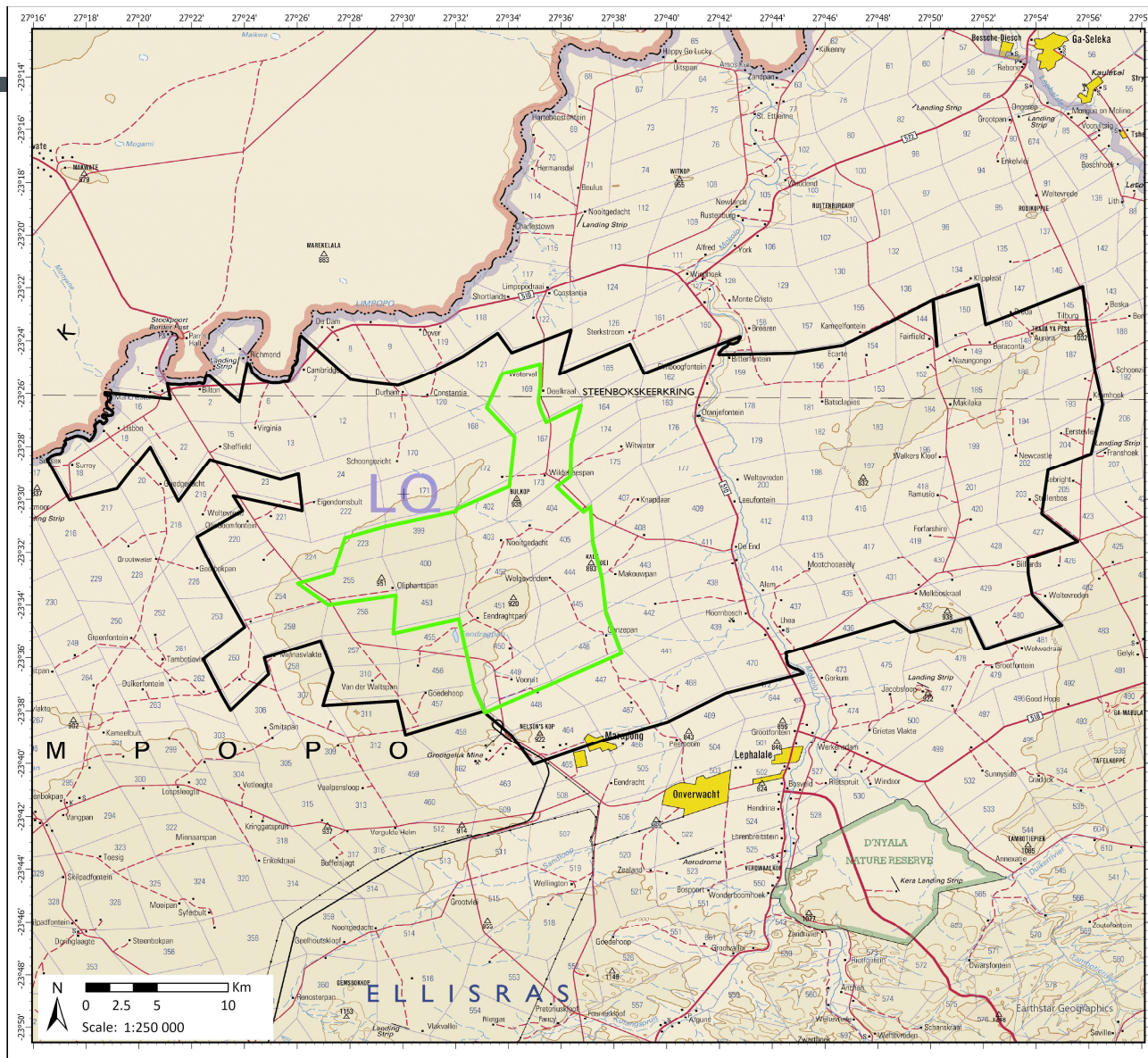
## PROJECT DESCRIPTION

- Production activities will involve:
  - Phase 1 comprising of ~333 wells. This will include the Exploration / Proof of Concept infrastructure.
  - Gas gathering network (buried gas and water pipelines) to a centralized gas and water processing facility.
  - Ancilliary facilities (e.g. gas generator, powerlines, main road upgrade, internal roads, offices, discharge water pipeline to Magol River, etc)
  - A new Liquid Natural Gas (LNG) Plant and associated infrastructure.
- To optimally produce gas, hydraulic stimulation of the target coal seams will be undertaken.
- This first phase of production is planned to span a period of ~30 years.








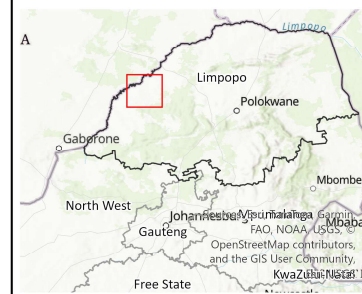


## Locality Map

1590 Thungela Lephalale CBM EIA

## Legend

-  Production Right Application Boundary
-  Environmental Authorisation Application Boundary



Data Sources:  
CSG; ESRI; MDB; 1:250k scanned Topographical map  
Coord System: GCS WGS 1984  
Datum: WGS 1984  
Units: Degree  
Ref: 1590\_topo

Date: 2026/02/17  
EIMS Ref: 1590  
Compiled: JW  
Reviewed: LJ  
Approved: LW





# APPLICABLE/IDENTIFIED ACTIVITIES

NEMA LISTING NOTICE 1 ACTIVITIES	
Activity 9	This project will include pipelines for treated water. The length, diameter and throughput capacity of the water pipelines will be confirmed once engineering designs are available.
Activity 10	This project will include pipelines for process water (produced water). The length, diameter and throughput capacity of the water pipelines will be confirmed once engineering designs are available.
Activity 11	Additional powerlines will be developed around the existing Eskom 22kV powerlines. The Phase 1 plant will be fed from a 132kV powerline. The final proposed powerlines and voltages will be identified once the engineering designs are available.
Activity 12	Non-perennial drainage lines and dams/pans occur within the application area which would constitute "watercourses" and various infrastructure may be constructed within a watercourse or within 32m of a watercourse (such as pipelines and access roads).
Activity 13	Engineering designs will confirm final dirty water containment facilities dimensions and thereafter the applicability of this listed activity can be confirmed.
Activity 16	The project includes a reverse osmosis water treatment plant with a capacity greater than 100m <sup>3</sup> per day.
Activity 19	Non-perennial drainage lines and dams/pans occur within the application area which would constitute "watercourses" and various infrastructure may be constructed within a watercourse or within 32m of a watercourse (such as pipelines and access roads).
Activity 21	The requirement for any new borrow pits for aggregate will be determined during the course of this EIA.
Activity 21F	Drill cuttings are to be disposed of and not "reclaimed" but could be construed as being "reclaimed" once storage thereof is done. Additionally, topsoil will be stripped and stored and later "reclaimed" for rehabilitation.
Activity 25	A water treatment plant will be constructed to treat produced water. The throughput capacity of the plant will be confirmed by the engineering team and thereafter the applicability of this listed activity will be finalised.
Activity 28	The LNG Plant would constitute industrial land use and the footprint of the plant would be greater than 1 hectare. The land is currently used for game farming.
Activity 34	Thungela intends to make use of existing infrastructure which was established as part of their PoC and Exploration activities. This includes the incorporation of the existing LNG plant, and CBM wells (Original 5-spot, and the additional 19 wells of the PoC) into the first phase of production.
Activity 46	Expansions of existing infrastructure (existing CBM wellfield and LNG Plant) and the incorporation thereof into the first phase of production which will include additional infrastructure resulting in the development of the wellfield of ~333 wells, two plants as well as RO plant.
Activity 48	The current LNG plant and associated existing infrastructure will be expanded to accommodate the increased capacity of gas and water from CBM wells.
Activity 50	The existing water storage facilities may require expansion to accommodate the extra water generated. Once the engineering designs are completed, the applicability of this listed activity can be confirmed.
Activity 53	Once the engineering designs are available, the required expansions to the existing 5-spot reverse osmosis plant will be confirmed and thereafter the applicability of this listed activity.
Activity 56	Traffic engineers will identify whether there will be any required upgrades to existing roads and thereafter, the applicability of this listed activity will be confirmed.
Activity 59	Expansion of the existing 5-spot gas processing plant to accommodate the gas production volumes will be confirmed during the EIA phase once detailed engineering designs are completed.
Activity 66A	The original 5-Spot gas wells were previously stimulated, and the additional wells will result in an expansion.
Activity 67	The sequential construction of wells and pipelines will eventually trigger certain listed activity thresholds while in the early stages may not trigger the thresholds. The overall intention of this project is to undertake a phased construction of infrastructure.



## APPLICABLE/IDENTIFIED ACTIVITIES

### NEMA LISTING NOTICE 2 ACTIVITIES

Activity 2	As part of this LCBM Project, a gas to power generator of ~25MW will be installed as a backup power supply. The gas generator (turbine) will utilise methane from the LNG plant and this source of methane would be considered a non-renewable resource.
Activity 4	The LNG gas storage volumes will be ~750m <sup>3</sup> which is above the 500m <sup>3</sup> threshold in this listed activity. LNG is listed as a dangerous good and therefore this activity is applicable. Furthermore, the explosive magazine may be constructed for the storage of the explosive charges for the well bore perforation gun and the explosives would likely trigger the definition of dangerous good. The total volume of storage of explosive charges as well as their chemical makeup to define them as a dangerous good will be identified during the course of this EIA process.
Activity 5	The volume of LNG produced per day for this LCBM Project exceeds 50m <sup>3</sup> per day.
Activity 6	Additional legislative triggers for this LCBM Project include a WUL under the NWA, an AEL under the NEMAQA, as well as a WML under NEM:WA.
Activity 15	The combined clearance of all the well pads for this LCBM project would be in the order of ~50 ha. The Phase 2 LNG plant would an additional ~5ha. The study area contains almost exclusively indigenous vegetation and therefore this project will result in the clearance of more than 20ha of indigenous vegetation and this activity is applicable.
Activity 16	This activity is unlikely to be triggered based on the available information however on completion of the engineering designs, the applicability of this activity can be confirmed.
Activity 20	This is one of the two primary activities applicable to this LCBM Project as a Production Right application is required.
Activity 20A	This is one of the two primary activities applicable to this LCBM Project as the CBM extraction requires hydraulic stimulation.



## APPLICABLE/IDENTIFIED ACTIVITIES

NEMA LISTING NOTICE 3 ACTIVITIES	
Activity 2	The applicability of this activity will be confirmed on completion of the engineering designs and specifically the location of the proposed water storage dams.
Activity 3	Due to the intermittent cellular coverage over the entire application area, it is likely that broadcast masts will be required to boost the signal strength. The applicability of this activity will be confirmed on completion of the engineering designs.
Activity 4	The Traffic engineering study will identify the required road network upgrades and therefore the applicability of this activity will be confirmed in the EIA phase.
Activity 12	The application area contains sensitive environmental features which shall be assessed in detail by the Terrestrial specialist. This activity will therefore be confirmed during the EIA phase.
Activity 14	Non-perennial drainage lines and dams/pans occur within the application area which would constitute “watercourses” and various infrastructure may be constructed within a watercourse or within 32m of a watercourse (such as pipelines and access roads). The Wetland and Aquatic specialist study will inform the applicability of this activity in the EIA phase.
Activity 15	Three alternative locations of the Phase 2 LNG Plant will be assessed during the EIA phase and thereafter the applicability of this activity will be confirmed.
Activity 16	Whilst it is highly unlikely that 5-spot dam will be physically expanded (broken and made bigger) the engineering designs will inform the applicability of this listed activity in the EIA phase.

## APPLICABLE/IDENTIFIED ACTIVITIES - NWA

### NWA SECTION 21 ACTIVITIES

<b>a</b>	Abstracted water which will be re-used.
<b>c</b>	Aquatic and hydrology delineations show infrastructure within regulated area of a watercourse.
<b>e</b>	<p>Hydraulic stimulation is a controlled activity in terms Section 37(1) of the National Water Act as per the notice published by the Minister of Water and Sanitation dated 16 October 2015.</p> <p>This Section 21 water use is also triggered through the reinjection of coal seam water into a deeper coal seam aquifer.</p>
<b>f</b>	The potential discharge of treated (to acceptable standards) water into the Mogol River.
<b>g</b>	<ul style="list-style-type: none"><li>• Septic tanks for storage of sewage (for offsite disposal by waste contractor);</li><li>• Brine Storage Pond;</li><li>• PCDs / evaporation dams to store produced water.</li></ul>
<b>i</b>	Aquatic and hydrology delineations show infrastructure within regulated area of a watercourse.
<b>j</b>	Coal seam dewatering.

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## APPLICABLE/IDENTIFIED ACTIVITIES – NEMWA (TBC)

### NEMWA LISTED ACTIVITIES – TO BE CONFIRMED

Category A7	The separation (treatment) of the hazardous portion of the drill mud during drilling (assuming it is >500kg but below 1 ton per day).
Category B11	Awaiting DFFE IQ clarification on whether or not drill mud would constitute a residue stockpile and if the collection of this mud for offsite disposal would constitute reclamation.
Category C2	Once the engineering designs for the LNG Plant is available, the applicability of this activity will be confirmed.

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## **APPLICABLE/IDENTIFIED ACTIVITIES – NEMAQA (TBC)**

### **NEMAQA SCHEDULED ACTIVITIES**

<b>Sub-category 1.4</b>	One or multiple gas-to-power generators to a maximum generation capacity of 25MW will be installed.
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## PROCESS TO BE FOLLOWED



The proposed project will require an integrated EA and WML through a full S&EIA Process.



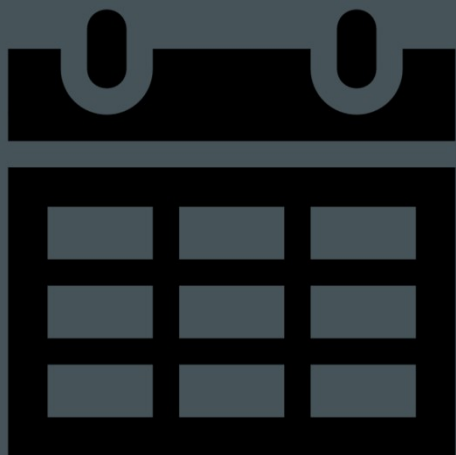
WUL application will be run concurrently with EIA process.



AEL application submitted after receipt of the EA.



## INDICATIVE TIMELINES



Initial PPP

~March-April 2026

Application

End April 2026

SR Review

May 2026

EIAR/EMPr  
Review

Mid September  
2026

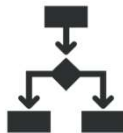
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## PUBLIC PARTICIPATION STRATEGY



### Initial Call the Register

Dedicated Landowner Focus Group  
Meetings prior to CTR  
Adverts 4 languages (Mogol Pos &  
Ntshebele Newspaper & National  
Gazette)  
Radio Announcements  
~60 A1 Correx Site Notices  
Posters  
Registered Letters  
Faxes  
E-mails  
BID  
SMS  
Questionnaire  
Include Landowners, NGOs, Provincial  
and National Authorities



### SR Report Review

EIMS Website  
Hard Copy at Local Venue  
Public Meetings and Focus Group  
Meetings during review period



### EIAR/EMPr Report Review

EIMS Website  
Hard Copy at Local Venue  
Public Meetings and Focus Group  
Meetings during review period



### Decision Notification

Decision Notification of Registered  
I&APs including appeal process

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## NGOS AND SPECIAL INTEREST GROUPS PRE-IDENTIFIED

Endangered  
Wildfire Trust

Greenpeace  
Africa

GroundWork

Centre of  
Environmental  
Rights

The Green  
Connection

The Wildlife and  
Environment  
Society of South  
Africa

Federation for a  
Sustainable  
Environment

World Wildlife  
Fund for Nature

Earthlife Africa

Natural Justice

Frackfree SA

Justshare

Lephalale  
Farmers'  
associations

Transvaal  
Landbou Unie

AGRI SA -  
Lephalale

Traditional  
Leaders of the  
area

## **PRE-IDENTIFIED SPECIALIST STUDIES**



- Air Quality
- Climate Change
- Surface Water (Hydrology)
- Groundwater (Geohydrology)
- Terrestrial Ecology (Biodiversity)
- Soils and Land Capability
- Noise
- Visual
- Social
- Economic
- Heritage and Palaeontological
- Seismic Risk
- Major Hazardous Installation Risk Assessment
- Traffic

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## PASA GUIDANCE



No landowner consents required for application - NEMA GNR 982 Section 39 (2) (b) “activities constituting, or activities directly related to prospecting or exploration of a mineral and petroleum resource or extraction and primary processing of a mineral or petroleum resource”.



Can PASA assist with providing list of mineral and petroleum rights holders in study area as we want to ensure that potential competing rights holders are notified (if relevant) as well as other mineral rights holders?



DFFE Generic Gas Pipeline EMPr will be used and appended with management measures for non-pipeline infrastructure (well drilling and stimulation, water reticulation and treatment system, electricity, LNG Plant, etc).



Production Right Application acceptance letter extension request.