

Annex C

## Authority Communications



## Annex C

# Authority Communications

### **C.1 Final Scoping Report Acceptance**

PASA issued a letter, acknowledging acceptance of the final scoping report.

# Petroleum Agency SA

Tygerpoort Building · 7 Mispel Street · Bellville 7530 · P.O. Box 5111 Tygervally 7536 · South Africa  
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16 April 2018

Enquiries: *Dovhani Mahumele*

Tel (021) 938 3500

Fax (021) 910 0811

**Our Ref: 12/3/236**

**Attention: Ms Claire Alborough**

Email: [Claire.alborough@erm.com](mailto:Claire.alborough@erm.com)

Environmental Resources Management Southern Africa

2<sup>nd</sup> Floor, Great Westerford House

240 Main Road

Rondebosch

8001

Dear Madam

## **ACCEPTANCE OF THE FINAL SCOPING REPORT FOR ENVIRONMENTAL AUTHORISATION: EXPLORATION FOR DRILLING IN THE DURBAN AND ZULULAND BASINS, OFF THE EAST COAST OF SOUTH AFRICA**

The Final Scoping Report (FSR) and Plan of Study for Environmental Impact Assessment dated 08 March 2018 refer.

1. The Petroleum Agency SA (hereafter referred to as the 'Agency') has evaluated the submitted FSR and Plan of Study for Environmental Impact Assessment and is satisfied that the documents comply with the minimum requirements of Appendix 2(2) of the National Environmental Management Act, 1998 (Act 107 of 1998): Environmental Impact Assessment Regulations, 2014 (hereafter referred to as "EIA Regulations, 2014"). The FSR is hereby accepted in terms of Regulation 22 (a) of the EIA Regulations, 2014. You may therefore proceed with the environmental impact assessment in accordance with the tasks contemplated in the Plan of Study for Environmental Impact Assessment submitted with the FSR and appendices 3-6 of the EIA Regulations, 2014.

Directors: M. Fusi (Chairperson)

B Luthuli R Nkambule L T engovhela \*L Mekwe (\*Executive)

Company Secretary: Adv E Hendricks

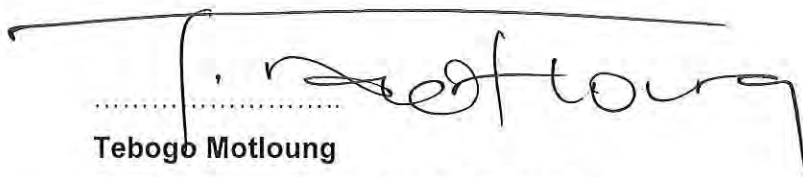
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South African Agency for Promotion of Petroleum Exploration and Exploitation SOC Ltd No. 1999/015715/30.



2. The implementation of the Plan of Study for EIA must be undertaken as outlined in the Final Scoping Report.
3. Issues and comments raised at scoping phase must be considered and addressed further during the EIA process.
4. The assessment of alternatives must include a full description of the process followed to reach the preferred alternative and such information must be provided in the Final EIR.
5. You are required to submit two hard copies of the EIR and EMPr and at least one soft copy (USB) of the complete EIR and EMPr to the Agency **on or before 03 August 2018**.

Yours sincerely



**Tebogo Motloung**

**Acting General Manager: Regulation**

**Directors:** M. Fusi (Chairperson)

B Luthuli R Nkambule L. Ingovhela \*L. Mekwe (\*Executive)

Company Secretary: Adv E. Hendricks

Subsidiary of CEF SOC Ltd.

South African Agency for Promotion of Petroleum Exploration and Exploitation SOC Ltd No. 1999/015715/30.



Annex C2

## Environmental Authorisation Acknowledgement

The Environmental Authorisation application was submitted to PASA for approval. PASA issued an acknowledgement of the Environmental Authorisation application on 29 August 2018.



# Petroleum Agency SA

Tygerpoort Building · 7 Mispel Street · Bellville 7530 · P.O. Box 5111 Tygervalley 7536 · South Africa  
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Email: ThovhakaleA@petroleumagencysa.com

29 August 2018

Email: vicky.stevens@erm.com  
Nicole.Lomberg@eni.com

Ms. Vicky Stevens  
Environmental Resources Management Southern Africa (Pty) Ltd  
1<sup>st</sup> Floor, Great Westerford House  
240 Main Road, Rondebosch  
South Africa  
7800

Dear Ms. Stevens

## **APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF REGULATION 16 OF THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 ("EIA REGULATIONS") UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 ("NEMA")**

The above application refers.

Your application for Environmental Authorisation in terms of Regulation 16 of the Environmental Impact Assessment Regulations, 2014 (EIA Regulations) is hereby acknowledged.

The Agency is aware that you have already submitted your scoping report on the 08<sup>th</sup> of March 2018 which was accepted on the 16<sup>th</sup> of April 2018. Therefore, according to Regulation 21(2), you are not required to submit another scoping report as the findings of the scoping report submitted are still valid.

You are therefore required to submit a final EIR/EMPR as contemplated in Regulation 23(1) of the Environmental Impact Assessment Regulations, 2014 on or before the **14<sup>th</sup> of December 2018**.

Directors: MP Fusi (Chairperson)

B Luthuli R Nkambule L Nengovhela L Mekwe (Acting Executive)

Company Secretary: Adv.E Hendricks

Subsidiary of CEF SOC Ltd.

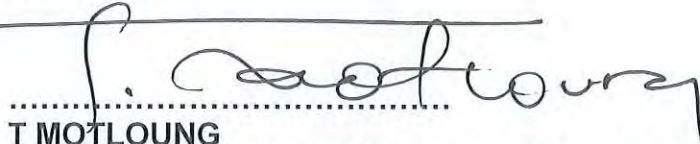
South African Agency for Promotion of Petroleum Exploration and Exploitation SOC Ltd. Registration No. 1999/015715/30



Please take note that the EIR/EMPR must be subjected to a public participation process of at least 30 days.

Furthermore, you are required to notify us of the dates and places you intend to hold public consultation meetings.

Yours sincerely,



**T MOTLOUNG**  
**ACTING GENERAL MANAGER: REGULATION**

Directors: MP Fusi (Chairperson)

B Luthuli R Nkambule L Nengovhela L Mekwe (Acting Executive)

Company Secretary: Adv. E Hendricks

Subsidiary of CEF SOC Ltd.

South African Agency for Promotion of Petroleum Exploration and Exploitation SOC Ltd. Registration No. 1999/015715/30





## Annex C3

# Meeting with Eastern Cape EDTEA Authorities

### **3.1. Minutes of Meeting**

A meeting was held on 5 October 2018, with authorities from the Eastern Cape Department of Economic Development, Tourism and Environmental Affairs.

### **3.2. Presentation**

A presentation was used to further emphasise the project scope during the meeting with Eastern Cape Department of Economic Development, Tourism and Environmental Affairs.

Annex C3.1

## Minutes of Meeting with Eastern Cape EDTEA



## MEETING MINUTES

**Date:** 5 October 2018

**Time:** 10h30

**Location:** Eastern Cape Department: Economic Development, Environmental Affairs and Tourism, Beacon Hill, Hockley Close, King William's Town, 5605

**Subject:** Exploration Drilling within Block ER236, off the East Coast of South Africa

**Present:**

**DEDEAT:** Linden Marvinc (LM), Cecilia Gyan (CG), Gerry Pienaar (GP), Sibulele Sigxashe (SS), Gcabisa Mdoda (GM), Kwandwe Mayekiso (KM),

**Eni:** Nicole Lomborg (NL), Nicola Salmaso (NS), Marco Pelucchi (MP), Luca Cassina (LC), Fabrizio Pecoraro (FP),

**ERM:** Vicky Stevens (VS), Amy Barclay (AB), Khosi Dlamini (KD)

### 1 Introductions

VS from ERM greeted the room and requested that all attendees introduce themselves. After this, she introduced the project and explained why ERM and Eni requested the meeting. The meeting consisted of a presentation (attached in *Annex C3.1*) and discussion about the project.

### 2 Project Background

The relationship between Eni and Sasol, the project background and context was explained by Eni. This consisted of a description of the following project information.

An explanation was provided of the offshore location of the exploration and appraisal wells and that they would be drilled in two possible areas of interest inside Block ER 236. The depths of drilling, vessel size, crew and equipment were described in detail. The project phases: Pre-Drilling, Drilling, Well plugging and abandonment (decommissioning) were described in detail.

Eni clarified that it has not been decided whether the exploration drilling will take place in the northern or southern area of interest as the complete seismic data processing and analysis will determine which area is more likely to be successful. Eni also clarified that the number of wells that will be drilled is dependent on the success of the first exploration well and there would be a maximum of 6 wells drilled (3 exploration and 3 appraisal) in total.

MP explained that drilling will occur in phases where different drill bit sizes will be used to drill a series of telescopic holes. The biggest drill bit will be used at the seabed to drill the tophole, while the smallest drill bit will be used to reach the reservoir. MP also explained that sea water would be used to drill closer to the seabed, while drilling muds (either water or non-aqueous drilling fluids based) would be used closer to the reservoir. GP from the Department of Environmental

Affairs (DEA) asked what the machine in the picture was on slide 11. MP from Eni explained that it was a Blowout Preventer (BOP) and described the purpose of the equipment, and its components. He explained that the BOP and wellhead are designed, manufactured and tested with pressure ratings that overestimate the maximum estimated pore pressure from the reservoir.

The abandonment and decommissioning phase was explained and it was clarified that the well will be plugged and abandoned according to Eni's internal standards, which meet best international practise. At the seabed, the wellhead would remain on seafloor.

Cecilia from DEA asked if the well would be plugged, even if hydrocarbons are found.

NS confirmed that the well would be plugged either way, as this would just be the exploration phase.

LM from the DEA asked if the mud and cuttings are returned to the hole afterwards. MP answered that exploration wells are not suited to having mud and cuttings returned and disposal wells are not planned for an exploration campaign..

NS introduced Eni and their history, and the company's strategy across the energy value chain, including renewables.

### **3 Specialist Studies**

VS listed the specialist studies undertaken to date. An overview from the results of the fisheries study has been provided. Only one fishery would overlap with the exploration block - the pelagic long line fisheries (tuna, shark etc.) – this is a seasonal fishery operating in the area. The fisheries study found that the potential impact would be local in extent, with a short term duration, and a small scale. NL explained that Eni will develop a communications plan to enable fishermen to be notified of the timing and location of the drilling activities. Eni would also send out radio signals, emails and notices, to make sure that overlapping industries are aware of the drilling taking place. NL reiterated that there would be no direct impact to linefish or crustacean trawl from drilling activities. NL mentioned briefly that marine study and the environmental factors that have been examined by ERM in EIA study, including key sensitivity analysis, has been undertaken internally by Eni to plan activities and operations execution..

### **4 Unplanned Events**

VS defined unplanned events and explained that the probability of a spill is low, i.e., according to the OGP study 1 case in 4,000 wells may have an event (minor or large). Eni has further reduced the likelihood to 1 in 400,000 cases through the implementation of advanced drilling technology and control measures.

LM queried what the nature of a blowout could be. VS explained that this is dependent on what is found in the well.

VS reminded attendees that the modelling is conducted assuming that no mitigation measures are implemented, and so it models the absolute worst impact possible. VS detailed the results of the modelling for the southern area, as it's closer to shore and closer to King Williams Town. Vicky described Scenario 1 – a vessel collision, Scenario 2 – a blowout, and Scenario 3 – a disconnection of the riser resulting in Non-Aqueous Drilling Fluid (NADF) mud release.

## 5 Oil Spill Modelling Results

LC from Eni explained the three scenarios that were modelled. Each scenario was modelled over 5 years to give a statistical probability map.

CG asked if Eni had had any accidents. LC replied that there have been no incidents during exploration of subsea wells. He also said that Eni are learning from other companies that have had accidents.

LC explained the results for scenario 2 (Blowout) in depth. Two different release durations were simulated: 7 days (2a) and 20 days (2b). In each of the two cases, the simulation continued for 14 days after the end of the release, giving respectively a total of 21 (2a) and 34 days (2b). Over these periods, probability of having oil more than 1  $\mu\text{m}$  on the surface was calculated.

CG asked what the colours on the map indicated. LC explained that the colours show probability.

GP asked how the sardine run might be affected by an oil spill. VS stated that the oil spill simulation in winter season has been modelled and demonstrate the possible worst impact on migrating species, including sardines, in case of an accident with no mitigation in place..

LC described the many ways in which the risk of an oil spill can be reduced; e.g. drilling in certain seasons, etc. NS affirmed that Eni preference is to drill during the summer season.

GP asked about the specialist report on marine mammals, what are the impacts?

VS explained that the report found that in terms of behavioural impacts (masking and avoidance) as a result of noise, the impact would be Moderate. The use of thruster is mandatory to guarantee rig positioning and stability but through mitigation measures such as regular maintenance the impact could be Minor.

LM asked what the sound level would be. VS said that the thrusters could be between 120 – 190 decibels (ref. pressure: 1  $\mu\text{Pa}$ ), which is in hearing range of marine mammals but would not cause damage or injury. The avoidance behavioural impact is possible. LC explained that most ships produce the same level of noise, the difference would be that this ship will be in one position. LC said that sound speed along the water column changes due to temperature and pressure, creating layers within which noise becomes 'trapped' (sound channels), bouncing off of the warm layers. In this case, being the source of this noise on the top of the surface, it should bounce off the bottom of the mixed layer (shallow layer extending below the sea surface for dozens of meters, depending on the season) and not travel far downwards.

LC went back to drill side profile image and explained how Eni preferred the casing design is to hang casing hangers directly onto the well head, so that each casing is surrounded by all the outer casings and cement for their entire length. This increases the number of redundancy barriers in each section of the well. Other technologies and tools used during drilling operations (e.g. real time data monitoring) that Eni would implement to improve safety were explained. LC also described how the oil spill equipment is always readily available in case of an emergency. MP specified that also training and competence of the staff is important to guarantee safely operations and told the attendees that safety drills are regularly conducted on board of the drilling ship, at least once a week.

GP asked what would happen if hydrocarbons were found. NS said that it depends on what is found; for example gas could be piped to the closest country, oil could be treated by a Floating Production Storage and Operation (FPSO) vessel and then taken to a domestic market. JP



queried where the pipeline would run to if gas was found. NS said that if there is sufficient gas, gas could be piped to nearest port with the appropriate infrastructure

## **6 Conclusion and questions**

MP played a video of an oil exploration project that has taken place by Eni in Ghana. The video showed to attendees the possible impact of a successful discovery and consequent development phase with profitable benefit to the local market and development of local communities, including job creation, leverage on education and health promotion.

VS told attendees that if they had any further questions that they could email a specifically set up email address.

**The meeting was adjourned.**

## Annex C3.2

# Presentation - Meeting with Eastern Cape EDTEA



# EIA for Deepwater Exploration Drilling within Block ER236, off the East Coast of South Africa

EIA Phase Public Meetings

October 2018

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*The business of sustainability*



# Outline

1. Introduction
2. Project Overview
3. EIA Results



Source: Shutterstock



Source: Shutterstock



# Introduction



# Introduction

- ERM has been appointed by Eni as the independent Environmental Assessment Practitioner (EAP).
- ERM is undertaking, the full EIA process for the project as per the National Environmental Management Act (NEMA) Regulations, 2014 (as amended in 2017).
- The project requires Environmental Authorisation (EA) from the National Department of Mineral Resources (DMR), through the Petroleum Agency South Africa (PASA).
- Purpose of the meeting is to present the outcome of the EIA process and there may be an interaction with the Eastern Cape.
- Although highly unlikely event of the spill modelling has indicated that the surface spill may overlap with the fisheries in the Eastern Cape.

Source: ERM



# **PART 1: Project Overview**

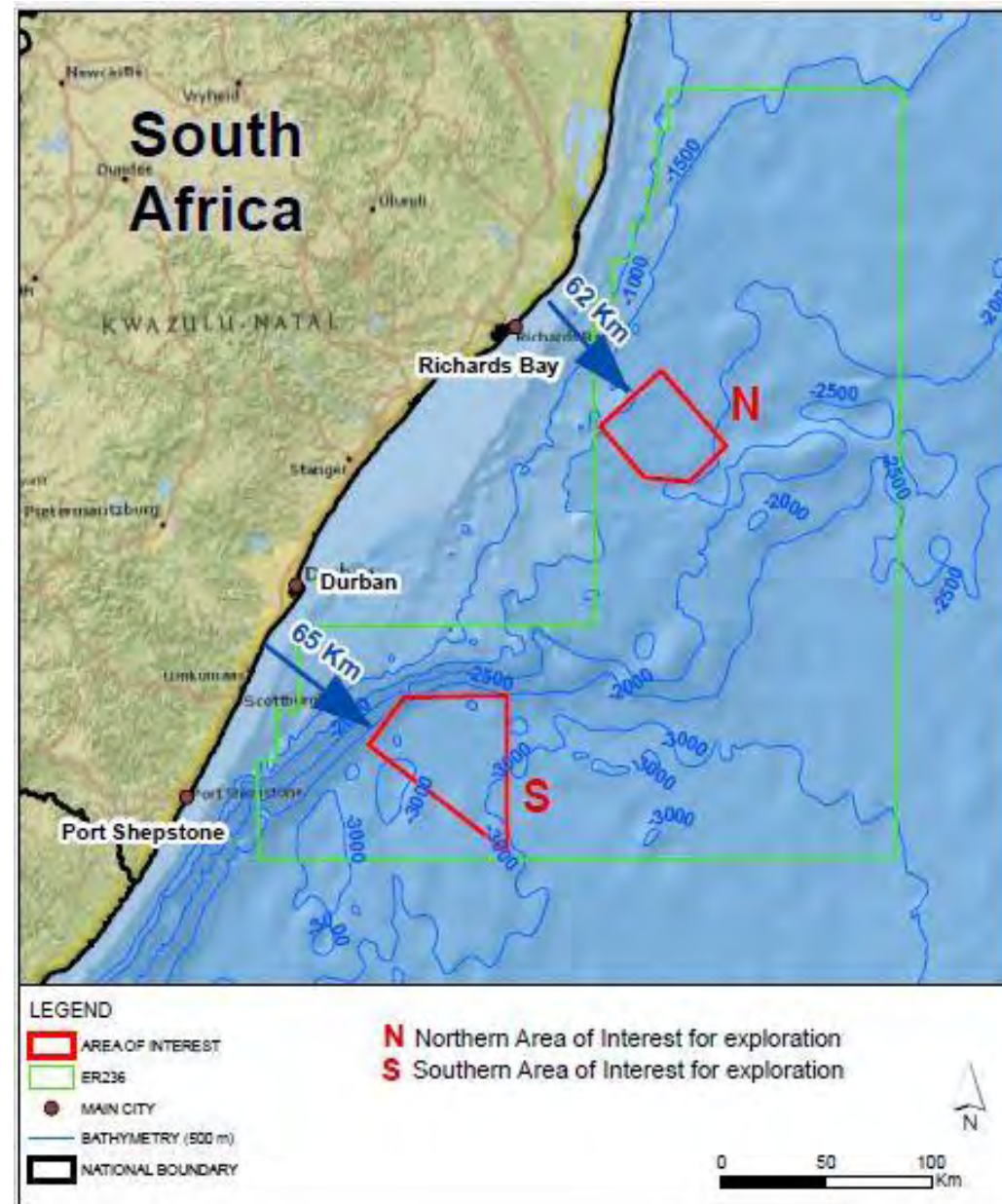
# Project Context

- Eni South Africa BV (Eni), and Sasol Africa Limited (Sasol) hold an Exploration Right off the East Coast of South Africa Block ER236 (12/3/236).
- Eni and Sasol are considering conducting an exploration drilling programme in Block ER236 to determine the presence of hydrocarbons.
- Eni is considering drilling one well in late 2019/ early 2020.
- Drilling of one well will take up to two months (71 days).
- The success of the first well will determine whether or not subsequent wells are drilled (up to 5 additional wells).
- Exploration drilling will investigate the subsea geological structures to determine the presence of naturally occurring hydrocarbons: gas and/or oil.



Source: Shutterstock

# Project Location



# Project Phases

## Project activities include the following phases:

- Mobilisation and Pre-Drilling;
- Drilling;
- Well plugging and Abandonment (decommissioning);
- Demobilisation phase



Source: Shutterstock

All activities conducted will comply with South Africa legislation requirements, international standards, and industry good practice



# Mobilisation and Pre-Drilling

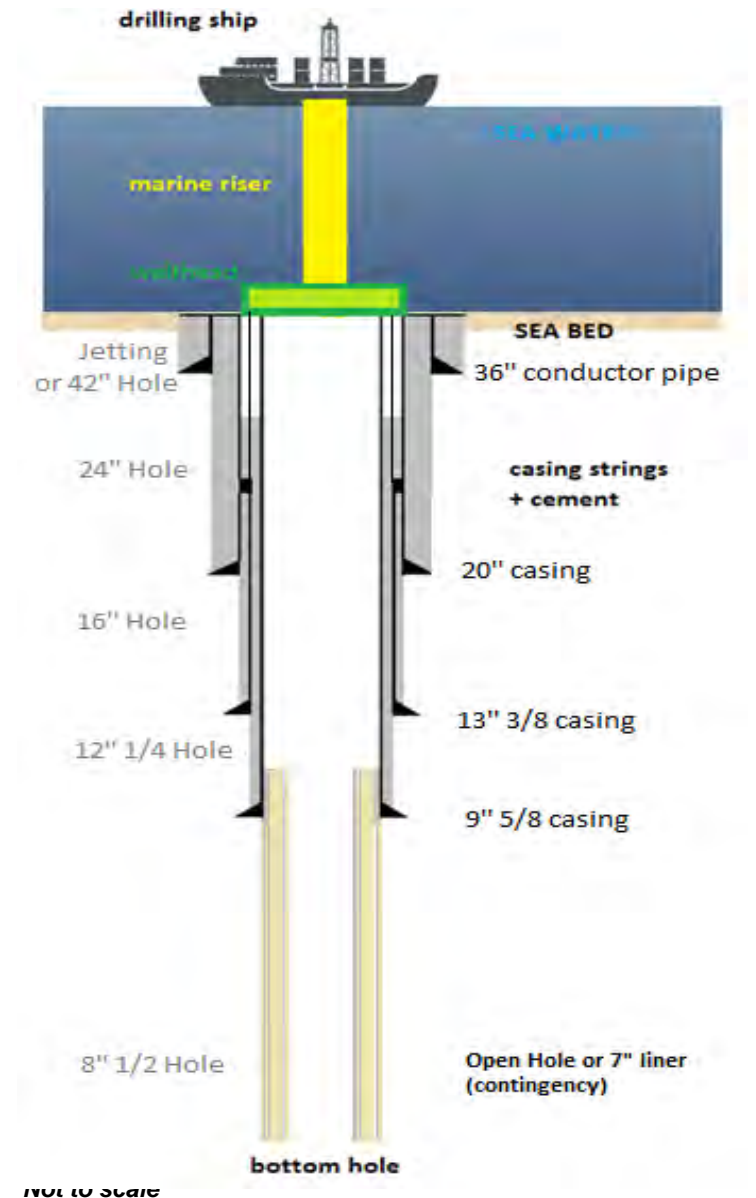
- Navigation equipment (dynamic positioning, GPS and beacons) will keep the ship stable above the well location through all over operations
- Mobilisation of the drillship in deepwater
  - 1,500 to 2,100m water depth in Northern area
  - 2,600 to 3,000m water depth in in Southern area
- Pre-drilling activities includes:
  - Seabed survey with Remote Operated Vehicle (ROV)
  - Positioning of well
  - Beacon placement
  - Dynamic positioning trials



Source: Shutterstock

# Drilling

- Different drilling bits sizes are used to drill a series of telescoping holes, from the seabed to the total depth of the planned well.
- Each hole is cased in a steel tube which is cemented in place to secure/seal the hole.
- A blowout preventer (BOP) will be present at wellhead during drilling to prevent an uncontrolled release of hydrocarbons to surface/seabed.
- The drilling activity proposed vertical well to a total depth of:
  - Northern Area: ~ 3,800m to 4,100m below the sea surface
  - Southern Area: ~ 5,100m below the sea surface



# Well Evaluation & Testing

## Well Logging

- Continuous monitoring and evaluation of drilling parameters, formation and cuttings with analysis carried throughout operations.

## Well Completion and Testing

- Well completion and well testing operations will only be conducted on the appraisal well if hydrocarbons are found.
- No well testing will be conducted on the exploration well.



Source: Shutterstock

# Well Plugging & Abandonment (Decommissioning) and Demobilization

- The well is plugged and sealed by setting cement plugs inside the wellbore.
- Plugs are tested for integrity to prevent leaks.
- The blowout preventer will be then retrieved to surface.
- The wellhead remains on the seabed.
- Final Remote Operated Vehicle survey will be performed at seabed.
- The drillship and support vessels leave the well location.
- Final ROV survey will be performed at seabed.



Source: Shutterstock

# Logistics

## **Onshore Logistics Base**

- The onshore logistics base will be located in Richards Bay or Durban, on an existing brownfield site (previously developed land) within the Port or the Industrial Development Zone (IDZ).

## **Offshore Logistics**

- Movements of materials and drilling fluids (mud, industrial water, waste) by supply vessels from the port; and
- Transport of personnel (around 200 people will work offshore) to the drillship will probably be by helicopter



## **PART 2: EIA Results**

# Specialist Studies

**Proposed studies to address potential impacts include:**

- Marine fauna;
- Fisheries;
- Oil Spill modelling;
- Drill cuttings dispersion modelling; and
- Marine Heritage Baseline.



Source: ERM

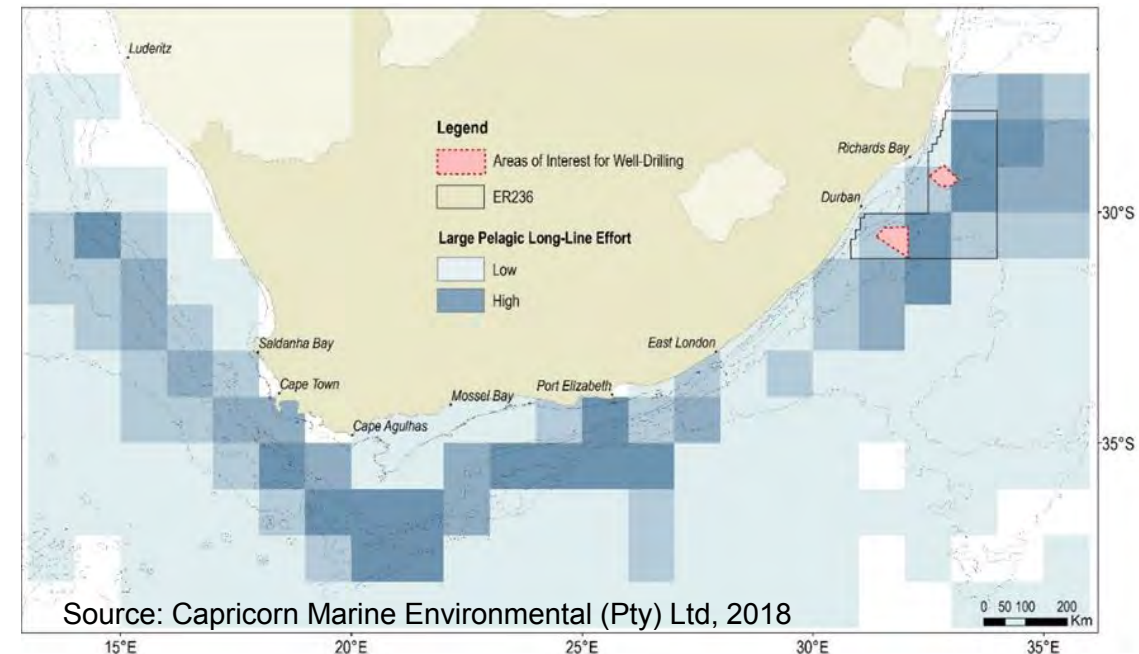


Source: ERM

# Minor Impacts to Fisheries

## Pelagic Fishing:

- The fishery operates extensively within the South African EEZ, primarily along the continental shelf break and further offshore.
- There are currently 30 commercial large pelagic fishing rights issued and 21 vessels active in the pelagic fishery.
- Areas with medium effort for pelagic longline fishery overlap with the drilling areas of interest.
- During drilling operations no fishing is allowed within the exclusion zone (**500 m** radius around drillship).
- The **impact** was considered **be local in extent** (limited to the area of interest) and of **short-term duration** (up to two months).
- The scale of the impact is determined to be small.

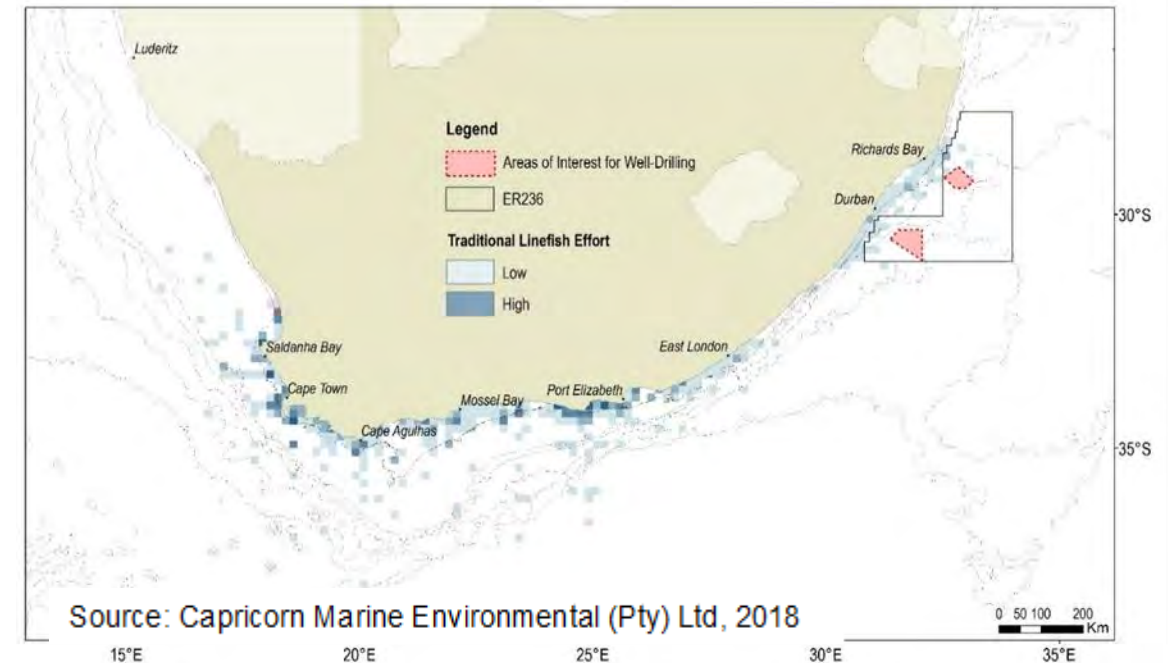


Spatial distribution the long-line sector targeting large pelagic species in relation to ER236 and the drilling areas of interest

# Minor Impacts to Fisheries

## Nearshore (Coastal) Fishing:

- The KwaZulu-Natal (KZN) prawn trawl fishery lies 30 to 35km inshore of the northern and southern drilling areas of interest, respectively.
- The KZN line-fish fishing effort lies at least 10km and 35km inshore of the northern and southern drilling areas of interest, respectively.
- The KZN line-fish and prawn trawl fishery partially overlap with the Block but no areas overlap with drilling area of interest.
- During drilling operations there will be **no impact to the linefish and crustacean trawl fisheries.**



Spatial distribution of traditional line-fish sector showing there is no interaction with ER236 and the drilling areas of interest

# Risk Significance of Unplanned Events

An **unplanned/ accidental event** is a foreseeable unlikely incident with a very low probability of occurrence.

## MODELLING CONDUCTED

Three accidental spill scenarios events were assessed in the EIA Report to predict their consequences:

1. Accidental **oil spill due to a vessel collision**;
2. Accidental **oil spill due to a blowout**; and
3. Emergency **release of Non-Aqueous Drilling Fluid (NADF)** due to the **disconnection of the riser**.

The simulations have been performed without the response and mitigation measures applied. This is a **unrealistic situation with no mitigation**. In reality Eni and its contractor will immediately **activate the Contingency Plan to promptly react** to the emergency, limit the environmental impacts and solve the emergency situation.

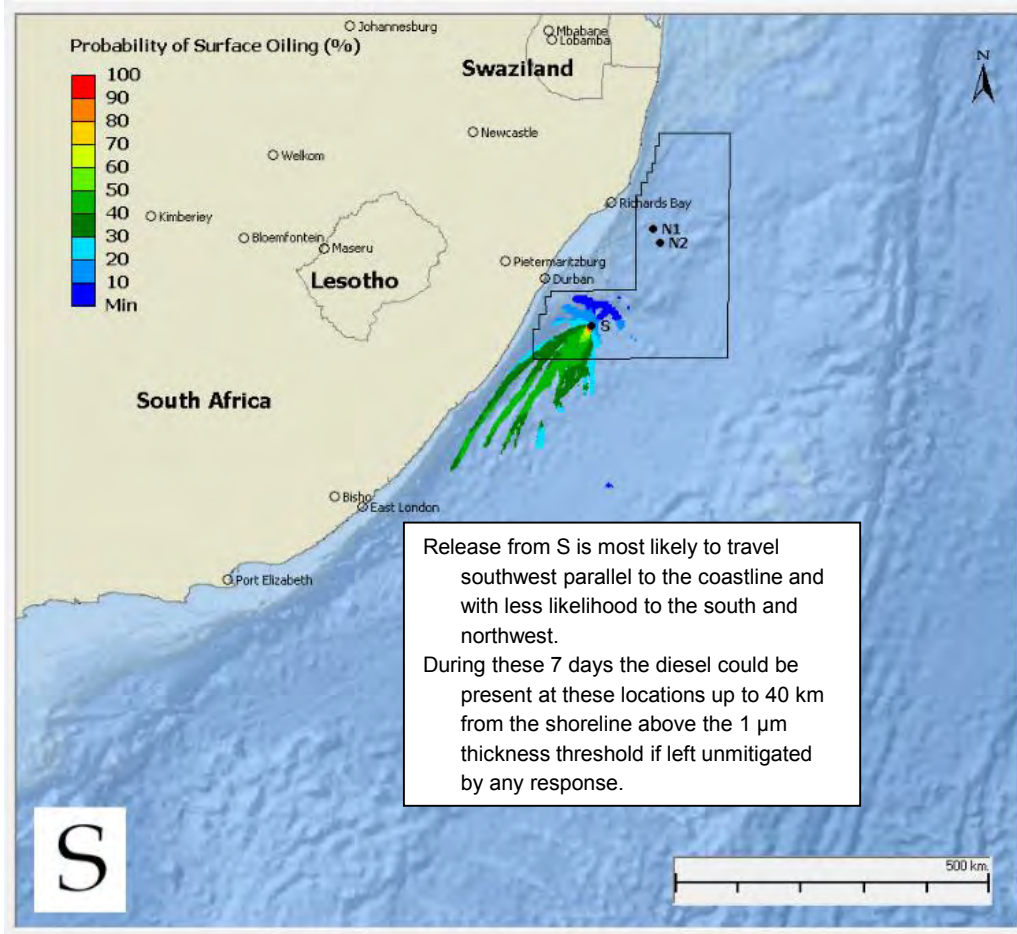
## LIKELIHOOD / PROBABILITY OF A SPILL

- The **probability of a blowout is very low** where the frequency of occurrence is  $2.5 \times 10^{-4}$ , **1 case in 4,000 drilled wells** (OGP Report, 2010).
- Eni assesses the risk of a well blowout, from the geological factors, tools reliability and human errors, during the well design phase and considers the use and development of new technology to minimize the risk. This results in a **reduction of the blowout frequency** from  $10^{-4}$  down to  $10^{-6}$ , **1 case in 400,000 drilled wells**.

# Oil Spill Modelling Scenarios and Results of the Sothorn Well

## Scenario 1: Vessel Collision Diesel Spill

The figure shows the probability of oil being present at a location on the water surface from a very unlikely diesel oil spill due to a vessel collision.

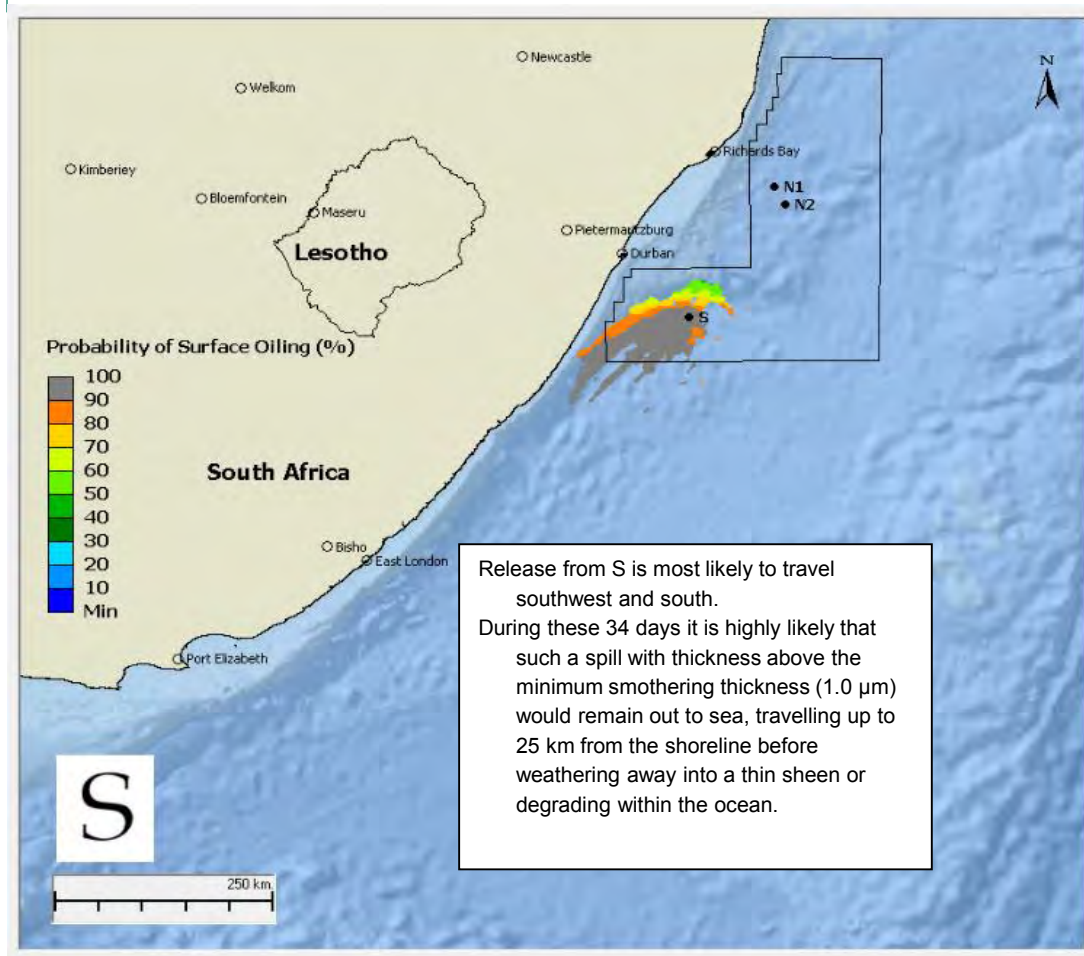




# Oil Spill Modelling Scenarios and Results of the Southern Well

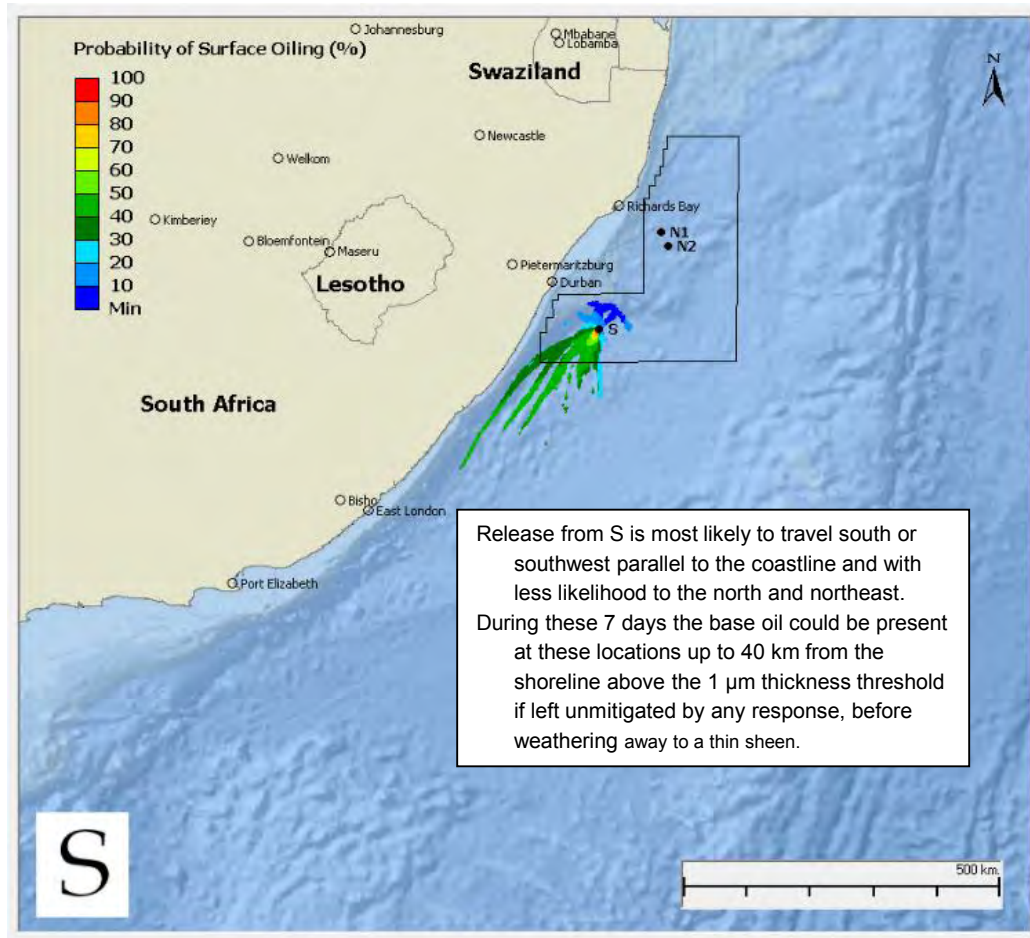
## Scenario 2: 20-Day Crude Oil Blow out

The figure shows the probability of oil being present at a location on the water surface from a very unlikely crude oil spill due to a blowout being stopped by the installation of a capping system after 20 days of release.





# Oil Spill Modelling Scenarios and Results of the Southern Well



## Scenario 3: NADF Mud Release

The figure shows the probability of oil being present at a location on the water surface a very unlikely oil spill due to a riser disconnect and No Aqueous Drilling Fluid (NADF) dispersion.

# Unplanned Events

## RISK SIGNIFICANCE ON MARINE & COASTAL

### HABITATS AND SPECIES

- A **slick** resulting from all 3 scenarios would **spread in a south-westerly direction** and would be **unlikely to reach the shore**.
- **Dissolved aromatic hydrocarbon concentrations may persist** in the top few meters of the water column beneath the slick from a blowout potentially **resulting in toxicological effects in marine fauna** coming in contact with the slick for extended periods.

### LIVELIHOODS, FISHING, TOURISM

- Result of the modelling indicates that **no significant shoreline oiling would occur**, and it is therefore, unlikely that the unplanned release of hydrocarbons would affect the operations of the nearshore fisheries.
- Extent of loss of livelihood would depend of the severity of the spill and how long **clean-up operations** take to complete.
- In a vessel to vessel collision there is a risk of injury or fatalities to crew or passengers on other vessel and loss of work.
- Disturbances and damages to fishing/tourism would result in the **temporary stand-by and loss of access** during the implementation of the oil spill contingency plan.

# Risk Prevention and Response Measures

To prevent an unwanted oil spill, Eni has defined number of mandatory responses, control and management measures, that will be implemented prior to and during drilling operations.

## **Including:**

- Advanced planning of the drilling activity;
- Optimization of the well design, geological and drilling programs;
- Use of safety device and reliable drilling tools, (e.g. logs to monitor hydrocarbon presence and drilling parameters);
- Selection of skilled and trained personnel; and
- Rig crew and relevant personnel will be certified to early detect possible anomalies during the drilling and promptly manage an unwanted hydrocarbon spill event in order to limit its severity and duration, and reduce/mitigate the spill consequences.

# Risk Prevention and Response Measures

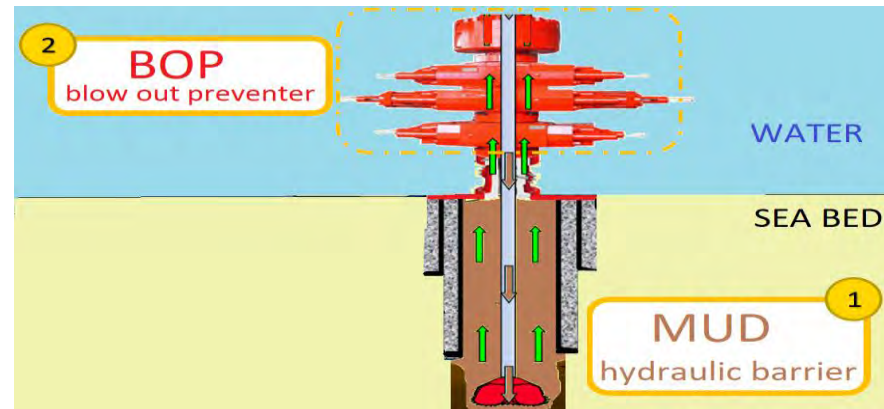
## SHUT IN OF WELL IN CASE OF EMERGENCY

In case of an emergency when all preventing and well control actions are not sufficient, different mechanical tools can be used to shut in the well, such as:

- Flow-back preventing valve inside the drilling string; and
- Subsea BOP (Blowout Preventer).

The BOP rapidly seals the well (or “shut in”) and its use is mandatory to avoid an unwanted release of hydrocarbon to surface, also called “blowout”. The BOP will be regularly pressure and function tested as per ISO/API standards.

Recent development of new technologies allows the availability of a back-up tool: the capping stack system.



# Risk Prevention and Response Measures

AVOIDANCE AND PREVENTATIVE MEASURES	REDUCTION AND RESPONSE MEASURES
<ul style="list-style-type: none"><li>• Eni and its contractors have competent, certified and qualified staff.</li><li>• Adoption of <b>highest industry standard</b>, for <b>well design, material and equipment selection, drilling procedures and operations</b> to guarantee integrity and provide <b>multiple barriers</b> (adoption of dual barrier principle). For instance:<ul style="list-style-type: none"><li>◦ <b>Casings and equipment selection</b> designed to withstand a variety of forces, such as collapse, burst or tensile failure &amp; chemical aggression;</li><li>◦ <b>Weighted mud properties selection and control</b>: to guarantee wellbore stability and bottom hole pressure balanced, controlling its properties and using downhole/surface sensors for monitoring; and</li><li>◦ <b>Blowout prevention</b>: presence of certified safety critical equipment, e.g. BOP Preventer Stack, to control pressure anomalies.</li></ul></li><li>• Drilling program revised by Eni HQ drilling technical authority.</li><li>• Preparation and approval of an <b>Emergency Response and Oil Spill Contingency Plans</b>.</li></ul>	<ul style="list-style-type: none"><li>• In case of unwanted emergency, Eni will adopt the contingency plans to promptly react and reduce effects. The presence and application of the Oil Spill Contingency Plan is mandatory. It is based on 3 principle components:<ul style="list-style-type: none"><li>◦ Crisis management and control;</li><li>◦ Spill response, containment and clean-up; and</li><li>◦ Well control.</li></ul></li><li>• BOP immediate closure and sealing of well; in case of BOP failure, mobilisation and installation of capping system.</li><li>• Deployment and use of offshore containment equipment including booms, skimmers, tanks, dispersants.<ul style="list-style-type: none"><li>◦ Eni will provide primary response equipment on board of vessels; additional will be mobilised from onshore.</li></ul></li><li>• Onshore mobilisation and installation of containment, absorbent and clean-up equipment in case of spill approaching the shore.</li></ul>

**You can also submit your comments on the Draft EIA  
Report to ERM:**

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# Thank you

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## Annex C4

# Meeting with Ezemvelo KZN

### **4.1. Minutes of Meeting with Ezemvelo KZN**

A meeting was held with Ezemvelo Wildlife on 10 October 2018 at the Ezemvelo Offices, to outline the ambits of the proposed project.

### **4.2. Presentation**

A presentation was used to further emphasise the project scope during the meeting with Ezemvelo KZN.