Annex B7

Comments Received
Morning Ann

The Block is located offshore, and extends from off the coast of Port Shepstone to just south of the border with Mozambique, see map below. However, the areas that Eni proposed to undertake exploration activities are located off the coast of Richards Bay and Port Shepstone. We understand the sensitivities associated with the iSimangaliso Park, and while we have not had meetings in St Lucia, and representatives from the Park are on our stakeholder database and are aware of the project.

The Scoping Report is available on the Project website: [https://www.erm.com/eni-offshore-eia](https://www.erm.com/eni-offshore-eia)
Please let me know if you have any further questions.

Kind regards
Lindsey
From: ANN M. MCDONNELL <MCDONNELLA@kznleg.gov.za>
Sent: Friday, June 22, 2018 2:40 PM
To: ERM South Africa Project ENI Offshore Exploration <eni.exploration.eia@erm.com>
Subject: EIA for Exploration Drilling within Block ER236 off East coast of SA

Good afternoon

Please advise the extent of this block – seems you have consulted from Richards Bay to Port Elizabeth. Does it extend to the iSimangaliso Park, a world Heritage site?

Also how far into the ocean?

Many thanks

Ann McDonnell

---

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and automatically archived by Mimecast SA (Pty) Ltd, an innovator in Software as a Service (SaaS) for business. Mimecast Unified Email Management™ (UEM) offers email continuity, security, archiving and compliance with all current legislation. To find out more, contact Mimecast.
COMMENTS on ERM - Exploration Drilling within Offshore Block ER236

1. Need and Desirability Motivation fails to highlight negative aspects of anticipated oil and/or gas exploration “success”

It is noted that in the Policy Framework section of the Need and Desirability motivation contained in the Draft Scoping Report, it is stated that the discovery of a commercially viable oil and/or gas reserve offshore South Africa would assist in meeting the objectives included in the Integrated Energy Plan (IEP, 2016):

“The development of a National Integrated Energy Plan (IEP) was envisaged in the White Paper on the Energy Policy of the Republic of South Africa of 1998 and, in terms of the National Energy Act, 2008 (Act No. 34 of 2008), the Minister of Energy is mandated to develop and, on an annual basis, review and publish the IEP in the Government Gazette. The purpose of the IEP is to provide a roadmap of the future energy landscape for South Africa which guides future energy infrastructure investments and policy development. (DoE, 2016). Key objectives of the IEP (2016) include the following:

- Security of supply;
- Minimising the cost of energy; and
- Diversification of supply sources and primary sources of energy.

The discovery of a commercially viable reserve of oil and/or gas offshore South Africa would assist in meeting the above objectives.”

It is pointed out that section 6 of the National Energy Act, 2008 (NEA) is the relevant section dealing with integrated energy planning, and is also the enabling provision for the development of an IEP. Importantly, section 6 of the NEA has not yet commenced (the date of commencement is to be proclaimed). The legal status of the IEP² is thus unclear. This has not been pointed out in the Draft Scoping Report (Appendix 2 to the Environmental Impact Assessment Regulations, 2014 stipulates that

---

² GN 1430 of 25 November 2016.
one of the objectives of scoping process is to identify the relevant policies and legislation relevant to the activity).

Notwithstanding this, it is relevant to note that the IEP also contains other key objectives that are not referred to in the Draft Scoping Report, including:

- **Objective 4: Minimise negative environmental impacts from the energy sector.**

The *Need and Desirability* portion of the Draft Scoping Report seems to focus almost exclusively on the potentially beneficial aspects of the anticipated ‘exploration success’, and fails to adequately describe potentially negative aspects. For example, the Draft Scoping Report does not adequately make provision for the assessment of the climate change implications of tapping into new hydrocarbon resources.

A balanced assessment of both the positive and negative aspects of the proposed activity is required in order for the EIA phase to adequately assess *Need and Desirability*.

2. **Assessment of socio-economic impacts of a worst-case scenario spill**

The proposed "Exploration Drilling within Offshore Block ER236" project will take place in deep water, according to the following description on page 1 of the Scoping Report:

"ENI is considering drilling up to six deep water wells within Block ER236, four wells within a northern 1,840 km2 area of interest, in water depths ranging between 1,500 m and 2,100 m and two wells within a southern 2,905 km2 area of interest (Figure 1.1), in water depth ranging between 2,600 m and 3,000 m."

According to Dr. Chernaik, this puts the project on par with one of the worst environmental catastrophes of the new century: the Deepwater Horizon oil spill of 2010.

---

3 Assistance in commenting on this Draft Scoping Report was provided by Dr. Mark Chernaik, Staff Scientist, E-LAW (Environmental Law Alliance World Wide), Eugene, Oregon, USA.
Dr. Chernaik points out that details of the short and long-term effects of the Deepwater Horizon spill can be found on the U.S. National Oceanic and Atmospheric Administration’s (NOAA) website:


For example, the NOAA reports on its website that on 4 April 2016:

“the court approved a settlement with BP for natural resource injuries stemming from the Deepwater Horizon oil spill. This settlement concludes the largest natural resource damage assessment ever undertaken. We will now begin implementing restoration as laid out in the Trustees’ comprehensive restoration plan. Under this settlement, BP will pay the Trustees up to $8.8 billion for restoration to address natural resources injuries and lost recreational uses”.

Dr. Chernaik notes that the draft ENI Scoping Report seems to require assessment of a worst-case spill (as it should):

- Physical and chemical environmental impacts on surface waters from potential hydrocarbon spills will be assessed using a comprehensive modelling approach. In the comprehensive modelling approach, a single model, GEMSS® (Generalized Environmental Modelling System for Surfacewaters), is used to determine the fate and transport of unplanned hypothetical oil spills.
- The following scenarios will be assessed:
  - Scenario 1 - diesel spill associated with vessel collision happening either during drilling of wells;
  - Scenario 2 - release of NADF due to the accidental disconnection of the riser occurring
  - Scenario 3 – blowout of crude oil at the wellhead on the seabed.
- For each scenario, the “worst cases” will be determined using three different criteria: the conditions that result in the shortest time for oil to contact a shoreline, the case with the most amount of shoreline oiling, and the conditions in which the most amount oil spreads across the water surface.
Impacts will be assessed in terms of the probability of the presence of a visible hydrocarbon slick on the surface, probability of oil contacting shorelines, and dissolved aromatic concentrations in the water column. For the riser disconnect scenario, impacts will also include an evaluation of the suspended solids concentration and untreated NADF contamination on the sea floor using the GIFT module.

Results of the modelling will be provided as a stand-alone report, included as an annex to the main EIA report.\(^4\)

However, while the Draft Scoping Report makes reference to an assessment of worst-case scenario impacts “in terms of probability”, no mention is made of assessing the nature, significance, consequence, extent and duration of socio-economic impacts that would arise in the event of a worst-case spill scenario materializing, including the degree to which such impacts can be reversed and may cause irreplaceable loss of resources (e.g. clean-up costs; the extent to which the environment could be restored following significant ecological damage; impacts on natural resources such as fishing; impacts on tourism; impacts on recreational users of natural resources etc.).\(^5\)

It is submitted that the Draft Scoping Report should make provision for a detailed assessment in the Draft Environmental Impact Report (DEIR) of the nature, significance, consequence, extent and duration of socio-economic impacts that would arise in the event of a worst-case spill scenario materializing.

3. Failure to require redundancy (e.g. an acoustic control system) for activating the blowout preventer in case of a spill

According to Dr. Chernaik, one of the defects identified in the Deepwater Horizon EIA was a failure to require redundancy (e.g. an acoustic control system) for activating the blowout preventer in case of a spill. Dr. Chernaik comments that with respect to the Draft Scoping Report for the Exploration Drilling within Offshore Block ER236, it seems that this defect

---

\(^4\) Draft Scoping Report, pages 127-128.

\(^5\) EIA Regulations, 2015 (GN R.982 of 4 December 2014, as amended), Appendix 2, Section 2(1)(g)(v).
may be repeated. With respect to blowout prevention, the Draft Scoping Report for the Exploration Drilling within Offshore Block ER236:

Secondary well control is provided by the installation of mechanical device, such as the float collar in the drilling string and the blowout preventer (BOP) at seabed, installed on top of the wellhead after the running and setting of the surface casing. The BOP effectively closes and seals the annulus if there is a sudden influx of formation fluids into the well bore, by the use of a series of hydraulically/electrically actuated rams. In addition, this device allows the formation fluids to be safely vented or pumped at the surface with the well closed, thereby enabling other methods to be applied to restore a sufficient hydrostatic head of mud on the well bore, for example pumping a higher density volume of mud, the so called 'kill mud'. The capacity and pressure rating of equipment, safety device and the BOP rating exceed the predicted reservoir pressures.\(^6\)

Dr. Chernai

Dr. Chernai advises further that the existence of a blowout preventer at seabed, while essential, does no good if an explosion or other catastrophic event prevent the ability to activate (switch on) the BOP: the fundamental reason why the Deepwater Horizon oil spill lasted so long and was such a catastrophe.

It is submitted that the Draft Scoping Report for the Exploration Drilling within Offshore Block ER236 should require a robust discussion in the DEIR for the project of redundancies that would be employed by the project to activate the BOP under each and every accident scenario.

4. Oil Spill Response Plan

Dr Chernai notes that the Draft Scoping Report alludes to the possibility of there being an Oil Spill Response Plan forming part of the DEIR for the project: "ENI will develop and implement an Oil and Chemical Spill Response Plan in the event of an accidental release of oil offshore."\(^7\)

\(^6\) At page 37.
\(^7\) At page 44.
Dr. Chernaike advises that is must be ensured that an Oil Spill Response Plan is indeed part of the DEIR for the project.

Dr. Chernaike goes on to state that the Oil Spill Response Plan also needs to conform to guidelines about what information needs to be in the plan. An example of such guidelines is the Guidelines for Offshore Oil Spill Response Plans - Guidance for Offshore Oil and Gas Exploration, Production and Pipeline Facility Operators (API TECHNICAL REPORT 1145, SEPTEMBER 2013), available online at: http://www.oilspillprevention.org/~media/oil-spill-prevention/spillprevention/r-and-d/spill-response-planning/1145-e1-final.pdf.

In Dr. Chernaike's view, one of the most important elements of a good Oil Spill Response Plan is the identification of available resources for responding to a major spill. If an Oil Spill Response Plan correctly describes what to do in case of a major spill, but the required equipment or trained personnel are not available to rapidly implement the plan, then correctly describing what to do is of no use. This is why guidelines for Oil Spill Response Plans require such plans to identify response resources, such as section 4.2 of the guidelines cited above, which provides as follows:

4.2 Resource Inventories and Mobilization Times

Identify the primary Oil Spill Removal Organizations that are under contract or can provide key response resources (boom, skimmers, barges, dispersants and application platforms, etc.) and how they will likely be utilized in a response. For example, due to varying capabilities between Oil Spill Removal Organizations, some may be more suited or pre-designated for offshore containment and recovery whereas others may only provide shoreline cleanup services. If company owned equipment will be utilized, it should be identified in this section as well.

Resource inventory lists of the major response equipment and personnel should be included for the company and primary Oil Spill Removal Organizations. The lists should include at least those resources that could be mobilized to the site(s) in the first 24 hours to make the Oil Spill Response Plan as stand-alone as possible for the initial response phase. Alternatively, Oil Spill Removal Organizations websites or those that maintain compilations of resource inventories such as the Response Resource Inventory can be referenced for that information."
Dr. Chernaik goes on to point out that the question of response resources available to be mobilized in the first 24 hours of a spill may be very critical in the context of South Africa given its relative lack of experience in offshore oil and gas projects, and advises that if South Africa lacks local equipment or trained personnel to respond rapidly (within 24 hours) to a major spill from an offshore oil and gas facility, then this is an issue the DEIR for the Exploration Drilling within Block ER236, off the East Coast of South Africa needs to explore.

In light of the above, it is submitted that the Draft Scoping Report should require the DEIR includes a description of the available resources to respond to a major oil spill.

Adrian Pole Attorneys
1 March 2018