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Dear Ms Lindsey Bungartz,

**SCOPING REPORT: EIA FOR EXPLORATION DRILLING WITHIN OFFSHORE BLOCK ER236, KZN, SOUTH AFRICA;  
ERM Ref: 0414229 pertains.**

I appreciate the opportunity to comment on the above-mentioned Scoping Report, especially considering the potential impact to the marine environment and shoreline that the proposed activities pose.

Below you'll find my main areas of concern, which include, but are not limited to, the points made. Specifics to comments on seismic surveys, biodiversity and waste management await the release of the EIA and its annexes before further elucidation. It would be of value to have the following dealt with in the final EIA:

#### 1. INCIDENCE MANAGEMENT

Transparency is needed with regards to Oil Spill Response, Planning and Capacity necessary for public health and welfare and the marine and coastal environment. An annex to the EIA should include the blowout management protocol for Eni South Africa BV (Eni), and Sasol Africa Limited (Sasol) for this project. Included in this annex should be highlighted any deficit of technological expertise or resources or difficulty of effective co-ordination with all government or conservation agencies that have a statutory responsibility for some aspect of offshore oil and gas activities regarding incident management. The delegated National Incident Commander, along with the intended lines of responsibility for interagency efforts, should be made public information in this annex. The public needs assurance that incident management is fully informed, and has capacity to deal with, the latest technology, practices and risks associated with, and due to, the different geological and ocean environments being explored, prior to commencement of drilling.

#### 2. LIABILITIES AND FINANCIAL RESPONSIBILITY FOR OIL SPILL REMEDIATION

Further to 1. the Scoping Report makes no mention of what appropriate insurance safeguards Eni or Sasol have in place for remediation against oil spills and other environmental damages. Considering the serious toll a spill would have on safe recreation at beaches, healthy habitats for wildlife, industries such as tourism and fishing, the South African taxpayer and the general public, the EIA should produce proof of these insurance safeguards and a reasonable level of fiscal readiness for long term cleanup and reparation process, in the event of a major disaster.

### 3. CLIMATE CHANGE

The EIA requires a more thorough investigation with regards to climate change, rather than just implications of the project vessels.

An assessment of the end output of the project, i.e. the expected barrel delivery, must be measured for its increase in carbon emissions to South Africa's peak, plateau and decline commitments to the global economy.

### 4. OPERATIONAL WASTE

Not only must the drill cuttings' offshore treatment and discharge to sea be assessed for in terms of impact on seafloor/ benthic community, water column biology and expected dispersion, but also composition of these emissions and effluents regarding their toxicity, biodegradation, polynuclear aromatic hydrocarbons content, and metals content, need to be made public. In addition, an explanation as to how these toxins will be mitigated by the "natural dispersion, dilution and assimilative capacity of water" is required.

Please also provide practicable steps in the EIA to prevent this 'dumping at sea' considering Eni's preferred option is to 'off-shore treat and discharge cuttings' given that that dumping permits are not required.

### 5. NOISE POLLUTION

Please broaden your key species of concern to include Short-finned Pilot Whales and Cuvier's beaked whale since both acoustically sensitive species are vulnerable to anthropogenic noise pollution, and are resident in the region. The EIA should consider observations that show how they actively select the shelf-break edge, indicating that this is an important foraging area for these species. Consideration should also be made for elevated levels of nitrogen in deep diving whales making them more susceptible to anthropogenic disturbances. High levels of anthropogenic marine noise impact Short-finned Pilot Whales (Hohn et al. 2006).

The mitigation of Vertical Seismic Profiling cannot simply be an issue of 'short duration'. These airguns are capable of inducing significant acoustic trauma. The use of airguns producing high decibels and amplitudes of sound in a marine environment requires mitigation.

Please fully address the adverse effects of subsurface man-made noise and vibration during these operations. Noise emissions from drilling operations often produce noise that includes strong tonal components at low frequencies, including infra-sonic frequencies in some cases, thereby leading to potential disturbance, damage or interference to a variety of marine species. Please assess the full scale of this acoustic footprint including impacts caused by vibration through drill string and casing, vibration into the seabed and vibration of the drill bit.

### 6. AIR POLLUTION

Gas flaring and venting must be mitigated during well testing and production operations to prevent emission of CO<sub>2</sub>, methane and other forms of gases which contribute to global warming causing climate change / environmental degradation both at a local and global level. Ambient winds averaging 10 knots along this coastline may affect flaring efficiency and requires consideration. If gas must be flared, an accurate means to determine volume of gas flared, its emissions quantity and concentration must be agreed upon. An annual and public report of flaring volumes by Eni and Sasol would be required. Flaring negates commitments made by South Africa under the United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol and the Paris Agreement.

## 7. LIGHT POLLUTION

Operations at oil fields introduce considerable amounts of artificial light (e.g., electric lighting, gas flares) that can potentially affect ecological processes in the upper ocean, such as diel vertical migration of plankton. Artificial night light also attracts numerous species, including squid, large predatory fishes, and birds. Please evaluate for mitigation the effect of lights and the physical presence of ships on the movement of sensitive species.

## 8. PHYSICAL DAMAGE TO THE SEA FLOOR AND IMPORTANT HABITATS

The disruption that drilling causes to the seafloor habitat and the benthic community was not adequately dealt with in the Scoping Report. Impacts of drilling on the seabed are not necessarily localised or short-term and must be assessed further. Cognisance must be taken of the hazards of drill cuttings disposal onto the seabed because they are often contaminated with drilling lubricants, synthetic-based drilling fluids (SBFs) and other non-aqueous drilling fluids (NAFs). The EIA must include mitigation against sediments contaminated with petroleum products, heavy metals and salts, which do not biodegrade and can accumulate in high concentrations affecting reproduction of marine life, and biomagnify toxic substances in the food chain.

## 9. INVASIVE SPECIES

Ships, drilling equipment and rigs are used and relocated all around the world. Negative impacts on native biodiversity from invasive species colonising drilling infrastructure should be mitigated.

## 10. BASELINE STUDIES NEEDED

The occurrence of deep-water corals in Block ER 236 and the areas of interest are unknown. Therefore potential gains and/or losses at the inter- and intra-species levels; changes in species abundances; loss of habitat; loss of physical connectivity between habitats, and ecosystems and the unknown impacts on seabed features as well as undiscovered species are unaccounted for. Consequently, there is a need for planned, coherent, and consistent ecological data to inform this EIA to develop robust physical and biological baselines. The effectiveness of implemented mitigation measures with well-designed and consistent environmental monitoring is a critical next step.

## 11. TIMING OF IMPACT

The timing of this exploratory drilling is critical for least possible impact on seasonal breeding, feeding and migrations. Best practice is to mitigate negative impacts of oil exploration on endangered marine life is to separate them in time, space, or both. There should be no leeway given in the proposed temporal window of this survey, except to reduce the schedule duration, given the degree of threat due to the survey area overlapping Humpback whale, Southern Right whale, sardine and critically endangered Leatherback and endangered Loggerhead turtle migration routes.

## 10. WELL ABANDONMENT

More information is required with regards to well abandonment and its mitigation. How will Eni and Sasol ensure monitoring will be carried out after production has ceased and throughout de-commissioning?

Yours sincerely,  
Janet Solomon

