

**Referral Business Entry Point, EIA Policy
Section (EPBC Act)**

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To Whom it May Concern

Thank you for the opportunity to provide comment on **Referral 2011/5969**
Ceduna 3D Marine Seismic Survey, Great Australian Bight.

The Conservation Council of South Australia (Conservation Council SA) is the Peak
conservation body for South Australia representing over 50 of the State's
environment and conservation organisations.

We provide our comments in relation the proposed seismic testing 3D Marine Seismic
Surveys.

I also acknowledge that BP has been proactive in providing information about its
proposed oil exploration activities to the Conservation Council of South Australia
(Conservation Council SA).

In this submission Conservation Council of SA identifies its preliminary concerns in
relation to BP's activities in the Great Australian Bight

Kind regards

Tim Kelly

A handwritten signature in black ink that reads "Tim Kelly".

Chief Executive

Conservation Council of South Australia Submission in response to Invitation for Public Comment on Referral 2011/5969

Ceduna 3D Marine Seismic Survey, Great Australian Bight.

As the peak environmental body for South Australia the Conservation Council of South Australia has grave concerns about gas and petroleum exploration in the Great Australian Bight.

We consider the referral 2011/5969 on the action of Ceduna 3D Marine Seismic Survey, Great Australian Bight, to have elements that are misleading and in some cases incorrect.

We consider the action of 3D marine seismic surveys, when assessed in the wider scope of exploration for oil and gas reserves to have a significant impact on matters protected by the EPBC Act. These matters relate specifically to Listed Threatened Species (Section 18, EPBC Act), Listed Migratory Species (Section 20, EPBC Act) and the Commonwealth Marine Environment (Section 23, EPBC Act).

The full scope of this action will take place in part of the Great Australian Bight Marine Park (GABMP) Benthic Protection Zone (BPZ) and immediately south of the Marine Mammal Protection Zone. The GABMP is subject to both

- the Great Australian Bight Marine Park Management Plan (SA), and
- the Great Australian Bight Marine Park Management Plan (Commonwealth Waters)

This seismic survey and subsequent drilling of exploration wells will occur in a region of important ecological significance. Conservation Council SA has a strong interest in protecting the environment in this area.

We have identified 5 key areas of concern to the Conservation Council SA. We consider BP to have presented misleading or incorrect information with regards to these 5 areas in referral 2011/5969.

1. The 3D seismic surveys are a component of a larger project, including required drilling of exploration wells, and are not a single action.
2. Fundamental gaps in the scientific understanding of the biology and ecology of the area included in the licenses EEP 37, EEP 38, EEP 39 and EEP 40 and surrounding areas.
3. The risk of injury to listed threatened and migratory species protected by sections 18 and 20 of the EPBC Act and there are inadequate precautions to prevent their injury.
4. The environmental record of the party responsible, BP. In light of the April 2010 Deepwater Horizon Oil Spill, also known as the Mocondo Oil Spill, BP can not be considered to have a good environmental safety record
5. The action and its wider consequences should be considered a controlled action.

1. The 3D Marine seismic surveys are a component of a larger action by BP, including drilling four exploration wells, and are therefore not a single action.

The Conservation Council of SA strongly disagrees with BP's assessment that the considered action is not a component of a larger project. We strongly argue that the 3D seismic surveys are a component of the larger exploration project in the licence areas EEP 37, EEP 38, EEP 39 and EEP40. It is misleading for BP to represent the 3D seismic surveys as a stand alone exploration activity.

Despite the scope of the referral to cover seismic testing only, drilling for oil and gas will follow as a condition of the exploration licences. BP is committed a program of drilling exploration wells by January 2014. These wells are a direct impact of the 3D seismic testing and are part of the project as a whole (Section 527E (1) EPBC Act). They should therefore be included in the referral to the Minister. Drilling can be considered as a direct consequence of the 3D seismic surveys, therefore it can be considered an impact of conducting this action (Section 527E (1) EPBC Act).

It is misleading for BP to separate these two activities when it is understood the 3D seismic surveys are being conducted to determine where to place these wells.

Actions should be considered in its broadest scope (Significant impact guidelines 1.2 EPBC Act 1999). BP has not considered the action in its broadest scope. As it stands, the action to perform 3D marine seismic surveys forms a component of the work program outlined in the exploration licences, EEP 37, EEP 38, EEP 39 and EEP 40 awarded to BP. Failure to complete the work schedule, which includes drilling exploration wells, would cause the permit to be cancelled in accordance with the Offshore Petroleum and Greenhouse Gas Storage Act 2006. Future actions, drilling and geotechnical studies, should be included in the scope of the action as they are a direct impact of conducting the 3D seismic surveys (Section 527E (1) EPBC Act).

Conservation Council of SA's Recommendation

This proposal is clearly a component of a larger action by BP (alpha) for the exploration of EPP 37, EEP 38, EEP 39 and EEP 40. The Minister should request a referral of a larger action (Section 74A EPBC Act). A referral incorporating the drilling of exploration wells as an impact and subsequent impacts on the GABMP Benthic Protection Zone should be submitted. Under the EPBC Act the GABMP BPZ is a conservation and special use area.

2. Fundamental gaps in the scientific understanding of the biology and ecology of the Great Australian Bight included in the licences EEP 37, EEP 38, EEP 39 and EEP 40 and surrounding areas.

The 3D marine seismic surveys have the potential to impact 18 threatened species listed on the EPBC Act Protected Matters Database. Conservation Council SA is concerned that there is insufficient scientific understanding about the species present (their biology, behaviour, habitat use and life cycles) to warrant considering the effect of seismic testing and exploration negligible in the Great Australian Bight.

BP indicates in Referral 2011/5969 that impacts on listed threatened and migratory species is minimal as they occur in low numbers in the described area and they can move away from the survey areas. The Conservation Council SA considers this assumption misleading and potentially incorrect.

The area has not been subject to rigorous scientific monitoring. BP cites data obtained from previous seismic surveys in the GAB as evidence for low marine mammal numbers in the area at the proposed time of testing. These sightings are not based on scientific monitoring or methodology and cannot be considered as concrete information about the populations and ecology of marine mammals in the Great Australian Bight. It is misleading for BP to present this as evidence of mammal numbers.

Over 30 species of cetacean have been recorded in waters off SA, many of which are poorly understood and classified as data deficient. Furthermore the actual effects of seismic surveys on marine mammals are largely unknown.

Given the lack of scientific data on the ecology and biology of the region, there is significant scientific uncertainty about the impacts 3D marine seismic surveys will have. **This lack of scientific certainty must be considered when making a decision on this action. There is a clear, lack of information about the region and the precautionary principle must be considered (Section 391 EPBC Act).**

Conservation Council of SA's Recommendation

The precautionary principle must be considered for this region (Section 391(3) Item 2 EPBC Act). Not enough is known about what species may inhabit the area to warrant dismissing the effect of seismic testing as negligible. Rigorous scientific monitoring and exploration of the region is required before exploration can safely proceed with adequate protections for all marine life.

3. There are risks of injury to listed threatened and migratory species protected by sections 18 and 20 of the EPBC Act with inadequate precautions to prevent injury.

The Conservation Council has concerns about the listed threatened and migratory species listed to occur in the areas designated by EEP 37, EEP 38, EEP 39 and EEP 40.

Concerns about the seismic testing

- The testing consists of a series of multiple blasts from air guns of up to 260 decibels, one every ten seconds, continuously for months. (Simmonds, Dolman and Weilgart 2003)
- 180 decibels has been shown to cause discomfort or injure mammals, and sound of this magnitude travels through water for hundreds of kilometres. (If we think about the response of our domestic animals during fireworks displays, we can appreciate that continuous seismic testing could displace and confuse marine animals. (Simmonds, Dolman and Weilgart 2003)

- Ear damage and hearing loss in marine mammals of a temporary (Temporary Threshold shifts) or permanent (Permanent threshold shifts) nature impairs their ability to function properly. (Simmonds, Dolman and Weilgart 2003)
- Seismic testing has been known to disturb the communications (Iorio and Clark 2009)
- Seismic surveys are known to disturb migratory patterns of whales and mammals. (Simmonds, Dolman and Weilgart 2003)
- Seismic testing has been known to mask environmentally important noises placing marine mammals at greater risk of collisions with shipping and altering feeding patterns and behaviour. (Simmonds and Dolman, 1999)
- Seismic testing may also be disturbing to the food sources of the threatened and listed species. (Simmonds, Dolman and Weilgart 2003)

Conservation Council SA feels there is inadequate information about the effects of seismic testing on marine animals to guarantee a low likelihood of potential impacts, impacts that include communication disruption and displaced migratory and feeding patterns.

The Conservation Council SA notes BP will abide by the EPBC Act Policy Statement 2.1 Interaction between offshore seismic exploration and whales. However we feel this policy statement does not take into account the deep diving behaviours of some whale species, meaning that seismic testing may occur without knowing where whales are present in the area, but not readily visible. These guidelines consider Passive Acoustic Monitoring to be an emerging technology, the Conservation Council of SA considers these technologies to be established and should be used routinely as part of 3D marine Seismic Surveys.

We also query who is responsible for regulating and monitoring the actions and reporting of Marine Mammal Officers.

Conservation Council of SA's Recommendation

In the absence of concrete data on the impacts of seismic surveys on marine mammals, the precautionary principle must be considered (Section 391 EPBC Act).

4. The environmental record of the party responsible, BP, in light of the April 2010 Deepwater Horizon Oil Spill, also known as the Macondo Oil Spill.

In the referral 2011/5969 BP states that it has a satisfactory record of responsible environmental management. In light of the April 2010 Deepwater Horizon Oil Spill, and many other spills by BP that have been documented in recent decades this statement is clearly misleading.

The inquiry into the Macondo Deepwater Horizon well blowout in the Gulf of Mexico found that the disaster "can be traced to a series of identifiable mistakes made by

BP, Halliburton, and Transocean that reveal such systematic failures in risk management **that they place in doubt the safety culture of the entire industry"**.

Conservation Council SA is concerned that the oil exploration wells proposed in the GAB are in even deeper water than the Deepwater Horizon Incident in the Gulf of Mexico. We are concerned that BP cannot safely drill in this ultra deepwater location. We are also concerned that BP cannot adequately manage an incident if something serious does go wrong in this location.

We note that BP is "sorry" for the deaths of 11 people, yet there is not mention of the environmental damage sustained in the Gulf of Mexico. Further to this BP has stated they are creating new Safety and Operational Risk organisation, yet there is no indication of when they will be implemented.

Conservation Council of SA's Recommendation

BP's track record of highly unsatisfactory environmental management means activities undertaken by the company should be placed under strict guidelines for operation. We need strong guarantees and independent assurance that measures will be taken to ensure the same mistakes from the Macondo Oil Spill and elsewhere cannot be repeated.

5. The action and its wider consequences should be considered a controlled action.

The Proponent, BP (alpha) considers the Ceduna 3D Marine Seismic Survey not to be a Controlled Action under the EPBC Act. EPP 37, EEP 38, EEP 39 and EEP 40 sit directly over the GABMP BPZ. As we have already discussed, this action is a component of a larger action, where impacts include drilling exploration wells.

In the context of the full scope of the larger action, it is highly probably drilling within or adjacent to the GABMP BPZ will occur. Therefore, this action needs to be considered as a controlled action.

Drilling as an impact of the of the 3D marine seismic surveys, in or near or in the GABMP BZP will have a significant impact on three sections of EPBC Act, Listed Threatened Species (Section 18, EPBC Act), Listed Migratory Species (Section 20, EPBC Act) and the Commonwealth Marine Environment (Section 23, EPBC Act).

The effects on threatened and migratory species from 3D seismic surveys have been covered in further detail earlier in this document.

Given our concerns with BP's safety record we do not feel the company is equipped to alleviate the concerns of drilling in deep water and a biologically sensitive area. As such the whole operation needs to be considered not just the component of 3D seismic surveys.

Conservation Council of SA's Recommendation

This referral should be considered as a controlled action. The Minister should request a referral of a larger action of exploration of EEP 37, EEP 38, EEP 39 and EEP 40 by BP(alpha). (Section 74A EPBC Act). A referral incorporating the drilling of exploration wells as an impact and subsequent impacts on the GABMP Benthic Protection Zone should be submitted. Under the EPBC Act the GABMP BPZ is a conservation and special use area.

References

<http://environment.gov.au/epbc/publications/commonwealth-guidelines.html>

<http://environment.gov.au/epbc/publications/nes-guidelines.html>

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M.P Simmonds. & S., Dolman A note on the vulnerability of cetaceans to acoustic disturbance. *Paper to International Whaling Commission 51/E15*. 1999

Mark Simmonds, Sarah Dolman and Lindy Weilgart, "Oceans of Noise: A WDCS Science Report" Whale and Dolphin Conservation Society 2003