

**BHP Billiton Petroleum Limited.
Bel Air Exploration Well 110/13b-21
Environmental Statement Summary**

To: Sarah Pritchard

From: Sarah Dacre

Date: 17th December 2009

ES Title:	Bel Air Exploration Well 110/13b-21
Operator:	BHP Billiton Petroleum Limited
Consultants:	Jos Tissen (TINA Consultants)
Field Group (DECC):	London
ES Report No:	W/4059/2009
ES Date:	August 2009
Block Nos:	110/13
Development Type:	Single deviated exploration well

Project Description

The project comprises:

- The drilling of a single deviated exploration well to evaluate the Douglas East and Bel Air targets using the ENSCO 92 jack-up drilling rig;
- The well being drilled using Water Based Mud (WBM), which will be discharged at surface;
- The drilling period is estimated to be 40 days and is scheduled for December 2009 - March 2010.

Environmental Sensitivities

The EIA identified the following environmental sensitivities:

- High shipping activity;
- Moderate fishing activity;
- Fish spawning area for herring, sole, lemon sole, *Nephrops*, plaice (peak in January and February), sprat (peak in May and June) and cod (peak February and March). There are currently no restrictions on drilling or seismic activity in this block during the drilling period proposed.
- Seabird vulnerability is very high between December and March, high in April, May, September and November and moderate between July and August and October.
- Low numbers of cetaceans have been recorded;
- Annex I Habitats: Site surveys did not identify any potential Annex I habitats within the vicinity of the proposed project.
- Annex I Species: there are no Annex I species in the vicinity of the proposed well.
- Annex II Species: harbour porpoise and bottlenose dolphin occurs in low numbers, mainly in the summer months;
- Protected sites: The proposed operations are approximately 2km from the boundary of the proposed Liverpool Bay Special Protection Area. The area qualifies for designation under the EC Birds Directive as it supports an internationally important population of common scoter and is an area regularly used by the red-throated diver, an Annex I

species.

Key Potential Environmental Impacts

The following potential impacts and mitigation were addressed in the EIA:

- Obstacles to other marine activities during operations – the primary obstacles will be the presence of the rig and associated support vessels during mobilisation, drilling and demobilisation. A collision risk management plan will be in place to minimise the risk of vessel collision. In addition, safety zones will also be designated and the operations will be promulgated in advance through the Notices to mariners, Navtex and VHF broadcast.
- Seabed disturbance – As a result of drilling activities there will be a temporary disturbance to the seabed through:

(i) *Physical presence of the rig* - The placement of the spud cans of the jack-up rig on the seabed will disturb localised areas of seabed. Each spud can impact area will be approximately 176m², therefore the total impact area of the 3 spud cans is estimated to be 530m². Once the rig has moved off location re-colonisation of any impacted area will occur.

(ii) *Mud and cuttings discharge* - Drilling operations at the Bel Air well will include the use and discharge of WBM mud and cuttings to the sea-surface and at the seabed. Due to the well design, a worse case scenario of 729 and 551 tonnes of mud and cuttings will be discharged at the seabed and at the sea surface respectively, totalling 1,280 tonnes.

Extrapolation of cuttings modelling shows initial cuttings deposition of depths greater than 1mm will remain within 1km of the well on an East-West axis and thus wholly outside the pSPA area. Only within the 1km radius is any smothering due to drill cuttings a possibility, however this is likely to be temporary in nature due to rapid re-mobilisation and dispersion of cuttings and sediments in the area.

- Noise – the drilling operations and the presence of standby vessels and helicopter traffic will produce noise for approximately 40 days. The propagation of drilling noise will reach background noise levels within 1km of the source and the short duration of operations, it is unlikely that marine mammals or seabirds will be disturbed or displaced from the area beyond a radius of 1km. All vessels involved in working or supplying the rig will be subject to a vessel-routing program that will ensure all vessels maintain the distance of 2km from the boundary of the SPA as a minimum.
- Atmospheric emissions – the main sources of atmospheric emissions during drilling operations will be the result of diesel burnt for power generation of the drilling rig and associated stand-by vessels. Given travel times of vessels, the number of vessels required and drilling time being optimised emissions will be negligible. In addition, all equipment and generators will be well maintained to ensure optimum efficiency.
- Marine discharges – the only foreseeable discharges are associated with the proposed drilling of the Bel Air exploration well. The drilling operation will only use Water Based Muds. All chemicals are CEFAS registered and are not considered to be significantly harmful to the environment.
- Accidental events – A number of control measures will be in place to minimise the risk of accidental events such as an Oil Pollution Emergency Plan (OPEP) and an Emergency Response Plan (ERP).

- Cumulative Impacts – There are a number of proposed operations being considered within the vicinity of the Bel Air well, however it is unlikely that operations will be conducted simultaneously and therefore the Bel Air Exploration well is unlikely to have a significant effect in combination with other projects

Public Consultation: No comments were received as a result of the public consultation.

Consultee(s):

The statutory consultees for this project were JNCC, NE, CCW and CEFAS. The following comments were made:

JNCC/NE/CCW: DECC and its consultees had a number of issues relating to the overall structure of the ES, gaps in site-specific survey data, out-of-date information, environmental impact assessment methodology and BHP's overall understanding of the EIA and Habitats Regulations requirements. A meeting was held at DECC, Atholl House on the 6th November with BHP, JNCC, NE and CCW to discuss these issues in depth.

CEFAS: There are no fisheries related restrictions covering this Block during the proposed works period. Recommendation for consent was issued.

Further Information: Following the meeting a number of actions were placed upon BHP in order to address the issues highlighted. Additional information was provided, including the provision of site-specific survey data. All issues were considered satisfactorily amended and clarified in order to meet the EIA requirements. A commitment was made to incorporate these changes in future ES submissions.

Conclusion(s):

Following consultation and the provision of the additional information on the 20th November, DECC and its consultees are satisfied that this project is not likely to have a significant impact on the receiving environment, including any sites or species protected under the Habitats Regulations.

Recommendation(s):

On the basis of the information presented within the ES and advice from consultees it is recommended that the ES should be approved.

Sarah Pritchard
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17.12.2009
Date