

Environmental Statement (ES) Summary and Sign-Off

Title:	Alder Environmental Statement
Operator:	Chevron North Sea Limited (Chevron)
Report No:	D/4117/2011
Submission Date:	March 2012
Block No:	15/29a
Development Type:	Field Development
Reviewer:	Saravanan Marappan
Date:	August 2012

A) Project Description:

Chevron is planning to develop the Alder Field as a subsea tieback to the Britannia Bridge Link Platform (BLP). The field development will consist of drilling of up to two production wells and the installation of subsea infrastructure, including a production manifold, a 27 kilometre (km) production flowline to transport reservoir fluids to the Britannia BLP and a control and chemical umbilical.

Situated within Block 15/29a, the Alder Field lies approximately 160 km east of the nearest UK coastline and 60 km west of the UK / Norway median line, in a water depth of approximately 150 metres (m). The Alder Field has a maximum estimated recovery of 4,820 million scm of gas over an estimated field life of 10 years.

The wells will be drilled using a conventional semi-submersible drilling rig anchored over the well location, with the top hole sections being drilled riserless with seawater and high viscosity sweeps. The lower sections will be drilled with low toxicity oil based mud (LTOBM). Each well will generate approximately 455 tonnes of water based mud and cuttings which will be discharged at the seabed, and 1,170 tonnes of LTOBM cuttings which will be skipped and shipped ashore for treatment and disposal or treated offshore prior to disposal. No extended well test will be carried out, but there will be limited flaring during well clean-up operations.

Pipelay operations will be conducted using a dynamically positioned (DP) reel-lay vessel. The production flowline and the umbilical trenching and burial will be undertaken using either a mechanical plough or jetting. An estimated 27,000 tonnes of rock and 100 concrete mattresses will be required along the length of 27 km production flowline to mitigate against upheaval buckling and to protect pipeline crossings and the manifold structure.

Drilling is scheduled for Q2 2014, subsea installation scheduled for Q2 2015 and commissioning scheduled for Q2 – Q3 2015. First production is expected in Q3 2015. All activities will be subject of an Oil Pollution Emergency Plan (OPEP) that will need to be approved prior to commencement of operations.

B) Key Environmental Impacts:

The EIA identified and discussed the following key activities as having the potential to cause

an environmental impact:

- Drilling – presence of the drill rig, combustion emissions, well clean-up emissions, discharge of drill cuttings with WBM, rig and vessel noise, accidental hydrocarbon spills.
- Sub-sea installation – combustion emissions, subsea infrastructure and pipelines installation, rock dumping, pipelay vessel noise, hydrotest discharges, accidental spills.
- Production – atmospheric emissions, produced water discharge, accidental hydrocarbon spills.
- Wider concerns – noise impacts, accidental events, transboundary issues, cumulative effects.

C) Key Environmental Sensitivities:

The EIA identified the following environmental sensitivities:

- Fish: The area is recognised as a spawning area for Nephrops and Norway pout and nursery area for Haddock, Blue whiting, Norway pout and Nephrops. The spawning and nursery areas are extensive and the area of impact would be localised and temporary. Therefore the drilling of wells and pipelay is unlikely to impact these species.
- Seabirds: Offshore seabird vulnerability is very high during October and November, high during July and August and moderate to low throughout the remainder of the year. It has been assessed that there are sufficient mitigation measures in place to prevent accidental spills that could have a significant impact on seabirds and this will also be covered by the OPEP.
- Protected habitats: There are no designated protected habitats in the vicinity of the proposed development. The closest identified Annex I habitat is the Scanner Pockmark candidate Special Area of Conservation (cSAC), located 30 km to the northeast of the proposed development. The development proposals are not expected to have any significant impact on the protected habitat.
- Protected species: Minke whale, White-beaked dolphin, White sided dolphin and Harbour porpoise have been recorded in this general area with highest numbers recorded during the period of May to October. Grey and Common Seals inhabit the coastal waters and have occasionally been observed to travel long distances when foraging, both species are unlikely to be present in the area of the proposed development. Any disturbance of marine mammals is expected to be limited to the drilling period, and the localised disturbance is considered unlikely to have any significant impact.
- Other users of the sea: The proposed development is located within ICES rectangle 45F0, and relative fishing effort in the area is low in comparison to the other areas of the North Sea. Shipping density in the vicinity of the proposed well is moderate. Appropriate navigational controls will be put in place, and it is not anticipated that there will be any significant impact on other users of the sea.

D) Consultation:

Comments were received from the Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), Maritime and Coastguard Agency (MCA), Ministry of Defence (MoD) and Northern Lighthouse Board (NLB). The ES was also subject to public notice.

JNCC: JNCC confirmed that they were satisfied with the assessment of the potential impacts

of the proposed operations.

MS: MS confirmed that they were content for the ES to be accepted.

MCA: MCA confirmed that they have no objections.

MoD: MoD confirmed that they have no objections.

NLB: NLB advised that the permanent infrastructure on the seabed must be communicated to UK Hydrographic Office to ensure updating of all relevant admiralty charts.

Public Notice: No comments were received in response to the public notice.

E) Further information:

Further information was requested from Chevron which addressed the issues raised during the internal DECC review, which included clarification in relation to sediment contamination levels, drilling discharges and environmental commitments. Additional information was provided by Chevron on 26 July 2012, which adequately addressed the issues raised.

F) Conclusion:

Following consultation and the provision of further information, DECC OED is satisfied that this project will not have a significant adverse impact on the receiving environment or the living resources it supports, or on any protected sites or species or other users of the sea.

G) Recommendation:

On the basis of the information presented within the ES and advice received from consultees, DECC OED is content that there are no environmental or navigational objections to approval of the proposals, and has advised DECC LED that there are no objections to the grant of the relevant consents.

Approved : Wendy Kennedy
Head of Oil & Gas Environment and Decommissioning

Wendy Kennedy
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Date:14 August 2012.....