

Environmental Statement (ES) Summary and Sign-Off

Title:	Enochdhu Environmental Statement
Operator:	ConocoPhillips (U.K.) Limited (ConocoPhillips)
Report No:	D/4100/2010
Submission Date:	July 2011
Block No:	21/05a
Development Type:	Field Development
Reviewer:	Julie Cook
Date:	18 October 2012

A) Project Description:

ConocoPhillips is planning to develop the Enochdhu Field as a subsea tieback to the existing BritSats (Callanish and Brodgar) and Britannia facilities. The field development will consist of drilling up to two development wells and the installation of subsea infrastructure, including a production manifold at Enochdhu, a tie-in skid adjacent to the Callanish manifold, a new production and gas lift pipeline and a control umbilical between the Enochdhu manifold and tie-in skid at Callanish. Oil and gas produced from the Enochdhu development will be processed on the Britannia facilities. Oil will be exported via the Forties Pipeline System to the Kinneil terminal and gas will be exported via the Britannia Gas Export Pipeline to the SAGE Terminal at St. Fergus.

Situated within Block 21/05a, the Enochdhu Field lies approximately 167 km east of the nearest UK coastline and 55 km west of the UK / Norway median line, in a water depth of approximately 145 metres (m). Annual oil and gas production at the Enochdhu development is expected to peak in 2014 with the production of approximately 940 thousand standard cubic metres (kSm³) oil and 116,000 kSm³ gas. Following this peak production is expected to decrease with field life.

The wells will be drilled using a conventional semi-submersible drilling rig 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 403 tonnes of water based mud and cuttings which will be discharged at the seabed, and 435 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.

ConocoPhillips have three different options for the pipeline configuration under consideration and three potential pipeline route options. The method of pipelay installation is dependent on the configuration and route selection. A bundle option would be installed directly onto the seabed, without any requirement for additional protection. A conventional pipeline system would require two or three trenches for the production pipeline, gas lift pipeline and umbilical. A maximum of 22,500 tonnes rock and 140 concrete mattresses will be required to mitigate against upheaval buckling and to protect pipeline crossings and the subsea infrastructure.

Drilling is scheduled for Q3 – Q4 2012, pipeline, umbilical and subsea installation scheduled for Q2 2013 and commissioning scheduled for Q3 2013. First production is expected in Q3 2013. 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 lemon sole, *Nephrops* and Norway pout and nursery area for blue whiting, Norway pout and *Nephrops*. The spawning and nursery areas are extensive and the area of impact would be localised and temporary. Drilling of wells, subsea infrastructure installation and pipelaying is unlikely to impact these species.
- Seabirds: Offshore seabird vulnerability is high to very high in February and July to November, with low to moderate vulnerability 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 127 km to the north 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 moderate in comparison to the other areas of the North Sea. Shipping density in the vicinity of the proposed well is low. 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), Northern Lighthouse Board (NLB) and The Royal Society for the protection of Birds (RSPB). 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.

RSPB Scotland: RSPB confirmed they were satisfied that the proposed development is unlikely to have a major impact on birds or their marine habitat.

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

E) Further information:

Further information was requested from ConocoPhillips which addressed the issues raised during the internal DECC review, which included clarification in relation to modifications to the Britannia facilities, drilling discharges and accidental hydrocarbon release. Additional information was provided by ConocoPhillips on 08 March 2012, which adequately addressed the issues raised.

F) Conclusion:

Following consultation and the provision of further information, DECC OGED 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 OGED 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 : Sarah Prichard
Head of Environmental Operations Unit

Sarah Prichard

.....

Date: 18th October 2012.....