

Environmental Statement (ES) Summary and Sign-Off

Title: Scolty Crathes Field Development Environmental Statement

Operator: EnQuest Heather Limited (EnQuest)

Report No: D/4161/2013
Submission Date: November 2014
Quad / Block: 21/8a, 21/12c & 21/13a
Development Type: Field Development

Reviewer: Fiona Brett
Date: May 2015

(A) PROJECT DESCRIPTION

EnQuest is planning to develop the Scolty and Crathes Fields as subsea tiebacks to the existing Kittiwake Platform located in Block 21/18. The proposed development consists of a single horizontal well drilled in each of the Scolty and Crathes Fields, installation of two new manifolds, laying of 25 km 8" production flowline, 4" gas lift pipeline and control umbilical in a daisy chain pattern. Production fluids from Scolty and Crathes Fields will be processed at the Kittiwake Platform and exported to shore via the Forties Pipeline System.

Situated within Blocks 21/8a, 21/12c & 21/13a in the central North Sea, the Scolty and Crathes Fields lie approximately 133 kilometres (km) from the Scottish coastline and 100 km from the UK / Norwegian median line; in a water depth varying between 95 to 105 metres (m).

The wells will be drilled using a conventional semi-submersible Mobile Drilling Unit (MoDU) anchored over the well location. The top hole sections will be drilled riserless with water based mud (WBM) and the lower sections will be drilled with low toxicity oil based mud (LTOBM). Each well will generate approximately 315 tonnes of water based mud and cuttings which will be discharged to sea, and 455 tonnes of LTOBM cuttings which will be returned to the rig and skipped and shipped ashore for treatment and disposal. No extended well test will be carried out, but there will be limited flaring during well clean-up.

Pipelay operations to install the flowline, gas lift pipeline and the umbilical will be undertaken using a reel lay vessel. The flowline and the pipeline will be piggybacked with the umbilical and will be trenched and buried. An estimated 277 concrete mattresses and 23,000 tonnes of rock will be required to mitigate against upheaval buckling and to protect subsea infrastructure.

The development of the Scolty and Crathes Fields will span over a year with development drilling commencing Q2 2016, sub-sea infrastructure installation scheduled for Q4 2016 and first Oil anticipated in July 2017. 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 ES identified and discussed the following key activities as having the potential to cause an environmental impact:

Drilling: Combustion emissions, well clean-up emissions, MoDU anchors, MoDU

and vessel noise, cutting discharges and accidental hydrocarbon spills.

Sub-sea installation: Combustion emissions, subsea infrastructure, protection materials,

subsea infrastructure installation noise and accidental spills.

Production: Atmospheric emissions, produced water discharges and accidental

hydrocarbon spills.

Wider concerns: Accidental events, transboundary issues, cumulative effects

(C) KEY ENVIRONMENTAL SENSITIVITIES

The Environmental Impact Assessment (EIA) identified the following environmental sensitivities:

- Fish: The development area is a potential spawning area for herring, lemon sole, Norway Pout, Sandeel, Nephrops sp. and cod. The location is also within a potential nursery area for haddock, whiting, Norway Pout, mackerel, blue whiting, herring, Sandeel, ling, European hake, anglerfish, plaice, nephrops sp., spotted ray, spurdog and cod. The spawning and nursery areas are extensive and the area of impact would be localised and temporary. The development proposals are unlikely to have an impact on these species.
- Seabirds: Seabird vulnerability is at its highest between July and November and low to
 moderate 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: The original pipeline route survey identified evidence of active methane derived authigenic carbonate (MDAC) structures, formed by leaking gases (pockmarks), resulting in further detail survey by EnQuest and subsequent re-routing of the export pipeline. The closest MDAC habitat is now approximately 100 m from the pipeline. The nearest Special Area of Conservation (SAC) is the Scanner and Braemar Pockmarks SCIs which are located 74 km and 156 km to the North east of the proposed development. The development proposals are not expected to have any significant impact on the protected habitat.
- Protected species: The most common occurring species present in the CNS area are Harbour porpoise, minke whales and white-beaked dolphins, which have all been recorded in low numbers. Grey and Common Seals inhabit the coastal waters around the North Sea and have occasionally been observed to travel long distances when foraging, both species are unlikely to be present in large numbers at the proposed development location. Any disturbance of marine mammals is expected to be limited to the drilling period and during infrastructure installation, and the localised disturbance is considered unlikely to have any significant impact.
- Other users of the sea: The proposed development is situated within ICES rectangle 44F0 and relative fishing effort in the area is low to moderate. Shipping density in the vicinity of the proposed development 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 requested further clarifications on information presented in the ES including information on the recent MDAC survey (GES 2013) undertaken by EnQuest and on the assessment criteria used. Following the provision of additional information, JNCC had no further comments.

MS: MS requested further clarifications on decommissioning aspects and survey information relating to the proposed new pipeline route. Following the provision of additional information, MS had no

further comments.

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 EnQuest which addressed the issues raised by JNCC, Marine Scotland and the internal DECC review. The information requested included clarification on the MDAC assessment criteria, survey information and decommissioning aspects. The additional information received from EnQuest on 24 March 2015 and then subsequently on the 26 May 2015 adequately addressed the issues raised.

(F) CONCLUSION

Following review of the ES, the comments received from consultees and the additional information provided by EnQuest, DECC OGED is satisfied that the project will not have a significant adverse impact on the receiving environment or on 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

Wendy J Kennedy

......Date 8 June 2015

Wendy Kennedy

Head of Offshore Oil & Gas Environment and Decommissioning, DECC OGED