

**EnQuest Dons Limited.
Conrie Field Development
Environmental Statement Summary**

To: Sarah Pritchard

From: Sarah Dacre

Date: 19 July 2011

ES Title:	Conrie Field Development
Operator:	EnQuest Dons Limited
Consultants:	Metoc Ltd.
Field Group (DECC):	Aberdeen
ES Report No:	D/4109/2011
ES Submission Date:	June 2011
Quad/Block:	211/18
Project Type:	Development

Project Description

The Conrie Field will be developed through an existing drill centre at either Don SW or West Don Fields. The wells will be tied-back to the oil export and water injection pipelines to the Northern Producer Floating Production Facility (FPF). The initial development will consist of 1 producer and 1 water injector well, however the ES also addresses the potential to drill a second production and water-injector well pair in 2013. The wells will be drilled using a combination of water-based and oil-based mud and will be drilled from the semi-submersible mobile drilling unit, Transocean John Shaw. Each well will take approximately 50 days to complete.

The Conrie wells will be tied-back to the existing pipeline infrastructure of either the Don SW or West Don fields using a short daisy-chain of spool pieces approximately 30-35m long. Mattresses and grout bags will be used to protect the spool pieces. The control umbilical will be connected directly to the main distribution unit (60-100m in length) and will also be protected by mattressing.

First oil is scheduled for August 2011. It is estimated that the field will produce 800,000 bbls of oil in the first year, decreasing to around 30,000 bbls by the end of 2019.

Key Environmental Sensitivities

The EIA identified the following environmental sensitivities:

- Low shipping activity;
- Fishing effort is moderate;
- Fish spawning area for haddock (February to May); saithe (January to April) and Norway pout (January to April);
- Seabird vulnerability is high in July and moderate to low the rest of the year;
- Low numbers of cetaceans have been recorded in the area. Harbour porpoise are the only species to be sighted in Block 211/18;
- Annex I Habitats: There are no Annex I habitats within the area;
- Annex I Species: There are no Annex I species in the vicinity of the proposed development;
- Annex II Species: Harbour porpoise occurs in low numbers, mainly in the summer

months;

- Protected sites: Development area is located on the outer shelf/upper slope iceberg ploughmark zone and surveys indicate extensive ploughmark scarring.

Key Potential Environmental Impacts

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

Obstacles to other marine activities during operations

With appropriate mitigation measures in place e.g. 500m safety zones around the drilling rig and wellheads, Kingfisher bulletins, Notices to Mariners etc. and the fact the area has relatively low shipping and fishing activity, any impact on other users of the sea will be negligible.

Seabed disturbance

A number of project activities will impact the seabed. The presence of the drilling rig will impact the seabed by 0.000199km² due to the positioning of the anchors. In addition, 300m of anchor chain will be in contact with the sea where gouges and scar marks are likely to be created. Existing scars have been identified in the area averaging 625m in length. Overall, it is estimated that anchor impacts and associated mounds will impact an area of 0.0025km² over the whole development and therefore is not considered to be a significant impact.

Drill cuttings associated with the drilling of the wells has an estimated seabed footprint of 0.0048km² and although experience suggests that cutting piles are likely to persist for 5 years or more in this area of the North Sea, with sediment mobility and the likelihood of bioturbation it is likely that the cuttings will be readily incorporated into the sediment and dispersed.

The well tie-in footprint is relatively small due to the short pipeline lengths and the minimal quantity of protective material required. Estimated area of impact is 1.8^{e-9}km².

The area of impact will be local to the development and small in scale. In addition to the direct impact on the seabed, there will also be a residual impact on benthic communities in the vicinity of the operations from the physical disturbance of operations. However, this disturbance will be localised and likely to have no long-term impact and it can therefore be concluded that any impacts are of minor significance.

Noise

Noise emissions from the DSV and drilling operations are not expected to exceed normal background noise levels and due to the low populations of cetaceans in the area, it can be concluded that the proposed activities are unlikely to cause an offence to a European Protected Species.

Atmospheric emissions

During the drilling of the wells and pipeline tie-in operations a number of emissions sources will be within the area e.g. drilling rig, stand-by vessels, DSV etc. Well testing may also be undertaken. By keeping flaring to a minimum, using low-emission fuels and ensuring efficient operations, there is unlikely to be a significant impact.

The increase in production at the Northern producer will result in increased power generation. The increase is estimated to be 5.6% over the life of the Conrie development. This is not considered to have a significant impact on the local and global air quality.

Marine discharges

Selection of chemicals for the drilling phase and pipeline commissioning will be CEFAS registered and chemical use will be monitored on a daily basis. The marine environment is sufficiently dynamic to allow any discharges to be dispersed readily. Further risk assessment will be undertaken in subsequent chemical permit applications for the drilling and pipeline operations and at the FPF.

Although produced water and oil in water discharges will increase due to the addition of the Conrie Field, it is unlikely that concentrations would reach 30mg/l/day as recommended by OSPAR 2005/03. Levels are estimated to reach a maximum of 17.5mg/l/day

Accidental events

Modelling of a 29,850 tonne oil spill from a blow-out was undertaken. Stochastic modelling suggests a 14% chance of beaching occurring in Norway. During the production phase there is a potential for loss of integrity of the oil export lines and gas-lift pipelines. Modelling was conducted for 500m³ of oil (a worse-case scenario for the export line) and modelling suggests a 20% chance of beaching in the Norway. However due to the prevalent wind and current direction this is unlikely.

The total diesel inventory for the rig is 1,489 tonnes. Modelling results have shown that the diesel will disperse within 11 hours of discharge with no impact on the coastline.

A number of control measures will be in place to minimise the risk of accidental events, including an Oil Pollution Emergency Plan (OPEP) and an Emergency Procedures Plan (EPP).

Cumulative Impacts

The area of the proposed development is subject to a range of oil and gas operations, shipping and commercial fishing, however, it is unlikely to have a significant effect in combination with other projects.

Transboundary Impacts

The nearest transboundary line is the UK/Norway, approximately 10km from the development area. In the event of an oil spill entering Norwegian waters it may be necessary to implement the NORBIT Agreement (the Norway-UK Joint Contingency Plan).

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

Consultee(s):

JNCC: JNCC concluded that EnQuest Dons Ltd have taken adequate precaution in order to minimise the potential impacts of this development and associated future activity on the marine environment.

Marine Scotland: Marine Scotland is content that the Environmental Statement for the Conrie Field Development can be accepted.

Further Information: A number of minor clarifications were identified and further information was requested.

EnQuest Dons Limited provided the additional information requested and where appropriate

acknowledged comments and committed to incorporating them in future submissions. All issues were considered satisfactorily amended and clarified.

Conclusion(s):

Following consultation and the provision of the additional information on the 6th July 2011, 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

19/07/2011

Sarah Pritchard

Date