

**TAQA Bratani Ltd
Falcon Development
Environmental Statement Summary**

To: Sarah Pritchard

From: Evelyn Pizzolla

Date: 01 March 2011

ES Title:	Falcon Development
Operator:	TAQA Bratani Ltd
Consultants:	Xodus Aurora
Field Group (DECC):	Aberdeen
ES Report No:	D/4090/2010
ES Date:	02 September 2010
Block Nos:	210/25 & 211/21
Development Type:	Development Oil well

Project Description

The Falcon Development is located in Blocks 210/25 and 210/21 in the northern North Sea, 105 km northeast of the coast of Shetland and 46km from the UK/Norway median line in water depths of approximately 167m. Development of the Falcon field will include the completion of a suspended appraisal well and the installation of a production pipeline, gas lift line and umbilical tied back to the existing Kestrel P2 well, situated 4.5km to the southeast, and then onward to the Tern Alpha platform.

The Falcon well is currently suspended following appraisal drilling in early 2010. In order to complete the well the suspension cap will be removed to allow the installation of downhole tubulars and also gas lift equipment to allow gas injection to promote the well to flow. A horizontal tree with all well controls and an integrated protection structure will be installed at the well head.

A 4.5km pipeline will be installed using the reel-lay method from a Dynamically Positioned (DP) vessel. This vessel will also be used to undertake pre-installation, installation and post-installation surveys. The pipeline will be trenched to a depth of 2m and mechanically backfilled. The umbilical and gas lift lines will also be incorporated into the single trench. Mattress protection will be required for the un-trenched lengths at the Falcon and the Kestrel wellheads and mattresses and rock protection will be required where the pipeline crosses the Eider Water Injection (EWI) pipelines.

The development will produce both oil and gas. Assuming first production in 2011, production is forecast to peak at 487 m³/day of oil and 9,000 m³/day of gas in 2012, before steadily declining over a predicted 12 year field life. The hydrocarbons and produced water will be exported to the Tern Alpha for processing. At Tern Alpha oil is exported to North Cormorant prior to joining the Brent Oil Pipeline System whilst produced gas is compressed and used as fuel gas and gas lift for the Tern, Hudson and Kestrel production wells

Key Potential Environmental Impacts

The EIA identified the following environmental impacts

- Seabed impacts
- Discharges to Sea
- Atmospheric Emissions

- Interaction with other sea users
- Spill Risk

Seabed Impacts

There will be direct disturbance from placing the wellhead and protection structure on the seabed and also from pipeline trenching activities and rock placement. There may also be indirect impacts associated with the re-suspension of the sediments. There will be a smothering of the local benthic communities in the vicinity of the well head, during pipeline installation and rock placement. However, it is expected that recovery of the seabed communities will begin almost immediately following cessation of activities and that the residual impact will be insignificant

Discharges to Sea

There will be a discharge to sea of pipeline commissioning chemicals used to protect the pipeline from corrosion prior to tie-in. All chemicals will undergo a formal risk assessment prior to use and it is not expected that the small volumes discharged will have a significant impact on the marine environment. Discharges from produced water and chemicals associated with processing the well fluids at Tern Alpha are not expected to pose a significant environmental risk from the incremental production.

Atmospheric Emissions

Atmospheric emissions will arise from the vessels during well completion and pipeline installation activities. Operational emissions will largely be from combustion gases associated with power generation although no increase in emissions from Tern Alpha are expected as a result of the Falcon development. The impacts from emissions are mitigated by the dispersive nature offshore and the lack of receptors in the immediate vicinity and therefore not considered to be significant. The predicted increase in emissions do not represent a significant proportion of the UK emissions.

Interaction with other sea users

There will be a short term increase in vessel activity however, the likelihood of collision occurring is extremely small. The subsea installation will reduce fishing access due to the 500m safety exclusion zone but this is considered minor compared to the overall area available.

Spill Risk

Spills associated with the development would be small operational spills and a number of mitigation measures are in place to reduce the probability of a spill occurring at the Tern Alpha or during bunkering operations at the Falcon well. The development well will produce both gas and oil and the potential impact of an uncontrolled blow out was modeled although the well is not expected to flow without the aid of gas lift. TAQA already hold an approved Oil Pollution Emergency Plan (OPEP) for the Tern field detailing approved response measures and TAQA have demonstrated that management and mitigation measures are at the forefront of their planning for this well. A relevant and dedicated OPEP for the well will be submitted before operations commence.

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

Consultee(s):

The statutory consultees for this project were JNCC and MS. The following comments were made:

JNCC

JNCC considered that the ES had demonstrated TAQA had taken adequate steps to minimize potential impacts of the activities on the marine environment.

MS:

Consider the environmental description to be adequate with good use made of site specific data. However, they had minor queries on the Fisheries data and the volumes modeled for a potential oil spill.

Further Information: DECC request additional information of potential rock dumping and matting activities; oil spill volumes and modeling and future produced water handling.

TAQA provide additional information in a letter amending or clarifying the data provided.

Conclusion(s):

Following consultation and the provision of the additional information on 27 January 2010, 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

01/03/2011

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Sarah Pritchard

Date