Centrica Resources Limited.
York Field Development
Environmental Statement Summary

To: Sarah Pritchard

From: Sarah Dacre
Date: 3rd February 2010

ES Title:	York Field Development
Operator:	Centrica Resources Limited
Consultants:	RPS Energy HSE and Risk Management
Field Group (DECC):	London
ES Report No:	D/4065/2009
ES Date:	December 2009
Block Nos:	47/2a, 47/3a, 47/3d and 47/3e
Development Type:	Two production wells, the installation of a NUI and pipeline.

Project Description

The project comprises:

- Development of the York Field in Blocks 47/2a, 47/3a, 47/3d and 47/3e in the Southern North Sea. The proposed development will include:
- the installation of an NUI;
- the drilling of two horizontal wells;
- the installation of a 480m tie-back to the Cleeton pipeline, where fluids will be transported to the Dimlington terminal.
- Installation of the offshore facilities is due to take place in Q2 2011, with drilling operations proposed for Q3 2011. First gas is proposed for Q4 2011 and Q1 2012.

Environmental Sensitivities

The EIA identified the following environmental sensitivities:

- Low to Medium shipping activity;
- Moderate fishing activity;
- Fish spawning area for lemon sole, sprat (peak in May and June, sandeels, cod (peak February to March) and herring. Block 47/3 is subject to fisheries related timing restrictions on seismic activities between January to May to protect spawning demersal stocks, and restrictions on drilling and seismic activities between August to October to protect spawning herring stocks. Centrica have stated that they have conducted a herring spawning ground survey in this block which showed little potential for herring spawning.
- Seabird vulnerability is very high in January, February, June to December; High in March and May and moderate in April.
- Moderate numbers of cetaceans have been recorded;
- Annex I Habitats: Site surveys did not identify any potential Annex I habitats within the vicinity of the proposed project.
- Annex I Species: No Annex I species have been recorded in the vicinity of the proposed operations.
- Annex II Species: harbour porpoise have been sighted in the vicinity of Blocks

48/6 and 48/7, but only in February, August and September and the area is unlikely to qualify for SAC status.

- Protected sites: The proposed operations are located over 36km away from the nearest coastal protected site and 77km from the North Norfolk Sandbanks pSAC, the nearest offshore protected site.

Key Potential Environmental Impacts

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

- Obstacles to other marine activities during operations – the primary obstacles will be the presence of the rig and associated support vessels during mobilisation, drilling and demobilisation and during pipelay operations. Presence of the NUI with its 500m exclusion zone will pose some obstruction, but will not have a significant impact on shipping, navigation or fishing. A collision risk management plan will be in place to minimise the risk of vessel collision. In addition, safety zones will also be designated and the operations will be promulgated in advance through the Notices to mariners, Navtex and VHF broadcast.

- Seabed disturbance – As a result of the proposed development and associated activities there will be a disturbance to the seabed through:

  (i) *Physical presence of the NUI* - offshore facilities are designed for a maximum of 15 years to accommodate an estimated field life of 10 years. Any disruption to the seabed will be minimal and plans to minimise disturbance will be put into place at the decommissioning phase.

  (ii) *Physical presence of the rig* - The placement of the spud cans of the jack-up rig on the seabed will disturb localised areas of seabed. However, on removal of the rig these areas will recover and therefore disturbance will be temporary in nature.

  (iii) *Mud and cuttings discharge* – The two drilling operations at York well will include the use and discharge of WBM mud and cuttings to the sea-surface and seabed. The maximum total of drill cuttings is estimated to be 3,387 tonnes.

  Modelling indicates that 50% of the cuttings will be deposited within a distance of 90m of the York NUI, 92% within 200m and 99% within 630m, where depth of cuttings is estimated to be 1.6mm. The remaining cuttings will travel up to 2km away and will be widely spread. The cuttings pile will be orientated along the north-west axis to south-west axis. Though there will be a direct effect on the seabed fauna, in time as cuttings disperse, full recovery of benthic communities will take place. Both wells will be drilled at the same location, minimising the overall impact area.

  (iv) *Installation and presence of pipeline* - The 12.75 inch diameter, 480m long pipeline will not be trenched. Some seabed disturbance will occur due to the installation of the hot tap tee along two metres of the SNSPS pipeline. The total area affected by the pipeline will dependent on the number of mattresses used and it is estimated that 44 mattresses will be used, affecting a potential area of 792 m2 and the pipeline itself will have an impact area of 144m2. The flora and fauna present in the area are typical of the SNS and benthic communities are expected to recover quickly.

  - Noise – the drilling operations and the presence of standby vessels and helicopter traffic will produce noise for the duration of the drilling schedule, estimated to be 114 days. Piling operations associated with the installation of the NUI are likely to generate a source noise level of 140dB. Given that noise modelling suggests that the propagation of the drilling noise will reach background noise levels within 1km of the

source and the short duration of operations, it is unlikely that marine mammals or seabirds will be disturbed or displaced from the area beyond a radius of 1km. Mitigation will also be put in place to minimise any risk of disturbance during piling operations which will follow JNCC guidelines and include MMO's.

- Atmospheric emissions – the main sources of atmospheric emissions during the installation and drilling operations will be the result of diesel burnt for power generation of the drilling rig and associated stand-by vessels. Given travel times of vessels, the number of vessels required and drilling time being optimised emissions will be negligible. In addition, all equipment and generators will be well maintained to ensure optimum efficiency. During well clean-up activities, high combustion efficiency burners will be used and volumes flared will be kept to a minimum. Emissions throughout the production phase will be negligible.

- Marine discharges – the only foreseeable discharges are associated with the proposed drilling of the York wells and the production phase at the NUI. The drilling operation will only use Water Based Muds. All chemicals are CEFAS registered and are not considered to be significantly harmful to the environment. There will be no discharge of produced water, as it will be transported to the Dimlington terminal.

- Accidental events – A number of control measures will be in place to minimise the risk of accidental events such as bunkering, well monitoring, BOP and well control training. In addition, an Oil Pollution Emergency Plan (OPEP) and an Emergency Response Plan (ERP) will be prepared and submitted.

- Cumulative Impacts – The area of the York development has been subject to and continues to be subject to development, including drilling operations. There are no cumulative impact issues associated with the York development .

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

Consultee(s):

The statutory consultees for this project were Environment Agency, JNCC and CEFAS. The following comments were made:

EA: The EA had no objections to the development of the York Field.

JNCC: JNCC were content for DECC to approve the York Field Development ES.

CEFAS: There are fisheries related restrictions on seismic and drilling activities. However, due to the little potential of herring spawning restrictions were lifted between August and October for both drilling and seismic activities. Restrictions still apply for seismic activities between January and May. Approval was recommended.

Further Information: A few minor clarifications were sought from Centrica.

Centrica Resources 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 28th 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.

S Pritchard

…… 4 February 2010

Sarah Pritchard **Date**