

**RWE DEA UK SNS LIMITED
CLIPPER SOUTH FIELD DEVELOPMENT
Environmental Statement Summary**

To: Sarah Pritchard

From: Tracy Edwards- Environmental Manager

Date: 11 May 2011

ES Title:	Breagh Offshore Development- Addendum to Environmental Statement
Operator:	RWE DEA UK SNS Limited
Consultants:	
Field Group (DECC):	SNS- Ivor Newman/Alison D'arcy/Helen Hitchen
ES Report No:	D/4037/2008
ES Date:	8 April 2011
Block Nos:	42/13, (including 40/15, 41/11, 41/12, 41/13, 41/14, 41/15, 42/11, 42/12)
Development Type:	Gas Field (with some condensate)

<p>Project Description</p> <p>Phase I of the Breagh development has been previously assessed by the Department and was approved on 4th March 2011. Subsequent to that approval, RWE DEA SNS UK Ltd have amended the drilling plan and production profiles of the project, though the design concept remains unchanged.</p> <p>An additional three wells are to be drilled from the Breagh A platform, taking the total to ten wells. The additional wells are of similar design to the original seven, but will be longer reach at about 22,000ft each. Drilling will still commence in October 2011, but the extended drilling program will now last for a continuous 650 days (as opposed to 455 days), using a 3 legged jack-up.</p> <p>Composition of the drilling chemicals will remain the same as the original design, although volumes discharged will be increased. As previously, both Water Based Muds (WBM) and Low-Toxicity Oil Based Muds (LTOBM) are anticipated to be used.</p> <p>The additional three wells will increase the production profiles.</p> <p><i>Key Environmental Sensitivities</i></p> <p>The EIA process has identified the following environmental sensitivities:</p> <ul style="list-style-type: none">• Fish spawning and nursery areas are identified in the area for cod, herring, lemon sole, mackerel, sprat, sandeel, plaice, Haddock, Whiting and <i>Nethrops</i>;• There is very high seabird vulnerability in January, February and September. Although there are migrant species and wintering waterfowl in the vicinity, the development does not pass through any important bird areas;• Cetacean numbers are low for the area, with harbour porpoises being the most frequently sited throughout the year;• There is high to very high shipping density within the proposed development area;• Fishing effort is low, focused on demersal species, including crustaceans along the
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pipeline route.

Key Potential Environmental Impacts

Potential impacts on the environment were documented in the addendum to the ES and additional information provided.

1. Physical Presence of the Drilling Rig and Stabilisation

- **Spud Cans**

Although there is additional drilling, there will be no rig moves as the program is continuous. Impacts from any additional footprint is therefore not expected.

- **Rig Stabilisation**

Rig stabilisation has not previously been required for the area and was deemed unlikely. However, given the duration of the revised drilling schedule, there is an increased risk that some rig stabilisation may be required. Contingency deposits were assessed during the original submission. If scour is experienced, up to 1,800 tonnes may be deposited around the spud cans. Smothering of habitats and disturbance to sediments is likely. However, deposits will be highly localised. Although sediment changes and habitat loss will occur, it is anticipated that these would be short lived.

- **Shipping and other users**

As the additional drilling simply extends the campaign which is already wholly within the 500m zone of the Breagh A installation, no additional impacts on shipping or other users are envisaged.

2. Drilling Discharges

- **LTOBM and cuttings**

There will be a proportional increase in the use of LTOBM, given that the bottom-hole sections (8 1/2") of the additional three wells will be drilled using LTOBM, as will the original seven wells. All LTOBM cuttings will be skipped and shipped to shore for treatment and/or disposal with OBM and thus it is considered that there are no significant issues associated with this increment.

- **Discharge of WBM**

The expanded drilling program results in an additional 1,881 m³ of WBM being discharged. Water Based Muds have typically low toxicity and the majority of the constituent chemicals are PLONOR rated. Therefore the additional discharge of WBM is unlikely to cause any significant contamination.

- **Discharge of cuttings**

Dispersion of WBM cuttings was re-modelled on the basis of 10 wells, which indicated that the area of impact remained similar to that for the 7 well case, although the maximum thickness was revised from 33mm to 46mm. Deposits will result in smothering of benthic organisms and temporary elevations of barium in the sediment. However, impacts are not deemed to be significant as modelling indicates they would be restricted to approximately within 500m of the NUI. It is anticipated the currents and tides in this area will further mitigate impacts and recolonisation of benthos is expected to be rapid. In addition, the main modelling assumption is that all discharges are over a 60-day period. In reality, discharges will be released over 650 days, indicating that the actual impact is likely to be far less than the case presented.

Well Clean-up

- **Well Clean-up**

The additional three wells will result in additional discharges of well clean-up fluids discharging to sea. However, fluids will only be discharged once visibly clean. If reservoir hydrocarbons are expected this will be regulated via an OPPC permit. Therefore, the

amount of oil discharged overboard is not considered to have a significant impact.

- **Atmospherics**

The drilling of three additional wells will result in the release of incremental emissions. However, carbon dioxide emissions from the total drilling activities, as revised, represent <1% of the UKCS platform emissions. Therefore the revised impact of is still considered not to be significant, given that the development is 50km from shore and that the totals predicted are comparatively small.

3. Operational Phase

There are no production processing facilities on the Breagh platform.

- **Marine Discharges:** There are no planned discharges offshore from the Breagh Development. Whilst there will be increased produced water, this is exported via the production line and is directed for separation and treatment at the TGPP onshore. Similarly, there will be a proportional increase in the use of MEG and corrosion inhibitor. However, these are delivered to the installation from onshore via the closed loop 3" line and returned in the production fluids via the 20" production line.
- **Atmospherics:** Increased production will not raise the relatively low electrical base loads (maximum of 3 (47KW) diesel generators running at 50 tonnes/year) on topsides. There will be no incremental emissions from the additional three wells.

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

Consultee(s):

JNCC do not consider that the additional proposed activities are likely to have a significant effect on the marine environment.

CEFAS commented that although there are advised restrictions in place for drilling, survey data indicates that there is little or no potential for herring spawning. On this basis, they would be content for DECC to grant approval of the ES.

Conclusion(s):

Following review, 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.

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Date