# Maersk Oil North Sea UK Limited Tullich Field Production Consent Increase Environmental Statement Summary

To: Sarah Pritchard

From: Inger Soderstrom

Date: 21/10/2009

**ES Title:** Tullich Field Production Consent Increase **Operator:** Maersk Oil North Sea U.K. Limited

**Consultants:** Genesis Oil and Gas Consultants Limited (Maersk)

Field Group (DECC): Aberdeen
ES Report No: D/4051/2009
ES Date: July 2009
Block Nos: 9/23a

**Development Type:** Increase in production

## **Project Description**

The Tullich Field is located in Block 9/23a in the Northern North Sea, approximately 300 km north east of Aberdeen and 8km west of the median line between the UK an Norwegian sectors. The field, currently consisting of 3 wells, is tied back to the Gryphon FPSO, moored in block 9/18b, approximately 5.3 km north east of the Tullich Field. The oil is stored on the FPSO before being exported by tanker and gas is exported via a 16" flow line to Beryl Alpha Platform and onto the SAGE Terminal.

The proposed project comprises of:

- The increase in oil and gas production resulting from the drilling of the SW and CE wells which will result in an increase in the current production consent for the Tullich Field by more than the 500 tonnes oil/day and 500,000 m3/day thresholds. It is expected that gas production will increase to a maximum of 31.2 Mmscf/d in 2012, with oil rising to a maximum of 2.1 Mm³ in Q4 2010.
- There will be no modifications required to the Gryphon FPSO to accommodate the increased production from Tullich as the produced fluids from the SW and CE wells will utilise existing ullage at Gryphon. Any increased power demand at Gryphon will be negligible and will not result in an increase fuel requirement or atmospheric emissions above historic levels at Gryphon. The PPC or EUETS permits will not be required to be revised as a result of the increased production at Tullich.

#### **Key Potential Environmental Impacts**

The following potential impacts were discussed in the EIA as they relate to the production phase:

- Atmospheric emissions there will be no increased power demand and therefore no increased atmospheric emissions at the Gryphon as a result of the increased production from the Tullich Field due to existing ullage at the Gryphon FPSO. Emissions during storage and loading of oil are not expected to increase following commencement of production from the Tullich SW & CE wells as oil export rates and frequency of tanker off-loads are not expected to exceed historic levels.
- Marine discharges There is currently re-injection of produced water at Gryphon but due to reservoir management issues there is approximately 50% discharge to sea. However commencement of production from the Tullich SW and CE wells allows

production from the Gryphon wells to be reduced, resulting in a reduction in the total volume of produced water. Produced water rates are forecast to fall to 20,533 bbl/d at the end of field life in comparison to 54,779 bbl/d without the SW & CE wells.

• Accidental Spills – The Gryphon, Tullich and Maclure fields have an approved Oil Pollution Emergency Plan which assesses the risks and details the prevention measures and responses required in the event of a spill. The increase in production at Tullich has been assessed as not increasing the overall risk of an oil spill as production levels will be below historic thresholds at Gryphon and there will be no increment in bunkering operations or frequency of tanker off-loads.

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

#### Consultee(s):

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

<u>JNCC</u>: JNCC commented that "On the basis of the information provided we consider that the associated increase in oil and gas production is unlikely to have a significant environmental impact on the nature conservation value of the marine environment on the following grounds: The Tullich extension will utilise existing ullage on the Gryphon FPSO, and therefore an incremental increase in atmospheric emissions from the Gryphon FPSO is not expected."

<u>Marine Scotland</u>: Marine Scotland requested copies of the reports cited in the ES to be forwarded to them for information and Maersk has confirmed this has been undertaken. Marine Scotland stated they are prepared to accept this Environmental Statement on the basis that once a copy of the report of the hydrocarbon, heavy metal and macrofaunal analyses is available, it will be made forwarded to Marine Scotland.

**Further Information:** Clarification was sought from Maersk concerning the production profiles, assessment of potential impacts and flaring. Maersk responded on the 20 October 2009.

### Conclusion(s):

Following the consultation period and the provision of additional information on the 20 October 2009, DECC and its consultees are satisfied that the increase in production proposed 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 approval is granted for the increase in production.

Signed:- Dated:-

Sarah Pritchard - Head of Offshore Environmental Operations