

Premier Oil E&P UK Limited

Tolmount Area Development Environmental Statement Summary

To: Jonathan Ward

From: Nicola Abrams
Date: 11 June 2018

ES Title: Tolmount Area Development Offshore Environmental Statement

Developer: Premier Oil E&P UK Limited

Consultants: Xodus Group
OGA Field Group: Southern North Sea

ES Report No: D/4203/2017 **ES Submission Date:** November 2017

Block No: 42/28 (Pipeline Route 47/2, 47/7 and 47/6)

Development Type: Gas and Condensate Development

Project Description

The Tolmount field is located in Block 42/8d in the Southern North Sea, approximately 36 kilometres (km) from the nearest UK coastline at Flamborough Head, approximately 156 km from the UK/Norway median line and in a water depth of approximately 50 metres (m).

Premier Oil E&P UK Limited (Premier) proposes to develop the field using a minimum facilities platform (MFP) supporting four development wells. The MFP processing facilities will be remotely controlled from onshore, and the produced water treatment facilities are designed to achieve a discharge standard of 15 mg/l dispersed oil.

The produced gas and condensate will be exported to a new gas processing facility within the existing Dimlington gas terminal via a new 47 km 20" export pipeline and a piggybacked 3" methanol pipeline. The pipeline system will be installed through the cliffs from the Dimlington terminal and then trenched and buried over its entire length to connect to the MFP.

First gas is scheduled for the end of 2020, with anticipated peak production of approximately 7,560,000 m³ per day of gas and 340 tonnes per day of condensate in 2022. As gas production will exceed the 500,000 m³ EIA Directive production threshold an Environmental Statement (ES) was required under the Offshore Petroleum Production and Pipelines (Assessment of Environmental Effects) Regulations 1999 (as amended).

Key Environmental Impacts

The ES identified and discussed the following as having the potential to result in an environmental impact:

• Physical Presence;

- Seabed disturbance;
- Discharges to sea;
- · Atmospheric emissions;
- Underwater Noise; and
- Accidental events

Key Environmental Sensitivities

The ES identified the following environmental sensitivities:

- Seabed features. The project is located within an area comprising circalittoral mixed and coarse sediments with potential stony reef habitats. The offshore section of the pipeline route also crosses rippled sands and shell fragments. The trenching and creation of spoil tips, the clearance of boulders and the introduction of rock protection has the potential to impact features of potential conservation interest. However, the seabed features are widespread in the area and pipeline route optimisation has been conducted to minimise adverse effects. Impacts are therefore considered to be minor.
- Fish: The project is located within spawning grounds for cod, lemon sole, plaice, herring, sandeels and sprat; and nursery areas for blue whiting, cod, lemon sole, whiting, herring, mackerel, sandeels, sprat, anglerfish and spurdog. A herring spawning assessment was undertaken and areas potentially impacted by the project were identified as prime, sub-prime and suitable. The proposed operations therefore have the potential to impact these spawning grounds, but any impacts would be short term and localised, and are therefore considered to be minor.
- Seabirds: Seabird vulnerability in the MFP area is very high in January, February and June to December, high in March and May and moderate in April. Seabird vulnerability over the pipeline route is considered to be extremely high in nearshore areas in February, March, May and June, very high in August, September and November, and high in January and December. It is considered that sufficient mitigation measures are in place to prevent accidental spills that could have a significant impact on seabirds, and Premier will have an approved Oil Pollution Emergency Plan (OPEP) in place before offshore operations are undertaken.
- Protected habitats: The pipeline proposals overlap the Greater Wash proposed Special Protection Area (pSPA), the Southern North Sea Harbour Porpoise candidate Special Area of Conservation (cSAC), the Holderness Inshore Marine Conservation Zone (MCZ) and the Holderness Offshore recommended MCZ (rMCZ). The MFP is located outwith any protected sites. A likely significant effect (LSE) assessment was conducted for the Greater Wash pSPA and concluded that the pipeline will have a small permanent footprint (0.615 km²) in relation to the total foraging area available (24 km²). Vessels have the potential to disturb foraging birds as 156 km² of the vessel transit corridor is within the Greater Wash pSPA and the ES estimates that 6% of the red-throated diver population and 2% of the common scoter population are likely to be present within this area. However, any disturbance impacts will be temporary and localised and both species are unlikely to be present in significant numbers during the pipeline construction period (April September). It is therefore considered that the project will

not result in any likely significant effect on the Greater Wash pSPA. Potential impacts on the designated features of the Holderness Inshore MCZ and the Holderness Offshore rMCZ were also considered and it was concluded that installation of the pipeline would not hinder achieving the conservation objectives for either site.

- Protected species: Harbour porpoise, bottlenose dolphins white-beaked dolphin, white-sided dolphin and minke whale have all been recorded in Block 42/28. Grey and common seals also inhabit coastal and inshore waters adjacent to the Tolmount area, and the Donna Nook grey seal breeding site is located approximately 17 km from the project. The disturbance impact relating to pipeline installation is considered to be low. The platform piling has the potential to impact marine mammals, but the JNCC guidelines will be followed to minimise the impact. An LSE assessment was undertaken for the Southern North Sea Harbour Porpoise cSAC and concluded that piling works are likely to result in disturbance of harbour porpoise inside the site, but impacts would be localised and short-term and the activity is not likely to result in significant disturbance.
- Other users of the sea: The project is located within ICES rectangles 37F0 and 36F0. Fishing effort in the area is moderate and the majority of the effort is for shellfish (99%). Shipping density in the area is high. Appropriate navigational controls will be put in place and it is not anticipated that the proposed drilling, pipeline installation or platform installation operations will have any significant impact on other users of the sea.
- Heritage interests: There are six shipwrecks and five areas of archaeologic interest in the vicinity of the project. The operator will therefore implement archaeological exclusion zones (AEZ) and a protocol for archaeological discoveries (PAD) to reduce the potential impact.
- In-combination, cumulative and transboundary effects: No significant in-combination, cumulative or transboundary effects are anticipated.

Key Mitigation Measures (including environmental or monitoring conditions)

All activities will be undertaken in line with commitments detailed in the ES and best industry practice. Specific mitigation measures identified for the project are:

- Archaeological review of marine geophysical survey data to be undertaken for anchoring areas and results submitted to the BEIS Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) prior to construction.
- Routine vessel movements to be restricted to levels described in the ES, or lower, to ensure potential impacts on the Greater Wash pSPA have been accurately assessed.
- Spoil tips to be located outwith the MCZ areas, with the exception of the near-shore pipeline section where the spoil deposit location will be agreed with OPRED.
- Piling to be undertaken in accordance with JNCC guidelines for minimising the risk of injury to marine mammals.

Consultation

The Joint Nature Conservation Committee (JNCC), Marine Management Organisation (MMO), the Centre for Environment, Fisheries and Aquaculture Science (CEFAS), the Environment

Agency, Natural England, the Maritime and Coastguard Agency, (MCA), the Ministry of Defence (MOD), Trinity House and the East Riding of Yorkshire Council were consulted on the project. The Health and Safety Executive (HSE) was also notified of the proposals. The ES was also subject to public notice.

- JNCC did not raise any objections but highlighted that stony reef impacts and hard substrate introduction (rock dumping) should be minimised, and that JNCC guidelines for minimising the risk of injury to marine mammals from piling noise should be followed.
- Natural England did not raise any objections but highlighted the importance of assessing impacts on the protected sites. As indicated above, LSE assessments were undertaken for the Greater Wash pSPA and the Southern North Sea Harbour Porpoise cSAC.
- MCA did not raise any objections but detailed navigational and OPEP requirements and suggested that pipeline burial depth should not decrease by more than 5%.

No comments were received from the MMO, CEFAS, the EA, the MOD, Trinity House, the East Riding of Yorkshire Council or the HSE, and there was no response to the public notice.

Further Information

Further information was requested from Premier Oil to address issues that were raised by consultees and during the internal OPRED review. The information requested related to site specific survey data, seabed disturbance, habitat classifications, rock dumping, seabird disturbance, produced water treatment and oil spill modelling. The additional information provided by Premier on 3rd April and 22nd May 2018 addressed all the issues that were raised.

Determination

Following review of the ES, the responses received from consultees and the additional information provided by Premier, OPRED is satisfied that the project will not have a significant adverse impact on the receiving environment or the living resources it supports, or on any protected habitats or species or other users of the sea. OPRED is therefore content that there are no grounds for objection and agrees to the OGA issuing the necessary consent for the proposals subject to the key mitigation requirements detailed above.

Jonathan Ward	14.06.2018
Jonathan Ward	Date
Director, Environmental Operations BEIS OPRED	