



Environmental Statement (ES) Summary and Sign-Off

Title:	Craster Exploration Well Environmental Statement (ES)
Operator:	Nexen Petroleum UK Limited (Nexen)
Report No:	W/4181/2015
Submission Date:	November 2015
Block No:	205/15
Development Type:	Exploration Well
Reviewer:	Nicola Abrams/Victoria Crossland
Date:	July 2016

A) Project Description:

Nexen is planning to drill an exploration well in the Craster prospect in Block 205/15 to establish whether commercially viable quantities of hydrocarbons are present at the Craster prospect. Two well locations / options have been considered; Craster and Budle, however only one of the well options will be drilled. The Craster well is located approximately 73 kilometres (km) (Budle – 71 km) north-west of Shetland and approximately 72 km (Budle – 73 km) from the UK/Faroes median line.

The well is located in a water depth of 249 metres (m) and will be drilled using a semi-submersible mobile drilling unit (MODU). The drilling programme is expected to commence in May 2017 and will last approximately 168 days. The well will comprise five sections, 42", 26", 17.5", 12.25" and 8.5". The 42" and 26" sections will be drilled using seawater and bentonite sweeps with cuttings discharged at the drill site. The 17.5", 12.25" and 8.5" sections will be drilled using Low Toxicity Oil Based Mud (LTOBM) and cuttings will either be treated by thermo-mechanical cuttings cleaning system (TCC) prior to offshore discharge or skipped and shipped to shore for treatment and disposal.

In the event that potentially commercial quantities of hydrocarbons are found, well testing may be undertaken. In addition a vertical seismic profile (VSP) may be undertaken. Following completion of drilling operations and subject to the necessary consent from the Oil and Gas Authority (OGA), the well will be plugged and abandoned in accordance with Oil and Gas UK Guidelines. All activities will be covered by an Oil Pollution Emergency Plan (OPEP), which will require to be approved prior to the commencement of operations.

B) Key Environmental Impacts:

The ES identified and discussed the following key activities as having the potential to cause an environmental impact:

- Seabed disturbance;

- Underwater noise;
- Atmospheric emissions;
- Discharges to sea;
- Interactions with other sea users; and
- Spill risk.

C) Key Environmental Sensitivities:

The ES identified the following environmental sensitivities:

- **Fish:** The Craster well is located in the vicinity of a spawning ground and nursery ground for Norway pout, and nursery areas for blue whiting, and mackerel. The spawning and nursery areas are extensive and the drilling operation is unlikely to have an impact on the fish species. In addition the west coast of the Shetland Isles is intensively used for aquaculture and shellfish harvesting and the ES has considered the potential impacts on aquaculture and shellfish sites.
- **Seabirds:** Seabirds most likely to be encountered in the offshore waters surrounding Craster and Budle well locations are northern fulmar, northern gannet, black legged kittiwake, guillemot, puffin and razorbill. Seabird vulnerability to surface oiling is high during February, July and September, moderate in March, May, June and August and low during the rest of the year. It has been assessed that there are sufficient mitigation measures in place to prevent accidental spills that could have a significant impact on seabirds and this will also be covered in the OPEP.
- **Protected Sites:** The Faroe-Shetland Sponge Belt Nature Conservation Marine Protected Area (FSSB NC MPA) is the closest site to the Craster and Budle wells located approximately 10 km and 12 km to the west, respectively. There are also a number of coastal protected sites on the west coast of the Shetland Isles, including Hermaness, Saxa Vord and Vallafield Special Protection Areas (SPA). The proposed drilling operations are not expected to have any significant impact on the FSSB NCMPA or the coastal SPAs.
- **Protected species:** The species most likely to be present during the period of proposed operations are white-beaked dolphins and harbour porpoise. It is also possible that sei whale, sperm whale, killer whale, minke whale, bottlenose whale and fin whale may also be present. Any disturbance of marine mammals is expected to be limited to the drilling period, and the localised disturbance is considered unlikely to have any significant impact.
- **Other users of the sea:** The Craster / Budle well is situated within ICES rectangle 50E6, and the relative fishing effort is considered to be low. Shipping density in the vicinity of Block 205/15 is also regarded as low. Appropriate navigational controls will be put in place, and it is not anticipated that there will be any significant impact on other users of the sea.

D) Consultation:

Comments were received from the Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), the Maritime and Coastguard Agency (MCA) and the Ministry of Defence (MoD). The ES was also subject to public notice.

JNCC: JNCC confirmed that they have no objections.

MS: MS confirmed that they have no concerns.

MCA: MCA confirmed that they have no objections.

MoD: MoD confirmed that they have no objections.

Public Notice: No comments were received in response to the public notice.

E) Further Information:

Further information was requested from Nexen which addressed issues raised following the internal DECC review. The information requested included clarification on the single well selection criteria and VSP operations, impacts on aquaculture, protected sites and cumulative impacts. The additional information provided by Nexen on March 2016 satisfactorily addressed the issues raised.

F) Conclusion:

Following review of the ES, the responses received from consultees and the additional information provided by Nexen, DECC OGED is satisfied that this project will not have a significant adverse impact on the receiving environment or the living resources it supports, or on any protected sites or species or other users of the sea.

G) Recommendation:

On the basis of the information presented within the ES and advice received from consultees, DECC OGED is content that there are no environmental or navigational objections to approval of the proposals, and has advised the OGA that there are no objections to the grant of the relevant consents.

Approved

.....*Sarah Pritchard*..... Date ...12/07/2016.....

Sarah Pritchard
Head of Offshore Environment Unit, DECC Offshore Oil & Gas Environment and
Decommissioning (DECC OGED)