Our Ref: 01.01.01.01-4180U UKOP Doc Ref:1135812

Offshore Petroleum Regulator for Environment & Decommissioning

Department for Business, Energy & Industrial Strategy

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SHELL U.K. LIMITED SHELL CENTRE LONDON SE1 7NA

Registered No.: 00140141

Date: 4th May 2021

Dear Sir / Madam

#### THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020 Arran Field, Ocean Endeavor DRILLING PRODUCER WELL 23/16b- 15

A screening direction for the project detailed in your application, reference DR/2118/0 (Version 1), dated 4th May 2021 has been issued under regulation 6 of the above Regulations. The screening direction notice, and any relevant conditions and comments are attached. A copy of this screening direction will be forwarded to the application consultees, the Oil and Gas Authority and published on the gov.uk website.

If you have any queries in relation to this screening direction or the attachments, please do not hesitate to contact **and the state of the state of** 

Yours faithfully

## THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020

## SCREENING DIRECTION CONFIRMING THAT AN ENVIRONMENTAL IMPACT ASSESSMENT IS NOT REQUIRED

# Arran Field, Ocean Endeavor DRILLING PRODUCER WELL 23/16b-15

# DR/2118/0 (Version 1)

Whereas SHELL U.K. LIMITED has made an application dated 4th May 2021, under The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020, and whereas the Secretary of State has considered the application and is satisfied that the project is not likely to have a significant effect on the environment; in exercise of the powers available under regulation 6, the Secretary of State hereby directs that the application for consent in respect of the project need not be accompanied by an Environmental Impact Assessment, provided that the project is carried out as described in the application for the screening direction and in accordance with the conditions specified in the attached schedule.

In giving a screening direction under regulation 6 of the above Regulations, the Secretary of State accordingly gives his agreement to the Oil and Gas Authority to the grant of consent for the project as detailed in the application.

Effective Date: 4th May 2021

## THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020

# SCHEDULE OF SCREENING DIRECTION CONDITIONS

The grant of this screening direction is conditional upon the screening direction holder complying with the following conditions.

## **1** Screening direction validity

The screening direction shall be valid from 4 May 2021 until 31 August 2021.

## 2 Commencement and completion of the project

The holder of the screening direction must notify the Department for Business, Energy & Industrial Strategy (hereinafter called the 'Department') of commencement and completion of the project within two days:

- a) of commencement of the project and
- b) of completion of the project.

Notification should be sent by email to the Environmental Management Team Mailbox: bst@beis.gov.uk

#### 3 Extended well tests

a) Production levels

The holder of the screening direction shall ensure that the production of hydrocarbons during the well test does not exceed the level(s) detailed in the application for the screening direction.

b) Associated flaring and venting

The holder of the screening direction shall, ensure that any associated flaring of hydrocarbons during the well test does not exceed the level(s) detailed in the application for the screening direction and/or that any associated venting of gas during the well test does not exceed the level(s) detailed in the application for the screening direction.

#### 4 Prevention of pollution

The holder of the screening direction must ensure that appropriate measures are taken to minimise discharges, emissions and waste, in particular through the appropriate use of technology; and to ensure that necessary measures are taken to



prevent incidents affecting the environment or, where they occur, to limit their consequences in relation to the environment.

## **5** Inspections

Should the Department consider it necessary or expedient for an inspector appointed by the Secretary of State to investigate whether the conditions of the screening direction are being complied with, the holder of the screening direction shall afford the inspector with such facilities and assistance as the inspector considers necessary to exercise the powers conferred by the regulations. The holder of the screening direction shall additionally ensure that copies (electronic or paper) of the screening direction and any other relevant documents are available for inspection by the inspector at:

- a) the premises of the holder of the screening direction; and
- b) the facilities undertaking the project covered by the screening direction.

## 6 Check monitoring

Should the Department consider it necessary or expedient to undertake an independent monitoring programme to assess the impact of the project covered by the screening direction, the screening direction holder shall afford the Department with such facilities and assistance as the Department considers necessary to undertake the work.

## 7 Atmospheric emissions returns

Following completion of the project covered by the screening direction, the holder of the screening direction shall report all relevant atmospheric emissions, such as combustion emissions, extended well test emissions or flaring and venting emissions relating to a well test, using the appropriate Environmental Emissions Monitoring System (EEMS) reporting forms. In the case of atmospheric emissions relating to drilling projects undertaken from a fixed installation, they should be included in the annual EEMS reporting forms for the fixed installation.

#### 8 Unauthorised deposits

Following completion of the project covered by the screening direction, the holder of the screening direction shall recover any materials accidentally or temporarily deposited on the seabed, such as debris, temporary containers, structures or deposits, or scientific instruments, and shall return the materials to land. If it is not possible to recover any of these deposits, full details of the materials remaining on the seabed must be reported to the Department in accordance with the requirements of Petroleum Operations Notice No.2 (PON2).

#### **9** Screening direction variation

In the event that the holder of the screening direction proposes changes to any of the

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particulars detailed in the application for a screening direction, the holder must notify the Department immediately and submit an application for a post screening direction amendment. The post screening direction must be in place prior to the amended proposals taking effect.

# COMMENTS ON THE APPLICATION FOR SCREENING DIRECTION

## Section 1

The attention of screening direction holders is drawn to the following provisions regarding The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020.

1) You are deemed to have satisfied yourself that there are no barriers, legal or otherwise, to the carrying out of the project covered by the screening direction. The issue of a screening direction does not absolve the screening direction holder from obtaining such authorisations, consents etc that may be required under any other legislation.

2) The Department would draw your attention to the following comments:

For note

The screening direction for the project reflects a change to the orginal project (ref: DR/1966 & DR/2104). The change relates to extending the duration of the project, change of anchor spread, and increase in use of vessel time.

3) All communications relating to the screening direction should be addressed to:

#### Out-of-hours emergency screening direction variations:

Telephone Met Office out-of-hours service (0330 135 0010) and ask to be connected to the Department's On-call Response Officer (Offshore Environmental Inspectorate).

#### **Routine communications**

bst@beis.gov.uk

or

Offshore Petroleum Regulator for Environment & Decommissioning Department for Business, Energy & Industrial Strategy AB1 Building Crimon Place Aberdeen AB10 1BJ

Tel

Fax

# SCHEDULE OF SCREENING DIRECTION DECISION REASONS

The Secretary of State has decided that, based on the information provided, the project is not likely to have a significant effect on the environment. The main reasons for this decision are:

## 1) Decision reasons

The following provides a summary of the assessments undertaken by OPRED to determine whether an Environmental Impact Assessment is required for this project, summarises the information considered, the potential impacts and sets out the main reasons for the decision made. In considering whether an Environmental Impact Assessment is required or not, the following have been taken into account:

a) the information provided by the developer;

b) the matters listed in Schedule 5 of The Offshore Oil and Gas Exploration,

Production, Unloading and Storage (Environmental Impact Regulations 2020) (the Regulations);

c) the results of any preliminary verifications or assessments of the effects on the environment of the project; and

d) any conditions that the Secretary of State may attach to the agreement to the grant of consent.

## **Characteristics of the Project**

Having regard, in particular, to the matters identified at paragraphs 1(a) to (g) of Schedule 5 to the Regulations, the characteristics of the project include the following:-

#### Summary of the Project

Replacement anchor spread at Arran AN1 well location. Increase in use of vessel time to accommodate extended schedule.

#### **Description of the Project**

The replacement anchor spread and increased use of support vessel time for the drilling of the Arran AN1 well represents a change to the drilling project which was subject of a direction given previously (ref: DR/1968). The original project size and design included use of a 12-anchor spread and use of support vessels for 35 (anchor handling vessel) and 112 days (emergency response vessel) respectively.

The applicant has applied for a change to the project as described above due to storm damage that was encountered in recent poor weather. The changes relate to a replacement anchor spread (removing the 12-anchor spread and replacing with an 8-anchor spread and an additional 2 contingent anchors) and increasing the use of support vessel time to 182 days (an increase of 35 days). The project change will



take place during the months May to August of 2021.

No cumulative impacts are expected to occur with any other existing or approved projects.

The risk of a major accident such as a well blowout has been assessed. The Developer has control measures in place to reduce the risk of a major accident occurring and the probability of such an event occurring is very low.

There is not likely to be any significant impact of the project on population and human health. It is not considered likely that the project will be affected by natural disasters. No pollution or nuisances are foreseen from the project change. There are no associated waste streams linked to the project change.

#### Location of the Project

Having regard, in particular, to the matters identified at paragraphs 2(a) to (c) of Schedule 5 to the Regulations, the environmental sensitivity of geographical areas likely to be affected by the project has been considered as follows:-

The project is in an offshore oil and gas licenced area, approximately 229 km east from the Aberdeenshire coastline in Scotland and 4 km west of the

UK/Norwegian median line, in an area where water depth is approximately 80-90 m and the seabed type are characterised as sand with abundant shell fragments. The predominant current in the location originates from well mixed coastal water, Atlantic inflow from the north and the Fair Isle/Dooley current from the Orkney Islands. The expected wave heights for the project area are 2.1 to 2.4 m. The project is not located in or close to any protected areas. The closest protected area is the East of Gannet and Montrose Fields, 33 km west of the project location.

Site-specific surveys identified the seabed as consisting of a very similar, fine sand seabed across all sample stations located in the project area. The survey results revealed that there was a diverse faunal community which was moderately distributed. Ocean quahog were recorded during historic sampling analysis, with the majority consisting of juvenile specimens; however, no specimens were recorded in the most recent site survey. Potential areas of reef forming habitat were identified during site survey work in 2016. The reef forming habitat is borne from methane derived authigenic carbonate (MDAC). The potential habitat is located approximately 332 m from the closest point of the drilling project works.

The project works will take place during peak spawning of mackerel. The project location is also within an area of high intensity spawning for mackerel. Sightings of cetaceans have been recorded during the period for which the project works are planned. Seabird density is described as high for the period when project works are planned. The project area is not within a commonly fished ground and fishing effort is predominantly focussed on demersal and shellfish species. The area is described as a low intensity fishing area. There is a large amount of other oil and gas infrastructure in the surrounding area. The project location is not within a military activity zone,



aggregate extraction location, or near any renewable energy infrastructure projects. There is a fibre optic cable located relatively close to the drilling location.

Given the location of the project, the areas identified at paragraphs 2(c)(i), (iii), (iv), (vi), (vii) and (viii) of Schedule 5 are not likely to be affected by the project.

#### Type and characteristics of the potential impact

In accordance with paragraph 3 of Schedule 5 to the Regulations, the likely significant effects of the project on the environment have been considered. Potential effects to the environment from the activities associated with the change to the project were assessed, with particular focus on the predominant impacts resulting from seabed disturbance from the new anchor spread and atmospheric emissions from increase in vessel use.

The change in anchor spread (i.e. use of less anchors) is possible due to better weather conditions being likely throughout the remainder of the project schedule (May-August 2021). Potential reef habitats were previously identified during site surveys, and their proximity to the well location was less than 500 m. The applicant has been made aware that anchor placement must not encroach a radius of 145 m from the potential habitat (a commitment outlined in the original screening application). With the new anchor spread, the anchors (at their closest point) will not be within 332 m of the potential reef habitat. Anchor scarring and depressions will result from removal of the spread, but the impact is expected to be temporary, and the seabed is expected to revert to its natural state quite rapidly. The anchors and chains will be located in a different location to those of the original spread and so there is a temporary cumulative impact associated with the change. The additional impact from seabed disturbance is 0.034 square kilometres.

The main receptor impacted by seabed disturbance will be the benthic communities. Physical disturbance can cause mortality or displacement of benthic species in the impacted zone. Direct loss of habitat and direct mortality of sessile seabed organisms that cannot move away from the contact area would be expected at the anchor and anchor line laydown locations. Once the drilling project is completed and the rig moves offsite the seabed will begin to recover and re-colonisation by mobile species from adjacent areas of seabed and from larval settlement will occur. No significant impacts are expected as a result of the change to the anchor spread for the project.

The change in vessel use results in an increase in vessel associated emissions. The emissions emanate from the use of combustion plant on the vessels. Because of the change to the rig time at the location, additional demobilisations and remobilisation and changes to anchor use, there changes to vessel time relate to emergency response support vessels and anchor handling vessels. The increase in emissions attributed to the change reflects in an increase in CO2 equivalent from 0.122% of the 2018 offshore oil and gas industry emissions to 0.170% of the 2018 emissions. The emissions may result in short term deterioration of local air quality, however given the meteorological environment at the location, the impact is not considered significant.



There are no expected transboundary impacts as a result of the change to the project.

## Decision

Taking the above considerations into account, the Secretary of State has concluded that the project is not likely to have a significant impact on the environment and that an environmental impact assessment is not required.

## 2) Mitigation of significant effects

The following are features of the project or measures envisaged that the developer has proposed to avoid or prevent what might otherwise have been significant adverse effects on the environment:

Not applicable.