

Our Ref: 01.01.01.01-4548U  
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Offshore Petroleum Regulator  
for Environment & Decommissioning

SHELL U.K. LIMITED  
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Registered No.: 00140141

Date: 20th September 2021

Department for Business, Energy  
& Industrial Strategy

AB1 Building  
Crimon Place  
Aberdeen  
AB10 1BJ

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Fax

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[bst@beis.gov.uk](mailto:bst@beis.gov.uk)

Dear Sir / Madam

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

**GANNET B, Gannet B Subsea Completion, Ocean Endeavor DRILLING  
PRODUCER WELL 21/25-B2Z**

I refer to your amended application dated 19th September 2021, reference DR/2084/2 (Version 1).

It has been determined that the proposed changes to the project is not likely to result in a significant effect on the environment, and therefore an environmental impact assessment is not required.

A screening direction is therefore issued for the changes to the project. An amended schedule of conditions, comments, and main reasons for the decision on the amended application, 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 [REDACTED] on [REDACTED] or email the Environmental Management Team at [bst@beis.gov.uk](mailto:bst@beis.gov.uk).

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**

**GANNET B, Gannet B Subsea Completion, Ocean Endeavor DRILLING  
PRODUCER WELL 21/25-B2Z**

**DR/2084/2 (Version 1)**

Whereas SHELL U.K. LIMITED has made an application dated 19th September 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: 20th September 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 6 May 2021 until 30 November 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](mailto:bst@beis.gov.uk)

#### **3 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.

#### **4 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.



## **5 Monitoring**

The applicant must notify the Department in writing prior to undertaking any flaring or venting activities, and again once the flaring or venting activity has ceased. The notification, made after the activity has taken place, must detail (in the case of flaring) whether the base-case or high-case flaring activity was required, and what the total volume of hydrocarbons that was flared was. Should venting not be required, the applicant must confirm this to the Department by way of notification.

## **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 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.

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## 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:

N/A

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 [REDACTED]



## **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

- Plug and abandonment of mother-bore well;
- Drilling of side-track well;
- Contingent option to drill further side-track well;
- Completion of the side-track well; and
- Suspension of the side-track well for prior to production phase.

#### Summary of Change to the Project - 5 July 2021

- Wet storage of anchors.

#### Summary of change to project - 20 September 2021

- Increase in duration of well testing from 48 to 96 hours. No increase in quantity of hydrocarbon flared and no change to impact already assessed.

### **Description of the Project**



The drilling of the well will be facilitated by the anchored semi-submersible drill rig Ocean Endeavour and may take 58 days to complete. The rig will be anchored by 8 anchors with a contingent option for a further 8 piggybacked anchors in addition. An additional requirement to wet store eight anchors on the seabed is also needed (ref: DR/2084/1/1). The project will be supported by six vessels. The original well will be plug and lubricated (during which there is a small potential to vent a non-routine volume of gas) and then fully abandoned. A side-track well will then be drilled from the 13 3/8 inch casing of the original bore. The side-track sections will consist of 12 inch and 8 inch diameter lengths. The side-track will be drilled using low toxicity oil based mud, which will be separated on return and recycled with the cuttings being treated and discharged. Non-routine flaring of hydrocarbons is proposed during clean-up of the well to ensure production will meet specification when the well is handed over to production phase. Drilling is planned to begin in May 2021, and the screening direction covers the period May to November 2021.

No cumulative impacts are expected to occur with any other existing or approved projects. The risk of a major accidents 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. There are a number of synthetic oil in water waste streams resulting from the project which will be treated and analysed before discharge. Where specification for discharge can't be met, the waste will be returned to shore for treatment and disposal.

### **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 164 km east from the Aberdeenshire coastline in Scotland and 82 km west of the UK/Norway median line, in an area where water depth is approximately 92-98 m and the seabed type is characterised as predominately comprising very fine to fine sand, with moderate proportions of fine material (silt and clay). Water circulation in the project location is anticlockwise. It is driven by the influx of Atlantic waters through the Fair Isle Channel moving southward along the Scottish and English coasts, with offshoot currents travelling east across the North Sea and a northward outflow through the Norwegian Trough. Within the region, there is an annual mean significant wave height between 2.11-2.40 m. The project is located within the East of Gannet and Montrose Fields (EoGMF) marine conservation area, designated for offshore deep sea muds, and the species ocean quahog.

The main biotope complex identified within the Gannet fields is 'Circalittoral muddy





sand' which supports fauna-dominated communities characterised by polychaetes and echinoderms. The 2019 Gannet B survey also identified a potential area of Methane Derived Authigenic Carbonate (MDAC), classified as 'Seeps and vents in sublittoral sediments'. Habitat assessments using data gathered during the 2013 and 2019 Gannet surveys were carried out to determine the presence and extent of habitat types, as well as to identify any sensitive habitats occurring in the Gannet fields. From the site specific surveys of the project location, there is no evidence of offshore deep sea muds. It is not thought likely that the 'Seapens and burrowing megafauna in circalittoral fine mud' component biotope of the 'Burrowed mud' feature occurs within the project area either, after analysis of survey data. The conservation area is designated for the infaunal venerid bivalve ocean quahog which inhabits sandy and muddy sediments from the low intertidal zone to 400 m. Juvenile ocean quahog were reported at all stations sampled during the Gannet A to Gannet D survey at densities estimated to be 'common' or 'abundant'. Adults were recorded in one grab sample (from a 2019 survey) and were estimated as 'common'. The species (mainly juveniles) was also found in low abundances across the greater Gannet field survey area.

The project works will take place during peak spawning of mackerel and Norwegian lobster. Sightings of cetaceans have been recorded during the period for which the project works are planned, and more frequently during the summer months. Seabird density is described as very high for the summer period when project works are planned but low during the autumn periods. The project area is not within a commonly fished ground, and 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 (less than 4km) and shipping traffic is very low. The project location is not in proximity to an aggregate extraction site or an offshore renewables site. There are no military exercise areas or other cables or wrecks in proximity to the project 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 physical presence from the rig / vessels, atmospheric emissions from vessel use, flare and vent activities, planned discharges to sea from chemical use, seabed disturbance from siting the rig.

The drill rig has the potential to cause interference to other users of the sea, namely fishermen and vessel traffic, however the rig and support vessels will be located in an extant safety zone for the well. Its presence within the safety zone means only authorised vessels would be allowed within the 500 m radius of the well. Therefore, no additional impact is foreseen, and any impact from physical presence of the rig is deemed insignificant. Where anchors extend out with the safety zone, a support



vessel will be on site continually to monitor for vessel traffic and provide alerts.

Emissions to air are possible from three main sources, (1) combustion plant used temporarily on the rig and vessels and (2) any flaring activity, and (3) any venting activity. The quantity of carbon dioxide equivalent from the vessel use amounts to 0.061% of the 2018 total emissions from offshore oil and gas activity. Flaring from the project for a worst-case four-day period, results in a carbon dioxide equivalent of 0.212% of UK offshore oil and gas emissions based on 2018 data. The project base-case results in a carbon dioxide equivalent of 0.049% of the UK 2018 total emissions from offshore oil and gas activity. The maximum estimated release of gas by venting during the project equates to 0.004% of the total gas released via venting in the UK offshore oil and gas industry in 2018.

The requirement to vent gas during the project is a contingent measure, and will only be required should the primary option to bullhead the completion fluid to inhibited seawater fail to achieve satisfactory results. Should clean-up of the well operations exceed expectations, the flaring of hydrocarbons will be curtailed as a result, and such a decision will be taken immediately. Should well clean-up develop efficiently the worst-case flaring levels will likely be avoided. Efficient well clean up is a real possibility in this case, hence both scenarios' have been provided for.

The non-routine flaring will not have a detrimental effect to local air quality over the long-term, nor will it inhibit the ability to reach wider climate change goals. The environmental effects from emissions to air are not expected to have a significant impact on the environment.

Offshore registered chemicals will be used and discharged during the drilling of the well. The use and discharge of the chemicals have been risk assessed and modelled in accordance with other regulatory requirements. The use and discharge modelling shows a low risk to the environment from the chemicals. Use and discharge of chemicals is not expected to have a significant impact on the environment.

The area of temporary seabed disturbance resulting from rig positioning and discharge of treated drill cuttings amounts to 0.071 km<sup>2</sup>. The predominant source of the impact is from use of anchors to position the rig, wet storage of anchors, and discharge of treated drill cuttings. The planned side-track well is within the EoGMF conservation area and therefore designated features of the site may potentially be directly impacted by the rig anchors and chains. Adult and juvenile ocean quahog were identified within the Gannet area during the most recent survey in 2019 and other historical surveys in the area. Potential MDAC was observed in a recent survey, but the location will be out with the zone of any potential impacts from the project. It remains possible that individual's ocean quahog may be directly impacted by seabed disturbance as a result of the placement of anchors and anchor chains, potentially resulting in individual mortality. It is not considered that the potential loss of a small number of juvenile individuals of this species will result in a significant effect on the population viability of this species, and therefore the impact from seabed disturbance is not deemed significant. It is estimated that areas affected by anchor scarring will recover within 1-5 years. Anchoring and catenary scarring are not expected to result



in significant changes to sediment properties and rapid recovery of faunal communities within the disturbed area may be expected through a combination of larval settlement and immigration of animals from the adjacent seabed. Based on cuttings discharge modelling, deposition of cuttings with a thickness > 6.5 mm is not expected beyond 215 m from the drilling location. The deposition of cuttings is therefore not anticipated to have a significant impact on ocean quahog present within the conservation area. The estimated total area of temporary impact to the seabed resulting from the drilling operations at Gannet is 0.065 km<sup>2</sup> which is 0.00004% of the area of the conservation site. Given the small size and temporary nature of the potential impacts to the seabed, habitats and species within the NCMPA, the proposed drilling operations are not expected to affect the conservation objectives of this protected area.

There are no expected transboundary impacts as a result of 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.