Our Ref: 01.01.01.01-5319U
UKOP Doc Ref:1288568

Offshore Petroleum Regulator
for Environment & Decommissioning

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

Registered No.: 00140141

Date: 2nd August 2023

Department for Energy Security &
Net Zero

AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Tel [redacted]
Fax

www.gov.uk/beis
OPRED@energysecurity.gov.uk

Dear Sir / Madam

THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020
PENGUIN EAST, 211/13a- 18 (PC-04)

I refer to your amended application dated 1st August 2023, reference DR/2305/1 (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 OPRED@energysecurity.gov.uk.

Yours faithfully

Signature Valid

Digitally signed by Environmental Section
Date: 2023.08.02 16:22:44 BST
Reason: On behalf of the Department for Energy Security and Net Zero
Location: The Department for Energy Security and Net Zero

Our Ref: 01.01.01.01-5319U
UKOP Doc Ref:1288568

Offshore Petroleum Regulator
for Environment & Decommissioning

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

PENGUIN EAST, 211/13a- 18 (PC-04)

DR/2305/1 (Version 1)

Whereas SHELL U.K. LIMITED has made an application dated 1st August 2023, 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 agreement to the Oil and Gas Authority to the grant of consent for the project as detailed in the applications WONS/11603/1/IDA/1, WONS/11603/1/C/1 and WONS/15738/0/EWT/1.

Effective Date: 2nd August 2023

Our Ref: 01.01.01.01-5319U
UKOP Doc Ref:1288568

Offshore Petroleum Regulator
for Environment & Decommissioning

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 10 April 2023 until 31 December 2023.

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: OPRED@energysecurity.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 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.

6 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.

7 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).

8 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.

Our Ref: 01.01.01.01-5319U
UKOP Doc Ref:1288568

Offshore Petroleum Regulator
for Environment & Decommissioning

Our Ref: 01.01.01.01-5319U
UKOP Doc Ref:1288568

Offshore Petroleum Regulator
for Environment & Decommissioning

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:

OPRED@energysecurity.gov.uk

or

Offshore Petroleum Regulator for Environment & Decommissioning
Department for Energy Security & Net Zero
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Tel [redacted]

Our Ref: 01.01.01.01-5319U
UKOP Doc Ref:1288568

Offshore Petroleum Regulator
for Environment & Decommissioning

SCHEDULE OF SCREENING DIRECTION DECISION REASONS

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:-

DR/2305/1 (Version 1)

This variation amends the duration of flaring from 96 hours to 168 hours only. No increase to quantity of hydrocarbon to be flared and no other changes. The assessment below remains valid.

Summary of the Project

-Drilling of the PC-04 production well (consisting of 17 1/2", 12 1/4" and 8 1/2" sections;

-Completion of the well;

-Well clean up

-Contingent side-track option on one or both of the 12.25 inch and 8.5 inch sections

but not more than two of the sections in total;

Description of the Project

The drilling of the production well will be facilitated by the anchored semi-submersible drill rig Ocean Endeavour and may take up to 101 days to complete. The rig will be held on location by 12 anchors (inclusive of six contingent anchors) which will be

pre-laid prior to rig arrival. The project will be supported by four anchor handling vessels, a supply vessel, an emergency response and rescue vessel and helicopter trips.

The well will be drilled in 3 sections, using low toxicity oil-based mud (LTOBM). The oil-based mud will be thermally treated, and cuttings discharged if within oil on cuttings specification. The well will be cleaned-up prior to production phase. Non-routine flaring of hydrocarbons is proposed during clean-up of the well as no pipeline infrastructure exists to produce the fluids back to a processing facility. Drilling is planned to begin in April 2023, and the screening direction covers the period 10 April 2023 to 31 December 2023.

No cumulative impacts are expected to occur with any other existing or approved projects. The risk of a major accidents and environmental effects from 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 nuisances are foreseen from the project. There are five synthetic oil in water waste streams resulting from the project which will be treated where necessary 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 Penguins field redevelopment location lies within a seaward licenced area, which has been licenced for the exploration and extraction of hydrocarbons. The project is located approximately 150 km east from the Shetland coastline in Scotland and adjacent to the UK/Norwegian median line, in an area where water depth is approximately 163 m.

The predominant current in the location is dominated by the Norwegian Atlantic flow. The project location is not within any protected areas, with the closest being approximately 82 km distant.

Site-specific surveys identified the seabed as comprising of gravelly sand with varying proportions of shell accumulations, pebbles, cobbles, and boulders. The main sediment type is described as circalittoral coarse sediment. The benthic species identified were more prevalent near or on cobbled and stony areas. The most ommonly observed benthic fauna included sea urchins, starfish, anemones, hermit crabs, squat lobsters, shrimps, sponges, and sea cucumbers.

The project works and timing will take place during a period when a number of fish

species may be found to using the area as juvenile or nursery locations. Sightings of cetaceans are most common between the months of May and August. Seals are not expected to be seen at the remote location. Seabirds are most common in the area during the late summer months of August and September when expected density is 10-20 individuals per square km. The project area is primarily used for demersal fishing, but with a very low historical effort. Shipping intensity at the project location is also very low. The surrounding area comprises other oil and gas infrastructure within 20 km, but is not within a military activity zone, with no telecommunications cables, marine aggregate sites or renewable energy locations in proximity. An unknown wreck was identified approximately 11km northwest of the 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 focus on the predominant impacts resulting from physical presence from the rig / vessels, atmospheric emissions from vessel use, and flare activities, planned discharges to sea from chemical use, seabed disturbance from siting the rig and drilling discharges, and accidental events such as an oil spill.

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 a 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 excluding users of the sea. Given the low importance of the fishing area and the low vessel traffic, and that the drilling project is a temporary activity - the impact is deemed insignificant. An emergency response and rescue vessel will be on site continually to monitor for vessel traffic and provide alerts to other users of the sea.

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. The area of temporary seabed disturbance resulting from rig positioning is 0.06 km2. The temporary installation of the drill rig anchors is not expected to result in significant changes to sediment properties. Based on cuttings discharge modelling, deposition of cuttings with a thickness > 6.5 mm is not expected beyond 215 m from the drilling location with a maximum area of permanent seabed disturbance of 0.145km2. 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 once the anchors and chains are removed and cuttings deposition ceases. Therefore, based on the above, impacts on benthic communities from the anchor system and cuttings deposition will be temporary, localised and not significant.

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 discharge of treated LTOBM cuttings will result in some impacts to marine organisms resulting primarily from smothering and grain size change. The impacts of drilling discharges on water quality and benthic fauna is predicted to be minimal as affects will be localised and short-lived. Moreover, given that recovery of the seabed and the associated benthic communities is likely to begin once drilling has been completed, the environmental impact of the discharged cuttings, within the impacted area, can be considered insignificant.

Emissions to air will occur from two main sources, (1) combustion plant used on the MODU and support vessels and (2) the proposed flaring activity. The quantity of carbon dioxide equivalent from the MODU and support vessel use amounts to 0.08% of the 2018 total emissions from offshore oil and gas activity. Flaring from the project for a worst-case 168 hr flow period, results in a carbon dioxide equivalent of 0.096% of UK offshore oil and gas flaring emissions based on 2018 data. The MODU, support vessel and flaring emissions 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. The impact of the vessel emissions will be mitigated by optimising vessel efficiency (i.e. minimising the number of vessels used and vessel trips required to achieve the construction deliverables) and hence minimising fuel use and avoiding the unnecessary operation of power generation / combustion equipment.

In the event that an unlikely and unplanned accidental spill scenario from a well blow-out was realised the total volume of oil that would be released from the well has been estimated at 1,079,620 m3 (890,687 tonnes). The modelling suggests that beaching of oil would occur and that a major environmental incident would be likely.

All drilling activities will be carried out in accordance with the Offshore Safety Directive as per Shell's Well Examination Scheme and Guidance Document. An approved Oil Spill Emergency Plan to manage hydrocarbon releases will be in place prior to activities being undertaken. There are no planned expected transboundary impacts because of the project.

The drilling operations are consistent with the National Marine Plan for Scotland's objectives and policies.

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:

n/a