Our Ref: 01.01.01.01-5716U
UKOP Doc Ref:1328542

Offshore Petroleum Regulator
for Environment & Decommissioning

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

Registered No.: 00140141

Date: 23rd February 2024

Department for Energy Security &
Net Zero

AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Tel [redacted]
Fax

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

Dear Sir / Madam

THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020
JACKDAW, WELL 30/02a-AJD02 planned well

I refer to your amended application dated 21st February 2024, reference DR/2382/1 (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 Not Verified
Digitally signed by Department for Energy Security and Net Zero
Date: 2024.02.23 13:48:17 GMT
Reason: On behalf of the Secretary of State
Location: Offshore Petroleum Regulator for Environment and Decommissioning

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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

JACKDAW, WELL 30/02a-AJD02 planned well

DR/2382/1 (Version 1)

Whereas SHELL U.K. LIMITED has made an application dated 21st February 2024, 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/15407/0/IDA/1 (Version 3) and WONS/15407/0/C/1 (Version 3).

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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 19 September 2023 until 20 February 2025.

2 Commencement and completion of the project

The holder of the screening direction must notify the Department for Energy Security & Net Zero (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.

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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:

No comments

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
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AB10 1BJ

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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 assessment 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 has 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 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 changes to the project

DR/2382/1: There has been an increase in the number of sidetracks that may be drilled for the 17.5" section accross the 4 wells being drilled at Jackdaw (JD02, 03, 05, 06). The initial application assessed the drilling of one 17.5" sidetrack to be used as required accross the 4 wells. The updated application assess the impacts of 4 17.5" section sidetracks, one per well.

Summary of the Project

Drilling of the Jackdaw JD02 well in five sections, with the top two sections being batch drilled along with three other Jackdaw wells. The lower well sections will then be drilled linearly.

The 36" section will be drilled riserless using seawater and bentonite sweeps with cuttings discharged at the seabed.

The 26" section will be drilled with water based mud (WBM) with cuttings discharged to sea from the Valaris 122 Mobile Offshore Drilling Unit (MODU).

The bottom-hole sections: (17.5", 12.25" and 8.5") will be drilled with low toxicity oil-based mud (LTOBM), with cuttings from the 17.5" section thermally treated offshore to less than 1% oil on cuttings and discharged to sea from the MODU.

Cuttings from the lower two sections will be transferred onshore for treatment and disposal.

Contingent mechanical sidetrack and tophole re-spud. Note: the screening direction application refers to two contingency mechanical sidetracks. Shell confirmed they understand if a second mechanical sidetrack is proposed to be undertaken they will engage with the NSTA and submit the necessary WONS application. The impact of two sidetracks has been assessed in this screening direction application.

Well suspension, involving the displacement of LTOBM to inhibited seawater and clean up.

Description of the Project

This project is the drilling of the Jackdaw JD02 production well for production via the Shearwater installation. The MODU anchors were be pre-laid and protected by the Shearwater Emergency Response and Rescue Vessel (ERRV). Once on location, the MODU is be protected by the Jackdaw Well head Platform (WHP) surface 500m safety zone and a dedicated ERRV.

It is estimated that the project will take up to 125 days between 19 September 2023 and 20th February 2025. The well will be drilled in five sections as described above.

Displacement returns to the MODU will be discharged to sea, if within oil in water specification, otherwise these fluids will be transported to shore for disposal. No significant 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 is one synthetic oil waste streams resulting from the project which will be 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 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 275 km east from the Aberdeen coastline in Scotland and 5 km west of the UK/Norway median line, in an area where water depth is approximately 76 m and the seabed type is characterised as predominately comprising fine sand. Water circulation in the project location is driven by the influx of North Atlantic waters through the Fair Isle Channel moving southwards along the Scottish coast. Within the region, there is an annual mean significant wave height between 2.1m.

The project location is not within any protected areas, with the closest UK area, the Fulmar Marine Conservation Zone (MCZ), designated for ocean quahog being approximately 33 km distant.

The epifauna observed in the 2018 Shearwater survey area were dominated by dominated by annelids, molluscs, arthropods and echinoderms. Sea pens were identified during the survey, with elements of the OSPAR habitat 'sea pens and burrowing megafauna communities' identified intermittently. it could therefore be considered representative of a 'sea pens and burrowing megafauna community.

The project works and timing will take place at a time when a number of fish species may be found to use the area as spawning, juvenile or nursery locations. Sightings of cetaceans are most common between the months of June and September. Seals are not expected to be seen at the remote location. Seabirds are most common in the area during the months of March to October when expected density is 5 - 10 individuals per square km. The project area is used for fishing, but with a very low historical effort, showing no landings in 2022. Shipping intensity at the project location is very low. The surrounding area comprises other oil and gas infrastructure within 35 km, but is not within a military activity zone, with no telecommunications cables, marine aggregate sites or renewable energy locations in proximity. The closest wreck was identified approximately 14 km south west 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 project were assessed, with focus on the predominant impacts resulting from physical presence from the MODU / vessels, atmospheric emissions from vessel use, planned discharges to sea from chemical use, drilling discharges, and accidental events such as an oil spill. Impacts from locating the MODU are assessed under DRA/997.

The MODU 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 the Jackdaw WHP safety zone. Its presence within the safety zone means only authorised vessels would be allowed within the 500 m radius of the MODU, therefore excluding other users of the sea. Given the very low importance of the fishing area and the very 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. Based on cuttings discharge modelling, deposition of cuttings is expected to have a permanent impact area of 0.0167 km2 due to change to seabed sediment composition. The area of impact is small in comparison to the surrounding area of similar habitat and no significant impact is expected at a population level. Recovery by recolonisation is expected to start following the cessation of drill cuttings deposition.

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 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.

The cumulative volume of drill cuttings discharged to sea accross the 4 Jackdaw wells (JD02, 03, 05, 06) has increased from the initial application due to the increased number of 17.5" sidetracks that may be employed. The impact from this increase in cuttings has been assessed and there is not a significant increase in seabed impact or risk

Emissions to air will occur from combustion plant used on the MODU and support vessels. The quantity of carbon dioxide equivalent from the MODU and support vessel use amounts to 0.11% of the 2018 total emissions from offshore oil and gas activity. The MODU and support vessel emissions will not have a detrimental effect to local air quality over the long-term, nor are they expected to 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 project 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 892,471m3. The modelling suggests that beaching of oil is predicted to occur and that a major environmental incident is considered 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.

The drilling operations are in accordance with the National Marine Plan for Scotland's objectives andpolicies. It is considered that the drilling of the JD02 well is not likely to have a significant impact on other offshore activities or other users of the sea and no cumulative or transboundary impacts are expected to occur.

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