

Our Ref: 01.01.01.01-6141U
UKOP Doc Ref:1350360



Offshore Petroleum Regulator
for Environment & Decommissioning

SHELL U.K. LIMITED
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Registered No.: 00140141

Date: 3rd July 2024

Department for Energy Security &
Net Zero

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Dear Sir / Madam

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

PENGUIN EAST, Stena Don DRILLING PRODUCER WELL 211/14- 7 - E1-ST

I refer to your amended application dated 28th June 2024, reference DR/2467/2 (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 opred@energysecurity.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**

PENGUIN EAST, Stena Don DRILLING PRODUCER WELL 211/14- 7 - E1-ST

DR/2467/2 (Version 1)

Whereas SHELL U.K. LIMITED has made an application dated 28th June 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 application, WONS/16406/0/S/1, WONS/16498/0/WT/1 and WONS_SCON/5346.

Effective Date: 3rd July 2024

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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 24 April 2024 until 31 December 2024.

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:

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]



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 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 change to the Project (DR/2467/2)

Increase in flaring amounts to include base oil and associated increases in atmospheric emissions and changes to completions operations.

Summary of the change to the Project (DR/2467/1)

to clarify details in project summary :-

- Drilling of the E1-ST production well via a sidetrack of the existing E1 well;
- Drilling of the 12.25" and 8.5" well sections using Low Toxicity Oil Based Mud (LTOBM);
- Completion of well;



- Well clean up involving flaring;
- Contingency options include sidetrack of the lowers sections;
- Contingency 6" section;
- Contingency well suspension if well is unsuccessful

(WONS/16406/0/S/1, WONS/16498/0/WT/1 and WONS_SCON/5346)

Summary of the Project

DR/2467/0

- Drilling of the E1-ST production well via a sidetrack of the existing E1 well;
- Drilling of the 12 " and 8 " well sections using Low Toxicity Oil Based Mud (LTOBM);
- Completion of well;
- Well clean up involving flaring;
- Well test;
- Contingency options include sidetrack of the lowers sections or a respud;
- Contingency 6" section;
- Contingency well suspension if well is unsuccessful

(WONS/16406/0/S/1, WONS/16498/0/WT/1 and WONS_SCON/5346)

Description of the Project

The drilling of E1-ST well is part of the re-development of the Penguins field, this will involve plugging and lubricating (P & L) and then plugging and abandoning (P & A) the existing E1 well which will then be sidetracked as the E1-ST well. The drilling of the production well will be from the Mobile Offshore Drilling Unit (MODU) Stena Don. The MODU will be held on location by up to 8 anchors which will be pre-laid prior to MODU arrival, 3 of the anchors will be laid in Norwegian waters. The project will be supported by up to 2 anchor handling vessels (AHV), supply vessels, a guard vessel, an emergency support vessel and helicopter flights. A contingency wet storage area for the anchors will be used in the event of deck space being restricted on the AHVs.

The well will be drilled in 2 sections, 12.25" and 8.5" with LTOBM. The LTOBM and cuttings will be thermally treated on the rig, and cuttings discharged from the drill rig. The well will be cleaned-up prior to production phase. A flowbase and cocoon (including 4 x 1 tonne grout gabions) to protect the wellhead has already been



installed (Under DRA/648). There are 8 synthetic oil-in-water waste streams resulting from the project (including from the P & L/P & A which precede the sidetracking of well E1-ST) which will be treated and analysed before discharge. Where specification for discharge cannot be met, the waste will be returned to shore for treatment and disposal.

The project will take place from the earliest 24 April until 31st December 2024, taking 118 days to complete. No significant cumulative impacts are expected to occur with any other existing or approved projects. 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.

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 proposed drilling project at the Penguins E1-ST well location is within the Northern North Sea in the Penguins West Field, UKCS Block 211/14 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 208m. As part of the Penguins 2024 drilling campaign, Shell propose to carry out drilling activities at two Penguin wells: the E1-ST well and the DT-04 well (which will be the subject of a separate drilling application). Activities at both wells will be carried out by the single placement of the MODU, with the rig able to skid between the 2 wells.

The project location is not within any protected areas, with the closest being 102 km away. Site-specific surveys identified the seabed as comprising of gravelly sand with varying proportions of shell accumulations, pebbles, cobbles, and boulders. The sediment type is described as circalittoral coarse sediment. The benthic species identified, correlated with expected assumptions and were more prevalent near or on cobbled and stony areas. The most commonly observed benthic fauna included sea urchins, starfish, anemones, polychaetes, hermit crabs, squat lobsters, sponges, and sea cucumbers.

The project works will take place at a time when a number of fish species may be found to be using the area as spawning, juvenile or nursery locations. Sightings of cetaceans are most common during the months of July 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 low historical effort. Shipping intensity at the project location is low. The surrounding area comprises other oil and gas infrastructure within 11km, but is not within a military activity zone, with no telecommunications cables, marine aggregate sites or renewable energy locations in proximity. A wreck was identified approximately 2.9 km southeast of the E1-ST 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 MODU including flaring, vessel use and helicopter flights, planned discharges to sea from chemical use and discharge, seabed disturbance from siting the rig, and accidental events such as an oil release.

The MODU has the potential to cause interference to other users of the sea, however the MODU 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 other 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 not significant. A guard vessel will be on location from anchor pre-lay until the MODU arrives on location.

The area of seabed disturbance resulting from temporary disturbance from rig positioning is 0.035km². With an area of permanent impact of 0.385 km² from cuttings discharge, and sub-surface infrastructure. 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 temporary installation of the MODU anchor system is 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 migration of animals from the adjacent seabed once the anchors and moorings are removed. Therefore, the impact on benthic communities will not be significant.

Offshore 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 impact 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, is assessed as not significant.

Emissions to air will occur from combustion plant used on the MODU and support



vessels and from well clean up including (flaring). The quantity of carbon dioxide equivalent from the MODU and support vessel use amounts to 0.0997% of the 2018 total emissions from UK offshore oil and gas activity and the emissions from well clean up and flaring amounts to 0.357% of 2018 total emissions from UK offshore oil and gas activity. The drilling operation 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 unlikely event that an accidental spill from a well blow-out occurs the total volume of oil that would be released from the well has been estimated at 162,840m³. The modelling suggests that there is a 1% chance of beaching of oil is predicted to occur and there is no potential for a Major Environmental Incident (MEI) resulting from an uncontrolled well blow-out. 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 operations will be carried out in accordance with the Scottish National Marine Plan objectives.

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