

Our Ref: 01.01.01.01-5815U
UKOP Doc Ref:1317386



Offshore Petroleum Regulator
for Environment & Decommissioning

EQUINOR UK LIMITED
1 KINGDOM STREET
LONDON
W2 6BD

Registered No.: 01285743

Date: 20th December 2023

Department for Energy Security &
Net Zero

AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Tel [REDACTED]

Fax

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

Dear Sir / Madam

**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING
AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS
2020
MARINER, Mariner PDQ Platform, DRILLING PRODUCER WELL 9/11a-A35
AHPB planned well**

I refer to your amended application dated 19th December 2023, reference DR/2418/1 (Version 3).

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**

**MARINER, Mariner PDQ Platform, DRILLING PRODUCER WELL 9/11a-A35
AHPB planned well**

DR/2418/1 (Version 3)

Whereas EQUINOR UK LIMITED has made an application dated 19th December 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 application, WONS/15891/0/C/1 Version 1 and WONS/15778/1/IDA/1.

Effective Date: 20th December 2023

Our Ref: 01.01.01.01-5815U
UKOP Doc Ref:1317386



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 15 September 2023 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.

Our Ref: 01.01.01.01-5815U
UKOP Doc Ref:1317386



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:

The Department has no further comments

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

opred@energysecurity.go.uk

or

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

Tel [REDACTED]



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

This post amendment screening direction (ref: DR/2418/1) relates to the drilling of the lower sections of the well.

DR/2418/0 - relates to the drilling of the upper section of the well.

Having regard, in the 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/2418/1 - This variation relates to drilling of the lower sections of the 9/11a- A35 AHPB Production well from the Mariner A Production Drilling Quarters (PDQ) Platform and includes the following:

- The drilling of the lower sections of the Mariner AHPB production well (9/11a A35) from the existing Mariner A Production Drilling Quarters (PDQ) Platform;
- Re-enter well and commence drilling of the 24" section with sea water and Water Based Mud (WBM)



- Drilling of the 17 1/2" and 12 1/4" section with Low Toxicity Oil Based Mud (LTOBM);
- Drilling of the 8 1/2" section with WBM
- Cement casings
- Install standalone screens and open hole packers in the reservoir section;
- Install a 13 3/8" plug;
- Install Xmas Tree
- Run upper completion.

Summary of the Project

DR/2418/0 relates to the drilling of the upper sections of the well:

- Drilling of 34" section with seawater and Water Based Mud (WBM).
- Run and cement 28" conductor.
- Suspend well and install debris cap.

Description of the Project

The drilling of the wells at the Mariner project area was assessed in the Environmental Statement D/4145/2012 and approved on 31st January 2013. Drilling operations at the Mariner field have been ongoing since 2016. Drilling began with seven Mariner wells (AMPC, AMPE, AMPD, AMPR, AMPN, AMPK and AMPF), which were batch drilled through the well template jacket by the Noble Lloyd Noble (NLN), prior to the arrival and installation of the Mariner A PDQ. The Mariner A PDQ was completed in July 2017, and first oil from the Mariner field flowed in August 2019.

Project DR/2418/0 consisted of drilling of the top-hole riserless section (34" diameter) of the well with seawater sweeps; and Water Based Mud (WBM). The 34" section length is 109 m and a 28" conductor run and cemented in place. The mud and cuttings were discharged directly on to the seabed. The well was suspended.

Project DR/2418/1 consists of re-entering the well and the drilling of the lower sections to target depth with WBM used on the 24" and 8 1/2" sections, the WBM and relating cuttings will be returned to the platform and re-used and recycled if possible. WBM cuttings may have to be discharged directly overboard to the marine environment should re-use not be possible. Therefore, the full discharge of all WBM cuttings has been assessed. The 17 1/2" and 12 1/4" sections will be drilled using LTOBM with all mud and cuttings returned to the platform and treated using a Thermo-Mechanical Cuttings Cleaner prior to discharge.



The current operation is expected to last 77 days.

The cumulative impacts from drilling discharges, atmospheric releases and oil and chemical releases have been assessed for the current project.

It has been concluded that there will be no cumulative impacts expected to occur with this change to the project due to the selection of water-based muds and low toxicity oil-based muds, the proposed mitigation and the short duration of the project.

It is not considered to be likely that the change to the project will be affected by natural disasters and 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.

Other than the matters considered further below, there is not likely to be any significant impact from the change to the project on population and human health.

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 change to the project has been considered as follows:-

The proposed drilling project is located in the Mariner field in the Northern North Sea, in UKCS Block 9/11, approximately 134 km southeast of the Shetland Isles coastline, and 45 km west of the UK/Norway Median Line, in a depth of 110 metres (m). The seabed in the area of the Mariner A (PDQ) is described as relatively flat.

Sediments in the area are predominantly sand and muddy sand, although the deeper areas within the Fladen Ground consist of mud or sandy mud. Site specific surveys identified the seabed sediments to comprise a veneer, <0.2 m in thickness of 'clayey sand' with occasional shell fragments, but overall dominated by sand sediments with isolated boulders. The annual mean significant wave height ranges from 2.41 to 2.7m.

Benthic surveys found that the area was dominated by species which prefer fine sands such as polychaetes, dense populations of sea urchin Echinoidea/ Spatangoida. and Gracilechinus acutus, star fish Asterias rubens, Hippasteria phrygiana and Astropecten irregularis and hermit crabs Paguridae. Faunal burrows, tubes and tracks were visible on the sediment surface; however, these were small, and no burrowing megafauna were observed. Sessile fauna observed included anemones Actiniaria, common whelk Buccinum undatum and turf forming genera such as Hydrozoans and Bryozoans. There was evidence of ocean quahog Arctica islandica (OSPAR threatened and/or declining species and Scottish Priority Marine Feature (PMF)) in the vicinity of the Mariner field and additionally, one sea pen, Virgularia mirabilis was observed along with faunal burrows. This was not at a density sufficient to constitute the OSPAR habitat 'sea pens and burrowing megafauna



communities' from the survey samples, however it may be present. Survey results indicated the presence of *Funiculina quadrangularis* which may indicate the presence of the PMF 'burrowed mud'.

No Annex I habitats have been recorded within the area. There are no protected sites within 40km of the Mariner field. The project is within the Scottish National Marine Plan (NMP) area.

Five species of cetaceans have been spotted in the waters around the Mariner field: Atlantic white-sided dolphin, harbour porpoise, killer whale, minke whale, and white-beaked dolphin. Grey and harbour seals may be encountered in the area; however, are not expected to be found in significant densities.

Seabird vulnerability in the vicinity of the Mariner field is medium in May and low throughout the year, with no data being available for April and October - December.

The proposed operations are located in International council for the exploration of the Sea (ICES) rectangle 48F1, in an area of fish spawning and/or nursery activity for several species: anglerfish, blue whiting, cod, European hake, haddock, herring, ling, mackerel, Norway lobster, Norway pout, saithe, sandeel and whiting. With high intensity nursing for blue whiting and high concentration of spawning of Norway Pout. However, the probability juvenile fish species occurring is low for all species.

The project area is primarily used for demersal fishing and the fishing effort in the area is rated low.

There are several oil and gas fields nearby. The nearest marine cable is connected to the Mariner PDQ with another located approximately 1.5 km away. There are no nearby Ministry of Defence practice areas. There are no operational renewable energy sites, nor any under construction in the vicinity. Shipping density in the area is very low. There are no protected wrecks or sites, or objects of archaeological importance identified in the area. There are no shellfish water pr protected areas or active shellfish sites located within 40 km of the Mariner field.

Given the location of the project, it is not likely that the areas identified at paragraphs 2(c)(i), (iii), (iv), (vi), (vii) of Schedule 5 to the Regulations will be affected by the change to 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 change to the project on the environment have been considered. Potential effects on the environment from the activities associated with the project were assessed, including impacts arising from seabed disturbance, planned discharges, accidental spills, cumulative and transboundary impacts.

Other than the matters considered further below, there is not likely to be any significant impact of the change to the project on population and human health.



The well is to be drilled from the Mariner A PDQ Platform and the additional atmospheric emissions, as a result of the drilling of the lower sections of the well are not considered significant. The impact in terms of the physical presence of the operations on other users of the sea is considered insignificant. There is an existing 500 m radius safety zone around the Mariner A PDQ and all works will be undertaken within the existing safety zone, excluding unauthorised access of vessels and prohibiting access to fishing vessels. The impacts of underwater noise from the operation is not considered significant as there is no expected increase in noise.

During drilling of the lower sections as part of this project (DR/2418/1), water-based mud (WBM) will be used on the 24" and 8 1/2" sections; and Low Toxicity Oil based MUD (LTOBM) for the 17 1/2" and 12 1/4" sections. WBM and cuttings will be re-used and recycled and where this is not possible, discharged over the platform side. The discharge will result in a temporary plume containing drill cuttings with a thin coating of associated WBM. For the sections drilled with LTOBM, the cuttings will be returned to the platform and treated via a Thermo-Mechanical Cuttings Cleaner and discharged over the platform side.

During the drilling of the top-hole section (DR/2418/0), WBM cuttings were discharged to the seabed and predicted to deposit around the wellbore, declining rapidly away from the well. Most of the cementing material remaining downhole, with discharge to the environment occurring when the conductor was cemented back to the seabed. The bottom hole sections will be cemented from the platform, discharging to the environment when the cement unit is cleaned at the end of the cementing operation. However, the impacts are minor and not considered significant.

Seabed will be impacted when cementing the conductor back to the seabed, however, this is minor and therefore the impact is considered not to be significant.

The water depth and a residual current speed in the vicinity of the Mariner area means that the impact on the seabed and water column is expected to be localised and short lived.

Contaminated drill cuttings from the project will be treated via a Soiltech unit prior to discharge and therefore not considered to cause significant impact on water quality. A chemical risk assessment for the discharge of WBM, LTOBM, and completion fluids has been carried out and is not considered to present a significant impact on the environment.

There is evidence of ocean quahog in the vicinity of the Mariner field, however, this species is not expected to be significantly impacted at a population level by the proposed operations. Additionally, one sea pen was observed, however at an insufficient abundance to constitute the OSPAR habitat 'Sea pens and burrowing megafauna communities.' No Annex I habitats have been recorded within the area. Therefore, there are not likely to be any significant effects.

Although Norway lobster and sandeels are benthic spawners, only sandeels are likely



to be present within the vicinity of the operations. Although individual sandeels maybe impacted by smothering from the discharge of WBM & LTOBM drill cuttings sandeels are unlikely to be impacted at a population level. No sandeels or evidence of sandeel spawning were observed during the survey at the Mariner Field.

Potential transboundary effects, in the context of this well, are accidental events leading to a loss of well control. The nearest boundary (UK/Norway Median Line) is located approximately 45 km northwest of the operations. It is considered unlikely that any planned operational discharge (chemicals) will be detectable at this distance from the well location.

The well to be drilled is a production well and there is potential for a Major Environmental Incident (MEI) resulting from an uncontrolled well blow-out. However, the risk of an oil spill event because of a well blow out from the drilling of the lower sections of the well is minimal, and the developer has suitable mitigation in place to prevent such an occurrence.

An Oil Pollution Emergency Plan (OPEP) is in place covering all operations from the Mariner A PDQ.

Decision

Taking the above considerations into account, the Secretary of State has concluded that the change to 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