

Our Ref: 01.01.01.01-5335U
UKOP Doc Ref:1292787



Offshore Petroleum Regulator
for Environment & Decommissioning

BP EXPLORATION OPERATING COMPANY LIMITED
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Registered No.: 00305943

Date: 29th August 2023

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**

**LOYAL FIELD [Part of SCHIEHALLION], Glen Lyon FPSO, CAN-DUCTOR
INSTALLATION PRIOR TO DRILLING PLANNED WELL 204/20a- PX104.**

I refer to your amended application dated 18th August 2023, reference DR/2310/2 (Version 2).

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

[REDACTED]



**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**

**LOYAL FIELD [Part of SCHIEHALLION], Glen Lyon FPSO, CAN-DUCTOR
INSTALLATION PRIOR TO DRILLING PLANNED WELL 204/20a- PX104.**

DR/2310/2 (Version 2)

Whereas BP EXPLORATION OPERATING COMPANY LIMITED has made an application dated 18th 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 application, WONS/14452, WONS/15166/0/IDA/1 and WONS/15166/0/C/1

Effective Date: 29th August 2023



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 13 October 2022 until 31 March 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:

The Department has no further 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
Aberdeen
AB10 1BJ

Tel [REDACTED]
Fax



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

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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:

The information provided by the developer.

The matters listed in Schedule 5 of The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Regulations 2020) (the Regulations).

The results of any preliminary verifications or assessments of the effects on the environment of the project; and

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 changes to the project

DR/2310/0: The initial application was for the installation, by suction piling into the seabed, of the CAN-Ductor system, Low Pressure Wellhead housing, Conductor extension and Deflector Base at the PX104 well location, prior to drilling.

DR/2310/1: This application extended the end date of the CAN-ductor installation.



DR2310/2: This application covers the drilling and completion of the PX 104 well, the summary assessment below has been amended to consider the range of new impacts generated by the drilling operation. The consent associated with the project is **WONS/15166/0/IDA/1** and **WONS/15166/0/C/1**

Summary of the project

The project is a drilling operation, including the following phases

From the mudline drilling a 26 inch section to a length of 218.55 m with seawater sweeps and water based mud (WBM). 20" casing will be cemented in place

Drilling a 17 inch section to a depth of approximately 1,909 m Measured Depth Below Rotary Table (MDBRT) with a KCI polymer WBM system. 13 " inch casing cemented in place.

Drilling a 12 inch section to a target depth of 4,185 m MDBRT using Low Toxicity Oil-Based Mud (LTOBM).

Drilling 8 inch section using Oil Based Mud (OBM) to reach the deep case measured Depth (MD) of approximately 5,461 m within the Loyal reservoir

The drilling application includes the contingency of side track drill cuttings and lengths.

Installation of the well head

Clean up of the well bore

Completion: The reservoir will be completed with a sand screen, the well will then be suspended with the downhole safety valve (DHSV) and level 4 valves closed.

The Xmas tree will be installed from a vessel at a later date

Disconnection of the riser

Description of the project

The previous screening direction (DR/2310/1) assessed the installation of the can-ductor in preparation for drilling at a later date. The screening direction (DR/2310/2) refers to the drilling of the PX104 planned producer well from the Ocean great white semi-submersible at the Loyal drill centre. The Ocean Great White will be held in position by 8 anchors (6.4(W)x 7.1m (L)) which will have between 1500m and 1750m of chain laying on the seabed.

The well will be drilled with a combination of WBM, OBM and LTOBM. The water WBM and cuttings from the 26" section will be discharged at the seabed due to this



section being drilled without a riser. The WBM and cuttings from the 17 " section will be returned to the rig by riser and discharged to sea. The LTOBM/OBM and cuttings from the 12 " and 8 " sections will be returned to rig via riser and returned to shore for disposal. Drilling is expected to take 31 days.

Once the well sections have been drilled, casings will be run, and cement will be used to provide well integrity. On completion of the drilling operations, wellbore clean-up operations will be undertaken to displace the drilling mud to calcium chloride brine. The reservoir will then be completed and the well suspended with a downhole safety valve (DHSV). The Xmas tree will be installed from a vessel at a later date and the permit will be varied to cover this.

It is not considered likely that the project will be affected by natural disasters. 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 of 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 project has been considered as follows:-

The proposed project is located in the Loyal field, West of Shetland (WoS), in UKCS Block 204/20, approximately 132 kilometres (km) west of the Scottish coastline, and 32.5 km to the east of the UK-Faroes median line, in a depth of approximately 468 metres (m). The area in the vicinity of Schiehallion and Loyal infrastructure is characterised under the European Nature Information System (EUNIS) protocol as Atlantic slope mixed sediment which falls under the deep-sea mixed substrata (A6.2) habitat. The superficial sediments in the wider region comprise of coarse sand with variable contributions of shells, gravels, cobbles and small boulders with a mean particle size of 0.9mm. This layer overlies soft brown clay deposits.

The mean significant wave height is expected to be up to 3m. Currents in the area are predominately north-easterly and mean current speeds are normally in the region of 0.1-0.2ms⁻¹ with a maximum of 2ms⁻¹ at the surface; and 0.05-0.1ms⁻¹ with a maximum speed of 0.3ms⁻¹ at the seabed.

The project is located within the Faroe Shetland Sponge Belt Nature Conservation Marine Protected Area (NCMPA). It is designated for Ocean Quahog aggregations, deep sea sponge aggregations and offshore sands and gravels. Ocean Quahog aggregations have not been observed in the vicinity of the project. Sponge aggregations are found in a very patchy distribution across a large portion of the MPA but tend to be concentrated in a belt along the continental slope between 400m and 600m and in stony areas with high levels of cobbles and boulders. The drilling operation being at 468m depth and on the continental slope is within the belt where



sponge aggregations are more frequent and consequently sponges at varying densities are found growing within the wider area of operations and in the impact area.

Benthic survey data has been collected in 2014, 2017, 2021 and 2023 and this has been used to determine the likely presence of sponge aggregations at the loyal drill centre, the wider field and along the anchor chain corridors.

Close to the loyal drill centre the habitat was classified as EUNIS A6.2 'Deep-sea mixed substrata'. Sponges were observed at many of the survey stations, occurring at 'rare' or 'occasional' levels. Sponge aggregations representative of the OSPAR description were not deemed to be present close to the loyal drill centre or within the drill cuttings accumulation. However data from ROV footage (2023) for the Great White Sumi sub rig found patches along corridor ML6 where the sponges grew on an area of cobbles and boulders and which extended for approximately 16m with smaller density locations found on ML5, ML5, ML7 and ML8 corridors however these only covered small areas along 1500m+ corridor.

In places the sandy gravel was dominated by other species such as echinoderms: sea urchins - *Echinus* spp., *Cidaris cidaris*, sea cucumbers - *Parastichopus tremulus*, cushion stars - *Valvatida* and starfish including *Henricia* sp., anemones - *Bolocera tuediae* and possible *Pachycerianthus multiplicatus* and hermit crabs were also recorded.

No areas of stony reef, fluid seep areas or other habitats of conservation significance were recorded in the survey area.

A broad range of cetacean species have been observed in the Faroe Shetland channel and in the vicinity of the drilling operations. The densities and frequency of these sightings tends to be low, for example bottlenose dolphins, harbour porpoise and white beaked dolphins are some of the most observed but these are deemed to occur in relatively low densities compared to other areas of the UKCS.

A large range of seabirds have been observed in the area, the species composition and numbers of which vary throughout the year. The Seabird vulnerability in block 204/20 is low in October and December and very high in November. Adjacent blocks show similar vulnerability, also ranging from low to very high. The nearest SPA is the Seas off Foula SPA, which is 43.4 km to the east of the project.

The proposed operations will coincide with fish spawning and/or nursery activity for a number of species such as Atlantic mackerel, blue whiting, sandeels and Norway Pout.

There are several human activities ongoing in the region. The primary activity being oil and gas exploration and production with a number of surface and sub-surface installations present in the local vicinity. The nearest marine cable is 10.46 km away. No aggregate dredging and disposal sites, sites of marine archaeological interests, planned offshore renewable energy developments or recreational sailing routes have



been identified within 40km of the operation. Shipping density in the area is low. The project is in the National Marine Plan Area for Scotland.

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 on the environment from the activities associated with the project were assessed, including impacts arising from atmospheric emissions, seabed disturbance, physical presence, planned discharges and accidental spills. Other than the matters considered further below, there is not likely to be any significant impact of the project on population and human health.

The well will be drilled from the Ocean Great White semi-submersible, which will have a 500m safety exclusion zone in place excluding unauthorised access of vessels and prohibiting access to fishing vessels. An ERRV will be on site and in addition to providing emergency support to the Ocean Great White, it will act as a guard vessel advising other users of the presence of the mooring anchors and lines which will extend beyond the 500 m exclusion zone. All appropriate notifications to mariners will be made prior to the well drilling activities commencing. Given that the PX-104 well is located in an area considered to be of low importance to the UK fishing industry, is in an area which has very low shipping density, and the drilling campaign is of a relatively short duration, any impacts on other sea users is not considered to be significant.

Discharge of offshore chemicals associated with the drilling of the well, cementing and abandonment operations have been assessed and will be controlled by an associated chemical permit and thus are not likely to have a significant effect on the receiving environment. Offshore chemicals associated with LTOBM will be skipped and shipped to shore and thus will have no effect on the marine environment.

Fish, sea birds and marine mammals (which may be PMFs, Annex II species and EPSs) are not considered to be significantly impacted as there are few pressures which could directly or indirectly affect them. Specifically, there is no impulsive noise and operational noise levels will be below thresholds for significant disturbance and injury. The risk of an accidental release of hydrocarbons is very low as the developer has a number of control and mitigation measures in place.

There will be temporary and permanent disturbance to the seabed as a result of the project which equates to 148,253 m². Drill cuttings modelling was conducted for the well which predicted to produce a cuttings pile with a maximum thickness of 799 mm at the discharge location with thickness rapidly decreasing with increasing distance, such that it decreases to less than 1 mm within 1.11 km. Therefore, whilst there will likely be a decline in species and abundance due to the initial smothering effect, recovery and recolonisation is likely across the majority of the area. The impact of this



cuttings pile is not deemed to be significant or likely to hinder the MPA conservation objectives.

When examined the cumulative impact of all 4 wells and rig locations equates to a seabed impact of 0.5616km². This footprint equates to a seabed impact from these operations on the protected site 0.01% cumulatively. Of this 0.01%, video evidence shows that sponges are present in an even smaller proportion of this area.

The total impact of the project is not considered to hinder the conservation objectives of the Faroe Shetland Sponge Belt MPA due to the small scale presence of sponges and recovery is anticipated over time.

The emissions associated with the drilling of PX-104 operations and the installation of the CAN-ductors may result in short-term deterioration of local air quality within the vicinity of the well location, however, in the exposed conditions that prevail offshore, these emissions are expected to disperse rapidly such that emissions from the vessels are not considered to have a significant impact on any receptor. Greenhouse gas emissions will be emitted by the 4 vessels involved in the project namely the Ocean Great White, Normand Maximum, anchor handling vessel and emergency response and rescue vessels (ERRV). These will total 7,976.2 CO₂e emissions, whilst all greenhouse gas emissions will affect the climate, the contribution made by these emissions will be negligible, for example it represents 0.038% of the total atmospheric emissions associated with UK offshore activities in a year when other greenhouse gases are also included.

There are no expected transboundary effects from the project. The nearest boundary (Faroes median line) is located approximately 34.7km of the operations. Although not a planned activity, a worst-case major accident scenario resulting from a potential well blow-out was modelled and assessed. The probability of a large oil spill from the proposed operations is low. Therefore, it is considered that the control measures in place to prevent loss of well control will minimise the risk of an oil spill that could have a significant impact on the surrounding environment. The proposed operations carried out as planned are not likely to have a significant effect on the environment.

The project is in accordance with the National Marine Plan for Scotland's objectives and policies.

2. 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.

3. 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:

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Not applicable.