

Our Ref: 01.01.01.01-5516U
UKOP Doc Ref:1280137



Offshore Petroleum Regulator
for Environment & Decommissioning

TOTALENERGIES E&P UK LIMITED
18TH FLOOR
10 UPPER BANK STREET
CANARY WHARF
LONDON
E14 5BF

Registered No.: 00811900

Date: 15th June 2023

Department for Energy Security &
Net Zero

AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Tel [REDACTED]

Fax [REDACTED]

www.gov.uk/beis
bst@beis.gov.uk

Dear Sir / Madam

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

Benriach Exploration Well - Transocean Barents

I refer to your amended application dated 15th June 2023, reference DR/2353/3 (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 bst@beis.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**

Benriach Exploration Well - Transocean Barents

DR/2353/3 (Version 2)

Whereas TOTALENERGIES E&P UK LIMITED has made an application dated 15th June 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/13614/0/IDA/1 and WONS/15312/0/EWT/1 Version 1.

Effective Date: 15th June 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 15 March 2023 until 31 October 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: bst@beis.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: 01.01.01.01-5516U
UKOP Doc Ref:1280137



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 comments.

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

bst@beis.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 as follows:

1) Decision reasons

This document provides a summary of the assessments undertaken by OPRED to determine whether an Environmental Impact Assessment is required for this project. This document 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 developer 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:

Variation 3 Amendment

The post direction amendment outlined by application DR/2353/3 amends the project with the revised position on the suspension of the unsuccessful well after issues retrieving the well head were resolved. Initially it was thought the well head could not be recovered and a guard vessel would be necessary to mitigate the snagging hazard. However, the well head was retrieved on late attempt thus making a guard vessel unnecessary.

Variation 2 Amendment

The post direction amendment outlined by application DR/2353/2 amends the project with the inclusion of a reservoir perforation operation utilising of a small explosive charge 3700m deep in the well, which was omitted in error by the applicant from the previous application.



Variation 1 Amendment

The post direction amendment outlined by application DR/2353/1 amends the project by increasing the duration and tonnage of hydrocarbons sent to flare as part of the drill stem test. All other aspects of the project remain the same and the assessment of impacts beyond those of the drill stem test remain valid.

Summary of project

i.Pre-lay anchors.

ii.Drill an exploration well.

iii.The first two sections (26 x 36 x 42 then 26 inch hole) of the well will be drilled riserless before the blow-out preventor (BOP) will be run.

iv.The next two sections (17.5 and 12.25 inch) will be drilled with water-based mud (WBM) and the cuttings discharged overboard.

v.Reservoir section (8 inch) will be drilled with oil based mud (OBM), cuttings will be skipped and shipped.

vi.The 8 inch section may be drilled to Total Depth as a contingency 6" instead.

vii.A contingency for a mechanical sidetrack has been included.

viii.In the success case, a drill stem test will be performed and following this the well will be temporarily abandoned for future re-entry and completion as a development well. A fishing friendly wellhead protection structure will be placed over the wellhead and left in place.

ix.In the event that drilling is unsuccessful, the Benriach well will be fully plugged and abandoned in line with industry guidance.

Description of project

The original screening direction (ref DR/2353/0) relates to the Block 206/05c Benriach Exploration Well to be drilled from the Transocean Barents with operations expected to last 118 days in the case of a dry hole and 174 days in a success case.

In the event the well meets success criteria a Vertical Seismic Profile (VSP) survey will be undertake using 1000 cubic inch airgun array source (under the geological survey licence GS/1559/0). Following the VSP a drill stem test will be performed, the duration of this test and the tonnage of hydrocarbon to be flared may, under a worst



case scenario exceed the NSTAs thresholds of an extended well test (EWT) however the expected base case will not. The NSTA EWT application reference is WONS/15312/0/EWT/1 Version 1.

Following the drill stem test the well will be temporarily abandoned for future re-entry and completion as a development well. In a failure case the well will be permanently plugged and abandoned. The application includes a provision for a mechanical side track.

The first two sections will be drilled riserless before a BOP will be run allowing the return of cuttings to the surface. The next 2 sections will be drilled with WBM and this, along with cuttings, will be discharged to sea. The 8.5 inch (or contingent 6 inch) reservoir section will be drilled with OBM which will be skipped and shipped.

No cumulative impacts are expected to occur with any other existing or approved projects. The risk of a major environmental incident occurring as a result 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. It is not considered to be likely that the project will be affected by natural disasters.

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 Benriach exploration well is located in Block 206/05c approximately 59 km North West of Shetland and approximately 92 km from the UK/Faroe median line in a water depth of approximately 344 m. The Benriach well is located on the shelf break of the West of Shetland Continental Shelf and upper part of the Continental Slope (Eastern flank of the Faroe-Shetland Channel).

Environmental survey results indicated two broad types of surficial sediment present;

'Deep circalittoral coarse sediment' and 'Deep-sea mixed substrata'. A small area of bedrock was identified and was classified as the habitat 'Deep-sea rock and artificial hard substrate'. Areas of the seabed that were classified as 'Deep circalittoral coarse sediment', are categorised within the broad habitat of 'Offshore subtidal sands and gravels', a priority habitat within UK waters. However, across the Benriach survey area, this habitat is thought to be of low conservation significance as this sediment type is widely distributed and will be represented elsewhere in the Marine Protected Area (MPA) network.

One area (>2 square meters) has the potential to be considered an Annex I 'Stony



reef' habitat. The macrofaunal community within the Benriach survey area was highly diverse and dominated by annelids, such as the polychaetes. Although sponges (Demospongiae) were present in the survey area, the density was low. Therefore, the area does not qualify as the threatened and/or declining OSPAR habitat "Deep-sea sponge aggregations". The location is 5.8km NW of the Faroe Shetland sponge belt NCMFA, designated for Deep-sea sponge aggregations.

The Priority Marine Feature (PMF) low mobility species, the white cluster anemone (*Parazoanthus anguicomus*) was observed in the survey area (associated with boulders and cobbles along one survey transect). The PMF mobile species, blue ling (*Molva dypterygia*) and ling (*Molva molva*) were observed within the survey area. Fish spawning and nursery activity will occur in the area, which will coincide with the drilling operations. The proposed drilling period coincides with the spawning periods for Norway pout, whiting and herring. Cetaceans will be present in the area during operations, in particular, harbour porpoise, killer whale, long-finned pilot whale, white beaked dolphin and white-sided dolphin. Minke whale and Risso's dolphin may also be observed. Seals are not expected to be found in significant densities in the area throughout the year. The sensitivity of birds to surface oil pollution is low for the majority of the year for Block 206/05, with the exception of October where sensitivity is high. The project area is targeted by the fishing industry primarily for demersal species and whilst the fishing landings from the area are rated low the Vehicle Traffic Survey shows activity to be moderate to high. The Benriach well is in an area with low levels of oil and gas developments and infrastructure though there are several oil and gas fields nearby.

There are no licence conditions or military training areas within the Benriach well area on behalf of the Ministry of Defence. There are no scheduled monument war graves, Historic Marine Protected Areas or other wrecks located within the vicinity of the Benriach well. There are no telecommunications cables within the immediate area of the Benriach well. The closest active submarine telecommunications cable is the Faroese Telecom subsea power cable, located 5 km south of the well's location. There are no planned renewable energy developments nearby nor is there any aggregate extraction, dredging, or dumping activity.

The Vessel Traffic Survey identified that the development is in an area of low commercial traffic density with one low density shipping route within 10 nautical miles.

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 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. WBM and cuttings will be discharged to sea. With consideration of the low toxicity of the WBM and the quantity of cuttings discharged the environmental impact of drilling discharges at the Benriach well on the surrounding marine environment is likely to be negligible.

Physical smothering of the benthos in the immediate area is considered and re-colonisation is expected to be relatively rapid. Disturbance to the seabed from anchoring and deposition will not have any effects at population levels on seabed flora and fauna and impact is considered low. The cumulative impact of the discharge of the drilling cuttings and cement from the Benriach appraisal well operations is likely to affect the benthic community in the immediate area by burying some animals and impairing the feeding and respiratory system of others. The magnitude of any such impacts is unlikely to be significant given the localised and short-term nature of the increased suspended solids. Modelling suggests that the discharge at the sea surface is not expected to reach the Faroe-Shetland Sponge Belt.

Discharge of offshore chemicals associated with the drilling of the well, cementing and completion operations have been assessed and are unlikely to have a significant effect on the environment. The wellbore clean-up operations will result in the discharge of wastewater containing residual base oil from the OBM. This will be treated using the slops system. There will also be a minor discharge of treated oil from the Drill Stem Test. These discharges have been assessed and are unlikely to have a significant effect on the environment.

There is fish nursery activity in the vicinity of the well all year round and spawning activity for herring, Norway pout and whiting at certain times of the year coinciding with operations. However, the spawning and nursery areas are part of larger areas which are not expected to be significantly impacted by these operations as the impacts will be localised. Several species of marine mammal are expected to be present in the area during operations, with densities varying depending on the month. It is not expected that any of the activities associated with this project i.e. drilling, testing or seismic surveys will have a significant effect on these species.

There are no expected transboundary effects from the drilling operations at the Benriach. It is not considered likely that any planned operational discharge (chemicals) will be detectable at this distance (92km) from the well location. Although not a planned activity, a worst-case major accident scenario resulting from a potential well blow-out was modelled and assessed. Although the consequences of an oil spill can be severe, 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 minimise the risk of an oil spill which could have a significant impact and the proposed operations carried out as planned are not likely to have a significant effect on the environment.

The atmospheric emissions associated with the project result from power demand for the proposed operations. Drilling facilities are integrated on the MODU and use the



electricity generated by vessel's combustion plant. It is expected these emissions will be rapidly dispersed and are not likely to have a significant impact. The drill stem test could result in up to 533 tonnes of condensate and 2282.5 tonnes gas being sent to flare in a worst case scenario and 154.8 tonnes of condensate and 1,825.2 tonnes in the base case.

The annual carbon dioxide equivalent emissions from the drilling and completion activities of the Benriach well are estimated to be approximately 42,538 tonnes. This represents approx. 3.1% of the total TEPUK annual emissions during 2020. The CO₂e emissions from Benriach drilling will contribute approximately 0.2% of the CO₂ atmospheric emissions associated with UK offshore shipping and oil and gas activities.

Drilling operations will be conducted from the Tranoccean Barents MODU operating within a 500m exclusion zone and with the required inputs made to the Kingfisher database to ensure the presence of the rig is known. This rig will also be marked in accordance with the standard marking schedule to mitigate against collision hazards. It is considered that the drilling of the well is not likely to have a significant impact on other offshore oil and gas activities or other users of the sea. The project is in an area of sparse oil and gas development, and there are no expected cumulative impacts with other oil and gas activities. Cumulative impacts have thus been assessed as unlikely to have a significant effect on the environment.

DR/2353/3 version 2

As the residual well head snagging hazard anticipated did not eventually manifest itself there is no environmental impact of these changes.

DR/2353/2

The noise generated by the explosive charge is unlikely to be significant given the small size of the charge and its depth of use in the wellbore.

DR/2353/1

The larger emissions produced by the extended drill stem test and will not significantly increase the environmental impact of the project.

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

Our Ref: 01.01.01.01-5516U
UKOP Doc Ref:1280137



Offshore Petroleum Regulator
for Environment & Decommissioning

adverse effects on the environment