

Our Ref: 01.01.01.01-4514U
UKOP Doc Ref:1138280



Offshore Petroleum Regulator
for Environment & Decommissioning

CNOOC PETROLEUM EUROPE LIMITED
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Registered No.: 01051137

Date: 19th May 2021

Department for Business, Energy
& Industrial Strategy

AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Tel [REDACTED]

Fax

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**

**Glengorm Central 22/21c, Prospector 5 DRILLING APPRAISAL WELL
22/21c-CGlengorm Central 22/21c-C planned well**

A screening direction for the project detailed in your application, reference DR/2071/0 (Version 5), dated 20th April 2021 has been issued under regulation 6 of the above Regulations. The screening direction notice, and any relevant conditions and comments 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**

**Glengorm Central 22/21c, Prospector 5 DRILLING APPRAISAL WELL
22/21c-C Glengorm Central 22/21c-C planned well**

DR/2071/0 (Version 5)

Whereas CNOOC PETROLEUM EUROPE LIMITED has made an application dated 20th April 2021, 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 his agreement to the Oil and Gas Authority to the grant of consent for the project as detailed in the application.

Effective Date: 19th May 2021



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 19 May 2021 until 30 April 2022.

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 Extended well tests

- a) Production levels

The holder of the screening direction shall ensure that the production of hydrocarbons during the well test does not exceed the level(s) detailed in the application for the screening direction.

- b) Associated flaring and venting

The holder of the screening direction shall, ensure that any associated flaring of hydrocarbons during the well test does not exceed the level(s) detailed in the application for the screening direction and/or that any associated venting of gas during the well test does not exceed the level(s) detailed in the application for the screening direction.

4 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.

5 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.

6 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.

7 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.

8 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).

9 Screening direction variation

In the event that the holder of the screening direction proposes changes to any of the

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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.



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:

Out-of-hours emergency screening direction variations:

Telephone Met Office out-of-hours service (0330 135 0010) and ask to be connected to the Department's On-call Response Officer (Offshore Environmental Inspectorate).

Routine communications

bst@beis.gov.uk

or

Offshore Petroleum Regulator for Environment & Decommissioning
Department for Business, Energy & Industrial Strategy
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Tel [REDACTED]
Fax



SCHEDULE OF SCREENING DIRECTION DECISION REASONS

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. Information provided by the developer.
- b. Matters listed in Schedule 5 of The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Regulations 2020) (the Regulations).
- c. 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:

The Glengorm Central Appraisal Well 22/21c-C will be drilled from the Prospector 5 jack up rig, with operations expected to last 218 days. This is the 4th well in a series of appraisal wells drilled at Glengorm which is located in the Central North Sea. The jack up will be working within a well-developed area of the North Sea and cumulative impacts from drilling discharges, atmospheric release and oil and chemical releases have been assessed. It has been concluded that there will be no cumulative impacts expected to occur from this project due to the selection of low bioaccumulation water-based muds, the proposed mitigation and the short duration of the project.

The well will be drilled with a combination of Water Based Mud (WBM) and Oil Based Mud (OBM). The WBM will be discharged to the seabed, while the OBM and cuttings will be skipped and shipped onshore for disposal.

It is not considered to be likely that 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.

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:

Glengorm Central appraisal well is located approximately 73 km from the UK/Norwegian median line and 176 km from the nearest Scottish coastline. The project is in an area containing sand and slightly gravelly sand, with a significant mud content. Mean water depths of between 84.2m and 87.8m can be found and the wave height within the area ranges from 2.11 - 2.40m. Seabed photography and video footage indicate that sediments are characterised by the presence of a homogenous sediment, consisting of muddy sand with shell debris. Recent seabed surveys showed that the Glengorm area has a dominance of species from Annelida (43.6%), followed by Crustacea (22.7%) and Mollusca (19.9%). There was evidence of burrowing animals, including crabs, sea urchins, starfish, and worms. Depressions were observed in the survey, and further investigation showed that these were scour marks, rather than pockmarks (which can indicate the presence of the Annex I habitat submarine structures made by leaking gases). However, there was no evidence of that specific habitat.

Burrowed mud and offshore subtidal sands and gravels are known to occur in the area and are known as Priority Marine Features (PMF). Surveys have identified these features within the area. Seapens, which are OSPAR threatened and declining habitats species, were recorded throughout the surveys and the SCAFOR scale was used to determine the density level of burrows, with results showing that the average density of small and/or large burrows was occasional, rare or absent. As a result of the assessment, it was considered that the protected habitat did not occur across the survey area as the densities were too low.

Glengorm Central appraisal well is situated within the East of Gannet and Montrose Fields NCMPA. This NCMPA is designated due to the presence of offshore deep-sea muds (approx.100m deep) and also due to the presence of ocean quahog (and their sands and gravels as their supporting habitat). The Glengorm Central Well is located to the west of the NCMPA on the outer edge of the classified deep sea mud area, and in a water depth of 87m. There will be temporary physical loss of ocean quahog in the NCMPA as a result of the operations, however it is concluded that this impact on population levels is unlikely to be significant due to the small area of impact (<0.001% of the NCMPA area). The conservation objectives of the NCMPA are not likely to be significantly impacted by the proposed drilling operations.

The Glengorm area lies within a recognised area for peak spawning of cod, mackerel, Norway lobster and Norway Pout, along with spawning periods for lemon sole and sandeels. Of these species, it is Norway lobster and sandeels who are benthic spawners. However, surveys have shown no evidence of sandeels, and although there could be a presence of Norway lobster, these are not sensitive to smothering.

Three wrecks (two unknown, and the other known as Gannet D buoy) have been



identified within the northern part of Block 22/21. Additionally there are a further 2 wrecks on the south western edge of the block (known as Gannet A buoy and Compaganus steam trawler). Both are located within 6 km of the proposed well, however neither are thought to be at risk from the drilling operations. None of these wrecks are protected under the Protection of Military Remains. There are no windfarms within 40 km of the proposed operations and the closest marine cable is the North Sea Link Interconnector which is currently under construction, approximately 31 km to the south east. It is not anticipated that the operations at Glengorm will have a significant impact on either the wrecks or cables.

No other protected sites are located within 40km of the Glengorm Central Well area.

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.

There will be a 500 m radius safety zone around the Prospector 5 jack up rig, which excludes unauthorised access of vessels and prohibiting access to fishing vessels. No additional impacts are identified as part of the drilling of well 22/21c-C.

Cuttings from the WBM sections will be discharged at the seabed and into the water column. Cuttings modelling and assessment was therefore undertaken and the dispersion of the cuttings pile and the effect of seabed disturbance on spawning periods was assessed. It was concluded that the water column impact was short term and unlikely to have a significant effect on any water column species.

Drill cuttings is predicted to be deposited on the seabed close to the well. After 3 days the deposited material is predicted to reach its maximum thickness and area (0.74m and 400 m²). Within 2 km of the well, the thickness of deposited material is less than 1mm. The estimated cutting pile area of the well is 400 m², which is <0.1% of the total area of the NCMPA. It has been concluded that due to the low toxicity of the WBM and the small area of the impact and further dispersion, the conservation objectives of the site are not considered to be at risk from the drilling operations.

Seabed disturbance from the spud cans from the Prospector 5 Jack Up were assessed, resulting in a disturbance area of 810 m². Due to the small area of disturbance and the homogenous seabed habitat and sediment, it is expected that



the localised disturbed areas will recover quicker through re-colonisation from nearby undisturbed areas. The placement of the spud cans is therefore not expected to have a significant impact on the seabed.

Discharge of chemicals associated with WBM and cementing operations and the risk posed to the marine environment has been assessed as not having a likely significant effect as the chemicals are expected to dissolve, disperse, and dilute rapidly into the water column.

The nearest boundary (UK/Norwegian median) is located approximately 73 km from the proposed well location. The Glengorm central well is expected to produce condensate and gas, therefore the release of crude oil is highly unlikely. It is also not considered likely that any planned operational discharge (cuttings and chemicals) will be detectable at a distance of 73 km from the proposed well.

The Glengorm Central Well Temporary Operations Oil Pollution Emergency Plan (TOOPEP) was approved in 2021, which assess the worst-case assessment of an oil spill from the well operations. The TOOPEP contains proposed measures to prevent and respond to a worst-case hydrocarbon release from the Prospector 5 jack up.

A worst-case major accident scenario resulting from a potential well blow-out was modelled and assessed.

The Developer has a number of mitigation and control measures in place to reduce the risk of a major accident occurring and the probability of such an event occurring is very low.

A Vertical Seismic Profile survey will be conducted after the drilling has been undertaken, to determine the geological structure of the well and is subject to a separate Geological Survey Consent. Given the location and adequate mitigation, the VSP is not expected to have a significant impact on marine mammals or fish.

An Extended Well Test (EWT) is due to be undertaken for several reasons including an assessment of mercury and hydrogen sulphide concentrations, potential production and to understand faults within the reservoir. Atmospheric emissions resulting from the drilling of the well and the flaring of the gas and condensate have been assessed and are considered to have no significant impact on the environment.

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

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adverse effects on the environment:

There are no significant effects.