Our Ref: 01.01.01.01-4487U
UKOP Doc Ref:1125186

Offshore Petroleum Regulator
for Environment & Decommissioning

CNOOC PETROLEUM EUROPE LIMITED
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Registered No.: 01051137

Date: 26th February 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**
**GOLDEN EAGLE, Noble Sam Hartley DRILLING PRODUCER WELL 20/01a- CPE planned well**

A screening direction for the project detailed in your application, reference DR/2063/0 (Version 2), dated 19th February 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

Signature Not Verified
Digitally signed by Environmental Section
Date: 2021.02.26 11:37:38 GMT
Reason: On behalf of the Department for Business Energy and Industrial Strategy
Location: The Department for Business Energy and Industrial Strategy

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# 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

## GOLDEN EAGLE, Noble Sam Hartley DRILLING PRODUCER WELL 20/01a- CPE planned well

## DR/2063/0 (Version 2)

Whereas CNOOC PETROLEUM EUROPE LIMITED has made an application dated 19th February 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: 26th February 2021

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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 1 March 2021 until 30 September 2021.

### 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.

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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 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]
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# SCHEDULE OF SCREENING DIRECTION 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:

Development Well 20/01 (CPE) will be drilled from the Noble Sam Hartley (NSH) jack up rig which will be located over the Golden Eagle Platform, with operations expected to last 64 days. The Golden Eagle platform is situated in 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 drilling of the CPE well was assessed in the scope of the original Environmental Statement covering the Golden Eagle Area Development which was approved in 2010 and consisted of drilling up to 17 wells. The CPE well is the 4th well to be drilled at Golden Eagle by the NSH jack up rig within the last 12 months.

The well will be drilled with a combination of Water Based Mud (WBM) and Oil Based Mud (OBM). The OBM and cuttings will be, treated offshore with a Thermo-Mechanical Cuttings Cleaner (TCC), which separates out oil, water and solids. Oil is recovered and used again in drilling muds whilst recovered water is discharged to sea. The solids, which are in the form of a powder, are rehydrated to form a slurry, will also be discharged to sea. If the TCC unit is non-operational, drilling operations will cease and if the unit cannot be repaired, the OBM cuttings will be returned to shore for treatment and disposal.

It is not considered to be 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.

**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:

Golden Eagle Platform is located approximately 151km from the UK/Norwegian median line and 66km from the nearest Scottish coastline. The project is in an area characterised by fine silty to medium sand, with occasional areas of dense clay outcrops and a mean water depth of 106m. The wave height within the Golden Eagle field ranges from 1.81-2.1m. Surveys indicate that sediments in the area consist of deep circalittoral sand and mud. Seabed photography showed that visible fauna was generally low, but there was evidence of burrowing animals, including crabs, sea stars, anemone, and worms. Pockmarks were also recorded in the area, which can indicate the presence of the Annex I habitat submarine structures made by leaking gases. However, a further survey confirmed there was no evidence of the 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 but at low densities. It is expected that any disturbance to these areas will not be significant. Burrowing megafauna and sea pens, which are OSPAR threatened and declining habitats species, were recorded in surveys, however these were again recorded in low densities. The SCAFOR scale was not used to determine density level of burrows as the occurrence was low. Sea pens demonstrate high resistance and resilience to smothering and as the area likely to be impacted is small and localised, it is concluded that it is unlikely that operations will significantly impact the potential habitat of sea pens and burrowed mud.

Four wrecks have been identified within the vicinity of the Golden Eagle platform, none of which are designated under the Protection of Military Remains. The closest windfarm is Hywind (Scotland) Limited Buchan Deep demonstration windfarm, which is approximately 58km south west, with a potential wind farm development (NE7) located 2.5km to the north east of the platform. The closest marine cable is approximately 44km to the south east with a new cable due for construction between 2021-2024, 22km to the south of the platform. It is not anticipated that the operations at Golden Eagle platform will have a significant impact on either the wrecks, windfarms or cables.

There are no protected sites within 40km from the Golden Eagle 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

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 is a 500 m radius safety zone around the Golden Eagle Platform excluding unauthorised access of vessels and prohibiting access to fishing vessels. No additional impacts are identified as part of the drilling of well CPE.

Cuttings from the WBM sections will be discharged at the seabed or into the water column. Cuttings modelling and assessment was undertaken for CNOOC's Buzzard Phase II (BPII) campaign which was for the drilling of 6 wells at Buzzard Platform (17 km from Golden Eagle) and agreed to be representative of the likely impacts of drilling at Golden Eagle.

The dispersion of the cuttings pile and the effect of seabed disturbance on spawning periods was assessed. Modelling concluded that cuttings piles are likely to quickly disperse due to the currents in the area. The area of seabed at risk to oxygen depletion, median grain size change and burial was estimated to be 0.0668 km2. Cuttings deposition is likely to have minor impacts on species present, however it is concluded that the activity has a localised impact on habitat and benthic species, and this is not considered to be impacted on a large scale. The impacts from seabed disturbance have been assessed as not likely to have a significant effect.

Seabed disturbance from the spud cans and associated anchors from the NSH Jack Up have already been assessed as part of the screening direction for the 1st well to be drilled in this current campaign (2020/2021) (DRA/815). The placement of the spud cans is not expected to have a significant impact on the seabed.

Discharge of chemicals associated with WBM 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.

There are no expected transboundary effects from the operations. The nearest boundary (UK/Norwegian median) is located approximately 151 km from the proposed well location. It is not considered likely that any planned operational discharge (cuttings and chemicals) will be detectable at this distance from the Golden Eagle platform.

The current Golden Eagle Oil Pollution Emergency Plan (OPEP) was approved in 2020, which assess the worst-case assessment of an oil spill from the Golden Eagle platform. The OPEP contains proposed measures to prevent and respond to a worst-case hydrocarbon release and the Communications Interface Pan (CIP), (a bridging document to the Golden Eagle Platform and the NSH jack up) addresses the offshore response to a hydrocarbon release from the NSH jack up.

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

1. The maximum hydrocarbon blowout rate of oil from Golden Eagle is 9,205 m3/day (approximately 17,103 tonnes/day) for a maximum of 120 days.

2. The modelling indicates that crude oil has the potential to impact upon the UK coastline. The most likely beaching location is Grampian, with a maximum 90-100% probability of crude beaching and a minimum arrival time of one day between the months of December and February.

3. The modelling indicates that crude oil would cross the UK/Norway boundary line with a minimum arrival time of approximately three days in December to February and four days during all other months with a 90-100% probability for all seasons. Beaching may occur along the Norwegian shoreline with a minimum arrival time of 21 days and a maximum probability of 80-90% during March to May.

4. Crude oil would have the potential to cross the UK/Denmark median line with a minimum arrival time of 15 days in September to November with a 40-50% probability, however, there is a 90-100% probability for oiling across the UK/Denmark median line December to May in with a minimum arrival time of 16-17 days. There is a 50-60% probability of crude oil beaching on the Danish coastline with a minimum arrival time of 26 days between December and February while there is a 30-40% probability of beaching with a minimum arrival time of 24 days in March to May.

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 (including the worst-case scenario identified above) is very low.

No additional power generation will be required on Golden Eagle as a result of the proposed well. Atmospheric emissions resulting from the drilling of the well 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.