

Our Ref: 01.01.01.01-4685U
UKOP Doc Ref:1161437



Offshore Petroleum Regulator
for Environment & Decommissioning

PETROFAC FACILITIES MANAGEMENT LIMITED
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Registered No.: SC075047

Date: 23rd September 2021

Department for Business, Energy
& Industrial Strategy

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Aberdeen
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Dear Sir / Madam

**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING
AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS
2020
BLYTHE, Noble Hans Deul, DRILLING PRODUCER WELL 48/23a-A48/23a-H1
planned well**

I refer to your amended application dated 23rd September 2021, reference DR/2129/1 (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 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**

**BLYTHE, Noble Hans Deul, DRILLING PRODUCER WELL 48/23a-A48/23a-H1
planned well**

DR/2129/1 (Version 3)

Whereas PETROFAC FACILITIES MANAGEMENT LIMITED has made an application dated 23rd September 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: 23rd September 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 30 June 2021 until 31 October 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 change

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 screening direction application for a change to the project. The 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:

No comment.

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

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 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:

1. 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

This post screening direction amendment (ref DR/2129/1) relates to a change to the project for which a screening direction was previously issued.

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 the project:

To increase the duration of gas flared associated with the well bore clean up operations, and to potentially undertake a well test to re-determine the flow rates of the well. The total gas to be flared has increased by 384,719 cubic meters (m³) to 1,876,770 m³ over 48 hours.

Description of project:

This project (DR/2129/1) consists of changes to the duration of the well bore clean up and well testing only. Due to downhole losses of Low Toxicity Oil Based Mud (LTOBM) to the reservoir when drilling the well, there is now a requirement to flare more gas as part of well clean-up than originally planned. In addition, a well test



needs to be undertaken to determine potential damage to the reservoir sands and therefore to re-determine the flow rates of the well. This will increase the total quantity of gas to be flared to a total of 1,876, 770 m of gas over a period of 48 hours.

The original screening direction (DR/2129/0) relates to the drilling of the horizontal gas/condensate production well 48/23a-H1 using the Mobile Offshore Drilling Unit (MODU) Noble Hans Duel Jack Up. The project consisted of the drilling of the production well consisting of five sections. The 36" and 17" sections drilled using Water Based Mud (WBM) with cuttings discharged at the drill site. The other sections drilled with LTOBM with cuttings skipped and shipped to shore for treatment and disposal.

On completion of the drilling operations, it was always planned to clean up the well prior to entering into a production phase. During clean-up of the well, any produced hydrocarbons will be flared from the MODU. The flaring is required as clean-up of the well will include debris and particulates that could not be processed via the Blythe production system. Worst case estimates for duration of flaring is 48 hours, however the expectation is that the duration will be significantly less.

This screening direction (ref: DR/2129/1) relates to a change to duration of the well bore clean up and well testing operations. The MODU, the Noble Hans Duel will continue to be used for these activities. There is no change to the timing of the operations.

No cumulative impacts are expected to occur with any other existing or approved projects.

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

The risk of a major accident hazard, for example, a well blow out, 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 project area is in Block 48/23 in the southern North Sea (SNS) approximately 37 kilometres (km) north east of the UK and 107 km west of the UK/Netherlands median line. The well is in a water depth of 25 metres (m).

BL_H1 is within 40km of the following protected areas:



Greater Wash Special Protected Area (SPA);

Cromer Shoal Chalk Beds Marine Conservation Zone (MCZ);

Inner Dowsing, Race Bank and North Ridge Special Area of Conservation (SAC);

Southern North Sea SAC;

Haisborough, Hammond and Winterton SAC;

North Norfolk Sandbanks and Saturn Reef (NNSSR) SAC; and

The Wash and North Norfolk Coast SAC.

The project is in an area characterised by deep circalittoral sand and symmetrical megaripples (up to 1m in height and 9m wavelengths). Recent surveys indicate that sediments in the area consist predominantly of gravelly sand with shell fragments. The quantitative assessment of seabed imagery obtained during the survey indicated that the species abundance and diversity were typical of the SNS. Benthic communities within sandy mobile sediments of the SNS are typically low in both numbers of taxa and individuals and dominated by species adapted to a degree of physical disturbance associated with tidal movement and wave action.

Broken *Sabellaria spinulosa* tubes were collected in a few grab samples within the survey area but no intact *S. spinulosa* tubes were evident from the video analysis. Inspection of side scan sonar data and ground-truthing with visual camera systems indicated that there are no areas of *S. spinulosa* that could be classified as 'reef' within the surveyed area. Species diversity appeared to increase in areas of coarser sediments (favouring epilithic attachment). Epifauna was generally sparse throughout the survey area. No sensitive epifaunal species were identified near BL_H1.

Fish spawning and nursery activity will occur in the area, which may coincide with the drilling operations. Atlantic white-beaked dolphin, harbour porpoise and Atlantic white-sided dolphin have been recorded in the vicinity. Densities of these species range from high to low throughout the year. Common seal and the grey seal are resident in the SNS. The Wash and North Norfolk Coast SAC, provides ideal breeding site and haul out conditions, located 30.6km southwest of the operation area. Common seals usually feed within 50km of their haul-out site and therefore may be observed within the operational area. Grey seals usually feed within 100km of their haul-out site and therefore may be observed within the operational area, however it is estimated that they only spend 12% of their time at distances greater than 50 km from the coast. Seabird vulnerability is very high in October to December, high in February to April and August and September, moderate in January and low in May to June.

The fishing effort in the area (ICES 35F1) is rated low importance for demersal and



pelagic boats and medium for shellfish boats. Distribution of shellfish are concentrated towards the inshore area within ICES 35F1.

The project will coincide with the peak spawning of mackerel and the spawning of herring but sandeels spawning is not expected during the time when the project is taking place. A herring spawning assessment was undertaken to assess the suitability of the ground at Blythe for herring spawning. The assessment identified a number of locations in the immediate vicinity of the operation area which were considered to represent "unsuitable" herring spawning habitats due to the higher percentage of muds and lower percentages of gravel found in the grab samples analysed. More suitable herring spawning habitat was identified to the southwest of the operation area, the closest site was 6.5km from BL_H1.

Shipping density in the area is very high. A significant portion of vessel activity appear to be attributed to appearing to be a result of the Dudgeon Offshore windfarm which routes vessel traffic around its southwestern edge. Fishing activity has also been identified in the areas surrounding Blythe, but the major traffic is associated with general shipping and passing vessels. No aggregate dredging, military practice sites, sites of marine archaeological interests or aquaculture sites have been identified within 40km of the operation.

Given the location of the project, it is not likely that the areas identified at paragraphs 2(c)(i), (iii), (iv), (vi), (vii) or (viii) 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 remains a temporary 500 m safety exclusion zone around the Noble Hans Duel rig during operations, excluding unauthorised access of vessels and prohibiting access to fishing vessels. The presence of the Noble Hans Duel rig is not considered to have a significant impact on other users of the sea. There are no additional impacts identified from the increase in duration of flaring and no additional impacts to seabed disturbance.

Power generation by the MODU and flaring during well clean-up operations and well testing will result in the emission of gases to the atmosphere, however it is expected the emissions will be rapidly dispersed and are not likely to have a significant impact on local air quality. Although cumulatively the project will contribute to GHG emissions, the contribution is very minor and all efforts will be implemented to reduce the impact further (in terms of duration of flaring and subsequent volume of



emissions). The non-routine emissions are in this instance unavoidable, but temporary in nature. The effect from emissions on climate is deemed insignificant.

The cetacean density for Atlantic white-beaked dolphin, Atlantic white-sided dolphin and harbour porpoise (Annex II species), during the operational period (June to October), are low to moderate for Atlantic white-beaked dolphin and harbour porpoise, high for harbour porpoise in July and low for Atlantic white sided dolphin in August. The proposed operations are unlikely to have a significant impact on these species given the low level noise propagation from the project. Due to the distance of the drill site from shore harbour seals and grey seals (Annex II species) , are not likely to be encountered regularly at the drill site. Any noise generated during operations is expected to be within local background levels. Effects from noise on seals are not significant.

Broken *S. spinulosa* tubes were collected in a few grab samples within the survey area but no intact *S. spinulosa* tubes were evident from the video analysis. Inspection of side scan sonar data and ground-truthing with visual camera systems indicated that there are no areas of *S. spinulosa* that could be classified as 'reef' within the surveyed area. No evidence of any potential Annex I Habitats have been found in the vicinity.

The cuttings from the well sections drilled using LTOBM will be skipped and shipped to shore for treatment and disposal and therefore not discharged to the marine environment. The wellbore clean-up operations will result in the discharge of wastewater containing residual base oil from the LTOBM. Only the cuttings associated with the sections drilled using WBM will be discharged. This discharge of cuttings and associated drilling chemicals has been assessed and is not considered to have a likely significant effect on the environment. No additional rig stabilisation material is required for siting the MODU. The impacts on benthic fauna from the physical siting of the rig and from the discharge of cuttings will be localised and not considered to have a significant effect. There are no changes to the chemical quantities required.

There are no expected transboundary effects from the change to operations due to the localised and temporary nature of the disturbance and the 107 km distance from the UK/Norway Median Line. It is not considered likely that any planned operational discharge will be detectable at this distance from the well location.

Although not a planned activity, a worst-case major accident scenario resulting from a potential well blow-out (gas condensate) was modelled and assessed. The developer has mitigation and control measures in place to prevent loss of well control which could have a significant impact. The proposed operations carried out as planned are not likely to have a significant effect on the environment and the probability of a large gas condensate well blow out from the proposed operations is low.

The Dudgeon offshore wind farm is operational and is approximately 0.77km from the drill site and the project is not considered to have any significant in-combination



impacts. There are no planned construction operations, no aggregate dredging, military practice sites, sites of marine archaeological interests or aquaculture sites within the vicinity of the proposed operations. The drilling operations are in accordance with the East Offshore Marine Plan's objectives and policies. It is considered that the drilling of the BL_H1 development well is not likely to have a significant impact on other offshore activities or other users of the sea and no cumulative impacts are expected to occur. It is considered that the change to the duration of the well bore clean up and well test of the Blythe Development Well is not likely to have a significant impact on other offshore activities or other users of the sea and no cumulative impacts are expected to occur.

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:

Not applicable.