

Our Ref: 01.01.01.01-4874U
UKOP Doc Ref:1182971



Offshore Petroleum Regulator
for Environment & Decommissioning

PETROFAC FACILITIES MANAGEMENT LIMITED
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Registered No.: SC075047

Date: 24th December 2021

Department for Business, Energy
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Aberdeen
AB10 1BJ

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Dear Sir / Madam

**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING
AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS
2020
DRILLING of SOUTHWARK DEVELOPMENT WELL 49/21c-A49/21c-W1**

I refer to your amended application dated 23rd December 2021, reference DR/2183/1 (Version 4).

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**

DRILLING of SOUTHWARK DEVELOPMENT WELL 49/21c-A49/21c-W1

DR/2183/1 (Version 4)

Whereas PETROFAC FACILITIES MANAGEMENT LIMITED has made an application dated 23rd December 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: 24th December 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 1 October 2021 until 29 September 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.

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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]



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.
2. The matters listed in Schedule 5 of The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Regulations 2020) (the Regulations).
3. The results of any preliminary verifications or assessments of the effects on the environment of the project; and
4. 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/2183/1) 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 :

- Rig stabilisation deposits associated with drilling the well.

Description of project :

The previous screening direction (DR/2183/0) related to the drilling of the 49/21c-A49/21c-W1- which consists of the following five sections; 36", 17.5 ", 12.25", 8.5 " and 6" sections drilled using Water Based Mud (WBM), the completion of the well, well clean-up, and an extended well test.

The project consists of the drilling of the horizontal gas/condensate production well 49/21c-A49/21c-W1 using the Mobile Offshore Drilling Unit (MODU) Noble Hans Duel



Jack Up over the already existing Southwark Platform. Operations are expected to last a total of 119 days and are expected to commence 29 September 2021 and completed by 29 September 2022.

The well will consist of five sections (36", 17", 12", 8" and 6" sections drilled using WBM) with cuttings discharged at the drill site. If cuttings returned from the 6" reservoir (6") section are condensate wet, returned fluids and cuttings will be skipped and shipped to shore. On completion of the drilling operations the well will be cleaned up and conditioned prior to being shut-in pending commissioning of the Southwark gas export system. During clean-up of the well, any produced hydrocarbons will be flared from the MODU. Flaring is required as clean-up of the well and will include debris and particulates that could not be processed via the Southwark production system. Flaring is also required to undertake an Extended Well Test (EWT) to determine the productivity index of the well. Worst case estimates for the duration and volume of flaring have been assessed.

This screening direction (ref: DR/2183/1) relates to the requirement for rig stabilisation deposits associated with the drilling. To ensure the safe siting of the rig, up to a total of 200 rock bags will be placed beneath the spud cans around the existing footprint areas to fill seabed depressions causing issues with rig stability. The rock bags are stone filled nets each up to 3.6m in diameter and containing up to 8 tonnes of rock fill. The bags, including contents, are designed to be able to be removed from the seabed at the end of operations. If further protection against potential scour is required fringed mats will be laid around the legs of the rig. These mats are individually either 5m x 2m (if laid by ROV) or 5m x 5m (if laid by divers) and will cover up to 300m² of seabed around each leg of the Noble Hans Deul. As a result, the maximum total footprint of the rig will be 1,662m². All seabed deposits (rock bags and mats) will be removed when drilling operations at Southwark platform are completed.

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 49/21 in the southern North Sea (SNS) in an approximate water depth of 29 metres (m), approximately 55 kilometres (km) east of the UK coastline and 65 km west of the UK/Netherlands median line. The project area is located within North Norfolk Sandbanks and Saturn Reef (NNSSR) Special Area of Conservation (SAC), and the Southern North Sea SAC. The Greater Wash Special Protected Area (The Wash) (SPA) is 36km southwest.

The project is in an area characterised by circalittoral fine sand (fine sand and medium sand with shells and shell fragments). The site lies within a group of linear ridge sandbanks. The banks are 'active', as they are progressively elongating in a north-easterly direction and are generally asymmetric with a steeper face to the northeast.

The quantitative assessment of seabed imagery obtained during the survey indicated that the species abundance and diversity was very low. 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 *Sabellaria 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 *Sabellaria spinulosa* that could be classified as 'reef' (i.e., not an Annex I habitat) 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.

The fishing effort in the area (ICES 35F2) is rated low. Fish spawning and nursery activity will occur in the area, which may coincide with the operations. However, operations will be undertaken out with the herring and sandeel spawning period. Spawning intensity for sandeels in the area is low.

Harbour porpoise, and atlantic white-beaked 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, and the Wash and NNSSR, provides ideal breeding site and haul out conditions, located 67km 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 extremely high from November to February, very high in March and April and low from July to September.

Shipping density in the area is high to the north and north west of the Southwark site. In-field traffic at Southwark is mainly associated with the Leman Alpha gas production platform complex, 7.4km south of the operational area. Fishing activity is identified in the areas surrounding the operational area, but the major traffic is associated with general shipping and passing vessels. The project location is within the East Offshore Marine Plan area, 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.

A 500m exclusion zone is already located around the Southwark Platform and the drilling rig will be within this existing 500m safety zone, which excludes unauthorised access of vessels and prohibiting access to fishing vessels. There are no navigational concerns in relation to the proposed location, and no objections were received from the navigational consultees. Therefore, no significant effects are likely in terms of physical presence from the project.

Power generation by the MODU and flaring during well clean-up operations and the extended well test 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. The non-routine emissions are in this instance unavoidable, but temporary in nature. The effect from emissions is deemed to not have a significant effect on the environment.

The cetacean density for Atlantic white-beaked dolphin, and harbour porpoise (Annex II species), during the operational period, is low for Atlantic white-beaked dolphin and low to moderate for harbour porpoise with very high densities in July. The proposed operations are unlikely to have a significant impact on these species. Due to the distance of the operational area from shore, harbour seals and grey seals (Annex II species) , are not likely to be encountered regularly at the operational area. The sound generated during the operation is anticipated to be localised and short-term. Very high frequency species such as harbour porpoise are unlikely to be affected, although they may show avoidance behaviour during the operation. The impact of sound generated is therefore not anticipated to significantly impact the conservation objectives of the SNS SAC. Prey associated with the diets of harbour porpoise are also unlikely to be significantly impacted by the operations.

Broken *Sabellaria spinulosa* tubes were collected in a few grab samples within the survey area but no intact *Sabellaria 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.

As a worst case, the area of the seabed likely to be impacted by the operations is estimated to be 0.00088 km². This includes the discharge of drill cuttings (154m²) and the placement of the rig with three legs, each spud can having a footprint of 254m² (762m²), and temporary deposits for rig stabilisation (900m²). The North Norfolk Sandbanks and Saturn Reefs SAC is 3,603.41km² and the SNS SAC is 36,951km². It is therefore anticipated that the seabed impact from the operation is likely to be restricted to approximately <0.00005% of the total North Norfolk Sandbanks and Saturn Reefs SAC area and <0.00001% of the SNS SAC. The area of seabed impacted by the spud cans is expected to recover rapidly following removal due to the hydrographic conditions in the Southern North Sea. The impacts on benthic fauna from the physical siting of the rig will be localised and not considered to have a significant effect.

The discharge of associated drilling chemicals have been assessed and are not considered to have a likely significant effect on the environment.

There are no expected transboundary effects from the operations due to the localised and temporary nature of the disturbance and the 65 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 project location.

Although not a planned activity, a well blow out and an unplanned release of diesel from a vessel was assessed. The developer has mitigation and control measures in place to prevent such. The proposed operations carried out as planned are not likely to have a significant effect on the environment and the probability of an unplanned release from the proposed operations is low.

There is no aggregate dredging, military practice sites, sites of marine archaeological interests or aquaculture sites within the vicinity of the proposed operations. The operations are in accordance with the East Offshore Marine Plan's objectives and policies.

It is considered that the drilling of the Southwark 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 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

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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:

N/A