

Our Ref: 01.01.01.01-4874U
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Offshore Petroleum Regulator
for Environment & Decommissioning

PETROFAC FACILITIES MANAGEMENT LIMITED
BRIDGE VIEW
1 NORTH ESPLANADE WEST
ABERDEEN
AB11 5QF

Registered No.: SC075047

Date: 27th April 2023

Department for Business, Energy
& Industrial Strategy

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
DRILLING of SOUTHWARK DEVELOPMENT WELL 49/21c-A1**

I refer to your amended application dated 4th April 2023, reference DR/2183/6 (Version 1).

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-A1

DR/2183/6 (Version 1)

Whereas PETROFAC FACILITIES MANAGEMENT LIMITED has made an application dated 4th April 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 his agreement to the Oil and Gas Authority to the grant of consent for the project as detailed in the application, WONS/13517/0/IDA/1.

Effective Date: 27th April 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 1 October 2021 until 31 December 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 Nature of stabilisation or protection materials

Rock deposits

13,030 tonnes (8,144 m³) of clean, inert rock material, containing minimal fines, (The quantity of rock deposited should be the minimum required to provide the necessary stabilisation or protection, and any surplus rock must be returned to land).

4 Location of stabilisation or protection materials

53 degrees 11 minutes 2.4 seconds North

02 degrees 05 minutes 53.7 seconds East

5 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.

6 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.

7 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.

8 Monitoring

The results of any pre or post-placement surveys carried out to confirm the necessity for the deposits covered by the screening direction and/or to confirm the accurate positioning of the stabilisation or protection materials, should be forwarded to the Department following completion of the surveys

9 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.

10 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.

11 Deposit returns

The holder of the screening direction shall submit a report to the Department following completion of the deposit covered by the screening direction, confirming the quantity of materials deposited and the estimated area of impact, using the appropriate Environmental Emissions Monitoring System (EEMS) reporting form. Where no deposits are made, a 'nil' return is required.

12 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).

13 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:

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

Variation 6 amendment

This variation (DR/2183/6) amends the direction to extend the completion date. The assessment of impact as described below remains valid.

Variation 5 amendment

This variation (DR/2183/5) amends the direction to extend the completion date and includes details of a mechanical sidetrack. The assessment of impact as described below remains valid.

Variation 4 amendment

This variation (DR/2183/4) amends the direction to extend the completion date. The assessment of impact as described below remains valid.

Variation 3 amendments

This post screening direction amendment (ref DR/2183/3) 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 changes to the 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 drilling operation was due to be completed by June 30, 2023, but a variation has been requested to extend the working period to Dec 31 2023. All other aspects of the operation remain the same and there is no increase or change to the environmental impact.

Description of project :

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 166 days and are expected to commence in October 2023 and completed by 31 Dec 2023.

The well will consist of five sections (36", 17.5 ", 12.5 ", 8.5 " and 6.5" sections drilled using WBM) with cuttings discharged at the drill site. A mechanical sidetrack will be undertaken and commence from the 17.5" section. Cuttings are expected to result in a footprint of 332 m2. 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.

A previous screening direction (ref: DR/2183/3) relates to the change in rock pad design from three square pads to three circular pads. This has required a change to the rock density and therefore a change to the overall volume of rock required. There is no change to the tonnage of rock required (13,030 tonnes) or the total footprint of the deposits (5,586 m2). 1,191 m3 of rock is now expected to be required to fill in the scour channel that has been observed. 6,213 m3 (2,071 m3 per leg) of rock is expected to be required to create the three circular rock pads. Total area of rock required is therefore 7,404 m3 with an additional contingency of 10%, taking the total requested volume to 8,144 m3.



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, this includes sandeel spawning during November and December, however 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 continue to 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 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 increase due to the change in operational end date. The works therefore 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 project is likely to result in a worst case seabed footprint of 5,684 m² (comprising of 5,586 m² from the rock pads and scour infill and 98 m² from drill cuttings). The spud cans will now be placed on top of the rock pads so do not add to the total area of seabed impacted. The North Norfolk Sandbanks and Saturn Reefs SAC is 3,603 km² and the SNS SAC is 36,951 km². It is therefore anticipated that the seabed impact from the operation is likely to be restricted to approximately <0.0002% of the total North Norfolk Sandbanks and Saturn Reefs SAC area and <0.00002% of the SNS SAC. The impacts on benthic fauna will be localised and are not considered likely 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.

The drilling operation has been subject to a variation which extends the end date to 31st Dec, the previous end date being the 30 June. Delays in the work programme have been incurred as the rig has been moved from the site due to excessive movement created by seabed scour. The platform is expected to return to site October 2023. The variation accommodates the later start date in drilling operations but will not result in more days of operational drilling. Consequently, there will be no increase in atmospheric emissions.

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.