

Our Ref: 01.01.01.01-5623U  
UKOP Doc Ref:1273735



Offshore Petroleum Regulator  
for Environment & Decommissioning

PETROFAC FACILITIES MANAGEMENT LIMITED  
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Registered No.: SC075047

Date: 5th May 2023

Department for Energy Security &  
Net Zero

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[www.gov.uk/beis](http://www.gov.uk/beis)  
[bst@beis.gov.uk](mailto:bst@beis.gov.uk)

Dear Sir / Madam

**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING  
AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS  
2020**

**Kelham Appraisal Well - Well 53/01b-A**

A screening direction for the project detailed in your application, reference DR/2365/0 (Version 1), dated 3rd April 2023 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](mailto: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**

**Kelham Appraisal Well - Well 53/01b-A**

**DR/2365/0 (Version 1)**

Whereas PETROFAC FACILITIES MANAGEMENT LIMITED has made an application dated 3rd 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 agreement to the Oil and Gas Authority to the grant of consent for the project as detailed in the application, WONS/15311/0/IDA/1.

Effective Date: 5th May 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 13 May 2023 until 31 October 2023.

#### **2 Commencement and completion of the project**

The holder of the screening direction must notify the Department for Energy Security & Net Zero (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](mailto: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 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.

## **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 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 Energy Security & Net Zero  
AB1 Building  
Crimon Place  
Aberdeen  
AB10 1BJ

Tel [REDACTED]

Fax [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:

- a) The information provided by the developer.
- b) The matters listed in Schedule 5 of The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Regulations 2020) (the Regulations).
- c) The results of any preliminary verifications or 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:

#### Summary of the project :

- Drilling of the 36" and 12.25" sections with Water Based Mud (WBM)
- Drilling of the 8.5" Kelham North prospect sections using Oil Based Mud (OBM)
- Plug Kelham North prospect and sidetrack to drill the 8.5" Kelham Central prospect using OBM
- Plug and Abandonment
- Removal of wellhead

#### Description of project :

The project consists of the drilling of the 53/01b-A appraisal well using the Mobile



Offshore Drilling Unit (MODU) *Shelf Drilling Perseverance* Jack Up drilling rig. The MODU will be jacked down onto the seafloor with the spud cans being supported on rock pads (covered under application SA/1725). Operations for the Kelham North and Kelham Central are expected to last a total of 66 days and are expected to commence 13th May 2023 and be completed by 31st October 2023.

The well will consist of four sections (36", 12.25", 8.5" and an 8.5" sidetrack). The top two sections will be drilling using water based mud (WBM) with cuttings from the top hole section discharged at the seabed and the 12.25" section discharged to sea. Cuttings from the 8.5" and 8.5" sidetrack sections will be skipped and shipped to shore. On completion of the drilling and cementing operations the well will be plugged and abandoned, with the wellhead structure being removed. No flaring is planned as part 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 53/1b in the southern North Sea (SNS) in an approximate water depth of 38 metres (m), approximately 38 kilometres (km) east of the UK coastline and 70 km west of the UK / Netherlands median line. The project area is located within the Haisborough, Hammond and Winterton Special Area of Conservation (SAC), and the Southern North Sea SAC. The North Norfolk Sandbanks and Saturn Reef are 4.5 km from the planned operations. The Greater Wash Special Protected Area (The Wash) (SPA) lies 24 km to the southwest and the Outer Thames Estuary SPA is 37 km to the south of the Kelham prospect.

The project is in an area dominated by sands and fine sands with varying compositions of slightly gravelly/shelly sands which are classified as circalittoral fine sand (fine sand and medium sand with shells and shell fragments). The sandbanks in the vicinity of the Kelham site are predominantly rippled sand on megarippled sandwaves with proportions of shell material within the sandwave troughs. Evidence of sediment transport in the SNS and in the vicinity of the Kelham well is through the movement and evolution of the sandbanks and associated bedforms which are primarily caused by tidal currents. The orientation of the sandbanks and bedforms indicate that the sandy sediment is transported to the northeast.





The quantitative assessment of seabed imagery obtained from the survey results suggest that there is a limited diversity and density of species abundance across the vicinity of the Kelham site. 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. The reef building worm *Sabellaria spinulosa* has been found to be characteristic of coarse to medium sediments in the SNS, however, no *Sabellaria spinulosa* were present in samples taken from the Kelham site. No aggregations of sensitive benthic features including biogenic reefs created from horse mussel and common mussels were observed during the habitat survey. 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 34F2) is rated low. The proposed operations coincide with fish spawning and/or nursery activity for several species. Of the species identified as using the area a spawning ground or nursery area, those that are sensitive to disturbance from oil and gas related activities include cod, sandeel and herring, however operations will be undertaken out with the herring and sandeel spawning period. Spawning intensity for sandeels in the area is also low.

Harbour porpoise, atlantic white-beaked dolphin and common dolphin have all been recorded in the vicinity of the Kelham well. Harbour porpoise may be present in low to moderate densities and white beaked dolphin in low densities during the operational period. Common dolphin have been sighted out with the operational period. Whilst minke what are reported within the SNS they have not been observed within the vicinity of the Kelham location. Common seal and the grey seal are resident in the SNS, and the Wash and Haisborough, Hammond and Winterton Special Area of Conservation, 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 high from in June to October and low for the remaining part of the operational period. There are periods between October and February where sensitivity in some surrounding blocks is extremely high.

Shipping density in block 53/1b is very high. 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. The closest oil and gas installation is located 8 km northeast of the drilling site. The project area is not located within or near any military practice and exercise areas (PEXA), nor are there any Ministry of Defence (MoD) related restraints on Block 53/1b. There are no aggregate dredging or sites of archaeological interest or aquaculture sites within 40 km of the operations. The nearest telecommunication cable is identified as being 20 km east of the drilling location. The closest windfarm activity is Scroby Sands located 39 km southwest of the location. The North



Vanguard West windfarm is currently in the planning stages and is 15 km east of the Kelham worksite.

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 will be a temporary 500m exclusion zone located around the *Shelf Drilling Perseverance* jack-up rig during the drilling activities, excluding unauthorised access of vessels and prohibiting access to fishing vessels. No anchors will be used for the rig. All appropriate notifications to mariners will be made prior to the drilling activities commencing. 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.

As a worst case, the area of the seabed likely to be impacted by the operations is estimated to be 180 m<sup>2</sup> which is the result from the discharge of drill cuttings. The Haisborough, Hammond and Winterton SAC is 1,468.59 km<sup>2</sup> and the SNS SAC is 36,951 km<sup>2</sup>. It is therefore anticipated that the seabed impact from the operation is likely to be restricted to approximately <0.000122% of the total The Haisborough, Hammond and Winterton SAC area and <0.00000489% of the SNS SAC. The area of seabed impacted by the drill cuttings 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.

Atmospheric emissions will arise from the use of the *Shelf Drilling Perseverance* jack-up rig and other associated vessels, Atmospheric emissions, when compared with total UK figures, are considered to present a relatively small contribution. Furthermore, the temporary nature of the emissions along with the remote geographic location and winds within the offshore environment, means that the atmospheric emissions will be rapidly dispersed and are not likely to be detectable within a short distance from the shore. Therefore, while atmospheric emissions will make a cumulatively contribution to global climate change, they are not considered to present 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. 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.

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 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 70 km distance from the UK / Netherlands Median Line.

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 Kelham appraisal 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.

## **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:

N/A