

Our Ref: 01.01.01.01-5238U  
UKOP Doc Ref:1229442



Offshore Petroleum Regulator  
for Environment & Decommissioning

PETROFAC FACILITIES MANAGEMENT LIMITED  
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Registered No.: SC075047

Date: 5th October 2022

Department for Business, Energy  
& Industrial Strategy

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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**

**Serenity, Stena Don DRILLING APPRAISAL WELL SA-02**

I refer to your amended application dated 29th September 2022, reference DR/2279/1 (Version 2).

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](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**

**Serenity, Stena Don DRILLING APPRAISAL WELL SA-02**

**DR/2279/1 (Version 2)**

Whereas PETROFAC FACILITIES MANAGEMENT LIMITED has made an application dated 29th September 2022, 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 14650 (V2); 14650 GS1 and GS2 (V1).

Effective Date: 5th October 2022



## **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 9 September 2022 until 31 October 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](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 Unauthorised deposits**

Following completion of the project covered by the screening direction, the holder of the screening direction shall recover any materials accidentally or temporarily deposited on the seabed, such as debris, temporary containers, structures or deposits, or scientific instruments, and shall return the materials to land. If it is not possible to recover any of these deposits, full details of the materials remaining on the seabed must be reported to the Department in accordance with the requirements of Petroleum Operations Notice No.2 (PON2).

## **8 Screening direction variation**

In the event that the holder of the screening direction proposes changes to any of the particulars detailed in the application for a screening direction, the holder must notify the Department immediately and submit an application for a post screening direction amendment. The post screening direction must be in place prior to the amended proposals taking effect.

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## COMMENTS ON THE APPLICATION FOR SCREENING DIRECTION

### Section 1

The attention of screening direction holders is drawn to the following provisions regarding The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020.

1) You are deemed to have satisfied yourself that there are no barriers, legal or otherwise, to the carrying out of the project covered by the screening direction. The issue of a screening direction does not absolve the screening direction holder from obtaining such authorisations, consents etc that may be required under any other legislation.

2) The Department would draw your attention to the following comments:

#### **DR/2279/1 (Version 2)**

The Department has no comments.

#### **DR/2279/0 (Version 2)**

The Department notes that in the success case for this well a further side-track will be drilled. An application for consent has already been submitted to the NSTA under WONS 14650\_GS1 (V2) and WONS 14650\_GS2 (V2). PFML will be required to submit a 'change in project' screening direction to include the side-track. It would be beneficial for future applications to include any contingency scenario's upfront in the screening direction.

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 as follows:

### **1) Decision reasons**

This document provides a summary of the assessments undertaken by OPRED to determine whether an Environmental Impact Assessment is required for this project.

This document summarises the information considered, the potential impacts and sets out the main reasons for the decision made. In considering whether an Environmental Impact Assessment is required or not, the following have been taken into account:

- a) 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 developer assessments of the effects on the environment of the project; and
- d) Any conditions that the Secretary of State may attach to the agreement to the grant of consent.

### **Characteristics of the project:**

This Screening Direction (ref DR/2279/1) relates to the drilling of a side track if the main bore is a success case.

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 project**

Drill, appraise and permanently abandon the well.

The well will be drilled in three sections; 36 inch, 26 inch, and 8 and a half inch sections. Following drilling each well section a casing / liner will be cemented into place.

The 36 inch and 26 inch section will be drilled with seawater sweeps and bentonite mud.

The 8.5 inch reservoir section will be drilled with water based mud.

There will be no clean up of the well or a well test.

Vertical Seismic Profiling (contingency)



In the event of a success case an 8.5 inch side track will be drilled with WBM below the 13 3/8" casing shoe to understand the extent of the oil column. The well will then be permanently abandoned.

Drilling of the Serenity Appraisal well, and sidetrack if needed, will be undertaken from a mobile offshore drilling unit (MODU) and is expected to take 49 days to complete. The MODU will be maintained in position using 8 anchors and supported by an emergency response vessel. Drilling will be facilitated using seawater and water-based mud with cuttings discharged at the drill site. In a success case a further side track may be drilled and if so, this will be the subject of a variation to the existing applications. The well will then be permanently plugged and abandoned.

No significant cumulative interactions are foreseen with any other existing or approved projects. The nearest oil and gas installation (the Captain FPSO) is 9.3 kilometres from the well location. The MODU will be sited on an area of seabed comprised of deep circalittoral sand. The project is not at risk from natural disasters, and unplanned major accident scenarios were assessed. There is no risk to 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 is located 71 km north east of Fraserburgh and 176 km west of the UK/Norwegian median line, in an area where the seabed comprises sand and muddy sand, with a small area of slightly gravelly sand and muddy sand. The water depth is 145 metres (m). The wave height ranges from 1.81 to 2.1 metres, which is typical of the wider area.

Site specific surveys identify the seabed at the location as muddy sand ranging from coarse silt to very fine sand which is expected given the location and is typical of the wider region. Epibenthic fauna was sparse across the survey area, however, the sediment was heavily bioturbated with numerous burrows evident. Taxa observed on the majority of transects included: sea pens (*Pennatula phosphorea*), fish (*Pisces*) and faunal burrows (including *Nephrops norvegicus* burrows).

Other taxa recorded included: Norway lobster (*Nephrops norvegicus*), starfish (*Asteroidea* including *Luidia sarsi* and *Asterias rubens*), sea spiders (*Pycnogonida*), octopus (*Octopoda* including possible *Eledone cirrhosa*), shrimp (*Caridea*), krill (*Eucarida*), and flatfish (*Pleuronectiformes* including *Glyptocephalus cynoglossus*) and fish (*Gadiformes* including *Trisopterus esmarkii*). The polychaete *Paramphinome jeffreysii* was found in high abundances.

The OSPAR protected habitat of 'Sea pens and burrowing megafauna communities', was assessed and although present, it was concluded that the area is unlikely to be defined as this habitat. The drill site is not located in any designated protected areas





with the closest protected area (Southern Trench Nature Conservation Marine Protection Area) being 45 km to the south and no other sensitive habitats, such as those listed under Annex I of the Habitats Directive were identified.

The area around the proposed Serenity SA-02 well contains fish stocks of both commercial and non-commercial importance. Spawning and nursery areas exist for cod (*Gadus morhua*), herring (*Clupea harengus*), lemon sole (*Microstomus kitt*), Norway lobster (*Nephrops norvegicus*), Norway pout (*Trisopterus esmarkii*), plaice (*Pleuronectes platessa*), sandeel (*Ammodytes marinus*), sprat (*Sprattus sprattus*) and whiting (*Merlangius merlangus*). There are also nursery areas for anglerfish (*Lophius piscatorius*), blue whiting (*Micromesistius poutassou*), European hake (*Merluccius merluccius*), haddock (*Melanogrammus aeglefinus*), ling (*Molva molva*), mackerel (*Scomber scombrus*), spotted ray (*Raja montagui*) and spurdog (*Squalus acanthias*).

Seabird sensitivity to surface pollution in Block 13/23 varies throughout the year. Sensitivity is considered extremely high in February, high in June and December, medium in April, May, September and October, and low throughout the rest of the year. There is a period of concern in February, due to extremely high sensitivity, however, the drilling operations will not overlap with this.

Harbour porpoise and white-beaked dolphin are the most likely cetaceans to be in the location of the project in low to medium numbers respectively.

The SA-02 well location is approximately 71 km from the nearest landfall, so it is unlikely that significant numbers of seals will be found in the vicinity of the proposed operations.

Fishing effort is considered to be low to moderate throughout the year with the highest effort recorded in November.

The project location is not in an area of high oil and gas activity compared to other areas of the UKCS. Shipping traffic is considered to be moderate with 5 shipping routes passing within 1nm of the well location. The proposed well location is approximately 65 km east of the Moray Offshore Windfarm. In addition, the proposed well location is approximately 5 km west of the NE8 ScotWind Option Agreement Area and 16 km northeast of the NE6 ScotWind Option Agreement Area is also located within 1 km of the Acorn Carbon Capture and Storage area.

One wreck has been identified 1.6km to the south south west of the well location and there is no military activity.

Given the location of the project, it is not likely that the areas identified at paragraphs 2(c)(i), (iii), (iv), (vi), (vii) of Schedule 5 to the Regulations will be affected by the project.

**Type and characteristics of the potential impact:**



Potential impacts to the environment from the activities associated with the project were assessed, including impacts arising from atmospheric emissions, seabed disturbance, accidental spills, planned discharges and physical presence.

The presence of the MODU attracts a 500 m radius safety zone, excluding unauthorised access of vessels. The MODU presence will prohibit access to fishing vessels within the 500 m radius safety zone.

Data suggests that fishing effort is low to moderate in the immediate vicinity of the proposed well, though it is considered moderate to high in the areas immediately to the west. The Scottish Fishing Federation have advised that the general Serenity area is routinely used for turning and transiting by fishing vessels accessing nearby fishing grounds.

The area of seabed estimated to be disturbed by anchoring activities is 0.0033 km<sup>2</sup>, and for drilling activity and discharge of water-based mud drill cuttings it is estimated that a total area of 0.00314 km<sup>2</sup> will be impacted. Seabed disturbance could result in mortality of sedentary organisms. The potential impacts will not extend to or affect any protected habitats or species, protected sites, or the wreck identified in the surrounding area. The benthic communities are expected to regenerate the area impacted by drill cuttings and anchor scarring over time. It is estimated that areas affected by anchor scarring can recover within 1-5 years. Recovery of faunal communities within any disturbed area of a seabed of this nature may be expected through a combination of larval settlement and immigration of animals from the adjacent seabed. The impacts from seabed disturbance have been assessed as not significant.

Discharge of chemicals associated with the drilling operations have been assessed and found not to have a significant impact on the environment.

There are no expected transboundary impacts as a result of the drilling of the well, and no significant cumulative impacts have been identified with the other known approved projects in the wider area.

A worst-case major accident scenario resulting from a potential well blow-out was modelled and assessed. Due to the properties of the hydrocarbons, it is anticipated that any subsea release will rise rapidly to the surface and form a persistent emulsion. There is a potential for the Serenity crude to reach the seabed if the emulsion is less stable or it interacts with sediment particles, a process that often occurs in shallower waters. Modelling of a worst case loss of well control suggests that a substantial amount of oil could beach over an extended area of coastline. However, the probability of such a worst case incident is very low and the proposed measures to prevent and respond to any release, including a worst-case scenario, has been assessed and are considered to be acceptable.

The atmospheric emissions associated with the project result from power demand for the proposed operations. Drilling facilities are integrated on the rig and use the electricity generated by the combustion plant. It is expected the emissions will be



rapidly dispersed and are not likely to have a significant impact.

Drilling operations will be conducted from the Stena Don Rig operating within a 500m exclusion zone and with the required inputs made to the Kingfisher database to ensure the presence of the rig is known. This rig will also be marked in accordance with the standard marking schedule to mitigate against collision hazards. It is considered that the drilling of the well is not likely to have a significant impact on other offshore oil and gas activities or other users of the sea.

There is no aggregate extraction, dredging, or dumping activity in the area. The Serenity proposed well location is approximately 65 km east of the Moray Offshore Windfarm. In addition, the proposed well location is approximately 5 km west of the NE8 ScotWind Option Agreement Area and 16 km north east of the NE6 ScotWind Option Agreement Area.

The project is in the vicinity of other oil and gas developments, but there are no expected cumulative impacts with other oil and gas activities. Cumulative impacts have been assessed as not likely to have a significant effect on the environment.

Taking all the above determinations into account, the Secretary of State has concluded that the project is not likely to have a significant impact on the environment.

## **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.