

Our Ref: 01.01.01.01-5747U
UKOP Doc Ref:1289502



Offshore Petroleum Regulator
for Environment & Decommissioning

SHELL U.K. LIMITED
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LONDON
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Registered No.: 00140141

Date: 9th August 2023

Department for Energy Security &
Net Zero

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Crimon Place
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Dear Sir / Madam

**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING
AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS
2020
PIPELINE PL2027
PIERCE WATER INJECTOR AND CABLE DISCONNECT**

A screening direction for the project detailed in your application, reference PL/2396/0 (Version 2), dated 7th August 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 opred@energysecurity.org.uk.

Yours faithfully

Signature valid

Digitally signed by Environmental Section
Date: 2023.08.09 11:32:47 BST
Reason: On behalf of the Department for Energy
Security and Net Zero
Location: The Department for Energy Security and
Net Zero



**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**

**PIPELINE PL2027
PIERCE WATER INJECTOR AND CABLE DISCONNECT**

PL/2396/0 (Version 2)

Whereas SHELL U.K. LIMITED has made an application dated 7th August 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 PA/4558

Effective Date: 9th August 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 4 September 2023 until 31 March 2024.

2 Commencement and completion of the project

The holder of the screening direction must confirm the dates of commencement and completion of the project covered by the screening direction. Notification should be sent by email to the Environmental Management Team Mailbox: opred@energysecurity.org.uk

3 Nature of stabilisation or protection materials

*25Grout bag deposits

13 tonnes of grout contained within 25 kilogramme capacity biodegradable bags. (The number of bags deposited should be the minimum required to provide the necessary protection, and any surplus bags must be returned to land).

Concrete mattress deposits

33 concrete mattresses, each measuring 6 metres x 3 metres x 15 centimetres. (The number of mattresses deposited should be the minimum required to provide the necessary protection, and any surplus mattresses must be returned to land).

4 Location of pipeline and stabilisation or protection materials

Within an area bounded by the coordinates outlined in the application

5 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.

6 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.

7 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

8 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.

9 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, using the appropriate Environmental Emissions Monitoring System (EEMS) reporting forms.

10 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.

11 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).

12 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:

opred@energysecurity.org.uk

or

Offshore Petroleum Regulator for Environment & Decommissioning
Department for Energy Security & Net Zero
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 assessment undertaken 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

Pre-decommissioning activities whereby a number of lines at the Pierce field (water injection, flexible pipeline, and umbilical jumpers) will be disconnected and left on the seabed for recovery at a later date. The project will involve the following activities:

- Disconnection of 14 lines including water injection and umbilical pipelines and jumpers
- The cut and removal of hydraulic stab plates from the lines
- The placement of stabilisation and protection materials on the disconnected lines
- The temporary placement of baskets on the seabed

Details of the works have been described within the associated application to the North Sea Transition Authority (NSTA) for a pipeline works authorisation (PWA), reference PA/4558.

Description of the project

The Pierce development comprises two drill centres known as the Main Drill Site (MDS) and Satellite Drill Site (SDS). The drill centres are approximately 3 km apart



and both feature a subsea manifold and well cluster. Both are tied back to the Haewene Brim Floating Production Storage and Offloading (FPSO) facility. The project will take place at the MDS WI Manifold & A8z Tree and SDS WI Manifold Trees B3 & B4a. The pipelines and umbilical controls identified in this application are no longer required and will be removed from use as part of pre-decommissioning work for the overall Pierce field. They will be left on seabed in a stable state until a full decommissioning project is undertaken to at the end of the field's life, whereby a decision will be made on the permanent fate of these lines. It is expected that the surface laid spools/ jumpers and stabilisation materials to be installed under this permit applications will be recovered at end of field life.

The works will be undertaken from a dive support vessel (DSV), using dynamic positioning, meaning it won't require the use of anchors to maintain its position. Workbaskets will be used to lower to and remove objects from the seabed.

Disconnection Activities

The following lines be disconnected from their respective wells and manifolds and left in situ and potentially recovered at the end of field life.

PL2027 Water Injection Pipeline
PL2027JMWI-1 Water Injection Jumper
PL2027JMWI-2 Water Injection Jumper
PL2028 - Water Injection Pipeline
PL2028JMWI-1 Water Injection Jumper
PL2028JMWI-2 Water Injection Jumper
PL3096 Water Injection Jumper

The following lines will all be disconnected from their respective trees, Manifold and towhead and left in situ and potentially recovered at the end of field life

PLU2043 Umbilical Jumper
Temporary 1 PLU6338 (A8z) - Umbilical Jumper
Temporary 2 PLU6339 (A7z) - Umbilical Jumper
PLU2042 Umbilical Jumper
PLU4370 Umbilical Jumper
PLU2041 Umbilical Jumper
PL4022 Umbilical Jumper

Stab plates from the hydraulic/chemical umbilical jumpers will be cut, removed via basket and recovered to shore.

Seabed Deposits

Stabilisation and protection materials, namely concrete mattresses and grout bags will be deposited on the lines and recovered as part of the decommissioning process at the end of field life, however for the purposes of this assessment the impact on the seabed is considered permanent. The following deposits will be made:



Grout bags: Installation of 520 x 25 kg grout bags i.e., 13 te

- Temporary area of impact (m2): 13
- Permanent area of impact (m2): 13

Mattresses: Laydown of 33 mattresses 6 m (L) x 3 m (W)

- Temporary area of impact (m2): 2310
- Permanent area of impact (m2): 594

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 Pierce Field is located in Blocks 23/22a and 23/27a in the Central North Sea (CNS) in the United Kingdom Continental Shelf (UKCS), approximately 260 km east of Aberdeen and 2 km west of the UK/Norway median line and falls within the area of the Scottish National Marine Plan.

The site is not within any site designated for nature conservation or marine protection. The closest protected site is the East of Gannet and Montrose Field NCMPA which is c. 42 km west of the Pierce Field. This site is designated for offshore deep-sea muds and *A. islandica* aggregations. The Fulmar MCZ is located south of Pierce in the English marine plan area and protects a range of habitat features.

Cetacean species likely to occur within the area include Atlantic white-sided dolphin, which reach high densities in September and with a smaller peak occurring in July but densities remain low in this secondary peak. White-beaked dolphin occur between May and November reaching high densities in September to November, with another peak in May. Minke whale only occur in low densities during February to April. Harbour porpoise have a peak in October where densities are observed and moderate densities in June and July.

The distribution and abundance of seabird species varies seasonally and annually. Species such as Atlantic puffin (*Fratercula arctica*), black-legged kittiwake (*Rissa tridactyla*) and northern fulmar (*Fulmarus glacialis*) use the area in the breeding season (March - September), whereas other species such as the common guillemot (*Uria aalge*) are present in higher densities in the winter season (November - March). Seabird sensitivity to surface oil pollution within the Pierce area during the requested permit period (August to December) is predicted to be low, with the exceptions of Block 23/6, where it is classed as high in September and October. In addition, sensitivity in block 30/03 is classed as medium in May and June

The Pierce Field lies within the International Council for the Exploration of the Sea (ICES) Rectangle 43F2 and fish spawning and nursery grounds are known to occur in 43F2. Spawning grounds for lemon sole, mackerel, plaice and sandeel have been



identified during the period of operation (August to December). In addition, higher egg concentrations were also noted for mackerel and Norway pout. The area is noted as a high intensity nursery ground for cod alongside other juvenile populations of haddock, anglerfish, hake and Norway pout.

The benthos at Pierce is characterised by circalittoral muddy sand which displays evidence of burrows of varying densities with some areas showing dense numbers of burrows. Epifauna within the Pierce MDS and SDS survey areas is known to be relatively sparse, with varying densities of sea anemones (*Bolocera tuediae*), sea pens (*Virgularia mirabilis* and *Pennatula phosphorea*), seastars (*Asteroidea*), sea urchins (*Gracilechinus actus*), hermit crabs (*Paguroidea*) and bivalve molluscs (*Mytilidae*) observed. Epifaunal abundance was higher at those stations containing higher proportions of coarse material. Benthic fauna is dominated by infaunal polychaetes namely *Paramphinome jeffreysii* with the Norway Lobster *Nephrops norvegicus* also being present forming large burrows. The habitat shows a resemblance to the OSPAR listed threatened and/or declining habitat 'Sea pens and burrowing megafauna communities', yet the area does lack the surface mounds which are normally associated with this habitat.

Data on fishing effort indicates that the Pierce field is in an area which is of low importance. The field sits within ICES rectangle 43F2 and fisheries data published by Marine Scotland for the years 2016 - 2020 show that fishing effort in ICES rectangle 43F2 was greatest in 2018 with 8 days fished.

According to Oil and Gas Authority data, shipping density within Block 23/27 is low and within Block 23/22 it is very low. There are also no aggregate extraction areas, military exercise areas or existing or proposed renewable energy developments within the vicinity of Block's 23/27 and 23/22. Pierce is within a well-developed oil and gas production area with a number of pipelines and umbilicals present.

The Tampnet subsea telecommunications cable is c. 13.2 km north of the B5 well while the North Sea Link Interconnector power cable (under construction) crosses the northwest corner of Block 23/22 c. 16 km northwest of the B5 well. There are also wrecks in the vicinity of the Pierce field, with the closest situated c. 6km away

Given the location of the project, the areas identified at paragraphs 2(c)(i), (iii), (iv), (vi), (vii) and (viii) of Schedule 5 are not likely 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 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.



All works will take place within the 500 metre safety zone of Pierce Drill and satellite manifold meaning the likelihood of the works interacting with other sea users is low. The DSV will be dynamically positioned and not fixed to the seabed and the operator will take measures to inform other sea users of the works, in addition there were no navigational concerns raised by consultees. The risk of collision and impacts to sea users will therefore be minimal.

Benthic and seabed impacts will occur due to the interaction with the seabed from workbaskets and other equipment as well as the placement of protection and stabilisation material (grout bags and concrete mattresses) on the pipeline. The worst case temporary impact, which includes the wider area of seabed disturbance around the deposited materials, will be up to 2,638.4 m². The area of permanent impact, which comprises the seabed area covered by stabilization materials, is up to 607 m². The physical disturbance resulting from the installation activities can cause mortality or displacement of motile benthic species in the impacted area and direct mortality of sessile seabed organisms that cannot move away from the contact area. In addition, disturbance from sediment re-suspension will occur in the immediate area when the infrastructure is initially positioned. There will be a loss of functional habitat below the stabilisation materials i.e. mattresses as this area will not be available to many of the organisms which normally utilise this type of sediment habitat. The scale of these impacts is very small, furthermore the area affected by temporary impacts will likely show a full recovery of its benthic faunal assemblage.

Whilst the operations will take place in an area regularly used by cetacean species, occasionally at high densities, there is unlikely to be any significant impacts on marine mammals. This is due to the little noise created by these operations, with the only noise created by vessel and seabed intervention works. There will be no impulsive noise and the disturbance created by operational noise and vessel movements is not expected to be significant.

Atmospheric emissions will be limited to combustion gases emitted by the dive support vessel. The main combustion products associated with power generation on the vessel is carbon dioxide (CO₂) with small quantities of methane (CH₄), volatile organic compounds (VOCs), oxides of nitrogen (NO_x), carbon monoxide (CO) and very small quantities of nitrous oxide (N₂O) and sulphur dioxide (SO₂). Whilst all greenhouse emissions do influence climate the quantity of gases produced during these operations will be negligible and represent a very small relative contribution to the UKCS total emissions.

Chemicals will be used and discharged to the marine environment and these discharges will be controlled by an associated chemical permit. Some of these chemicals will be toxic and could have an effect on the local marine environment, however the quantities discharged are small and the high flushing and dilution rates of the receiving environment will prevent toxic concentrations forming which could have a significant impact on the local environment.

Although not a planned activity, an accidental and unplanned release of diesel from a vessel has been assessed. The developer has mitigation and control measures in



place to prevent such a release from occurring but if it does occur they also have response plans and resources in place to reduce and limit any impacts. 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, aquaculture sites or energy developments within the vicinity of the proposed operations which could be negatively impacted. The operations are in accordance with the Scottish Marine Plan's objectives and policies.

It is considered that the disconnection and pre-decommissioning activities on the identified lines at the Pierce field is not likely to have a significant impact on other offshore activities, users of the sea or the natural environment. This conclusion is based on an assessment where the impacts from the activity have been considered alone, in combination and cumulatively with any other activities.

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

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: