

D/4273/2021

**Department for Energy Security
and Net Zero**

By email: consents@nstauthority.co.uk

Offshore Petroleum Regulator for
Environment & Decommissioning
AB1 Building
Wing C
Crimon Place
Aberdeen
AB10 1BJ

██████████
North Sea Transition Authority
3rd Floor
1 Marischal Square
Broad Street
Aberdeen
AB10 1BL

Tel ██████████

www.beis.gov.uk
BST@beis.gov.uk

10th March 2023

Dear ██████████

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

NOTIFICATION OF THE DECISION TO AGREE TO THE GRANT OF CONSENT

Talbot Field Development

In accordance with the Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020 (the “EIA Regulations”), an environmental impact assessment has been carried out for the Talbot Field Development. Having considered the Environmental Statement (OPRED Ref: D/4273/2021) and the representations received from relevant authorities, the Secretary of State has concluded that the project is not likely to have a significant effect on the environment. The Secretary of State has also decided that no conditions should be attached to the agreement to the grant of consent.

In accordance with the Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001 (the “Habitats Regulations”), the Secretary of State has also considered whether the grant of consent for this project would be likely to lead to a significant effect on a relevant site. The Secretary of State does not consider that anything that might be done or any activity which might be carried on pursuant to the consent is likely to have a significant effect on a relevant site, whether individually or in combination with any other plan or project, including but not limited to any other relevant project.

The Secretary of State accordingly gives agreement to the Oil and Gas Authority's (OGA¹) grant of consent for the project as detailed in the application for consent PCON/6485/0 and the Environmental Statement.

¹ The Oil and Gas Authority now operates under the business name of the North Sea Transition Authority (NSTA).

Once the OGA has reached a decision on whether to grant consent, please could you promptly, within 1 day, inform [REDACTED] by email on [REDACTED] (copying in BST@beis.gov.uk and [REDACTED], that Chrysaor Petroleum Company U.K. Limited has been notified of the decision, and the date of that decision. OPRED will then proceed to publish a notice (under Regulation 16) on the GOV.UK website and undertake its other obligations as set out in Regulation 16, regarding publication of the relevant ES decision documentation.

Yours sincerely,

[REDACTED]

.....

[REDACTED]

[REDACTED]

The Offshore Petroleum Regulator for Environment and Decommissioning
For and on behalf of the Secretary of State for Energy Security and Net Zero



Offshore Petroleum Regulator
for Environment & Decommissioning

**The Offshore Oil and Gas Exploration, Production, Unloading and Storage
(Environmental Impact Assessment) Regulations 2020**

**Regulation 14(3)
Secretary of State Decision**

Chrysaor Petroleum Company U.K. Limited

Talbot Field Development

To: [REDACTED]

Decision Recommendation:

That you agree, on behalf of the Secretary of State, to the grant of consent by the Oil and Gas Authority (OGA)².

As set out further below, taking into account the relevant considerations, I have concluded that the project will not have any significant effects on the environment and have decided that no conditions need to be attached to the agreement to the grant of consent.

From: [REDACTED]
[REDACTED]

Date: 9th March 2023

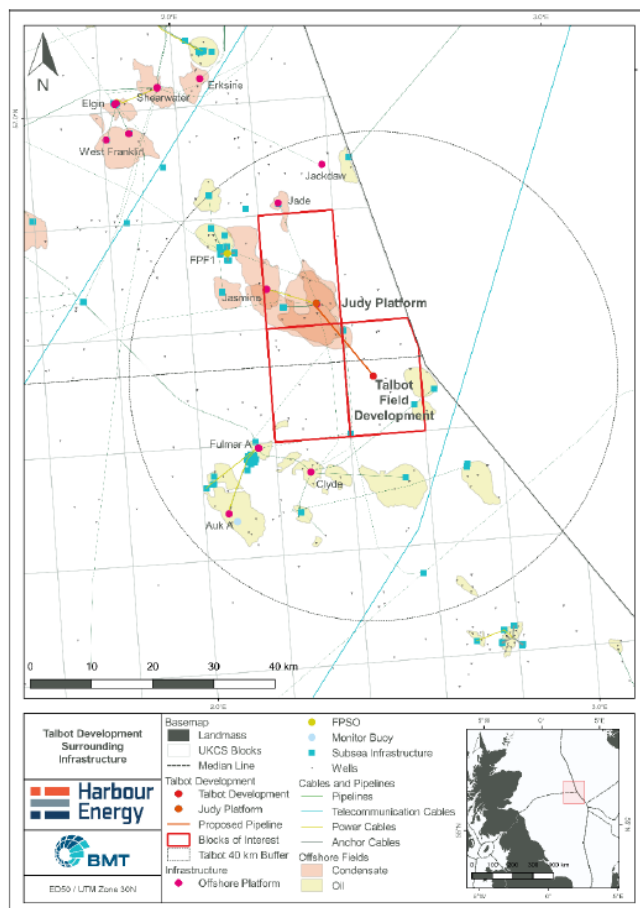
ES Title:	Talbot Field Development
Developer:	Chrysaor Petroleum Company U.K. Limited
Consultants:	BMT UK Limited

² The Oil and Gas Authority now operates under the business name of the North Sea Transition Authority (NSTA).

OGA Field Group: Central North Sea
ES Report No: D/4273/2021
ES Submission Date: 27th May 2022
Block No/s: 30/13e, 30/12a, 30/7a
Project Type: Field development
OGA Reference No: PCON/6485/0

Project Description

The Talbot Field Development consists of three production wells and a four-slot subsea manifold tied-back to the existing Judy installation, located in the Central North Sea approximately 278 km from Peterhead, Scotland and 7 km from the UK/Norway median line. Water depths across the Talbot field are between 71 – 75 metres. Anticipated hydrocarbons are oil and gas.



The Talbot Field will be developed by drilling three subsea production wells using a drilling template laid on the seabed. A manifold will be

installed adjacent to this to allow for chemical injection and to gather produced fluids from the three wells into a single pipeline. An 18" outer diameter production pipeline and associated controls umbilical will be laid in one pipeline trench from the manifold for approximately 16 km to the existing Judy installation, where it will connect to the existing PL1000 Joanne South 12" production pipeline within 500 metres of the installation. The trench will be backfilled once the pipelines have been laid and protection material (rock, concrete mattresses, grout bags) installed at any points where the minimum target depth of burial has not been achieved. Talbot fluids (oil and gas) will be processed alongside existing fluids on the Judy installation for onward export. Modifications required to the Judy installation to accommodate Talbot production include installation of a hydraulic power unit, topsides umbilical termination unit, chemical pumps and associated pipework. Replacement of existing valves on the PL1000 Joanne South 12" production pipeline will also be required. First production from the Talbot field is anticipated in Q3 2024 and field life is anticipated to be 13 years.

Key Environmental Impacts

The Environmental Statement (ES) identified and discussed the following as having the potential to cause an environmental impact:

- Effects on the seabed and protected species and habitats;
- Effects on water quality from discharges to sea;
- Effects on local air quality and climate from the atmospheric emissions generated by the project;
- Effects from underwater noise caused by piling of the drilling template and manifold and associated vessels;
- Effects on water quality, protected species and habitats, fauna and flora from an accidental event resulting in an oil release;
- Effects on the sediment, seabed habitats, fauna and flora from seabed disturbance from the physical presence of temporary and permanent infrastructure.
- Effects on users of the sea (e.g. commercial fishing and shipping) from the physical presence of temporary and permanent infrastructure.

Key Environmental Sensitivities

The ES identified the following environmental sensitivities:

- Fish and shellfish: The project area lies within multiple nursery and spawning areas of fish species. In particular, Scottish Priority Marine Features (PMFs) such as anglerfish, blue whiting, cod, herring, ling, mackerel, Norway pout, sandeels, spurdog and whiting are known to be found in the project area. Cod, spotted ray and spurdog are also listed on the OSPAR list of threatened and/or declining species in the project area. Sandeels are known to have a particularly important ecological function as a prey item for other fish, seabirds and marine mammals. There is evidence that the sediment at the location is unfavourable for sandeel spawning.

- Seabirds: Multiple species of seabird could be present at the project area in various levels of abundance. The most numerous seabird species is the black-legged kittiwake (between 10-20 individuals per km²). Sensitivity of seabirds in the project area varies from low to very high throughout the year. In Block 30/13 (Talbot Field), sensitivity is generally low other than in May – June when it is very high. In Block 30/12 (which the pipelines will pass through), sensitivity is generally low other than in February when it is moderate. In Block 30/7 (Judy installation), sensitivity is generally low.
- European Protected Species and pinnipeds: Cetaceans such as harbour porpoise, minke whale, white beaked dolphin, Atlantic white-sided dolphin and common dolphin are likely to occur in the project area, predominantly during the months from May to November. Pinnipeds such as the grey seal and the harbour seal may occur in the project area in very low densities (1-5 per 25 km²), which is to be expected given the distance to the nearest coastline.
- Protected habitats and species: The Talbot Field and part of the pipeline route are located within the Fulmar Marine Conservation Zone. The MCZ has been designated for subtidal sand, mud and mixed sediments as well as the ocean quahog. During site specific surveys, both adult and juvenile ocean quahog were observed in samples. Horse mussels were also observed during the site-specific surveys, but did not fulfil the criteria for biogenic reef. There are no other protected sites within 40 km of the project area.
- Other users of the sea: Commercial fishing effort in the project area is relatively low, representing approximately 0.1% of the total UK fishing effort. Demersal fishing gear is the most commonly used within the project area.

Shipping density in the area ranges from low to very low. The project area sits within a well-established location for offshore oil and gas infrastructure. The closest installation is the Judy installation (the selected host for Talbot production), approximately 16 km to the northwest of the Talbot Field. The closest pipelines are the Judy and Stella export pipelines, approximately 5 km to the west of the Talbot Field. The project area is not used for military exercises. A telecommunications cable is located along part of the pipeline route and there are three non-dangerous wrecks located in the project area. There are no renewable energy developments or Ministry of Defence activities within 100 km of the project area.

- In-combination, cumulative and transboundary sensitivities: The project area is located 7 km from the Norway / UK median line. Although the project is located in close proximity to the median line (7 km), impacts are expected to be localised to UK waters other than dispersion of atmospheric emissions and contribution to global climate change. There would be a risk of transboundary impacts in the event of an accidental event/spill. The project will add cumulatively to the produced water discharge and atmospheric emissions from the Judy installation.

The installation of subsea infrastructure will contribute cumulative impacts in terms of introducing hard substrate within the Fulmar MCZ. The infrastructure is planned to be removed at decommissioning. There will be permanent impacts resulting from the project, notably cuttings piles generated by discharged cuttings which will contribute

to seabed footprint within the Fulmar MCZ. The installation of infrastructure (and associated 500 metre safety zone) will reduce the availability of natural environment to activities such as fishing, but this will be offset by trenching and burying the pipeline so that fishing activities can continue in those locations. There will also be temporary seabed impacts from locating the drilling rig, which the seabed would be expected to recover from over time. Given the density of oil and gas infrastructure in the area, it is possible that cumulative impacts relating to air quality from atmospheric emissions may occur from other vessel operations.

Public Consultation(s)

The ES and the application for consent was subject to public notice, which was published on 16th June 2022 and ended on 15th July 2022. There were no public representations received.

Further information was requested on 21st October 2022 and 25th November 2022 under Regulation 12(1) notice. A response to the requests were provided by the developer on 11th November 2022 and 7th December 2022. In addition, a minor amendment to the project (increase in size of subsea manifold) was received on 21st December 2022. The further information including the minor amendment was considered, and some of it was deemed to be directly relevant to reaching a conclusion on whether the project is likely to have a significant effect on the environment, and was therefore subject to further public notice. The public notice was published on 26th January 2023 and ended on 24th February 2023. There were no public representations received.

Consultation with Other Authorities

The Joint Nature Conservation Committee (JNCC), Ministry of Defence (MoD), Northern Lighthouse Board (NLB), Trinity House (TH), Marine Scotland (MS), Marine Management Organisation (MMO), Centre for Environment Fisheries and Aquaculture Science (Cefas) and Maritime and Coastguard Agency (MCA) were consulted on the ES submission, and the further information subject to public notice. All the consultees submitted responses and none of the consultees had objections to the environmental impact assessment.

Consultation with other Countries

Given the location of the project proposal, Norway was contacted to offer the opportunity to participate in the EIA process. Norway confirmed receipt but did not participate in the EIA process.

Conclusion on the significant effect of the project on the environment

I have reviewed the following:

- The ES;
- The further information obtained under Regulation 12 as summarised above;
- The representations received from other authorities as summarised above; and
- The conditions that may be attached to the agreement to the grant of consent.

Taking those matters into account, I have concluded on behalf of the Secretary of State that this project will not have any significant effects on the environment:

Seabed impacts

Seabed impacts are anticipated from locating the rig (anchoring and deploying spud cans), installation of subsea infrastructure (pipeline and umbilical, drilling template, manifold, associated pipework) and protective materials and discharge of drill cuttings from the three wells. Water-based drill cuttings generated through drilling the three wells may be deposited using a subsea cuttings transportation system, resulting in a wider dispersed area of cuttings being deposited approximately 60 metres from the wells site, or may be discharged by traditional means (i.e. directly from the drilling rig) immediately adjacent to the three wells.

The worst-case permanent area of impact to the seabed is expected to be 197,875 m². The contributing factors to the permanently impacted area are drill cuttings, subsea infrastructure and protection material. The worst-case temporary area of impact to the seabed is expected to be 4,425 m², which accounts for location of the drilling rig. Of the total 202,300 m² area impacted (permanent and temporary), 49,596 m² is located within the Fulmar MCZ. Within the site, 45,171 m² is expected to be permanently impacted (through introduction of hard substrata to the marine environment from drill cuttings, subsea infrastructure and protection material) and 4,425 m² is expected to be temporarily impacted (through disturbance from locating the drilling rig).

Further information was provided by the developer relating to the cuttings transportation system, pipelay and trenching impacted area, drill cuttings modelling, cumulative impact assessment within the Fulmar MCZ, impacts of the cuttings on receptors and an increase in size of the manifold. This information was directly relevant to reaching a conclusion on whether the project is likely to have a significant effect on the environment, therefore the information was subject to a further public notice period as mentioned above.

Following temporary disturbance, the seabed features of the MCZ would be expected to recover over time. The permanently impacted area accounts for a relatively small part (0.002%) of the Fulmar MCZ and any habitat loss or effects on subtidal sand, mud and mixed sediments and ocean quahog are not expected to negatively impact the conservation objectives of the site. I agree with the assessment that there will be impacts to the seabed, but these are not expected to be significant given the ability of the environment to recover from temporary disturbance and the relatively small permanent footprint within the protected site of the Fulmar MCZ.

Physical presence of temporary and permanent infrastructure

There is no significant impact anticipated from the navigational hazards to other users of the sea given the low levels of shipping in the area. As the proposal is to trench and bury the pipelines and the infrastructure and subsea protection materials are of 'fishing friendly' overtrawlable design, the impacts to the fishing industry in the area are not significant. A change in habitat type is likely from the installation of new permanent infrastructure but the impact is not expected to be significant given the comparatively small amount of available natural habitat being altered. The protected features of the Fulmar MCZ site are not expected to be significantly impacted. I agree that there is no significant impact anticipated from navigational hazards associated with the project and the protected features of the Fulmar MCZ are not expected to be significantly impacted.

Discharges to sea

Discharges to sea are planned during the drilling phase (i.e. where drill cuttings, drilling mud, cement and wellbore clean-up fluids are discharged), installation and commissioning of infrastructure (i.e. discharge of inhibited seawater during leak testing) and the production phase (i.e. an increase in the volume of produced water discharged at the Judy installation and discharge of hydraulic fluid via subsea valve actuation). Produced water from the project is expected to be very similar in composition to the existing produced water discharged at the Judy installation. Although an increase in chemical use is anticipated when Talbot begins production, in terms of cumulative effects this is likely to be offset by reductions in production generally from those wells that currently produce through the Judy installation. No impacts are expected to reach Norwegian waters (7 km).

Water quality, marine organisms and protected habitats and species were identified as key receptors. As the impacts to water quality are likely to be localised and short term, the impact is not considered to be significant. Impacts to marine organisms including protected habitats and species are possible but not significant, as any impacts will be localised and are expected to return to near pre-operational status once activities have ceased. I agree with the assessment that discharges to sea will not result in a significant impact, given the dispersion and dilution expected in the marine environment.

Atmospheric emissions

Local air quality, global climate change and ocean acidification were the primary receptors considered in relation to atmospheric emissions from the project. The main emitting sources are from production of new materials and fabrication, combustion equipment on the Judy installation, flaring occurrences and fuel consumption associated with the drilling rig, support vessels and helicopter flights.

Emissions during the construction phase are associated with embodied carbon from manufacture of materials, fuel combustion onboard the drilling rig and associated vessels and helicopters. Fluids from well clean-up of the three wells are planned to be directed to the separator on the Judy installation rather than be flared from the drilling rig, thereby reducing emissions from this part of the project.

During the operational phase, an increase in atmospheric emissions from the Judy installation is expected from the Talbot project. These emissions are associated with power generation on the Judy installation, flaring operations from plant start-ups and supporting vessels and helicopters.

Emissions from each of these sources were estimated and their global warming potential assessed across the anticipated life of the Talbot field. Total quantities of greenhouse gas emissions associated with the project are very small compared to those of the wider industry and the UK in general. While the developer has used IPCC AR6 global warming potentials, I believe that the conclusions would not be altered if AR5 global warming potentials were used, as is currently reflected in the targets of the North Sea Transition Deal and government carbon accounting. The carbon intensity metric (kg CO₂ per barrel of oil equivalent produced) is forecast to reduce with the inclusion of Talbot production. This improvement in carbon intensity is expected due to power generation equipment on the Judy installation operating at an optimal load once Talbot production is included. Impact on local air quality will be mitigated by the open and dispersive nature of the offshore environment, although emissions generated by the project will inevitably contribute to global climate change. The project will contribute a very small proportion of the North Sea Transition Deal targets and UK Committee on Climate Change Carbon Budgets. Taking these matters into account I believe the project is aligned with the UK's Net Zero targets. The developer has a Climate Change Policy that states its commitment to attaining Net Zero by 2035, and states that the Talbot development aligns with this target. There are ongoing and future emissions reduction projects on the Judy installation that have not been accounted for within calculations of incremental emissions (at Judy from Talbot) but should result in a reduction in atmospheric emissions. I agree with the assessment that atmospheric emissions generated by the project will contribute to global climate change but will not themselves result in a significant effect on the environment as they will align with controls that limit climate change to agreed levels.

Underwater noise

The primary source of noise during the project results from the piling of the drilling template and manifold. To inform the impact assessment, modelling of the noise generated by piling and vessels was undertaken. This found that marine mammals may encounter injury or medium-long term behavioural changes (ranging from changing direction to confusion and altered diving behaviours) from noise generated by the piling operations. The contribution of vessel noise to cumulative noise levels (with the piling operations) was considered to be negligible. The main receptors to underwater noise are marine mammals and fish. Given the noted populations of cetaceans and fish throughout the project area, the sensitivity to noise was assessed. The piling works will be temporary in nature. The combined temporary impact and incorporation of standard noise mitigation measures is not expected to result in a significant impact to these receptors. The anticipated range of behavioural change is likely to overlap with Norwegian waters, but transboundary impacts are not expected given the extent to which the noise would attenuate at this distance. I agree with the results of the noise assessment that no significant effects are anticipated from the noise generated by the project.

Accidental events

Main scenarios of hydrocarbon spill considered in the analysis of accidental events are from a well blow-out, full loss of the pipeline inventory from Talbot to the Judy platform and complete loss of diesel inventory from the drilling rig or vessels. The environmental impact to water quality from a pipeline or diesel release is assessed as medium, and for a well blow-out would be considered significant.

Fish eggs and larvae in particular are vulnerable to oil pollution, meaning that a large spill has the potential to impact fish stocks. An oil spill could occur either at the sea surface or subsea. If the spill occurs at the sea surface it still has the potential to impact benthic organisms, including a protected feature of the Fulmar MCZ (ocean quahog), due to a portion of the water-soluble elements of a spill dissolving into the water column and settling on the seabed. Suspension feeders such as the ocean quahog could potentially ingest oil present in their surrounding water. Although cetaceans are generally highly mobile and can travel large distances, resident populations may not be as mobile. Cetaceans would also be impacted through accumulating oil pollution through the food chain. Seabirds are particularly vulnerable to oil pollution on the sea surface, which can cause loss of waterproofing through contact with hydrocarbons and toxic effects if it is ingested. Benthos, fish, protected areas and cetaceans would be moderately impacted in a pipeline or diesel release scenario. Benthos, fish, protected areas, cetaceans and seabirds would be significantly impacted in a blow-out scenario. Such an event is likely to also impact Norwegian waters.

I agree with the assessment that an accidental event (well blow-out from the Talbot field) has the potential to have a significant effect on the environment. Such an event would be highly unlikely and the developer has a range of mitigation measures in place to respond to such an event and reduce any potential impact. These measures include having an approved Oil Pollution Emergency Plan (OPEP) in place, including a relief well plan, and having primary and secondary well barriers in place. The developer has access to the oil spill response provider Oil Spill Response Limited (OSRL) and the OSPRAG Well Capping Device. The developer is

party to the oil pollution compensation scheme the Offshore Pollution Liability (OPOL) Agreement. I therefore agree with the assessment of environmental effects once control and mitigation measures from the unlikely event are accounted for.

Features of the project or measures envisaged to avoid, prevent, reduce or offset significant effects.

As discussed above, a well blow-out from a Talbot well has the potential to have a significant effect on the environment. The following features of the project or measures are envisaged to avoid, prevent, reduce or offset any significant adverse effects on the environment:

- The developer will have an approved Oil Pollution Emergency Plan (OPEP) in place before commencing operations, including a relief well plan.
- Operations will be carried out in accordance with a well plan and involve well control contingency planning.
- Primary well barrier: the developer will use appropriate drilling fluids to maintain well control and provide sufficient hydrostatic pressure.
- Secondary well barrier: the developer will utilise specialist equipment (Blow Out Preventer) to reduce the risk of a well blow-out occurring.
- The developer has access to the oil spill response provider Oil Spill Response Limited (OSRL) and the OSPRAG Well Capping Device.
- The developer party to the oil pollution compensation scheme the Offshore Pollution Liability (OPOL) Agreement

An unplanned event in the form of a well blow-out from a Talbot well has the potential to have a significant effect on the environment; however, the mitigation measures above seek to avoid, prevent, reduce or offset this impact as far as possible.

I therefore agree with the conclusion that while a well blow-out has the potential to have a significant effect on the environment, the range of mitigation measures in place reduce this risk to as low as possible.

Decision on Conditions to the agreement of the grant of consent

No conditions should be attached to the agreement to the grant of consent.

Recommendation

I have set out above my conclusion on the significant effects of the project on the environment and the conditions that should be attached to the grant of consent.

I recommend that the Secretary of State should agree to the grant of consent for this project because taking into account the effect of the measures / features set out above, there will be no significant effects on the environment.

[Redacted signature]

[Redacted name]

9th March 2023

[Redacted title]

Offshore Petroleum Regulator for Environment and Decommissioning
For and on behalf of the Secretary of State for Energy Security and Net Zero

Agreement decision

I accept the recommendation for the reasons given.

On behalf of the Secretary of State, I therefore agree to the grant of consent.

[Redacted signature]

[Redacted name]

Date 9th of March 2023

[Redacted title] Environmental Operations

Offshore Petroleum Regulator for Environment and Decommissioning
For and on behalf of the Secretary of State for Energy Security and Net Zero