



Offshore Petroleum Regulator
for Environment & Decommissioning



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**

Serica Energy (UK) Limited

Rhum Production Increase

To: Jonathan Ward

Decision Recommendation:

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

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 therefore there is no requirement for conditions to be attached to the grant of consent.

From: [REDACTED]
Date: 17 February 2022

ES Title:	Rhum Production Increase Environmental Statement
Developer:	Serica Energy (UK) Limited
Consultants:	BMT Cordah
OGA Field Group:	Northern North Sea
ES Report No:	D/4267/2021
ES Submission Date:	27 May 2021
Block No:	3/29
Project Type:	Increase in Production

Project Description

The Rhum well 3/29a-6 (R3) is an existing well which has been brought online, having been drilled in 2005 and shut in for 16 years. The Environmental Statement (ES) is required to cover an increase in gas production from the Rhum Field from the R3 well.

The R3 well forms part of the Rhum field development which consists of three subsea wells tied into a central manifold that produces back to the Bruce platform operated by Serica Energy (UK) Limited (Serica). From there gas is exported via the Frigg pipeline to the St Fergus terminal and liquids are exported via the Forties Pipeline System. No additional infrastructure is required as a result of the well coming online. The Rhum field is located in the northern North Sea (NNS) in block 3/29a, in an approximate water depth of 122 m. The field is 400 km northeast of Aberdeen and 44 km north of the Bruce Process, Utilities and Quarters (PUQ) installation. It is part of the wider Bruce, Keith and Rhum (BKR) area.



Offshore Petroleum Regulator for Environment & Decommissioning

Small volumes of condensate will also be produced from R3 well and the expected oil production from the R3 well is accommodated within the current Production Consent for the Rhum field.

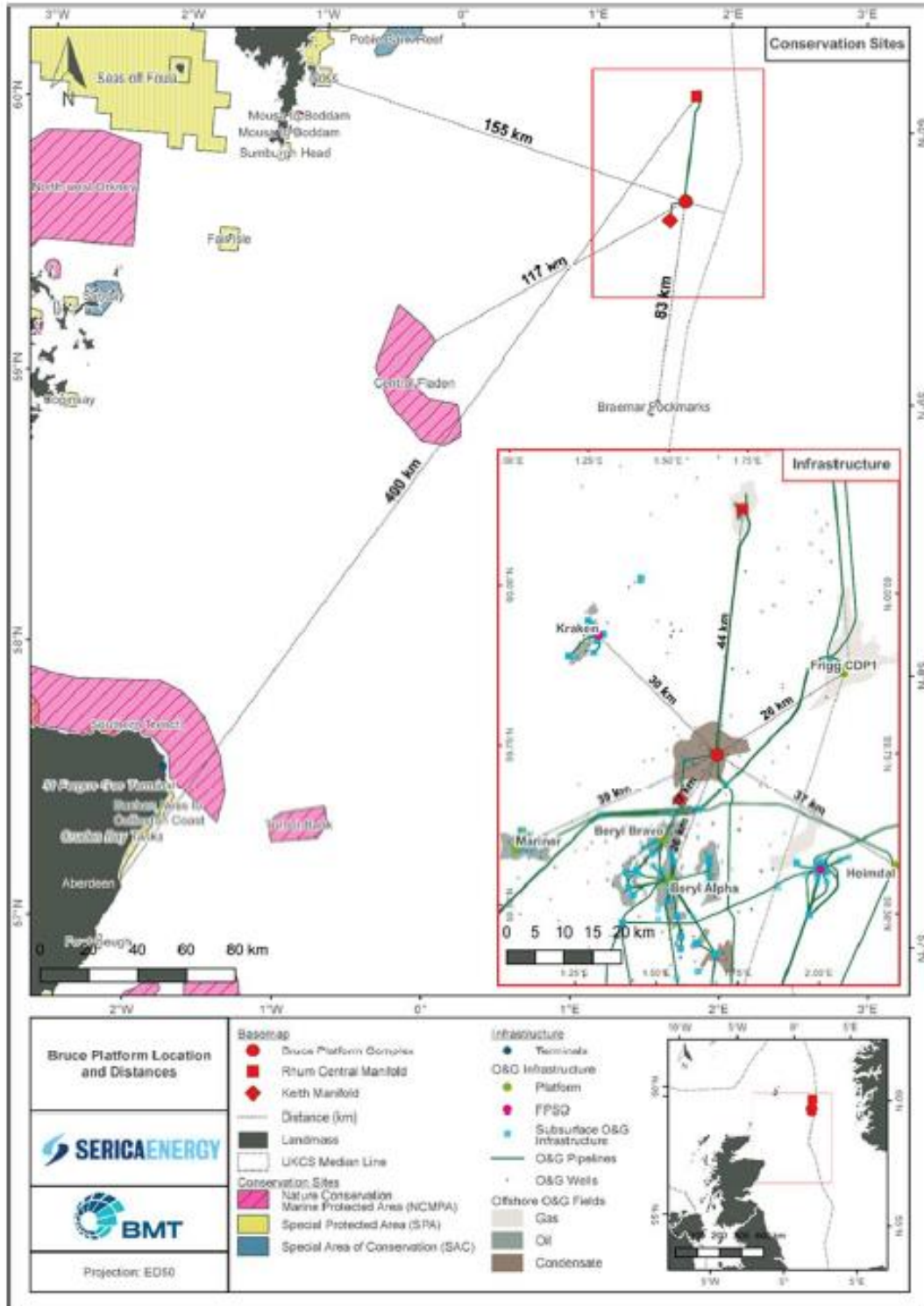


Figure 1. Bruce installation and Rhum field central manifold location



Key Environmental Impacts

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

- Effects on water quality, flora and fauna from an increase in chemical use and discharge and the increase in operational produced water;
- Effects on local air quality and climate from the increase in atmospheric emissions generated from the project; and
- Effects on the water quality, protected species and habitats, fauna and flora from an accidental event resulting in an oil release.

Key Environmental Sensitivities

The ES identified the following environmental sensitivities:

- Fish: The fish population in the area of operations is typical of that across the NNS. The platform is within ICES area 48F1 which is a spawning ground for haddock, Norway pout, saithe, whiting, cod and sandeel and a nursery area for whiting and cod. Cod and haddock are listed on the International Union for Conservation on Nature (IUCN) Red List of Threatened Species as vulnerable.
- Seabirds: Northern fulmar, northern gannet, arctic skua great skua, black-legged kittiwake, little gull, great black-backed gull, common gull, lesser black-backed gull, herring gull, sandwich tern, common tern, common guillemot, razorbill, little auk and Atlantic puffin could be present in the project area in various levels of abundance dependent on season. The limited available data from the Seabird Oil Sensitivity Index indicates that the area is considered to have low seabird sensitivity to oil pollution throughout the year.
- Protected habitats: There are no designated protected sites within 40 km of Bruce platform operations, the nearest being the Braemar Pockmarks SAC, approximately 83 km south.
- Protected species: Of the Annex II species listed, harbour porpoise, harbour seal and grey seal may be present within the area. The harbour porpoise has been sighted in high densities in February and in low densities in June, July and December, whereas the grey seal and harbour seal is found in low densities given the distance from the coast.
- Other users of the sea: There will be no additional construction or installation of infrastructure, nor additional marine traffic resulting from the proposed activities, and consequently other sea users are not expected to be adversely impacted.
- In-combination, cumulative and transboundary effects: The project area is adjacent to the UK/Norway median line, which is 17km to the east of the project area. No oil and gas construction activities are planned in the project area. The project will add cumulatively to the produced water production, chemical use and atmospheric



emissions at Bruce. There are no known: military activities; planned offshore renewable developments; aggregate activities; operational telecommunication cables; or wrecks within the immediate vicinity of R3. There are a number of neighbouring installations and associated pipelines located within 40 km of the Bruce field, with the closest being Beryl Bravo, 17 km to the south.

Public Consultation

The ES was subject to public consultation, for which the public notice was published on 11 June 2021. Following publication, changes were made to the ES which meant public consultation was required to be readvertised. The further public consultation, which detailed what had been changed within the ES, was published on 2 July 2021 and ended on 02 August 2021. There were no public representations received.

Consultation with Other Authorities

The Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), the Marine and Coastguard Agency (MCA) and the Ministry of Defence Infrastructure Organisation (MoD), were consulted on the proposals. JNCC, MS and the MoD submitted a response and none of the consultees had objections to the ES. Responses were not received from MCA. Comments were received from JNCC and Marine Scotland, but they did not register any objections. MOD confirmed they had no objections.

Further Information

Further information was requested under a Regulation 12(1) notice from the developer on 9th August 2021, including clarification of cumulative effects at Bruce, atmospheric emissions and volumes of condensate production. An additional further information request under a Regulation 12(1) notice was sent on 27th October 2021, seeking further clarification on atmospheric emissions arising from the production increase. Written responses were submitted to the Department on 10th September 2021 and 3rd December 2021 respectively to address the issues raised.

The further information provided by the developer was not directly relevant to reaching a conclusion on whether the project is likely to have a significant effect on the environment and was therefore not subject to further public notice

Conclusion on the significant effect of the project on the environment

Taking into account the matters set out in Regulation 14(2) I have concluded on behalf of the Secretary of State that this project will not have any significant effects on the environment:

Discharges to sea

There will be an increase in daily produced water volumes by an estimated 36 m³/day, which accounts for an approximate 16% increase in volumes of produced water processed on Bruce platform. Produced water is preferentially reinjected down a designated reinjection well. When reinjection is not available, the produced water will be processed through a deoiler package, installed for periods when the reinjection system is offline for maintenance, and will reduce the oil in water concentration to below 30mg/l, with 8-12 mg/l expected. The increase in produced water can be accommodated within the produced water processing system.

There will be also an increase in chemical use and discharge as a result of the R3 well



coming online. Discharges are expected to rapidly dilute and disperse within the strong water currents in the area and no significant impact from the additional discharge is expected.

All discharges of chemicals and produced water into the marine environment will be rapidly diluted and dispersed. Any impact on water quality from chemicals and produced water discharges will be localised and short term due to strong water currents in the area, and any impact on marine organisms has been assessed as not significant. I conclude that the impacts from discharges to sea from the project will not have a significant effect on the environment.

Atmospheric emissions

Local air quality and climate change were the primary receptors considered in relation to atmospheric emissions from the project. There will be an increase in fuel use for use on the compression trains and export compressor. The additional fuel use will contribute to a minor localised increase in atmospheric pollutants. Due to the remote geographic location and winds within the offshore environment, emissions are expected to rapidly disperse and are unlikely to be detectable within a short distance from the platform.

The impact on climate from production and processing from bringing R3 online was assessed. The increased power generation will give a worst case increase of 28,702 tonnes of CO₂ in 2022. Clarification was provided by the operator on the commentary on the increase in atmospheric emissions and impact on climate. The production consent is for the years 2022 and 2023 only and emissions are forecasted to drop below 2020 levels by 2023. No additional flaring and venting will be expected as a result of the well coming online.

I agree with the conclusion that the additional atmospheric emissions will contribute to both localised and short-term increase in atmospheric pollutants. The Production Consent covers two years and there is a short-term increase in emissions associated with the project. Taken into the wider context of UK atmospheric emissions, I conclude that there will be no significant effect on the environment.

Accidental Events

Serica have an Oil Pollution Emergency Plan in place which sets out arrangements for responding to oil pollution incidents in the event of a release from R3. The ES considered the worst case spill scenarios and noted there was no change in the oil spill scenario anticipated at BKR as a result of R3 coming online. The maximum release from R3 is anticipated to be 85 m³/day of oil, which will rapidly evaporate or disperse into the water column

Due to the relatively small volumes of oil and condensate, the properties of the hydrocarbon and the response options available to Serica, I agree that the previously modelled accidental event scenario has not changed and therefore the planned activities would not have the potential to have a significant effect on the environment.

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

No significant adverse impacts were identified that would warrant specific mitigation measures or monitoring conditions. All of the proposed activities will be undertaken in line with commitments detailed in the ES, conditions attached to existing environmental approvals and best industry practice.



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.

I recommend that the Secretary of State should agree to the grant of consent for this project because there are no significant effects on the environment.

Date: 17 February 2022

██████████
Environmental Manager
Offshore Petroleum Regulator for Environment and Decommissioning
For and on behalf of the Secretary of State for Business, Energy, and Industrial Strategy

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.

Jonathan Ward

Date 17 February 2022

Director, Environmental Operations
Offshore Petroleum Regulator for Environment and Decommissioning
For and on behalf of the Secretary of State for Business, Energy, and Industrial Strategy.