Chrysaor North Sea Limited

Production Increases, Hawkins and Seymour fields

Environmental Statement Summary

To: Wendy Kennedy
From: Angela Flowers
Date: 10th February 2020

<table>
<thead>
<tr>
<th>ES Title:</th>
<th>Hawkins and Seymour Production Increase</th>
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<tbody>
<tr>
<td>Developer:</td>
<td>Chrysaor North Sea Limited</td>
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<td>Consultants:</td>
<td>Prepared by Developer</td>
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<td>OGA Field Group:</td>
<td>Central North Sea</td>
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<tr>
<td>ES Report No:</td>
<td>D/4238/2019</td>
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<tr>
<td>ES Submission Date:</td>
<td>3rd September 2019 and re-submission on 18th December 2019</td>
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<tr>
<td>Block No:</td>
<td>22/05b</td>
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<td>Development Type:</td>
<td>Increase in production, Hawkins and Seymour fields.</td>
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Project Description

Chrysaor North Sea Limited (Chrysaor) proposes to develop the Seymour Horst formation and to increase the level of production from both the Hawkins and Seymour fields, related to the drilling of a new well in each field. The fields are located in Block 22/05b in the central North Sea, approximately 220 kilometres (km) northeast of the Aberdeenshire coast and approximately 3.8 km from the UK / Norway median line. The water depth in the area is approximately 90 metres (m).

The two new wells are scheduled to come online during 2020, an extended reach well (22/05b-A14) targeting the Seymour Horst formation and an infill development well (22/05b-A13) targeting the Hawkins reservoir. Both wells will be drilled from the Armada platform, and when they are brought on-line the production levels from both fields will exceed the current consented levels. The anticipated increase in gas production at the Hawkins field will be greater than 500,000 m³ per day and the anticipated increase in oil production at the Seymour field will be greater than 500 tonnes per day, and those increases will exceed the thresholds specified in the EIA Directive (Directive 2011/92/EU as amended by Directive 2014/75/EU). An Environmental Statement (ES) was therefore required under the Offshore Pipelines (Assessment of Environmental Effects) Regulations 1999 (as amended). There will also be increases in oil production at the Hawkins field and gas production at the Seymour field, but those increases will be below the thresholds specified in the Directive.

The Hawkins and Seymour fields are tied-back to the Armada platform, with processed gas exported via the Central Area Transmission System (CATS) and processed liquid hydrocarbons exported via the Everest link to the Forties export pipeline system. The Seymour Horst development proposals will involve minor modifications on the Armada platform, replacing instrumentation and installing a new flowline between the production tree and separator, but the proposed increases in production from both fields are within the design capacity of the platform and no plant modification is required to process the additional
gas and oil. The Armada platform has an existing Oil Pollution Emergency Plan (OPEP) covering the production operations.

Key Environmental Impacts

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

- Increase in atmospheric emissions;
- Increase in chemical use and discharge;
- Increase in produced water discharge volume (but no change to permitted discharge concentrations); and
- Increase in probability of accidental hydrocarbon spill (but any impacts would remain the same).

Key Environmental Sensitivities

The ES identified the following environmental sensitivities:

- Fish: The fields and Armada platform are located within spawning grounds for lemon sole, Norway pout, mackerel and sandeels, and nursery areas for anglerfish, blue whiting, cod, European hake, haddock, ling, Norway pout, plaice, whiting, herring, mackerel, sandeel, spotted ray, spurdog and Nephrops. However, the spawning and nursery areas are extensive, and the proposals are unlikely to have any impact on these species.
- Seabirds: Seabird vulnerability is moderate in the area during February and March, and low for the remainder of the year. It is considered that there are sufficient mitigation measures in place to prevent accidental spills that could have a significant impact on seabirds, and Chrysaor already has an approved Oil Pollution Emergency Plan (OPEP) in place for the fields and the Armada platform.
- Protected habitats: The nearest protected site is the Norwegian Boundary Sediment Plain NCMPA, located 5 km to the northwest of the Hawkins well. This is a sandy plain in relative shallow water, designated for the ocean quahog which is on the OSPAR list of threatened and/ or declining species. The East of Gannet and Montrose NCMPA is located 60 km to the south-southwest of the Armada platform and is designated for the ocean quahog and an offshore deep-sea mud habitat. The proposals are not anticipated to have any significant impact on these or any other protected habitat.
- Protected species: Common dolphin, harbour porpoise, killer whale, minke whale white-beaked dolphin and white-sided dolphin have all been recorded in Block 22/05. There have also been infrequent recordings of grey and harbour seals, which mostly inhabit coastal and inshore waters adjacent to Scotland. No disturbance of marine mammals, or any other adverse impacts, are anticipated in relation to the proposals.
- Other users of the sea: The development is located within ICES rectangle 44F1, and relative fishing effort has declined since 2016 and is relatively low. Shipping density in the vicinity of Block 22/05b is also low. Appropriate navigational controls are already in place, and it is not anticipated that there will be any significant impact on other
users of the sea as a result of the proposals.

- In-combination, cumulative and transboundary effects: No significant in-combination, cumulative or transboundary effects are anticipated as a result of the proposals.

**Key Mitigation Measures (including environmental or monitoring conditions)**

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.

**Consultation**

The Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), the Scottish Environmental Protection Agency (SEPA), Scottish Natural Heritage (SNH), the Marine and Coastguard Agency (MCA), the Ministry of Defence Infrastructure Organisation (MoD), the Northern Lighthouse Board (NLB) and the Norwegian Climate and Pollution Agency (KLIF) were consulted on the proposals. Responses were not received from SEPA or KLIF. Comments were received from the other consultees, but they did not register any objections. The ES was also subject to public notice, and copies of the ES were requested by Greenpeace and Kellas Midstream, but they did not submit any representations.

**Further Information**

Further information was requested from the developer on 5th November 2019, including clarification of forecasted production levels at Armada and further information relating to produced water, chemicals and atmospheric emissions. A revised ES was submitted on 18th December 2019 to address the issues raised.

**Second consultation**

The revised ES was subject to a repeat of the consultation and a new public notice. No representations against the proposals were received, and it was confirmed that all of the comments on the original ES had been adequately addressed.

**Decision**

Following its review of both the original and re-submitted ES and the comments received from consultees, OPRED is satisfied that this project will not have a significant adverse impact on the receiving environment or the living resources it supports, or on any protected habitats or species or other user of the sea. In respect of the potential environmental impacts, the revised ES satisfactorily confirmed:

- The increase in emissions arising from the greater use of fuel gas will be offset by a reduction in emissions related to the use of diesel fuel;
- There will be little change in chemical use and discharge, and all of the chemicals have been risk assessed and confirmed to be acceptable;
- There will be an increase in the produced water discharge, but the permitted discharge concentration will be maintained to ensure there are no adverse effects in the receiving environment;
- The risk of an accidental spill will not alter significantly, and appropriate mitigation is in place to prevent and respond to any spill; and
- All of the above will be offset by continuing reductions in production from other fields
producing via the Armada platform.

Noting the above and that the consultees did not raise any objections to the proposals and no representations were received in response to the public notice, for either the original or re-submitted ES, OPRED is satisfied that there are no grounds for objecting to the proposals and that the ES should be approved. On behalf of the Secretary of State, OPRED has therefore given its agreement to the grant of the necessary consents by the OGA.

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<th>Wendy J. Kennedy</th>
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<tr>
<td>Wendy Kennedy</td>
<td>Date</td>
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<tr>
<td>Chief Executive</td>
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<td>BEIS OPRED</td>
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