E.ON Ruhrgas UK North Sea Limited.
Babbage Field Development
Environmental Statement Summary

To: Wendy Kennedy

From: Sarah Dacre
Date: **22 December 2008**

ES Title:	Babbage Field Development
Operator:	E.ON Ruhrgas UK North Sea Limited
Consultants:	Rudall Blanchard Associates
Field Group (DECC):	London
ES Report No:	D/4014/2008
ES Date:	July 2008
Block Nos:	48/2a
Development Type:	2-phase development of Babbage Field, including 5 wells, production facility and 28km gas export pipeline.

Project Description

The proposed development is located in Block 48/2a in the Southern North Sea, approximately 80km from the northeast of Dimlington.

The project comprises a 2 phase development:

Phase I

- The drilling of 3 wells from a jack-up drilling rig;
- Installation of a Normally Unattended Installation (NUI);
- Well fracturing operations.

Phase II

- The drilling of two additional wells;
- 28km gas export facility tied back to the West Sole System (WSS).
- From west sole the gas will be commingled with the Hoton and Hyde fluids for export to the BP Dimlington.

Key Environmental Sensitivities

The EIA identified the following environmental sensitivities:

- Moderate shipping activity (c.13-14 vessels per day passing within 10nm);
- Low fishing activity;
- Fish spawning area for herring, lemon sole, sprat (peak May and June) and sandeels);
- Nursery area for lemon sole, plaice, sprat, sandeels and whiting;
- Seabird vulnerability is very high to high throughout the year except in June and July where vulnerability is considered to be low and very low.
- Moderate numbers of cetaceans have been recorded in the area, including white-beaked

dolphin, white-sided dolphin, minke whale and harbour porpoise;

- Annex I Habitats: The site and pipeline route surveys did not identify any potential Annex I habitats within the vicinity of the proposed project.
- Annex II Species: harbour porpoise occurs in low to moderate numbers between February and September.

Key Potential Environmental Impacts

The following potential impacts and mitigation were addressed in the EIA:

- Obstacles to other marine activities during operations - The shortest practical pipeline installation schedule is proposed, which will be trenched and buried to reduce the risk of snagging. Safety zones will be in operation throughout the installation and operational phase and other users of the sea will be notified of vessel presence. All subsea structures are fishing friendly and will be submitted for inclusion on the Admiralty charts.

- Seabed disturbance.

  Anchoring - the use of anchors with respect to the heavy-lift vessel during platform installation may cause anchor mounds. There are 8 anchors in total and will extend out 1-1.2km. Due to the sandy mobile nature of the seabed and strong tidal currents any anchor mounds formed are not anticipated to persist.

  Platform

  Pipeline - There will be negligible seabed disturbance with respect to the laying of the pipeline given the small diameter of the pipeline and short period of time the line will remain unburied. Surveys did not identify and potential Annex I species. Overall, pipeline operations are likely to have an impact area of 0.28km^2.

  It is expected that benthic communities will begin to recover as soon as operations have ceased.

  Proposed mattressing and rock dumping is thought to be required at the ends and crossings of the pipeline. The maximum area affected by 20,000 tonnes of rock dumping is estimated to be 0.1km^2.

  The proposed rock dumping and mattressing will also likely disturb the benthic fauna and change the local habitat from sand to rock, though it is thought the benthic communities will re-colonise the rock dumping area with the addition of opportunistic species.

  Drilling – it is estimated that the drilling of 5 development wells will generate a maximum of 1,475 tonnes of cuttings, 850 tonnes of which will be discharged at the surface and the remaining cuttings beings discharged at the seabed. A worse-case modelling scenario predicted the cuttings pile to be circular around the drill rig location, where deposits reached 1.8mm thick at the centre of discharge. The combined accumulation from the first three wells are deposited to a depth of >1mm over c.200m radius. As such the area impacted by cuttings of greater than 1mm in depth is approximately 0.126km^2. It is likely that benthic fauna will be affected in this zone of deposition but over the six months the 3 wells are drilled re-suspension and re-deposition will occur minimising the overall effect, including the re-colonisation of communities.

  Sediments and seabed communities will also be disturbed around the footprint of the drilling rig. Spud can impact will be approximately 462m^2. Re-colonisation of the affected area is expected. In addition, rig stabilisation material may have to be used if scour presents a problem. If this is necessary, the total quantity of gravel used will be 1,650 tonnes at each spud can cover a total area of 0.00138km^2.

Rig stabilisation is likely to disturb the benthic fauna and flora and change the local habitat from mobile sediment to rock and potentially introducing a habitat for new species. However, in this instant this rig stabilisation is only a contingency, but if used a small limited area will be impacted.

Based on the evidence provided in the ES, the impacts on the seabed are considered not to be significant.

- Noise – the Babbage development will generate noise through the installation of the platform (piling activities) and pipeline, as well as through drilling and fracturing operations and the operational phase. With mitigation in place, such as a Marine Mammal Observer (nominated crew member), soft starts, and activities commencing in daylight hours, impacts from these noise sources are expected to be negligible.

- Atmospheric emissions – as a result of the proposed tie-back, there will be additional emissions onshore at Dimlington, where any increase from the Babbage development is not considered to be significant.

- Marine discharges – the only foreseeable discharges are associated with the proposed commissioning of the pipeline, drilling operations and recovery of gas at Babbage. All are CEFAS registered and are not considered to be significantly harmful to the environment. No produced water is expected.

- Accidental events – Risks during the pipeline installation phase will be covered by the pipelay vessels approved Ship Oil Pollution Emergency Plan (SOPEP). During the production phase E.ON's OSCP for the Babbage facilities will be used if an incident occurs.

- Cumulative Impacts – The cumulative impacts from the proposed operations are negligible due to the extent of existing infrastructure in the area.

Public Consultation: No comments were received as a result of the public consultation.

Consultee(s):

The statutory consultees for this project were JNCC and CEFAS. The following comments were made:

JNCC: JNCC commented on the good quality of the ES. JNCC requested further information with respect to noise from piling operations and potential impact on cetaceans. E.ON was also required to confirm their satisfaction concerning modification to mitigation measures to reduce the risk of cetacean disturbance.

CEFAS: Confirmed that the proposed development would be in an area where spawning of herring, lemon sole, sandeel, sprat and plaice are likely to occur. Nursery areas for whiting, lemon sole sandeel and sprat are also located in the vicinity. There are currently restrictions on drilling and seismic activity in blocks 48/2 & 48/6 between August and October inclusive. Results from a Herring Spawning Survey conducted by E.ON Ruhrgas and concluded that there was no evidence of Herring spawning in the area. In addition, CEFAS are satisfied with the information the applicant has provided so far concerning the environmental impact of its proposed usage of chemicals, but await receipt of the PON15s to provide a more informed assessment. There was no objection to the proposed development project.

Further Information: In addition to the consultee comments a number of minor issues were highlighted by DECC and further information was requested.

E.ON Ruhrgas UK North Sea Limited provided the additional information requested and where appropriate, acknowledged comments and committed to incorporating them in future submissions All issues were considered satisfactorily amended and clarified. E.ON Ruhrgas UK North Sea Limited also accepted the modified mitigation measures associated with the proposed piling operations. JNCC recommendation for approval was given.

Conclusion(s):

Following consultation and the provision of the additional information on the 12th December 2008, DECC and its consultees are satisfied that this project is not likely to have a significant impact on the receiving environment, including any sites or species protected under the Habitats Regulations.

Recommendation(s):

On the basis of the information presented within the ES and advice from consultees it is recommended that the ES should be approved.

Wendy Kennedy…… 31/12/2008…….

Wendy Kennedy **Date**