

EXECUTIVE COUNCIL

RESTRICTED

Title of Report: Review of Environmental Impact Statements produced by Rockhopper Exploration PLC for offshore drilling

Paper No: 201/09

Date: 17 September 2009

Report of: Environmental Planning Officer

1.0 Purpose

1.1 To recommend approval procedures for two Environmental Impact Statements (EIS's) submitted by Rockhopper Exploration PLC.

2.0 Recommendation

(a) Honourable Members be advised to recommend that the Governor approves the two EIS's for exploration drilling prepared by Rockhopper Exploration PLC, subject to submission of Operational Addendums to include details of the drilling contractor, drilling unit, location and number of wells to be drilled, and proposed dates of operation.

(b) That the Addendums should also include revised Non-Technical Summaries that address the issues identified by the Review.

(c) That the Addendums to the EIS's are published in the Gazette and be approved by the Mineral Resources Committee.

(d) That the Review and Rockhopper Exploration's response to it both be made available to the public.

3.0 Summary of Financial Implications

3.1 None.

4.0 Background

4.1 In 2004 Rockhopper Exploration PLC was awarded licences PL023 and PL024 to drill in waters to the north of the Falkland Islands. The following year it was granted licences PL032 and PL033 which lie approximately 75 kms north of the earlier licences. The two latter licences were previously held

and drilled by Shell. The company is planning to drill in the areas covered by the licences as soon as a rig can be secured.

- 4.2 Earlier this year the company submitted two Environmental Impact Statements (EIS) for the four blocks (PL023-24 and PL032-33). Both use the same template as was used for the Desire Petroleum EIS published a few weeks earlier (see ExCo Paper 168/09). The Statements provide an assessment of the potential environmental impacts associated with the proposed drilling, together with mitigation and management measures and a description of any residual impacts to the environment. The assessments utilise a study of the baseline environment, together with a description of the proposed operations, in order to assess the risk of impacts occurring.
- 4.3 The EIS's were placed on deposit at the end of March 2009 with comments invited from the public and other interested parties. Rockhopper Exploration also organised a well attended public meeting in Stanley on 4 May 2009 to explain its proposals.
- 4.4 The Department for Energy and Climate Change (DECC) submitted a response to the Desire Petroleum EIS, as did Falklands Conservation (FC) and the Royal Society for the Protection of Birds (RSPB) on a joint basis as part of Birdlife International. In both cases the comments made are generally applicable to the Rockhopper EIS's and are summarised below for information.
- 4.5 DECC identified a few issues of concern, including the drilling schedule, drilling rig, well testing, cuttings and noise. The majority of these arose as a result of the lack of information regarding the proposed rig and when drilling is likely to take place (Rockhopper Exploration has re-affirmed its intention to produce an addendum to the EIS's when these details are known).
- 4.6 The FC/RSPB overall assessment was that the Statement was ok, although they identified some aspects of the EIA/EIS process which could be strengthened. These include:
 - Assessment of impacts section is focussed very much by activities e.g. drilling, vessel use, whereas to present a complete and clear view of impacts it would also be useful if the EIA presented the impacts by receptor e.g. birds, marine mammals, people, etc.
 - Recommend the preparation of a Strategic Environmental Assessment (SEA) to consider cumulative impacts and consider that this document would probably best be coordinated by the Mineral Resources Department with input from other departments. The respondents observe that such SEAs have been carried out for offshore energy in the UK and, while far from perfect, do provide a more strategic approach to planning.
- 4.7 The proposal to prepare a SEA is probably more relevant in the event of commercial quantities of hydrocarbons being discovered in a number of

licence areas than for the current round of exploratory drilling. Should this be the case it will be necessary to consider cumulative impacts and SEA is a valuable tool to achieve this.

5.0 Review Overview

- 5.1 As reported in last months ExCo paper (168/09), the Institute of Environmental Management and Assessment (IEMA) in the UK was engaged to review the Desire Petroleum EIS. The two Rockhopper Exploration EIS's were prepared by the same company (RPS Energy) and have been produced in the same format, to the same scope and largely say the same thing.
- 5.2 Because of the similarities between the Statements, the review of Rockhopper Exploration's EIS's has been completed in-house, drawing heavily on the external review already carried out by IEMA. The review was co-ordinated by a member of the Environmental Planning Department who is also an associate of IEMA.
- 5.3 For the purposes of the review the two Rockhopper Exploration EIS documents prepared for its drilling programme in the North Falkland basin were grouped together (but with differences highlighted as necessary).
- 5.4 The review was completed in July and forwarded to Rockhopper Exploration for comment (duly received: see 7 below).
- 5.5 When undertaking reviews IEMA grade the different sections of an EIS according to a scoring system that ranges from A (Excellent, no tasks left incomplete) to F (Very poor, most tasks left incomplete).
- 5.6 If the IEMA scoring system was to be applied to the Rockhopper Exploration EIS's the grades are likely to be as follows:

General Criteria

- i) Description of development – C
- ii) Site description – C
- iii) Scoping – C
- iv) Consideration of Alternatives – C

Issue Specific Criteria

- i) Baseline Conditions – C
- ii) Prediction of Impact Magnitude – D
- iii) Impact Significance – D
- iv) Mitigation – D
- v) Follow-up – C

Presentation of Results

- i) Presentation – C
- ii) Objectivity – C
- iii) Non-Technical Summary - D

- 5.7 The overall grade would accordingly have to lie between a C (Satisfactory despite omissions and inadequacies) and a D (Parts well attempted but must as a whole be considered unsatisfactory because of omissions and/or inadequacies).
- 5.8 Notwithstanding the weaknesses identified in the review, the overall quality of the EIS is generally satisfactory and the IEMA grading might be considered harsh due to the absence of the Addendums to which Rockhopper Exploration is committed to producing once a drilling rig has been procured. This additional information, when provided, is likely to raise the documents above acceptable minimum standards.

6. Main issues arising from the Review

- 6.1 A common theme running throughout the Review is the lack of information in the EIS's relating to the specifics of the proposed drilling operations. Such issues include the type of rig to be procured, the time of year that the activity will take place and the number and location of wells proposed. To a large extent these were recognised in the EIS's which include a commitment to produce an Operational Addendum once specific details are known.
- 6.2 Allowing for the uncertainties highlighted in 6.1 the Review also identified a number of areas where, in the absence of known conditions, the Statements could have been more expansive in consideration of different scenarios. These include:
- A discussion on the impacts and emissions arising from different flare tip designs;
 - Assessment of impact magnitudes and the development of consistent worse case scenarios;
 - A more comprehensive approach to the consideration of cumulative impacts; and
 - Strengthening approaches and commitment to mitigation measures.
- 6.3 One of the specific weaknesses identified in the Review is in relation to waste. There is a large degree of uncertainty associated with waste disposal from the drill rigs; both in terms of the amount of waste likely to be generated and the likely disposal method. The EIS's provides no estimate for hazardous and certain other wastes and a worse case estimate should have been possible. In addition (while accepting that specific details of waste treatment, recycling and disposal destinations cannot be confirmed at this stage), there should be greater commitment to dispose of, or recycle, non-hazardous waste in the Falklands.
- 6.4 Finally, although welcoming the production of Non-Technical Summaries as separate documents, they could be criticised for:
- Using technical language and terms not accessible to the general public;
 - A lack of maps and diagrams that could aid comprehension of the proposals;

- The use of cross-references to the EIS, rather than being stand alone documents; and
- A lack of information on contact details, timings and methods of consultation and how comments have been/will be addressed.

7. Response from Rockhopper Exploration PLC to the Review

7.1 Rockhopper Exploration was sent a copy of the Review in early July and responded in August addressing the points raised in it. Key parts of the response are as follows:

- i) Confirmation that Rockhopper Exploration will submit Operational Addendums containing details of the drilling contractor, drilling unit, location and number of wells to be drilled, and dates of operation. The company has confirmed that a maximum of two wells are to be drilled in PL023 and PL024 and up to three wells in PL032 and PL033.
- ii) The response provided further information on the points identified in 6.2 above:

Issue identified in the Review	Rockhopper Exploration response
The impacts and emissions arising from different flare tip designs	Well testing is not planned so flare design is not an issue at this stage. If this situation changes, we will address flaring in the Addendum to the EIS.
Impact magnitudes and the development of consistent worse case scenarios	Further information provided, including for oil spills. Will look to provide a table in the Addendum to summarise impacts.
The consideration of cumulative impacts	Likely that rig will be shared and there is unlikely to be any temporal overlap in operations. Also, wells being planned by other operators are a considerable distance from each other – any spatial impacts from different drilling operations must be considered to be remote. Cumulative environmental effects from the planned exploration programme are unlikely given the short term nature of the wells, the fact that they will be plugged and abandoned and that exploration activities are planned over a wide area.
Approaches and commitment to mitigation measures	Comments noted. Details will be presented in the Oil Spill Contingency Plan covering mitigation in the event of a major oil spill.

- iii) The company has provided further information on proposals for waste disposal (6.3 above).

- iv) The company noted the comments on weaknesses in the Non-Technical Summary.

8. Mineral Resources Committee

- 8.1 The Minerals Resources Committee has not specifically considered this Review. However on 16 July 2009 it considered a report on the Review of the Desire Petroleum EIS. Members were broadly content with both the Review and response from Desire Petroleum, recognising that the Operational Addendum should address the remaining unresolved matters.
- 8.2 The considerable similarities between the Desire Petroleum EIS and those produced by Rockhopper Exploration was brought to the attention of the Committee, which decided that it did not wish to convene a special meeting on the Rockhopper Exploration EIS's and was content for the matter to go straight to ExCo.

9. Next steps

- 9.1 It is recommended that Executive Council advises HE the Governor to approve the two EIS's for exploration drilling prepared by Rockhopper Exploration PLC, subject to submission of Operational Addendums. The Addendums to the EIS's should be published in the Gazette and be approved by the Mineral Resources Committee.
- 9.2 Revised Non-Technical Summaries that address the issues identified in the Review should be produced and submitted at the same time as the Operational Addendums. This would provide lay people with information on the full proposal in a form that should satisfy their level of interest.
- 9.3 Finally, it is appropriate the Review and Rockhopper Exploration's response to it both be made available to the public.

10. Financial Implications - None

11. Legal Implications - None

12. Human Resources Implications - None