An Roinn Cumarsáide, Mara agus Acmhainní Nádúrtha Baile Átha Cliath 2.

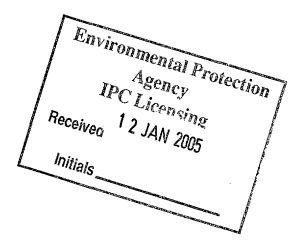


Department of Communications, Marine and Natural Resources Dublin 2.

Our ref A05/02 Your ref: 738

10th January 2005

Ms. Brid White
Office of Licensing & Guidance
Environmental Protection Agency
Headquarters, P.O. Box 3000
Johnstown Castle Estate
Wexford
Ireland



Re:Shell's application for an Integrated Pollution Prevention and Control Licence

Dear Ms. White,

I refer to your letter of 9 December 2004 to the Secretary General in regard to the above matter.

The development of the Corrib Gas Field has been the subject of thorough appraisal in the context of the Department 's regulatory role for Oil and Gas Exploration and Production operations. Following this the Minister issued approvals/consents, subject to a number of technical and environmental conditions, for the development of the Corrib Gas Field, including the terminal. The application to the Minister for approvals/ consents were accompanied by an Environmental impact Statement which was thoroughly assessed by the Department's technical experts and by outside environmental consultants. The Minister concluded from these assessments that no aspect of this development would have a significant effect on the environment.

While we have no additional comments to make in relation to the EIS, we would like to draw your attention to the various conditions included in the statutory approval for the Plan of Development ,Pipelines Consents and Foreshore Licence issued for this project.(copies enclosed)

Perhaps when you have examined these, we could organise a meeting to progress these important matters further.

Yours sincerely

Michael J Daly

Principal Officer
Petroleum Affairs Division

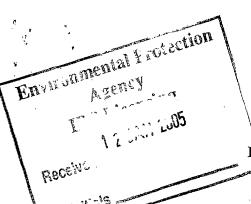
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DATE 19/1/05 (CH)



Environmental Protection

IPC Licensing

APPENDEX A 2 JAN 2005

DRRIBIGAS FIELD

PLAN OF DEVELOPMENT FOR CORREGAS FIELD

RECOMMENDATION AND CONDITIONS

This recommendation is made on the understanding that safety zones of 500m radius would be established around the subsea installations in the field and the diffuser at the end of the terminal water discharge pipe.

This approval should be subject to the following conditions:

- 1) Commencement of commercial production operations in January, 2004;
- 2) Compliance with all relevant national and international statutory requirements, regulations in force at the time for a particular location and all directions given by the relevant national or local competent authorities, including:
 - obtaining all necessary Planning Permissions;
 - obtaining a Foreshore Licence;
 - obtaining an IPCL Licence;
 - compliance with all requirements and regulations applying to offshore petroleum production operations concerning safety and environmental protection;
 - conducting all operations in relation to the Corrib Gas Field in accordance with the Rules and Procedures for Offshore Petroleum Production Operations as may be amended from time to time; and
 - compliance with terms of Corrib Lease.
- Approval by the Minister for First Gas (commencement of commercial production operations). Such approval will be subject to the following conditions:
 - Satisfactory fulfilment of the Conditions Precedent to the Commencement of Commercial Production Operations (Clause 5, Corrib Petroleum Lease);
 - All production operations in relation to Corrib being conducted according to all requirements of the Rules and Procedures for Offshore Petroleum Production Operations, as may be amended from time to time;
 - Prior to commencement of gas production (for commissioning or commercial operations) the receipt of a Letter(s) of Acceptance for all Corrib installations, pipelines and associated engineering infrastructure from the Minister's auditor indicating that 3rd Party Independent Verification has been carried out and completed satisfactorily in relation to the development.
- 4) The Minister will liaise with the Environmental Protection Agency in the determination of an IPC licence application for the operation of the terminal. As part of this consultation process, he will have the environmental matters

raised in recommendations 15, 16, 21, 22 and 23 of the MLVC Report brought to the attention of the EPA.

5) Compliance with the following specific conditions

5.1 Wells:

- All drilling and completion operations will be subject to separate approval according to the Rules and Procedures Manual;
- To enable continuous monitoring of reservoir performance, all wells will be completed with downhole pressure and temperature sensors, and Christmas Trees will be fitted with flow meters and pressure and temperature sensors;
- It is required that all future wells on the field have, as a priority objective, data gathering and testing programmes aimed at further, specific evaluation of [...specified aspects of the reservoir...], in so far as this is consistent with maximising recovery from the reservoir.
- It is required that:
- completion designs are to be optimised [...specified parts of the reservoir...] in all wells:
- reservoir property mapping and field volumetrics are to be reviewed after each future well is drilled; and
- comprehensive pressure measurements are to be made through the reservoir section in all wells drilled after the start of production.
- 5.2 Pipelines and Umbilicals:
 - All pipeline and umbilical installation operations will be subject to separate approval. Such approval and conditions will form an integral part of the POD approval.
- 5.3 Future Decisions:

As soon as outstanding decisions have been taken by the Corrib Group, PAD approval must be sought in relation to:

- the final configuration of the subsea Christmas Trees;
- the design of the structures to be installed to protect the subsea Christmas Trees;
- any modification to the terminal design that will reduce terminal inlet pressures;
- the addition of a propane refrigeration plant at the terminal; and
- the components in the sales gas stream which are to be continuously monitored.
- Environmental Conditions

6.1. Prior to the commencement of works, an Environmental Management Plan (EMP) shall be drawn up for the approval of the Minister (subject to such modifications, if any, as he may deem appropriate).

The Environmental Management Plan shall provide detailed construction methodology and shall further consider all potential and predicted impacts and how they shall be managed, the mitigation and control measures and how they shall be implemented as well as monitoring proposed.

The EMP shall also give details of the targets for emissions and the measures to be undertaken to ensure that the targets are met in light of construction and operational requirements. The Plan shall address, separately, both the construction aspects and the operational aspects and should, as a minimum, include:

- i. Traffic management both onshore and offshore;
- ii. Noise control procedures;
- iii. Dust control procedures;
- iv. Land/landfall restoration plan;
- v. Waste management plan;
- vi. Oil spill control plan; and
- vii. Environmental emergency procedures and contingency plans.

Other issues identified in other recommendations below and in the main body of the MLVC Report shall also be included in the EMP and submitted to the Minister for his approval. Any subsequent change proposed to the EMP will require the Minister's approval.

6.2. Prior to construction commencing, the developer shall provide, to the satisfaction of the Minister, details of Monitoring Programmes to be undertaken. The proposed monitoring plans shall be submitted prior to the commencement of each specific phase of construction,

Detailed monitoring programmes shall be submitted for the approval of the Minister in respect of the following activities:

- i. operations at the wellhead;
- ii. impact of the pipeline on seabed conditions and benthos along the pipeline route;
- iii. impact of the pipeline on the route of the pipeline onshore, including landfall;
- iv. impact of the pipeline on the sediments and biota of Sruwaddacon Bay; and
- v. impact of the discharge from the outfall pipe on water chemistry sediments and biota.
- 6.3. The Minister, in consultation with Mayo County Council, will establish

an Environmental Monitoring Group (EMG) charged with monitoring development during all stages of construction and development and with ensuring adherence to the approved EMP. The EMG will include representatives of:

- the Department of the Marine and Natural Resources;
- Mayo County Council;
- EEI;
- Duchas:
- NWRFB; and
- Local fishing interests and local residents.

The expenses of the Group, including all reasonable travel and subsistence costs incurred by members, shall be met by the developer.

6.4. The outfall point of the discharge pipeline shall be located outside the cSAC, not closer than 12 kilometres from the landfall site.

A benthic survey of the area at the discharge location shall be carried out by the developer, in agreement with the Marine Institute, prior to the commencement of discharges.

6.5. The effluent shall be treated to at least EQS as specified in the EIS using best available technology (BAT).

The Minister notes the OSPAR recommendation that, by 2020 members should aim for zero emissions of hazardous substances into the marine environment. The Minister requires that the discharge should be treated in such a way as to minimise emissions to the greatest possible extent. The Minister also recommends that the developers meet with the OSPAR recommendation (signed at Sintra on 23 July, 1998) at the earliest possible date and in any case, prior to 2020.

- 6.6. The pipeline shall be trenched along its entire length, where the geology allows, unless the developer submits evidence, to the satisfaction of the Minister, that demersal trawling can safely proceed over unburied sections of the pipeline without risk to fishing vessels or fishing gear.
- 6.7. The methodology of pipelaying within Broadhaven Bay, at the landfall and between the landfall and the Terminal shall be agreed with the Department before commencement of construction. The methodology shall be developed in full consultation with Dúchas to ensure that it meets its requirements for the protection of habitats and species.

Works or measures which would significantly adversely impact upon protected species shall be avoided.

6.8. Construction in the nearshore, the landfall and subsequent terrestrial routes for the pipeline to the Terminal shall consider particular periods of sensitivity of birds, fish and wild mammals.

The developer shall prepare a detailed Construction Constraints Schedule demonstrating compliance with the ecological sensitivities. This shall include details of the timing of construction works and protection measures for each of the protected species concerned. The construction methodology and timing shall be agreed with Dúchas and shall be included as part of the Environmental Management Plan.

The status of protected species at all construction sites shall be ascertained by survey. In the event that any such species are found, the developer shall notify Dúchas and agree to comply with the requirements of that body under relevant legislation including EU Birds and Habitats Directives and national legislation.

Any nests located on site prior to the construction period shall be marked and workers shall be informed of the presence of nesting species so that these birds are not disturbed.

The timing and methodology of any additional survey work to be carried out shall be with the prior approval of Dúchas. During the construction of the pipeline and Terminal, the developer shall maintain contact with the Development Applications Unit of Dúchas and comply with all requirements of Dúchas made in the exercise of its statutory functions in relation to activities along the route of the development or otherwise in connection with this project.

- 6.9. The Erris Inshore Fishermen's Association and the Killybegs Fishermen's Organisation shall be informed fall developments and the Fisheries Liaison Officer posts, established by EEI, shall be maintained for the duration of works between the wellhead and the landfall.
- 6.10. The developer shall undertake additional traffic studies and submit a Traffic Management Plan for approval by Mayo County Council for the management of construction traffic associated with pipeline and landfall construction activities. This plan shall also address emergency access for emergency response vehicles.

The developer shall submit, for the information of the Minister, a copy of the Traffic Management Plan as approved by Mayo County Council together with evidence of the acceptance of the plan by Mayo County Council.

Construction traffic management shall be such as to avoid peak hours and particularly those hours when children will be likely to be going to or from school.

- 6.11. Immediately prior to and during construction, monitoring of suspended sediment loads in local surface water bodies shall be provided in respect of each work area, and in particular Sruwaddacon Bay.
- 6.12. A monitoring programme for juvenile salmonid densities in the water courses adjoining the Terminal site shall be produced and agreed with the

North Western Regional Fisheries Board and the Marine Institute and the programme should utilise the monitoring stations used in previous surveys.

Monitoring (electro-fishing surveys) shall be carried out in salmonid fisheries sites through, and for a period of 2 years following construction, in order that the success of mitigation measures be assessed and reported on to the Minister.

Construction works involving crossings of watercourses shall be carried out only during the timeframe to be agreed with Dúchas so as to reduce potential impacts on salmonid migrations.

Visual monitoring of redd abundance shall be carried out as part of the ongoing monitoring programme on the salmonid spawning success and distribution within the catchment.

- 6.13. Relevant quality systems and practices shall be published in respect of sampling methods and quality assurance practices for water chemistry surveys. Quality assurance practices shall be provided for data analysis.
- 6.14. The lowest possible intensity lighting, consistent with safety, shall be used and lights shall be projected downward except where there is a proven operational need for lighting to be projected in another direction.
- 6.15. Particular regard shall be had for the impacts of noise on properties within 100 metres of the working area and prior to work commencing, details of the expected impacts shall be provided to the Minister and to residents affected, and such details shall indicate, for the information of the residents, comparative information to assist in assessing the impact of the noise.

 Meteorological considerations shall be taken into account and presented as part of the report.

Duration, likely frequency and noise associated with flaring of both the HP and LP flares should be kept to a minimum in accordance with best industry practice.

- 6.16. The developer shall be required to keep all construction sites and subsequent operational sites neat and tidy at all times.
- 6.17. Information on the location of wells along the pipeline route and in the area of the Terminal should be provided, together with a statement outlining the impacts that may be expected on each and mitigation measures should be proposed.
- 6.18. All future maps produced for the Corrib development shall be on a scale that makes the data contained therein readable without the aid of magnifiers.
- 6.19. The developer shall have studies carried out in consultation with the local communities to investigate the opportunities for work to arise during the construction and operation phases for members of the local community.

6.20. A detailed method statement, prepared in consultation with Dúchas and cetacean experts, to detail monitoring and mitigation measures shall be provided.

 $\begin{array}{c} E_{nviron_{mental}\,P_{rotection}} \\ APPENDIX\,B & A_{gen_{Cy}} \\ IP_{C\,Licensing} \\ Conditions attaching to pipeline consent & 12\,J_{AN\,2005} \\ Initials & Init$

Technical

- 1. Prior to installation operations, the Minister's consent to install and commission is obtained in accordance with the requirements of Part 7 of the Rules and Procedures Manual for Offshore Petroleum Production Operations.
- 2. The pipeline route is to be fixed near inhabited buildings to ensure that a minimum proximity distance of 70 metres is achieved.
- 3. The Onshore Pipeline Quantified Risk Assessment is to include:
 - an assessment of the effect of leaks from valves and small bore
 - pipework at the beach valve station, and
 - justification for the use of a 0.72 design factor at road crossings and will be subject to review and acceptance by PAD prior to pipeline installation.
- 4. The line inspection and maintenance procedures will be subject to review and acceptance by PAD prior to commissioning.
- 5. To ensure that hooking of trawl boards does not occur, the maximum allowable span height for the offshore section of the export pipeline is 0.57 metres. Where a line inspection shows a span height exceeding the maximum allowable, appropriate rectifying action will be taken within 8 months.
- 6. To ensure that liquid slugs can be safely accommodated in the onshore piping, additional transient analysis is to be undertaken and will be subject to review and acceptance by PAD prior to pipeline installation.
- 7. The pipeline section from KP 0 to KP 25 will be visually inspected during the first few days of operation, when it is operating at its maximum temperature, to ensure that any pipeline lateral movement as a result of buckling has not left the pipeline exposed with excessive spans.

- 8. The proposed measures for mitigating upheaval buckling of the flexible in-field flowlines should be subject to review and approval by PAD. The proposals are to be submitted at least 6 months prior to installation of the lines.
- 9. In order to minimise the potential for damage to the untrenched umbilical from trawl gear, the length of time between umbilical laying and trenching will be as short as possible and monitoring vessels will be used during the intervening period to warn all fishing vessels approaching the area.
- 10. The Pipeline Integrity Philosophy document, the hydrotest/precommissioning procedures and the Terminal Quantified Risk Assessment will be subject to review and acceptance by PAD prior to commissioning.

Environmental Conditions

11. Prior to the commencement of works, an Environmental Management Plan (EMP) shall be drawn up for the approval of the Minister (subject to such modifications, if any, as he may deem appropriate).

The Environmental Management Plan shall provide detailed construction methodology and shall further consider all potential and predicted impacts and how they shall be managed, the mitigation and control measures and how they shall be implemented as well as monitoring proposed.

The EMP shall also give details of the targets for emissions and the measures to be undertaken to ensure that the targets are met in light of construction and operational requirements. The Plan shall address, separately, both the construction aspects and the operational aspects and should, as a minimum, include:

- i. Traffic management both onshore and offshore;
- ii. Noise control procedures;
- iii. Dust control procedures;
- iv. Land/landfall restoration plan;
- v. Waste management plan;
- vi. Oil spill control plan; and
- vii. Environmental emergency procedures and contingency plans.

Other issues identified in other recommendations below and in the main body of the MLVC Report shall also be included in the EMP and submitted to the Minister for his approval. Any subsequent change proposed to the EMP will require the Minister's approval.

12. Prior to construction commencing, the developer shall provide, to the satisfaction of the Minister, details of Monitoring Programmes to be undertaken. The proposed monitoring plans shall be submitted prior to the commencement of each specific phase of construction.

Detailed monitoring programmes shall be submitted for the approval of the Minister in respect of the following activities:

- i. operations at the wellhead;
- ii. impact of the pipeline on seabed conditions and benthos along the pipeline route;
- iii. impact of the pipeline on the route of the pipeline onshore, including landfall
- iv. impact of the pipeline on the sediments and biota of Sruwaddacon Bay; and
- v. impact of the discharge from the outfall pipe on water chemistry sediments and biota.
- The Minister, in consultation with Mayo County Council, will establish an Environmental Monitoring Group (EMG) charged with monitoring development during all stages of construction and development and with ensuring adherence to the approved EMP. The EMG will include representatives of:
 - Department of the Marine and Natural Resources;
 - Mayo County Council;
 - EEI;
 - Dúchas;
 - NWRFB; and
 - Local fishing interests and local residents.

The expenses of the Group, including all reasonable travel and subsistence costs incurred by members, shall be met by the developer.

The outfall point of the discharge pipeline shall be located outside the cSAC, not closer than 12 kilometres from the landfall site.

A benthic survey of the area at the discharge location shall be carried out by the developer, in agreement with the Marine Institute, prior to the commencement of discharges.

- The pipeline shall be trenched along its entire length, where the geology allows, unless the developer submits evidence, to the satisfaction of the Minister, that demersal trawling can safely proceed over unburied sections of the pipeline without risk to fishing vessels or fishing gear.
- 16. The methodology of pipelaying within Broadhaven Bay, at the landfall and between the landfall and the Terminal shall be agreed with the Department before commencement of construction. The methodology shall be developed in full consultation with Dúchas to ensure that it meets its requirements for the protection of habitats and species.

Works or measures which would significantly adversely impact upon protected species shall be avoided.

17 Construction in the nearshore, the landfall and subsequent terrestrial routes for the pipeline to the Terminal shall consider particular periods of sensitivity of birds, fish and wild mammals.

The developer shall prepare a detailed Construction Constraints Schedule demonstrating compliance with the ecological sensitivities. This shall include details of the timing of construction works and protection measures for each of the protected species concerned. The construction methodology and timing shall be agreed with Dúchas and shall be included as part of the Environmental Management Plan.

The status of protected species at all construction sites shall be ascertained by survey. In the event that any such species are found, the developer shall notify Dúchas and agree to comply with the requirements of that body under relevant legislation including EU Birds and Habitats Directives and national legislation.

Any nests located on site prior to the construction period shall be marked and workers shall be informed of the presence of nesting species so that these birds are not disturbed.

The timing and methodology of any additional survey work to be carried out shall be with the prior approval of Dúchas. During the construction of the pipeline and Terminal, the developer shall maintain contact with the Development Applications Unit of Dúchas and comply with all requirements of Dúchas made in the exercise of its statutory functions in relation to activities along the

- 18. The Erris Inshore Fishermen's Association and the Killybegs Fishermen's Organisation shall be informed of all developments and the Fisheries Liaison Officer posts, established by EEI, shall be maintained for the duration of works between the wellhead and the landfall.
 - route of the pipeline or otherwise in connection with this project.
- The developer shall undertake additional traffic studies and submit a Traffic Management Plan for approval by Mayo County Council for the management of construction traffic associated with pipeline and landfall construction activities. This plan shall also address emergency access for emergency response vehicles.

The developer shall submit, for the information of the Minister, a copy of the Traffic Management Plan as approved by Mayo County Council together with evidence of the acceptance of the plan by Mayo County Council.

Construction traffic management shall be such as to avoid peak hours and particularly those hours when children will be likely to be going to or from school.

- Immediately prior to and during construction, monitoring of suspended sediment loads in local surface water bodies shall be provided in respect of each work area, and in particular Sruwaddacon Bay.
- 21. A monitoring programme for juvenile salmonid densities in the water courses adjoining the Terminal site shall be produced and agreed with the North Western Regional Fisheries Board and the Marine Institute and that the programme should utilise the monitoring stations used in previous surveys.

Monitoring (electro-fishing surveys) shall be carried out in salmonid fisheries sites through, and for a period of 2 years following construction, in order that the success of mitigation measures be assessed and reported on to the Minister.

Construction works involving crossings of watercourses shall be carried out only during the timeframe to be agreed with Dúchas so as to reduce potential impacts on salmonid migrations.

Visual monitoring of redd abundance shall be carried out as part of the ongoing monitoring programme on the salmonid spawning success and distribution within the catchment.

22. Particular regard shall be had for the impacts of noise on properties within 100 metres of the working area and, prior to work commencing, details of the expected impacts shall be provided to the Minister and to residents affected, and such details shall indicate, for the information of the residents, comparative information to assist in assessing the impact of the noise. Meteorological considerations shall be taken into account and presented as part of the report.

Duration, likely frequency and noise associated with flaring of both the HP and LP flares shall be kept to a minimum in accordance with best industry practice.

- Information on the location of wells along the pipeline route and in the area of the ferminal shall be provided, together with a statement outlining the impacts that may be expected on each and mitigation measures should be proposed.
- The developer shall be required to keep all construction sites and subsequent operational sites neat and tidy at all times.

Foleshore licence Environmental Protection

SCHEDULE 3

Received 12 JAN 2005

Initials

1. Prior to the commencement of any works, an Environmental Management Plan ("EMP") shall be drawn up for the approval of the Minister (subject to such modifications, if any, as he or she may deem appropriate).

The EMP shall provide detailed construction methodology and shall further consider all potential and predicted impacts and how they shall be managed, the mitigation and control measures and how they shall be implemented as well as monitoring proposed.

The EMP shall also give details of the targets for discharges from the Discharge Pipeline and the measures to be undertaken to ensure that the targets are met in light of construction and operational requirements. The EMP shall address, separately, both construction aspects and operational aspects and should, as a minimum, include:

- (a) traffic management;
- (b) noise control procedures;
- (c) landfall restoration plan;
- (d) waste management plan;
- (e) oil spill control plan; and
- (f) environmental emergency procedures and contingency plans.
- 2. The EMP shall be formally reviewed and submitted for the approval of the Minister (subject to such modifications, if any, as he or she may deem appropriate):
 - (a) annually until the commencement of production; and
 - (b) thereafter as determined by the Minister.
- 3. The Licensees shall:
 - (a) at all times comply with the EMP;
 - (b) provide the Minister and/or the EMG with such information in relation to environmental management and monitoring pursuant to the EMP as is reasonably required from time to time; and
 - (c) provide the Minister and/or the EMG with such information in relation to compliance with the EMP as is reasonably required from time to time in respect of works carried out on or in the Licensed Area.
- 4. The Licensees shall prepare a detailed construction constraints schedule demonstrating compliance with the ecological sensitivities of the Licensed Area. This shall address the particular periods of sensitivity for birds, fish and wild mammals,

and shall include details of the timing of construction works and protection measures for each of the protected species concerned. The construction methodology and timing shall be agreed with Dúchas and shall be included as part of the EMP.

- 5. The status of protected species at all construction sites shall be ascertained by survey. In the event that any such species are found, the Licensees shall notify Dúchas and shall comply with the requirements of Dúchas under relevant Law.
- 6. The timing and methodology of any additional survey work to be carried out shall be with the prior approval of Dúchas.
- 7. A benthic survey of the area adjacent to the seabed diffuser at the end of the Discharge Pipeline shall be carried out in consultation with the Marine Institute prior to the commencement of discharges.
- 8. The Licensees shall establish continuous lines of liaison with the Erris Inshore Fisherman's Association, the Killybegs Fishermen's Association and recreational users of the Licensed Area.
- 9. Prior to the commencement of construction work involving drilling and/or blasting in the Licensed Area, a detailed method statement, prepared in consultation with Dúchas and cetacean experts, to detail monitoring and mitigation measures for cetaceans shall be provided to the Minister.
- 10. Prior to commencement of any construction works in the Licensed Area, the Licensees shall:
 - (a) provide, to the satisfaction of the Minister, details of monitoring programmes to be undertaken. The proposed monitoring programmes shall be submitted prior to the commencement of each specific phase of construction. Detailed monitoring programmes shall be submitted for the approval of the Minister in respect of the following activities:
 - (i) impacts of the Facilities on seabed conditions and benthos in the Licensed Area; and
 - (ii) impact of the discharge from the Discharge Pipeline on water chemistry sediments and biota, subject to any Pollution Control Licence;
 - (b) forward to Dúchas for assessment of the potential archaeological implications a map or maps showing:
 - (i) the proposed location of the Facilities within Broadhaven Bay;
 - (ii) dredge zones; and
 - (iii) areas of submerged peat; and
 - (c) appoint a project archaeologist, who will act on behalf of the Licensees as a focal point for liaison with Dúchas in relation to all matters pertaining to archaeology.

- 11. Immediately prior to and during construction of the crossings of Sruwaddacon Bay, monitoring of suspended sediment loads shall be undertaken within the confines of Sruwaddacon Bay and for a reasonable area outside Sruwaddacon Bay.
- 12. The Facilities should avoid areas of submerged peat.
- 13. The results of the geophysical surveys already completed shall be assessed by an archaeologist and a report on this assessment shall be forwarded by the Licensees to Dúchas for consideration.
- 14. For the duration of the construction phase of the project, the Licensees shall:
 - (a) maintain contact with the Development Applications Unit of Dúchas and comply with all requirements of Dúchas made in the exercise of its statutory functions in relation to activities along the route of the development or otherwise in connection with this Licence;
 - (b) seek the advice of Duchas on finding any material of an archaeological nature in or adjacent to the Licensed Area and shall cease all works in the relevant areas until Duchas agree that works should be resumed and comply with any conditions specified by Duchas in relation thereto;
 - as Broadhaven Bay is an area of high archaeological potential, ensure that archaeological monitoring is carried out in respect of all dredging works. This should be carried out by a suitably qualified maritime archaeologist and licensed under the *National Moniments Acts 1930-1994*. If material of archaeological significance is discovered as a result of such monitoring, further archaeological mitigation may be required such as preservation in situ, avoidance or excavation Duchas shall advise on such issues and the Licensees shall comply with any conditions specified by Dúchas in relation thereto;
 - (d) ensure that guard vessels or other appropriate protection methods are used to prevent snagging of fish trawl nets on the ends of any Facilities prior to tie-in; and
 - (e) appoint a competent liaison officer, whose functions shall include informing fishing vessels, other shipping and recreational users of the construction taking place in the Licensed Area.

15. The Licensees shall:

- (a) on or before completion of construction of any Facilities in the Licensed Area, furnish to the Minister and the Marine Survey Office plans showing the exact location of such Facilities; and
- (b) within two months or the completion of construction of any Facilities in the Licensed Area, give notice of such completion to the Minister and the Marine Survey Office.
- 16. Discharges from the Discharge Pipeline shall be treated to at least EQS as specified in the Licensees' Environmental Impact Statement using best available technology.

- 17. The Minister notes the OSPAR recommendation, signed at Sintra on 23 July 1998 ("OSPAR Recommendation") that, by 2020 members should aim for zero emissions of certain hazardous substances into the marine environment. The Minister requires that discharges from the Discharge Pipeline should be treated in such a way as to minimise emissions of such hazardous substances to the greatest possible extent. The Minister also recommends that the Licensees meet the OSPAR Recommendation at the earliest possible date and in any case, prior to 2020.
- 18. Works or measures which would materially adversely impact upon protected species shall be avoided.

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