



24<sup>th</sup> February 2020

Darcy Kerwin,  
Managing Director  
Vermillion Energy Ireland  
Embassy House  
Herbert Park Lane,  
Ballsbridge  
Dublin D04 H6YO

**Letter of Approval to conduct an Offshore Pipeline Survey and Inspection and maintenance programme of the Offshore Facilities between the Corrib Field manifold and the landfall at Glengad, Co. Mayo**

Dear Mr Kerwin,

I am directed by the Minister for Communications, Climate Action and Environment to refer to Vermillion Exploration and Production Ireland Ltd (VEPIL's) application (received on 16<sup>th</sup> April 2019) to undertake a geophysical and visual survey programme and annual maintenance programme off the Corrib offshore gas pipeline and umbilical, Bellanaboy Bridge Gas Terminal (BBGT) treated surface water outfall pipeline, and infield flowlines and umbilicals between the Corrib Field manifold and the landfall at Glengad, Co. Mayo.

Having considered the application pursuant to;

- a) The Corrib Lease, granted under Section 13(1) of the Petroleum and Other Minerals Development Act 1960, as amended ('POMD') which provides that every Lease shall be granted upon such terms and conditions as the Minister thinks fit and specifies therein.
- b) Conditions 17(i)-(ii) and 20 of the Consent to Operate (29<sup>th</sup> December 2015) granted pursuant to section 40 of the Gas Act.
- c) SEPIL's Corrib 2018 Subsea Inspection and Maintenance Works Method Statement;
- d) SEPIL's Corrib 2018 P3 Hydraulic Fluid Loss Permanent Repair Method Statement;
- e) The Rules and Procedures Manual for Offshore Petroleum Exploration and Appraisal Operations;
- f) The EU Directive 2011/92/EU, as amended by Directive 2014/52/EU.
- g) Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011;



- h) Articles 6(3) and 12 of the Habitats Directive. (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora).**

**And having regard to inter alia;**

- The advice of independent environmental consultants engaged by the Department to advise with respect to whether or not the applications meet the requirement of European and Irish legislation and guidelines that give effect, in particular, to the Environmental Impact Assessment Directives, the Birds and the Habitats Directives;**
- The advice of the Department's Technical Experts, together with submissions received from prescribed bodies, including the NPWS.**

**I am further directed by the Minister to inform you that having regard to the above and having first satisfied himself that there will not be a significant effect on the environment, or significant effect on any sites or species protected under the Habitats Directive or the Birds Directive, in exercise of the powers vested in him by Regulations 3 of the European Union (Environmental Impact Assessment) (Petroleum Exploration) Regulations 2013 and specifically Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011, The Minister of State is satisfied that it is appropriate to grant the application, subject to the applicant's compliance with the eight conditions listed below, for the following reasons:**

- I. As set out in detail in the EIA Determination of 14<sup>th</sup> October 2019, the proposed survey programme in the Corrib Field, comprising an offshore pipeline and subsea structure inspection (to include repair and maintenance work as necessary), inshore pipeline inspection/maintenance, as well as the programme of repair works of the P3 wellhead can be completed without significant effects on the environment, subject to attachment of specified conditions (Table 1).**
- II. As set out in detail in the AA Screening Determination of 26<sup>th</sup> November 2019, the proposed survey programme, comprising an offshore pipeline and subsea structure inspection (to include repair and maintenance work as necessary), inshore pipeline inspection/maintenance, as well as a programme of repair and engineering work on the P3 well) will not adversely affect the integrity of the relevant European sites identified (whether individually or in combination with other plans or projects), in view of the sites' conservation objectives, subject to the implementation of the mitigation measures adopted and outlined in Table 2.**
- III. The technical elements of the proposals are acceptable and meet the Department's requirements. It is considered that the proposed subsea**



inspection to assess the facilities and pipelines of the near shore and offshore elements of the Corrib development is reasonable and required for annual maintenance of the facilities using industry standard equipment. The proposed works on the wellhead to fix the bridging plate is reasonable and demonstrates the operator is proactive in maintaining the subsea infrastructure.

This consent is valid from the date of this letter. Please note that the validity of this decision may be questioned by judicial review under Order 84 of the Rules of the Superior Courts (S.I. No.15 of 1986), as amended. Any application for leave to apply for judicial review must be made promptly and in any event within three months from the date of this decision. Practical information on Judicial Review can be obtained from the Citizens Information Board, Ground Floor, George's Quay House, 43 Townsend Street, Dublin 2 ([www.citizensinformation.ie](http://www.citizensinformation.ie)) or from the Courts Website ([www.courts.ie](http://www.courts.ie)).

Kind Regards,

**Martina Hennessy**

**Principal Officer**

**Petroleum Affairs Division**



## Conditions of Consent

1. The Minister of State consents to the carrying out of annual maintenance works under the Corrib Lease including:
  - a. the inspection of the subsea related infield and export pipelines, the water outfall pipe, the umbilicals and
  - b. inspection and maintenance works on the P3 wellhead to address hydraulic fluid loss.
2. All operations shall be conducted in compliance with the provisions of the Rules and Procedures Manual for Offshore Petroleum Production Operations.
3. In particular the applicant must comply with Reporting Procedures of the Rules and Procedures Manual for Offshore Petroleum Production Operations.
4. Daily reporting shall commence from the time the maintenance works commence and shall continue until the maintenance works are completed
5. Compliance with the conditions outlined in the attached Table 1: Mitigation measures required to be specified in any Consent that may be granted, following the EAU's EIA Determination.
6. Compliance with the conditions outlined in the attached Table 2: Mitigation and Management measures required to be specified in any Consent that may be granted, following the EAU's AA Screening Determination.
7. The applicant must seek approval from DCCAE prior to the commencement of the survey should alternative survey vessels be proposed. In this event, confirmation will be required that the survey equipment and methodology on any replacement vessel are equivalent to that described in the applicant's EIA Screening Report, and that the nature and extent of the proposed activities described in that Report has not materially changed.
8. The Department is to be informed on the commencement and completion of the maintenance works. Daily progress reports should be sent to DCCAE via secure website or by posting to a designated secure website or by emailing (addresses to be advised separately).



Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
Underwater Noise	<p>Dedicated MMO and vessel crew will monitor and report immediately any interactions with Annex IV species that cause concern.</p>	X	
	<p>The work will be scheduled so as to minimise the duration of project activities and to confine activities to as small an area as possible to minimise extent of acoustic presence.</p>	X	
	<p>Use of the lowest equipment output possible in order to obtain the required data quality;</p>		
	<p>A qualified and experienced Marine Mammal Observer (MMO) will be present onboard both the nearshore and offshore geophysical survey vessels. The MMO will have undergone marine mammal observation training (JNCC or equivalent) and have spent a minimum of six weeks of marine mammal survey experience at sea over a three-year period.</p>	X	
		X	
	<p>The MMO must submit a report, as outlined in NPWS code of practice, within 30 days of completion of the proposed activities to the relevant Licensing Authority, and copy the report to the NPWS.</p>		
	<p>The geophysical vessel operator must provide a report (including a daily log) on the operation of survey equipment that will indicate the soft starts and their duration to the MMO. This information will be made available to NPWS;</p>	X	
<p>The MMO must use a distance measuring stick, reticle telescope or binoculars to ascertain distances to marine mammals.</p>	X		

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
	<p>Sound-producing activities will only commence in daylight hours where effective visual monitoring, as performed and determined by the MMO, has been achieved. Effective visual monitoring should be undertaken in good weather conditions, where sea state is low and visibility is good (no fog, heavy rain).</p> <p>Prior to the soft start the MMO will survey for 30 minutes. Soft start can only begin if the 500m zone around the centre of the sound source has been clear of species for 30 minutes.</p> <p>Soft start procedure will ensure controlled build-up of acoustic energy output is undertaken in consistent stages, providing a steady and controlled graduation acoustic source levels that will allow animals the opportunity to vacate the area:</p> <ul style="list-style-type: none"> <li>• In commencing an acoustic survey operation, the following soft start (or ramp up) must be used, including during any testing of acoustic sources, where the output peak sound pressure level from any source exceeds 170 dB re: 1µPa @1m: <ul style="list-style-type: none"> <li>• a) Where it is possible according to the operational parameters of the equipment concerned, the device's acoustic energy output shall commence from a lower energy start-up (i.e., a peak sound pressure level not exceeding 170 dB re: 1µPa @1m) and thereafter be allowed to gradually build up to the necessary maximum output over a period of 20 minutes.</li> </ul> </li> </ul>	<p>X</p> <p>X</p> <p>X</p> <p>X</p>	

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
	<ul style="list-style-type: none"> <li>• b) This controlled build-up of acoustic energy output shall occur in consistent stages to provide a steady and gradual increase over the ramp-up period (e.g., output peak sound pressure level of 170 dB&gt;180 dB&gt;190 dB&gt;200 dB&gt;200+ dB over 20 minutes).</li> <li>• c) Where the acoustic output measures outlined in steps (a) and (b) are not possible according to the operational parameters of any such equipment, the device shall be switched “on” and “off” in a consistent sequential manner over a period of 20 minutes prior to commencement of the full necessary output.</li> <li>• In all cases where a Ramp-Up Procedure is employed the delay between the end of ramp-up and the necessary full output should be minimised to unnecessary high-level sound introduction into the environment</li> </ul> <p>Once the Ramp-Up Procedure commences, there is no requirement to halt or discontinue the procedure at night-time, nor if weather or visibility conditions deteriorate nor if Annex IV species occur within a 500 m radial distance of the sound source, i.e., within the Monitored Zone</p> <ul style="list-style-type: none"> <li>• If there is a break in sound output for a period greater than 30 minutes (e.g., due to equipment failure, shutdown, survey line or station change) then all Pre-Start Monitoring and a subsequent Ramp-up Procedure (where appropriate following Pre- Start Monitoring) must be undertaken.</li> </ul>		



Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
	<ul style="list-style-type: none"> <li>• An agreed and clear on-site communication signal must be used between the MMO and the Works Superintendent as to whether the relevant activity may or may not proceed, or resume following a break (see below). It shall only proceed on positive confirmation with the MMO.</li> <li>• For higher output survey operations which have the potential to produce injurious levels of underwater sound (see sections 2.4, 3.2) as informed by the associated risk assessment, there is likely to be a regulatory requirement to adopt a shorter 5- 10 minute break limit after which period all Pre-Start Monitoring and a subsequent Ramp-up Procedure (where appropriate following Pre-Start Monitoring) shall recommence as for start-up.</li> <li>• Vessel(s) working in or in vicinity to Broadhaven Bay SAC will operate in accordance with the Vessel Code of Conduct for Inspection and Maintenance Surveys (Document No. COR-14-SH-0227, 2018). This document forms part of the Operators Environmental Management Plan (EMP) and details specific measures for vessel operators to avoid impacts to marine mammals (particularly small cetaceans). Where at all possible when operating acoustic geophysical survey equipment, the Leah-C will work in an inshore to offshore direction, in an effort to retain an open aspect for animals to leave the confines of Broadhaven Bay, rather than animals wishing to increase their distance from the sound sources having to head further inshore</li> </ul>		

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
Atmospheric Emissions	Air emissions will be minimised through regular maintenance of all engines on-board, in line with Maritime Registry of Shipping (MRS), MARPOL 73/78 Annex VI and other similar requirements.	X	
Discharges to the Sea	<p>All waste will be handled in accordance with the vessels waste management plan, which will operate in accordance with all national and international legislation/regulations and corporate guidelines.</p> <p>Compliance with MARPOL 73/78.</p>	<p>X</p> <p>X</p>	
Archaeology	No mitigation proposed.		

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
General	<p>No refuelling of the vessels will take place at sea.</p> <p>Refuelling operations will be managed through detailed vessel specific procedures and be supported by emergency response plans.</p> <p>The use of well-maintained and modern vessels, with modern navigational systems to identify/avoid obstacles.</p> <p>All fuels and chemicals aboard the survey vessels will be stored according to regulations and manufacturer's directions. Material Safety Data Sheets (MSDSs) for all chemicals stored on-board will be readily available. Procedures will be in place for dealing with spills and leaks.</p> <p>Vessel decks will have measures in place to contain fuel / lubricant/chemical leaks, such as bunding. Spill response equipment will also be present on board vessels and personnel will be trained in its usage.</p> <p>The vessels will operate with strict safety, navigational, operating and communications procedures in place in order to avoid collisions. These will include use of Automatic Identification System (AIS) tracking, adherence to the Collision Regulations, communication with other vessels, and 24 hour look ahead plans.</p> <p>Use of marine grade oil (MGO), rather than traditional heavy bunker fuel. In the event of a release of oil, this will disperse more readily in the offshore environment.</p> <p>On-board the vessel, the valves between fuel tanks will be kept closed, thereby minimising potential for complete fuel loss. Refuelling will occur according to a specific procedure;</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>

Discipline	Mitigation Measure Proposed	Industry Standard	Project Specific Condition Recommended
	<p>Shipboard Oil Pollution Emergency Plans (SOPEP), spill mitigation equipment and other facilities are kept on-board all vessels in order to contain or minimise spills; all the vessel crews have been trained in the use of the plans and equipment; and</p> <p>The Emergency Response Plan will set out how all spill response resources (personnel, command structure, equipment, etc.) will interface, including co-ordination between other seismic survey operators, if applicable</p>	<p>X</p> <p>X</p>	

**Table 2: Mitigation and Management Measures**

<b>Commitment proposed</b>	<b>Additional notes</b>
Application of the NPWS (2014) Guidelines for marine mammal mitigation.	All measures outlined in the Guidelines will be implemented.
Spill contingency plans will be implemented.	To reduce the potential environmental impact of an unplanned oil spill.
No fuelling of vessels will be undertaken within European sites; it will take place in port. All deck machinery will only be refuelled within a bunded area.	To reduce the likelihood of occurrence of an oil spill.
Regular maintenance of all engines on-board, in line with Maritime Registry of Shipping (MRS), MARPOL 73/78 Annex VI (as appropriate) and other similar requirements.	To reduce impacts from standard emissions.
Vessel discharges will also be managed in accordance with the requirements of MARPOL 73/78 as appropriate.	To reduce impacts from discharges.
Communication between operators to ensure that surveys are co-ordinated to limit noise exposure.	Noise mitigation measures have been outlined in the EIA screening determination.
All project operators will apply appropriate mitigation measures to protect/prevent animals from the risk of collision/entanglement.	To reduce the risk of collision/entanglement with animals.

