Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

GREENHOUSE GAS EMISSIONS PERMIT

Permit Register Number:	IE-GHG161-10426-4
Operator:	Vermilion Exploration and Production Ireland Limited Embassy House Ballsbridge Dublin 4 D04 H6Y0
Installation Name:	Bellanaboy Bridge Gas Terminal
Site Name:	Bellanaboy Bridge Gas Terminal
Location:	Bellanaboy Bridge Bellagelly South Ballina Mayo

Ireland

Introductory Note

This introductory note does not form a part of the Greenhouse Gas Emissions Permit.

This Greenhouse Gas Emissions Permit authorises the holder to undertake named activities resulting in emissions of Carbon Dioxide from the listed emission sources. It also contains requirements that must be met in respect of such emissions, including monitoring and reporting requirements. This Greenhouse Gas Emissions Permit places an obligation on the Operator to surrender allowances to the Agency equal to the annual reportable emissions of carbon dioxide equivalent from the installation in each calendar year, no later than four months after the end of each such year.

Contact with Agency:

If you contact the Agency about this Greenhouse Gas Emissions Permit please quote the following reference: Greenhouse Gas Emissions Permit Nº IE-GHG161-10426.

All correspondence in relation to this permit should be addressed to:

Email: help.ets@epa.ie

By Post: Climate Change Unit, Environmental Protection Agency
P.O. Box 3000, Johnstown Castle Estate,
Co. Wexford

Updating of the permit:

This Greenhouse Gas Emissions Permit may be updated by the Agency, subject to compliance with Condition 2. The current Greenhouse Gas Emissions Permit will normally be available on the Agency's website at www.epa.ie and ETSWAP.

Surrender of the permit:

Before this Greenhouse Gas Emissions Permit can be wholly or partially surrendered, a written application must be made to the on-line ETS portal, and written permission received from, the Agency through ETSWAP.

Transfer of the permit or part of the permit:

Before this Greenhouse Gas Emissions Permit can be wholly or partially transferred to another Operator a joint written application to transfer this Greenhouse Gas Emissions Permit must be made (by both the existing and proposed Operators) to, and written permission received from, the Agency through the on-line ETS portal ETSWAP.

Licence held pursuant to the Environmental Protection Agency Act 1992, as amended. (as of the date of this permit)**:**

IPC/IE Licence Register Number
P0738-03

Status Log

Current Permit

Permit number	Date application received	Date Permit issued	Comment
IE-GHG161-10426-4	28 September 2018	11 January 2019	Operator name changed from Shell E&P Ireland Limited to Vermilion Exploration and Production Ireland Limited. Activity data tier for F2 (LP Fuel Gas) changed from tier 2 to tier 1 based on the unreasonable cost justification. Change to the monitoring methodology for activity data for F4 (Ground Flare). F5 (HP Flare) reclassified as a major source stream.

Previous Permits

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG161-10426-1	GHG Permit Application	22 July 2014	10 September 2014	
IE-GHG161-10426-2	GHG Variation	11 March 2015	10 July 2015	1. Addition of propane as a de-minimis source stream. 2. Correction of double entry of S10 in the regulated emission source table. 3. Inclusion of revised start date of activity.

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG161-10426-3	GHG Variation	17 February 2016	12 December 2016	Change of company registered address. Monitoring methodology for flare activity data modified. Expanded explanation of back-feed gas activity data calculation provided, reference for NCV and emission factor included. For F7 back feed gas: two additional metering devices added. One additional meter added for F3. The emission sources S11, S12 and S13 added to the source stream F2.

End of Introductory Note

Glossary of Terms

For the purposes of this permit the terms listed in the left hand column shall have the meaning given in the right hand column below:

The Agency	Environmental Protection Agency.
Agreement	Agreement in writing.
Allowance	Permission to emit to the atmosphere one tonne of carbon dioxide equivalent during a specified period issued for the purposes of Directive 2003/87/EC by the Agency or by a designated national competent authority of a Member State of the European Union.
Annual Reportable Emissions	Reportable Emissions of carbon dioxide made in any calendar year commencing from 1 January 2005 or the year of commencement of the activity, whichever is the later.
A & V Regulation	Commission Regulation (EU) No 600/2012 of 21 June 2012 on the verification of greenhouse gas emission reports and tonne-kilometre reports and the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council and any amendments or revisions thereto.
Category A Installation	As defined in Article 19.2 (a) of the M&R Regulation.
Category B Installation	As defined in Article 19.2 (b) of the M&R Regulation.
Category C Installation	As defined in Article 19.2 (c) of the M&R Regulation.
The Directive	Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC.
Emissions	The release of greenhouse gases into the atmosphere from sources in an installation.
EPA	Environmental Protection Agency.
Fall-Back Methodology	As defined in Article 22 of the M&R Regulation.
GHG	Greenhouse gas.
GHG Permit	Greenhouse gas emissions permit.
Greenhouse Gas	Any of the gases in Schedule 2 of the Regulations.
IPC/IE	Integrated Pollution Control/Industrial Emissions.
Installation	Any stationary technical unit where one or more activities listed in Schedule 1 to the Regulations are carried out. Also any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution. References to an installation include references to part of an installation.

Installation with low emissions	As defined in Article 47 of the M&R Regulation.
Major Source Streams	As defined in Article 19.3 (c) of the M&R Regulation.
M&R Regulation	Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council and any amendments or revisions thereto.
Mis-statement	An omission, misrepresentation or error in the Operators reported data, not considering the uncertainty permissible pursuant to Article 12(1)(a) of Regulation (EU) no 601/2012.
N/A	Not applicable.
Monitoring Plan	The Plan submitted and approved in accordance with Condition 3.1 of this permit and attached at Appendix 1.
Non-conformity	Any act or omission by the Operator, either intentional or unintentional, that is contrary to the greenhouse gas emissions permit and the requirements of the Monitoring Plan.
The National Administrator	The person so designated in accordance with the requirements of any Regulations adopted as provided for under Article 19.3 of Directive 2003/87/EC.
The Operator (for the purposes of this permit)	Vermilion Exploration and Production Ireland Limited
"operator"	Any person who operates or controls an installation or to whom decisive economic power over the functioning of the installation has been delegated.
Person	Any natural or legal person.
Reportable emissions	The total releases to the atmosphere of carbon dioxide (expressed in tonnes of carbon dioxide equivalent) from the emission sources specified in Table 2 and arising from the Schedule 1 activities which are specified in Table 1.
The Regulations	European Communities (Greenhouse Gas Emissions Trading) Regulations 2012 (S.I. No 490 of 2012) and any amendments or revisions thereto.
The Verifier	A legal person or another legal entity carrying out verification activities pursuant to Regulation (EU) No 600/2012 and accredited by a national accreditation body pursuant to Regulation (EC) No 765/2008 and Regulation (EU) No 600/2012 or a natural person otherwise authorised, without prejudice to Article 5(2) of Regulation (EC) No 765/2008, at the time a verification report is issued.
The Registry	The Registry as provided for under Article 19 of Directive 2003/87/EC.

Schedule 1	Schedule 1 to the Regulations.

Reasons for the Decision

The Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this permit, the Operator is capable of monitoring and reporting emissions in accordance with the requirements of the Regulations.

Activities Permitted

Pursuant to the Regulations the Agency issues this Greenhouse Gas Emissions Permit, subject to any subsequent revisions, corrections or modifications it deems appropriate, to:

The Operator:

Vermilion Exploration and Production Ireland Limited
Embassy House
Ballsbridge
Dublin 4
D04 H6Y0

Company Registration Number: 316588

to carry out the following

Categories of activity:

Annex 1 Activity
Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)

at the following installation(s):

Bellanaboy Bridge Gas Terminal **Installation number:** 206939

located at

Bellanaboy Bridge
Bellagelly South
Ballina
Mayo
Ireland

subject to the five conditions contained herein, with the reasons therefor and associated tables attached thereto.

Conditions

Condition 1. The Permitted Installation

1.1 This permit is being granted in substitution for the previous GHG permit granted to the Operator as listed in the Status Log of this GHG permit.

1.2 The Operator is authorised to undertake the activities and/or the directly associated activities specified in Table 1 below resulting in the emission of carbon dioxide:

Table 1 - Activities which are listed in Schedule 1 of the Regulations and other directly associated activities carried out on the site:

Installation No.: 206939

Activity Description
Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)

Directly Associated Activity Description
(S20) Mobile Vehicles - Diesel

1.3 Carbon dioxide from Schedule 1 activities shall be emitted to atmosphere only from the emission sources as listed in Table 2 below:

Table 2 Emission Sources and Capacities:

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S1	Gas turbine K-2002A	25.7	MW
S2	Gas turbine K-2002B	25.7	MW
S3	Power Generator G-8801A	3.2	MW
S4	Power Generator G-8801B	3.2	MW
S5	Power Generator G-8801C	3.2	MW
S6	Emergency Diesel Generator G-8802	1.9	MW
S7	Diesel Firewater Pump P-8701A	0.8	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S8	Diesel Firewater Pump P-8701B	0.8	MW
S9	Diesel Firewater Pump P-8701C	0.8	MW
S10	Diesel Firewater Pump P-8701D	0.8	MW
S11	Maintenance Ground Flare N-8111	121.8	MW
S12	HP Flare B-8101	3878	MW
S13	LP Flare B-8102	262	MW

1.4 The activity shall be controlled, operated and maintained so that emissions of carbon dioxide shall take place only as set out in this GHG Emissions Permit. The permit does not control emissions of gases other than carbon dioxide. All agreed plans, programmes and methodologies required to be carried out under the terms of this permit, become part of this permit.

1.5 This GHG Permit is for the purposes of GHG emissions permitting under the European Communities (Greenhouse Gas Emissions Trading) Regulations 2012 and any amendments to the same only and nothing in this permit shall be construed as negating the Operator's statutory obligations or requirements under any other enactments or regulations unless specifically amended by the Regulations.

1.6 Any reference in this permit to 'installation' shall mean the installation as described in the Greenhouse Gas Emissions Permit application and any amendments approved by the Agency.

Reason: To describe the installation and clarify the scope of this permit.

Condition 2. Notification

2.1 No alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in a change in:

2.1.1 the nature or functioning of the installation;

2.1.2 the capacity of the installation as detailed in this permit;

2.1.3 the fuels used at the installation;

2.1.4 the range of activities to be carried out at the installation

that may require updating of the GHG permit shall be carried out or commenced without prior notice to and without the prior written agreement of the Agency.

2.2 The Operator shall notify the Agency in writing of the cessation of all or part of any activity listed in Table 1 of this permit no later than one month from the date of cessation or by 31 December of the year of cessation, whichever is sooner.

2.3 The Operator shall apply for an update of this GHG Permit where there is a change to the Operator name and/or registered address of the Operator, within seven days of the change.

2.4 For installations or parts of installations which have not come into operation when the application for this permit was made the Operator shall notify the Agency of the date of commencement of the activity within seven days of commencement.

2.5 The Operator shall notify the Agency in writing within three days of becoming aware of any factors which may prevent compliance with the conditions of this permit.

2.6 The Operator shall submit to the Agency by 21 January of each year a declaration of operability. The declaration submitted shall be in the format required by the Agency.

2.7 All notifications required under Condition 2 above shall be made to the address given in the Explanatory Note included with this permit.

2.8 The Operator shall submit to the Agency by 31 December of each year all relevant information about any planned or effective changes to the capacity, activity level and operation of an installation. The information submitted shall be in the format required by the Agency.

Reason: To provide for the notification of updated information on the activity.

Condition 3. Monitoring and Reporting

3.1 The Operator shall monitor and record greenhouse gas emissions on site in accordance with the M&R Regulation and the approved Monitoring Plan attached at Appendix 1 to this GHG permit and in compliance with any other guidance approved by the Agency for the purposes of implementing the Directive and/or the Regulations.

3.2 The Operator shall modify the monitoring plan in any of the following situations:

3.2.1 new emissions occur due to new activities carried out or due to the use of new fuels or materials not yet contained in the monitoring plan;

3.2.2 the change of availability of data, due to the use of new measurement instrument types, sampling methods or analysis methods, or for other reasons, leads to higher accuracy in the determination of emissions;

3.2.3 data resulting from the previously applied monitoring methodology has been found incorrect;

3.2.4 changing the monitoring plan improves the accuracy of the reported data, unless this is technically not feasible or incurs unreasonable costs;

3.2.5 the monitoring plan is not in conformity with the requirements of the M&R Regulation and the Agency requests a change;

3.2.6 it is necessary to respond to the suggestions for improvement of the monitoring plan contained in the verification report.

The Operator shall notify any proposals for modification of the monitoring plan to the Agency without undue delay. Any significant modifications of the monitoring plan, as defined in Article 15 of the M&R Regulation, shall be subject to approval by the Agency. Where approved these changes shall be implemented within a timeframe agreed by the Agency.

3.3 Temporary changes to the monitoring methodology:

3.3.1 Where it is for technical reasons temporarily not feasible to apply the tier in the monitoring plan for the activity data or each calculation factor of a fuel or material stream as approved by the Agency, the Operator shall apply the highest achievable tier until the conditions for application of the tier approved in the monitoring plan have been restored. The Operator shall take all necessary measures to allow the prompt restoration of the tier in the approved monitoring plan. The Operator shall notify the temporary change to the monitoring methodology without undue delay to the Agency specifying:

(i) The reasons for the deviation from the tier;

(ii) in detail, the interim monitoring methodology applied by the Operator to determine the emissions until the conditions for the application of the tier in the monitoring plan have been restored;

(iii) the measures the Operator is taking to restore the conditions for the application of the tier in the approved monitoring plan;

(iv) the anticipated point in time when application of the approved tier will be resumed.

3.3.2 A record of all non-compliances with the approved monitoring plan shall be maintained on-site and shall be available on-site for inspection by authorised persons of the Agency and/or by the Verifier at all reasonable times.

3.4 The Operator shall appoint a Verifier to ensure that, before their submission, the reports required by Condition 3.5 below are verified in accordance with the criteria set out in Schedule 5 of the Regulations, the A&V Regulation and any more detailed requirements of the Agency.

3.5 The written report of the verified annual reportable emissions and the verification report in respect of each calendar year shall be submitted to the Agency by the Operator no later than 31 March of the following year. The reports shall be in the format required by the Agency and meet the criteria set out in the M&R and A&V Regulations.

3.6 The Operator shall enter the verified annual reportable emissions figure for the preceding year into the Registry no later than 31 March of the following year. This figure shall be electronically approved by the Verifier in the registry no later than 31 March of each year.

3.7 Where an Operator is applying the Fall-Back methodology, the Operator shall assess and quantify each year the uncertainties of all parameters used for the determination of the annual emissions in accordance with the ISO Guide to the Expression of Uncertainty in Measurement or another equivalent internationally accepted standard and include the verified results in the written report of the verified annual reportable emissions to be submitted to the Agency by 31 March each year.

3.8 An Operator shall submit to the Agency for approval a report containing the information detailed in (i) or (ii) below, where appropriate, by the following deadlines:

(a) for a category A installation, by 30 June every four years;

(b) for a category B installation, by 30 June every two years;

(c) for a category C installation, by 30 June every year.

(i) Where the Operator does not apply at least the tiers required pursuant to the first subparagraph of Article 26(1) and to Article 41(1) of the M&R Regulation, the Operator shall provide a justification as to why it is technically not feasible or would incur unreasonable costs to apply the required tiers. Where evidence is found that measures needed for reaching those tiers have become technically feasible and do not incur unreasonable costs, the Operator shall notify the Agency of appropriate modifications to the monitoring plan and submit proposals for implementing appropriate measures and its timing.

(ii) Where the Operator applies a fall-back monitoring methodology, the Operator shall provide a justification as to why it is technically not feasible or would incur unreasonable costs to apply at least tier 1 for one or more major or minor source streams. Where evidence is found that measures needed for reaching at least tier 1 for those source streams have become technically feasible and do not incur unreasonable costs, the Operator shall notify the Agency of appropriate modifications to the monitoring plan, submit proposals and a timeframe for implementing appropriate measures.

3.9 Where the verification report states outstanding non conformities, misstatements or recommendations for improvements the Operator shall submit a report to the Agency for approval by 30 June of the year in which the verification report is issued. This requirement does not apply to the Operator of an installation with low emissions where the verification report contains recommendations for improvements only. The report shall describe how and when the Operator has rectified or plans to rectify the non-conformities identified and to implement recommended improvements. Where recommended improvements would not lead to an improvement of the monitoring methodology this must be justified by the Operator. Where the recommended improvements would incur unreasonable costs the Operator shall provide evidence of the unreasonable nature of the costs. The Operator shall implement the improvements specified by the Agency in response to the report submitted in accordance with this Condition in accordance with a timeframe set by the Agency.

3.10 The Operator shall make available to the Verifier and to the Agency any information and data relating to emissions of carbon dioxide which are required in order to verify the reports referred to in Condition 3.5 above or as required by the Agency to facilitate it in establishing benchmarks and/or best practice guidance.

3.11 Provision shall also be made for the transfer of environmental information, in relation to this permit, to the Agency's computer system, as may be requested by the Agency.

3.12 The Operator shall retain all information as specified in the M&R Regulation for a period of at least 10 years after the submission of the relevant annual report.

3.13 A record of independent confirmation of capacities listed in this permit shall be available on-site for inspection by authorised persons of the Agency at all reasonable times.

3.14 The Operator shall keep records of all modifications of the monitoring plan. The records shall include the information specified in Article 16.3 of the M&R Regulation.

3.15 The Operator shall ensure that members of the public can view a copy of this permit and any reports submitted to the Agency in accordance with this permit at all reasonable times. This requirement shall be integrated with the requirements of any public information programme approved by the Agency in relation to any other permit or licence held by the Operator for the site.

Reason: To provide for monitoring and reporting in accordance with the Regulations.

Condition 4. Allowances

4.1 Surrender of Allowances

4.1.1 The Operator shall, by 30 April in each year, surrender to the Agency, or other appropriate body specified by the Agency, allowances equal to the annual reportable emissions in the preceding calendar year.

4.1.2 The number of allowances to be surrendered shall be the annual reportable emissions for the preceding calendar year plus such allowances as may be necessary to cover any earlier calendar year in respect of which allowances remain outstanding and due. This

includes allowances to cover the amount of any annual reportable emissions in respect of which allowances were not surrendered in accordance with Condition 4.1.1 in the previous year, and the amount of any reportable emissions which were discovered during the previous year to have been unreported in reports submitted under Condition 3 in that or in earlier years.

4.1.3 In relation to activities or parts of activities which have ceased to take place and have been notified to the Agency in accordance with Condition 2.2 above, the Operator shall surrender to the Agency allowances equal to the annual reportable emissions from such activities in the preceding calendar year or part thereof, together with such allowances as may be necessary to cover any earlier calendar year in respect of which allowances remain outstanding and due as described in Condition 4.1.2 above.

4.1.4 The Operator may, from 2008 onwards, subject to the provisions of the Regulations and the relevant National Allocation Plan for that compliance year, surrender emission reduction units (ERUs) and certified emission reduction units (CERs) in place of allowances.

4.2 The holding, transfer, surrender and cancellation of allowances shall be in accordance with the requirements of any Regulations adopted as provided for under Article 19.3 of Directive 2003/87/EC, any amendment or revision to the same and any guidance issued by the Agency or the National Administrator.

4.3 The Operator shall provide the National Administrator with all the necessary information for the opening of an Operator holding account for the installation described in Condition 1 of this permit within twenty working days of the issue of this permit, unless such an account is already open.

Reason: *To provide for the surrendering, holding, transfer and cancellation of allowances in respect of reported emissions.*

Condition 5. Penalties

5.1 Any Operator who fails to comply with Condition 4.1 above shall be subject to the provisions of the Regulations, including, but not limited to the payment of penalties.

Reason: To provide for the payment of excess emissions penalties as required under the Regulations.

Sealed by the seal of the Agency on this the 11 January 2019:

PRESENT when the seal of the Agency was affixed hereto:

_____

Ms. Annette Prendergast
Inspector/ Authorised Person

Appendix 1 to Greenhouse Gas Emissions Permit Number IE-GHG161-10426

Monitoring Plan

1. Guidelines & Conditions

1. Directive 2003/87/EC as amended by Directive 2009/29/EC (hereinafter "the (revised) EU ETS Directive") requires operators of installations which are included in the European Greenhouse Gas Emission Trading Scheme (the EU ETS) to hold a valid GHG emission permit issued by the relevant Competent Authority and to monitor and report their emissions and have the reports verified by an independent and accredited verifier.

The Directive can be downloaded from:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2003L0087:20090625:EN:PDF

2. The Monitoring and Reporting Regulation (Commission Regulation (EU) No 601/2012) (hereinafter the "MRR") defines further requirements for monitoring and reporting.

The MRR can be downloaded from:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:181:0030:0104:EN:PDF

Article 12 of the MRR sets out specific requirements for the content and submission of the monitoring plan and its updates. Article 12 outlines the importance of the Monitoring plan as follows:

The monitoring plan shall consist of a detailed complete and transparent documentation of the monitoring methodology of a specific installation [or aircraft operator] and shall contain at least the elements laid down in Annex I.

Furthermore Article 74(1) states:

Member States may require the operator and aircraft operator to use electronic templates or specific file formats for submission of monitoring plans and changes to the monitoring plan as well as for submission of annual emissions reports tonne-kilometre data reports verification reports and improvement reports. Those templates or file format specifications established by the Member States shall at least contain the information contained in electronic templates or file format specifications published by the Commission

3. All Commission guidance documents on the Monitoring and Reporting Regulation will be published at the link below as they become available:

http://ec.europa.eu/clima/policies/ets/monitoring/index_en.htm

(a) Information sources:

EU Websites:

EU-Legislation: http://eur-lex.europa.eu/en/index.htm
EU ETS general: http://ec.europa.eu/clima/policies/ets/index_en.htm

Monitoring and Reporting in the EU ETS: http://ec.europa.eu/clima/policies/ets/monitoring/index_en.htm

Environmental Protection Agency Website:

http://www.epa.ie

Environmental Protection Agency Contact:

GHGpermit@epa.ie

2. Application Details

The Installation Name, Site Name and the address of the site of the installation are detailed below. The Site Name and address can be updated from the Organisation Details Page on the ETSWAP website. The Installation Name can only be updated by your Competent Authority.

Installation name	Bellanaboy Bridge Gas Terminal
Site name	Bellanaboy Bridge Gas Terminal
Address	Bellanaboy Bridge Bellagelly South Ballina Mayo Ireland
Grid reference of site main entrance	086425E, 333125N
Licence held pursuant to the Environmental Protection Agency Act 1992, as amended.	Yes

IPC/IE Licence Register Number	Licence holder	Competent body
P0738-03	Shell E&P Ireland Limited	Environmental Protection Agency

Has the regulated activity commenced at the Installation?	Yes
Date of Regulated Activity commencement	15 April 2015

This information is only required to identify the first relevant reporting year of an installation. If the installation was in operation from the beginning of 2008 and held a Greenhouse Gas Emissions Permit from this point, 1 January 2008 will be used where the actual date of commencement is not readily known.

3. About the Operator

The information about the "Operator" is listed below. The "Operator" is defined as the person who it is proposed will have control over the relevant Regulated Activities in the installation in respect of which this application is being made.

(b) Operator Details

The name of the operator and where applicable the company registration number are detailed below. These details can only be updated by the Environmental Protection Agency.

Operator name	Vermilion Exploration and Production Ireland Limited
Company Registration Number	316588

Operator Legal status

The legal status of the operator is:	Company / Corporate Body

(c) Company / Corporate Body

Is the trading / business name different to the operator name?	No

Registered office address

Address Line 1	Embassy House
Address Line 2	Ballsbridge
City/Town	Dublin 4
County	N/A
Postcode	D04 H6Y0

Principal office address

Is the principal office address different to the registered office address?	Yes

Address Line 1	Bellagelly South
Address Line 2	Bellanaboy Bridge
City/Town	Ballina
County	Mayo
Postcode	N/A
Company registration number	316588

Holding company

Does the company belong to a holding company?	No

(d) Operator Authority

Does the operator named above have the authority and ability to:

a.	manage site operations through having day-to-day control of plant operation including the manner and rate of operation	Yes
b.	ensure that permit conditions are effectively complied with	Yes
c.	control monitor and report specified emissions	Yes
d.	be responsible for trading in Allowances so that at the	Yes

end of a reporting period allowances can be balanced against reported emissions.

4. Service Contact

e. Service Contact

Address	Embassy House Ballsbridge Dublin 4 Ireland

5. Installation Activities

f. Installation Description

Below is a description of the installation and its activities, a brief outline description of the site and the installation and the location of the installation on the site. The description also includes a non-technical summary of the activities carried out at the installation briefly describing each activity performed and the technical units used within each activity.

Overview: The Terminal is designed to receive, process and export natural gas. Gas (and other production fluids) will be transported from the sub-sea facilities to the Terminal in a gas pipeline for processing. The Terminal will process and treat the gas to meet Gas Networks Ireland (GNI) specification prior to export to the GNI distribution system.

Inlet and Reception Facilities: Production fluids including gas from the Corrib Field will be received in a slug catcher at the inlet and reception facilities where the aqueous and hydrocarbon liquids will be separated from the gas phase. Recovered condensate will be treated to remove mercury, if present, and then transferred to storage tanks. The aqueous phase (produced water) will be treated to recover methanol which is injected at the well as an antifreeze and the residual water further treated before discharge to sea.

Gas Conditioning: The gas passes through an absorbent bed to remove any entrained mercury and is then dried by lowering the dewpoint condensing out any traces of condensate, methanol and water.

Gas Compression: The gas is compressed to the required pressure by gas compressors powered by two gas turbines (25.7 MW each, 1 duty/ 1 standby) for export to the GNI distribution network. High Pressure (HP) fuel gas will be used as a fuel in the sales gas compressor turbines.

Power Generation: The Terminal will be self-sufficient in power generation. Three gas compression engines (3 x 3.2 MW - 2 Duty/l Standby) fuelled by LP fuel gas will generate power for the Terminal. A diesel driven emergency generator will be used to provide emergency power to critical users on loss of the normal power supply.

Firepumps: There are four firepumps driven by diesel engines.

Fuel Gas System: Natural gas that is used as a fuel in the Terminal is referred to as Fuel Gas.

The Fuel Gas system will use some of the natural gas extracted from the Corrib Field as a fuel supply for the Terminal operations. High Pressure (HP) fuel will be used as a fuel in the sales gas compressor turbines. Low Pressure (LP) fuel gas will be used as a fuel in the power generators.

Flaring: Safety flare systems comprising a Ground Maintenance Flare, HP flare (3,878 MW) and LP flare (262 MW) are provided at the Terminal for depressurisation of the plant for maintenance purposes and during emergency situations. The Ground Maintenance Flare System will primarily be used to safely depressurize sections of the Terminal's gas systems for maintenance. During emergency situations, gas from high pressure (HP) and low pressure (LP) sections of the plant can be flared through the HP and LP flares respectively.

The major sources of combustion are the gas turbines driving the compression system, the gas engines for power generation and the flare systems. The only GHG included is CO2.

g. Annex 1 Activities

The table below lists the technical details for each Annex 1 activity carried out at the installation.

Note that 'capacity' in this context means:

- Rated thermal input (for combustion installations) which is defined as the rate at which fuel can be burned at the maximum continuous rating of the installation multiplied by the calorific value of the fuel and expressed as megawatts thermal.
- Production capacity for those specified Annex I activities for which production capacity determines ETS eligibility.

Annex 1 Activity	Total Capacity	Capacity units	Specified Emissions
Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)	4327.9	MW	Carbon Dioxide

h. Site Diagram

The table below lists attachments (if available) that provide a simple diagram showing emissions sources source streams sampling points and metering/measurement equipment.

Attachment	Description
Pictorial Diagram of Corrib Gas Plant.doc	Pictorial Diagram of Corrib Gas Plant
Terminal_Data_Flow_Rev 5_September_2018.pdf	Revised Data Flow to include ground flare meter FT-8110

i. Estimated Annual Emissions

Detail of the estimated annual emission of CO_2 equivalent. This information enables categorisation of the installation in accordance with Article 19 of the MRR and is based on the average verified annual emissions of the previous trading period data OR if this data is not available or is inappropriate a conservative estimate of annual average emissions including transferred CO_2 excluding CO_2 from biomass.

Estimated Annual Emissions (tonnes $CO_{2(e)}$)	47000
Justification for the use of a conservative estimate of CO_2 emissions.	This Monitoring Plan principally relates to full production throughput on Corrib Gas. The estimated annual emissions is 47,000 tCO2(e) during full production. During commissioning, a limited amount of GNI gas (also called back feed gas) will be used. Back feed gas will not however feature during normal operations and CO2 emissions arising from this source stream will normally be zero.

Installation Category: A

6. Emissions Details

j. About your emissions

Annex I of the Monitoring and Reporting Regulations (MRR) requires that monitoring plans include a description of "the installation" and activities to be carried out and monitored including a list of emission sources and source streams. The information provided in this template relates to the Annex I activity(ies) comprised in the installation in question and should relate to a single installation. It includes any activities carried out by the operator and does not include related activities carried out by other operators.

k. Emission Sources

The table below lists all the emission sources at the installation, which may include directly associated activities/excluded activities.

Emission Source Reference	Emission Source Description
S1	Gas turbine K-2002A
S2	Gas turbine K-2002B
S3	Power Generator G-8801A
S4	Power Generator G-8801B
S5	Power Generator G-8801C
S6	Emergency Diesel Generator G-8802

Emission Source Reference	**Emission Source Description**
S7	Diesel Firewater Pump P-8701A
S8	Diesel Firewater Pump P-8701B
S9	Diesel Firewater Pump P-8701C
S10	Diesel Firewater Pump P-8701D
S11	Maintenance Ground Flare N-8111
S12	HP Flare B-8101
S13	LP Flare B-8102
S20	Mobile Vehicles - Diesel

The table below lists the emission sources which are linked to the Regulated Activities at the installation.

Emission Source Reference	**Emission Source Description**
S1	Gas turbine K-2002A
S2	Gas turbine K-2002B
S3	Power Generator G-8801A
S4	Power Generator G-8801B
S5	Power Generator G-8801C
S6	Emergency Diesel Generator G-8802
S7	Diesel Firewater Pump P-8701A
S8	Diesel Firewater Pump P-8701B
S9	Diesel Firewater Pump P-8701C
S10	Diesel Firewater Pump P-8701D
S11	Maintenance Ground Flare N-8111
S12	HP Flare B-8101
S13	LP Flare B-8102

I. Emission Points

The table below lists all the emission points at the installation, which may include directly associated activities/excluded activities.

Emission Point Reference	**Emission Point Description**
A2-1	Gas turbine K-2002A Exhaust stack
A2-2	Gas turbine K-2002B Exhaust stack
A2-4	Power Generator G-8801A Exhaust stack
A2-5	Power Generator G-8801B Exhaust stack

Emission Point Reference	Emission Point Description
A2-6	Power Generator G-8801C Exhaust stack
A3-2	Emergency Diesel Generator G-8802 Exhaust
A3-3	Diesel Firewater Pump P-8701A Exhaust
A3-4	Diesel Firewater Pump P-8701B Exhaust
A3-5	Diesel Firewater Pump P-8701C Exhaust
A3-6	Diesel Firewater Pump P-8701D Exhaust
A3-1	Ground Flare N-8111 Stack
A4-1	HP Flare Stack B-8101
A5-1	LP Flare Stack B-8102
A20-1	Mobile Vehicles - Diesel

m. Source Streams (fuels and/or materials)

The table below lists the source streams which are used in Schedule 1 Activities at the installation.

Source Stream Reference	Source Stream Type	Source Stream Description
F1(HP Fuel Gas)	Combustion: Other gaseous & liquid fuels	HP Fuel Gas
F2(LP Fuel Gas)	Combustion: Other gaseous & liquid fuels	LP Fuel Gas
F3 (GO)	Combustion: Commercial standard fuels	Gas/Diesel Oil
F4 (LP Ground flare)	Combustion: Flares	LP Ground Flare Gas
F5 (HP Flare)	Combustion: Flares	HP Flare Gas
F6 (LP Flare)	Combustion: Flares	LP Flare Gas
F7 (Back Feed Gas)	Combustion: Other gaseous & liquid fuels	Back Feed Gas
F8 (LPG)	Combustion: Other gaseous & liquid fuels	Liquefied Petroleum Gases

n. Emissions Summary

The table below provides a summary of the emission source and source stream details in the installation.

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Annex 1 Activity
F1(HP Fuel Gas)	S1,S2	A2-1,A2-2	Combustion of fuels in installations with a total rated thermal input

Source streams (Fuel / Material)	**Emission Source Refs.**	**Emission Point Refs.**	**Annex 1 Activity**
			exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F2(LP Fuel Gas)	S3,S4,S5,S11,S12,S13	A2-4,A2-5,A2-6,A3-1,A4-1,A5-1	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F3 (GO)	S10,S6,S7,S8,S9	A3-2,A3-3,A3-4,A3-5,A3-6	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F4 (LP Ground flare)	S11	A3-1	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F5 (HP Flare)	S12	A4-1	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F6 (LP Flare)	S13	A5-1	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F7 (Back Feed Gas)	S1,S11,S12,S13,S2,S3,S4,S5	A2-1,A2-2,A2-4,A2-5,A2-6,A3-1,A4-1,A5-1	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F8 (LPG)	S11,S12,S13	A3-1,A4-1,A5-1	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Annex 1 Activity
			in installations for the incineration of hazardous or municipal waste)

o. Excluded Activities

Certain activities that result in greenhouse gas emissions may be excluded under the EU ETS Directive for example truly mobile sources such as vehicle emissions.

Do you have any excluded activities which need to be identified in your monitoring plan? Yes

Detail of these activities:

Source Stream Refs	Emission Source Ref	Emission Point Ref
F3 (GO)	S20	A20-1

7. Low Emissions Eligibility

p. Low Emissions Eligibility

The operator may submit a simplified monitoring plan for an installation where no nitrous oxide activities are carried out and it can be demonstrated that:

(a) the average verified annual emissions of the installation during the previous trading period was less than 25 000 tonnes $CO_{2(e)}$ per year or;

(b) where this data is not available or inappropriate a conservative estimate shows that emissions for the next 5 years will be less than 25 000 tonnes $CO_{2(e)}$ per year.

Note: the above data shall include transferred CO_2 but exclude CO_2 stemming from biomass.

Does the installation satisfy the criteria for installations with low emissions (as defined by Article 47 of the MRR)? No

8. Monitoring Approaches

q. Monitoring Approaches

Emissions may be determined using either a calculation based methodology ("calculation") or measurement based methodology ("measurement") except where the use of a specific methodology is mandatory according to the provisions of the MRR. [MRR Article 21].

Note: the operator may subject to competent authority approval combine measurement and calculation for different sources. The operator is required to ensure and demonstrate that neither gaps nor double counting of reportable emissions occurs.

Please specify whether or not you propose to apply the following monitoring approaches. Select all monitoring approaches that are applicable to you. The consecutive sections will become mandatory based on the selected approaches.

Calculation	Yes
Measurement	No
Fall-back approach	No
Monitoring of N_2O	No
Monitoring of PFC	No
Monitoring of transferred / inherent CO_2	No

9. Calculation

r. Approach Description

The calculation approach including formulae used to determine annual CO_2 emissions:

Emissions are calculated using the general formula: tCO2 = Activity Data (tJ) x Emission Factor (tCO2/tJ) x Oxidation factor.

The Activity Data is calculated from total fuel used or combusted (e.g. Sm3, Nm3, kg) and the net calorific value NCV (e.g. tJ/Nm3 or MJ/Sm3) and is expressed in TJ. For reporting purposes fuel volume consumed and NCV is reported normalised.

The oxidation factor of 1.0 is used throughout.

F1 HP Fuel Gas: The HP fuel gas usage is continuously monitored by Orifice meter FI-8401. The gas is continuously analysed by an on-line gas chromatograph from which the NCV and Emissions Factor are derived.

F2 LP Fuel Gas: The LP fuel gas usage is continuously monitored by Orifice meter FI-8402. The gas is sampled and analysed monthly from which the NCV and Emissions Factor are derived.

F3 Diesel: The diesel usage is obtained from fuel delivery records and diesel storage tank (T-8803) level indicator (LI-8806). National NCV and EF for diesel are obtained from the EPA website. The Density value is obtained yearly from the fuel supplier. The diesel used by site vehicles is recorded and excluded from the total diesel used.

F4 Ground Flare: The ground flare gas usage is continuously monitored by Averaging Pitot Tube flow meter FT-8110. Ground flare activity data calculation is based on FT-8110 mass flow. Thus, only combusted gas is accounted for.

The reference EF of 0.00393 tCO2/Nm3 is used as per Annex IV of MRR.

F5 HP Flare Gas: The HP flare gas usage is continuously monitored by Ultrasonic meter FT-8103. The HP flare pilots are ignited based on a flow set point measured by a thermal mass flowmeter, FE-8105. HP flare activity data calculation is based on FT-8103 volumetric flow when the pilots are lit (based on FE-8105 flow threshold). Thus, only combusted gas is accounted for.

The reference EF of 0.00393 tCO2/Nm3 is used as per Annex IV of MRR.

F6 LP Flare Gas: The LP flare gas usage is continuously monitored by Ultrasonic meter FT-8104. The LP flare pilots are ignited based on a flow set point measured by a thermal mass flowmeter, FE-8106. LP flare activity data calculation is based on FT-8104 volumetric flow when the pilots are lit (based on FE-8106 flow threshold). Thus, only combusted gas is accounted for.

The reference EF of 0.00393 tCO2/Nm3 is used as per Annex IV of MRR.

F7 Back Feed Gas: Back feed gas activity data is metered by turbine meter FT-2064, ultrasonic meter FT-2301 or ultrasonic meter FT-2351. The NCV of the network gas is obtained from Gas Networks Ireland (GNI) published normalised GCV data. This is converted to NCV using the procedure set out in the EPA "current Country Specific NCV and Emission Factor sheet". The annually published EPA emission factor for natural gas is used for calculation to CO2.

F8 LPG: Emissions are determined using a conservative estimation method based on the number of cylinders purchased each year. National NCV and emission factor for propane are obtained from the annually published EPA emission factors.

s. Measurement Devices

Below is a description of the specification and location of the measurement systems used for each source stream where emissions are determined by calculation

Also a description of all measurement devices including sub-meters and meters used to deduct non-Annex I activities to be used for each source and source stream.

Source Stream Refs.	Emission Source Refs.	Measurement Device Ref.	Type of Measurement Device	Measurement Range	Metering Range Units	Specified Uncertainty (+/- %)	Location
F1(HP Fuel Gas)	S1,S2	FI-8401	Orifice meter	1185 - 2826	Nm^3/hr	1.265	Vapour outlet line from HP knockout drum (D-8402) to distributor header
F2(LP Fuel Gas)	S3,S4,S5,S11,S12,S13	FI-8402	Orifice meter	351-1410	Nm^3/hr	7.39	Vapour outlet line from LP knockout drum (D-8401) to distributor header
F3 (GO)	S6,S7,S8,S9,S10	Diesel Usage	Purchase Records	n/a	n/a	n/a	Operations Management Database (SAP)
F4 (LP Ground flare)	S11	FT-8110	Averaging Pitot Tube	0-10,000	kg/hr	N/A	On the line from the Maintenance flare knockout drum (D-8111) to the ground flare
F5 (HP Flare)	S12	FT-8103	Ultrasonic meter	30.5-266827	Nm^3/h	11.977	On the line from the HP flare knockout drum (D-8101) to the flare stack
F6 (LP Flare)	S13	FT-8104	Ultrasonic meter	15.4-14198	Nm^3/h	11.782	On the line from the LP flare

Source Stream Refs.	Emission Source Refs.	Measurement Device Ref.	Type of Measurement Device	Measurement Range	Metering Range Units	Specified Uncertainty (+/- %)	Location
							knockout drum (D-8102) to the flare stack
F7 (Back Feed Gas)	S1,S2,S3,S4,S5,S11, S12,S13	FT-2064	Turbine meter	654-15256	Nm3/hr	0.879	Prior to connection to BGE
F3 (GO)	S20	Mobile Vehicles - Diesel Meter	Turbine meter	N/A	litres	N/A	Diesel Tank Farm
F8 (LPG)	S11,S12,S13	LPG Usage	Purchase Records	N/A	N/A	N/A	Operations Management Database (SAP)
F3 (GO)	S6,S7,S8,S9,S10,S20	LI-8806 Diesel Storage Tank (T-8803) Level Indicator	Level gauge	150-5700	mm	N/A	Diesel Storage Tank (T-8803)
F7 (Back Feed Gas)	S1,S2,S3,S4,S5,S11, S12,S13	FT-2301	Ultrasonic meter	25 - 350	MMSCFD	0.763	Export Metering
F7 (Back Feed Gas)	S1,S2,S3,S4,S5,S11, S12,S13	FT-2351	Ultrasonic meter	25 - 350	MMSCFD	0.763	Export metering

Source Stream Refs.	Measurement Device Ref.	Determination Method	Instrument Under Control Of	Conditions Of Article 29(1) Satisfied	Invoices Used To Determine Amount Of Fuel Or Material	Trade Partner And Operator Independent
F1(HP Fuel Gas)	FI-8401	Continual	Operator	N/A	N/A	N/A
F2(LP Fuel Gas)	FI-8402	Continual	Operator	N/A	N/A	N/A
F3 (GO)	Diesel Usage	Batch	Trade partner	Yes	Yes	Yes
F4 (LP Ground flare)	FT-8110	Continual	Operator	N/A	N/A	N/A
F5 (HP Flare)	FT-8103	Continual	Operator	N/A	N/A	N/A

Source Stream Refs.	Measurement Device Ref.	Determination Method	Instrument Under Control Of	Conditions Of Article 29(1) Satisfied	Invoices Used To Determine Amount Of Fuel Or Material	Trade Partner And Operator Independent
F6 (LP Flare)	FT-8104	Continual	Operator	N/A	N/A	N/A
F7 (Back Feed Gas)	FT-2064	Continual	Operator	N/A	N/A	N/A
F3 (GO)	Mobile Vehicles - Diesel Meter	Continual	Operator	N/A	N/A	N/A
F8 (LPG)	LPG Usage	Batch	Trade partner	Yes	Yes	Yes
F3 (GO)	LI-8806 Diesel Storage Tank (T-8803) Level Indicator	Continual	Operator	N/A	N/A	N/A
F7 (Back Feed Gas)	FT-2301	Continual	Operator	N/A	N/A	N/A
F7 (Back Feed Gas)	FT-2351	Continual	Operator	N/A	N/A	N/A

t. Applied Tiers

The table below identifies the tiers applied against the relevant input data for each source stream and confirms whether a standard (MRR Article 24) or mass balance (MRR Article 25) approach is applied.

(i) The highest tiers as defined in Annex II of the MRR should be used by Category B and C installations to determine the activity data and each calculation factor (except the oxidation factor and conversion factor) for each major source stream. Category A installations should apply as a minimum the tiers listed in Annex V.

(ii) Operators may apply a tier one level lower than those referred to in sub paragraph (i) above for Category C installations and up to two levels lower for Category A and B installations with a minimum of tier 1 if the operator can demonstrate to the satisfaction of the competent authority that this is not technically feasible or would lead to unreasonable cost to apply the higher tier. The justification for not applying the higher tier should be recorded when completing the tier table.

(iii) The competent authority may allow an operator to apply even lower tiers than those referred to in the sub paragraph (ii) with a minimum of tier 1 for a transition period of up to three years if the operator can demonstrate to the satisfaction of the competent authority that this is not technically feasible or would lead to unreasonable cost to apply the higher tier and provides an improvement plan detailing how and by when at least the tier referred to in sub paragraph (ii) will be achieved. The improvement plan should be referenced in subsequent table and provided to the competent authority at the time of submission of this plan.

(iv) For minor source streams operators shall apply the highest tier which is technically feasible and will not lead to unreasonable costs with a minimum of tier 1 for activity data and each calculation factor. For de-minimis source streams operators may use conservative estimations rather than tiers unless a defined tier can be achieved without additional effort (MRR Article 26(2)).

(v) Installations with low emissions as identified in section 6(d) may apply as a minimum tier 1 for determining activity data and calculation factors for all source streams unless higher accuracy is achievable without additional effort.

* Note 1: For commercial standard fuels the minimum tiers listed in Annex V of the MRR may be applied for all activities in all installations.

* Note 2: If you are intending to apply a fall-back approach please complete the table below and select "n/a" for the tiers to be applied for each source stream where a fall-back approach is used. Section 10 "Fall-back" must also be completed for these source streams.

* Note 3: For biomass or mixed fuels the emission factor is the preliminary emission factor as defined in Definition 35 Article 3 of the MRR.

Source Stream Refs.	**Emission Source Refs.**	**Measurement Device Refs.**	**Overall Metering Uncertainty (less than +/- %)**	**Applied Monitoring Approach**	**Activity Data Tier Applied**	**Net Calorific Value Tier Applied**	**Emission Factor Tier Applied**	**Carbon Content Tier Applied**	**Oxidation Factor Tier Applied**	**Conversion Factor Tier Applied**	**Biomass Fraction Tier Applied**	**Estimated Emissions $tCO_{2(e)}$**	**% of Total Estimated Emissions**	**Source Category**	**Highest Tiers Applied**	**Justification for not applying the highest tiers**	**Improvement Plan Reference (where applicable)**
F1(HP Fuel Gas)	S1,S2	FI-8401	<1.5%	Standard	4	3	3	N/A	1	N/A	N/A	34834	80.99	Major	Yes	n/a	n/a
F2(LP Fuel Gas)	S3,S4,S5,S11,S12,S13	FI-8402	<7.5%	Standard	1	3	3	N/A	1	N/A	N/A	7308	16.99	Major	No	See attached cost benefit analysis (CBA) carried out using	n/a

Source Stream Refs.	Emission Source Refs.	Measurement Device Refs.	Overall Metering Uncertainty (less than +/- %)	Applied Monitoring Approach	Activity Data Tier Applied	Net Calorific Value Tier Applied	Emission Factor Tier Applied	Carbon Content Tier Applied	Oxidation Factor Tier Applied	Conversion Factor Tier Applied	Biomass Fraction Tier Applied	Estimated Emissions $tCO_{2(e)}$	% of Total Estimated Emissions	Source Category	Highest Tiers Applied	Justification for not applying the highest tiers	Improvement Plan Reference (where applicable)
																the official EU-ETS unreasonable costs assessment. CBA demonstrates that the cost is unreasonable. CBA based on flow measurement device change	

Source Stream Refs.	Emission Source Refs.	Measurement Device Refs.	Overall Metering Uncertainty (less than +/- %)	Applied Monitoring Approach	Activity Data Tier Applied	Net Calorific Value Tier Applied	Emission Factor Tier Applied	Carbon Content Tier Applied	Oxidation Factor Tier Applied	Conversion Factor Tier Applied	Biomass Fraction Tier Applied	Estimated Emissions $tCO_{2(e)}$	% of Total Estimated Emissions	Source Category	Highest Tiers Applied	Justification for not applying the highest tiers	Improvement Plan Reference (where applicable)
																estimate of 45,878 EUR and device lifetime of 20 years used in calculation.	
F3 (GO)	S6,S7,S8,S9,S10	Diesel Usage, LI-8806 Diesel Storage Tank (T-8803) Level Indicator,Mobile Vehicles -	N/A	Standard	No tier	2a	2a	N/A	1	N/A	N/A	98	0.23	De-minimis	N/A	n/a	n/a

Source Stream Refs.	**Emission Source Refs.**	**Measurement Device Refs.**	**Overall Metering Uncertainty (less than +/- %)**	**Applied Monitoring Approach**	**Activity Data Tier Applied**	**Net Calorific Value Tier Applied**	**Emission Factor Tier Applied**	**Carbon Content Tier Applied**	**Oxidation Factor Tier Applied**	**Conversion Factor Tier Applied**	**Biomass Fraction Tier Applied**	**Estimated Emissions $tCO_{2(e)}$**	**% of Total Estimated Emissions**	**Source Category**	**Highest Tiers Applied**	**Justification for not applying the highest tiers**	**Improvement Plan Reference (where applicable)**
		Diesel Meter															
F4 (LP Ground flare)	S11	FT-8110	N/A	Standard	No tier	1	1	N/A	1	N/A	N/A	256	0.6	De-minimis	N/A	n/a	n/a
F5 (HP Flare)	S12	FT-8103	<12.5%	Standard	2	1	1	N/A	1	N/A	N/A	256	0.6	Major	Yes	n/a	n/a
F6 (LP Flare)	S13	FT-8104	<12.5%	Standard	2	1	1	N/A	1	N/A	N/A	256	0.6	Minor	Yes	n/a	n/a
F7 (Back Feed Gas)	S1,S2,S3,S4,S5,S11,S12,S13	FT-2064,FT-2301,FT-2351	<1.5%	Standard	4	2b	2a	N/A	1	N/A	N/A	0	0	Minor	Yes	n/a	n/a
F8 (LPG)	S11,S12,S13	LPG Usage	N/A	Standard	No tier	2a	2a	N/A	1	N/A	N/A	0	0	De-minimis	N/A	n/a	n/a

Total Estimated Emissions for Calculation (tonnes $CO_{2(e)}$) 43008

u. Uncertainty Calculations

The table below lists evidence attached to the application that demonstrates compliance with the applied tiers in accordance with Article 12 of the MRR.

Attachment	**Description**
COR-52-SH-0070 R01 - Shell_Corrib Metering Uncertainties.pdf	Corrib Metering Uncertainties Manual
F7 Corrib Back flow Gas combined uncertainty.xlsx	F7 Corrib Back flow Gas combined uncertainty
APCAt A EUTS unreasonable_costs_tool_en - CQ_Corrib LP Fuel Gas_R1 160518.xls	EU ETS unreasonable costs tool - LP Fuel Gas R1

v. Applied tiers

Applied tiers for each source stream

Source Stream Ref.	Emission Source Refs.	Activity Data Tier Applied	Net Calorific Value Tier Applied	Emission Factor Tier Applied	Carbon Content Tier Applied	Oxidation Factor Tier Applied	Conversion Factor Tier Applied	Biomass Fraction Tier Applied
F1(HP Fuel Gas)	S1,S2	4	3	3	N/A	1	N/A	N/A
F2(LP Fuel Gas)	S3,S4,S5,S11,S12,S13	1	3	3	N/A	1	N/A	N/A
F3 (GO)	S6,S7,S8,S9,S10	No tier	2a	2a	N/A	1	N/A	N/A
F4 (LP Ground flare)	S11	No tier	1	1	N/A	1	N/A	N/A
F5 (HP Flare)	S12	2	1	1	N/A	1	N/A	N/A
F6 (LP Flare)	S13	2	1	1	N/A	1	N/A	N/A
F7 (Back Feed Gas)	S1,S2,S3,S4,S5,S11,S12,S13	4	2b	2a	N/A	1	N/A	N/A
F8 (LPG)	S11,S12,S13	No tier	2a	2a	N/A	1	N/A	N/A

w. Justification for Applied tiers

Justifications for the applied tiers for each major source stream where highest tiers are not currently achieved.

Source Stream Ref.	Emission Source Refs.	Justification for the applied tier	Improvement Plan Reference (where applicable)
F2(LP Fuel Gas)	S3,S4,S5,S11,S12,S13	See attached cost benefit analysis (CBA) carried out using the official EU-ETS unreasonable costs assessment. CBA demonstrates that the cost is unreasonable. CBA based on flow measurement device change-out to a coriolis type meter. Conservative cost estimate of 45,878EUR and device lifetime of 20 years used in calculation.	n/a

10. Calculation Factors

x. Default Values

The table below lists, for each parameter, where default values are to be used for calculation factors.

Source Stream Refs.	Emission Source Refs.	Parameter	Reference Source	Default Value applied (where appropriate)
F1(HP Fuel Gas),F2(LP Fuel Gas),F3 (GO),F4 (LP Ground flare),F5 (HP Flare),F6 (LP Flare),F7 (Back Feed Gas),F8 (LPG)	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13	OxF	As per Article 37 of EU 601/2012	1
F3 (GO)	S6,S7,S8,S9,S10	NCV	As per EPA Annual Guidance	n/a
F3 (GO)	S6,S7,S8,S9,S10	EF	As per EPA Annual Guidance	n/a
F4 (LP Ground flare),F5 (HP Flare),F6 (LP Flare)	S11,S12,S13	EF	IS4:MRR AnnexIV	0.00393 tCO2/Nm3
F8 (LPG)	S11,S12,S13	NCV	As per EPA Annual Guidance	n/a
F8 (LPG)	S11,S12,S13	EF	As per EPA Annual Guidance	n/a
F4 (LP Ground flare),F5 (HP Flare),F6 (LP Flare)	S11,S12,S13	NCV	ANNEX VI of EU Regulation 601/2012	46.4 Tj/Gg
F7 (Back Feed Gas)	S1,S2,S3,S4,S5,S11,S12,S13	NCV	GNI Published GCV data	n/a
F7 (Back Feed Gas)	S1,S11,S12,S13,S2,S3,S4,S5	EF	As per EPA annual guidance	n/a

Sampling and Analysis

Do you undertake sampling and analysis of any of the parameters used in the calculation of your CO_2 emissions? Yes

y. Analysis

The table below lists, for each source stream, where calculation factors are to be determined by analysis.

Source Stream Refs.	Emission Source Refs.	Parameter	Method of Analysis	Frequency	Laboratory Name	Laboratory ISO17025 Accredited	Evidence Reference
F1	S1,S2	NCV, EF	On-line gas chromatograph	Continuous on-line gas monitoring. Supported by annual verification of GCs by external specialists	Effectech, UK	Yes	n/a
F2(LP Fuel Gas)	S3,S4,S5	NCV, EF	CBA77 Pressurised Gases Extended Analysis	Monthly	Intertek, Aberdeen	Yes	n/a

Detail about the written procedures for the above analysis.

Where a number of procedures are used details of an overarching procedure which covers the quality assurance of analyses methods and links together individual analytical methods is listed.

Title of procedure	SEPIL EU ETS Procedures Manual
Reference for procedure	COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 4.3 describes the procedure for HP gas. HP gas is sampled and analyzed continuously by an on-line gas chromatograph. Section 4.4 describes the procedure for LP gas. LP Gas is sampled by SEPIL Production Chemistry personnel and sent to a UK laboratory (Intertek) for analysis.
Post or department responsible for the procedure and for any data generated	The SEPIL CO2 Focal Point has responsibility for implementation of procedures.
Location where records are kept	DCS System for HP Gas records; Production Chemistry for LP Gas records
Name of IT system used	N/A
List of EN or other standards applied	N/A

z. Sampling Plan

Details about the procedure covering the sampling plan for the analysis table above.

The procedure below covers the elements of a sampling plan as required by Article 33 of the MRR. Where a number of procedures are used, details of an overarching procedure which covers the sampling methods and links together individual sampling methods are listed.

Attachment	**Description**
Sampling Plan LP Fuel Gas_Rev 3 September 2016.docx	Sampling Plan LP Fuel Gas_Rev 3 September 2016

Title of procedure	Sampling Plan for LP Fuel Gas / SEPIL EU ETS Procedures Manual COR-14-SH-0150
Reference for procedure	COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The Sampling Plan for LP Gas describes the sampling for LP fuel gas only. The procedure specifies the methodology to obtain a representative composition of the fuel. HP fuel gas is analysed continuously by an online gas chromatograph linked to the DCS. The analyses from the GCs is used to calculate emission factors and net calorific values. The gas chromatograph is programmed to self-calibrate daily. A t-test will be used to statistically verify the representativeness of the LP fuel gas samples, refer to

	SEPIL EU ETS procedure for details.
Post or department responsible for the procedure and for any data generated	Production Chemist
Location where records are kept	Onsite Laboratory
Name of IT system used	N/A
List of EN or other standards applied	N/A

aa. Sampling Plan Appropriateness

The procedure to be used to revise the appropriateness of the sampling plan.

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 4.4 states that the appropriateness of the sampling plan will be reviewed periodically to ensure it is fit for purpose and in compliance with relevant guidance such as GD5 of the EU ETS system.
Post or department responsible for the procedure and for any data generated	Production Chemistry
Location where records are kept	Production Chemistry Laboratory
Name of IT system used	Sample Manager
List of EN or other standards applied	N/A

Are stock estimates carried out as part of the emission calculations?	Yes

bb. Year-end reconciliations

The procedure to be used to estimate stocks at the beginning/end of a reporting period where applicable. This should include any source streams monitored using batch metering e.g. where invoices are used.

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure.	Section 3.8 describes the procedure for estimating diesel consumption between and start and the end of each month.
Post or department responsible for the procedure and for any data generated	Process Engineer
Location where records are kept	SAP system
Name of IT system used	N/A
List of EN or other standards applied	N/A

cc. Tracking Instruments

The procedure used to keep track of instruments installed in the installation used for determining activity data.

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure.	Section 4 of the Procedures Manual describes the system for tracking, calibration, adjustment & checking of meters.
Post or department responsible for the procedure and for any data generated	Maintenance Co-ordinator
Location where records are kept	Maintenance Co-ordinator's office
Name of IT system used	SAP system
List of EN or other standards applied	N/A

11. Management

dd. Monitoring and Reporting Responsibilities

Responsibilities for monitoring and reporting emissions from the installation are listed below:

Relevant job titles/posts and provide a succinct summary of their role relevant to monitoring and reporting are listed below.

Job Title / Post	**Responsibilities**
Gas Plant Manager	Overall responsiblity for the Terminal's operations including EU ETS regulatory compliance
Production Co-ordinator	Coordination of Production
Process Engineer	Responsible for accuracy and integrity of data, CO2 calculations and reporting.
Maintenance Co-ordinator	Responsible for maintenance and calibration of relevant equpment.
Production Chemist	Responsible for sampling and anlysis of gas samples.
Environmental Advisor	Management of Environmental Aspects at Terminal. Also nominated as CO2 focal point for terminal.
Asset Environmental Specialist (UK based)	Responsible for coordination of EU ETS reporting for UK and Ireland and management of the EU Registry Account

Attachment	**Description**
COR-14-SH-0150 R06 Procedure Manual for Phase III of EU ETS.pdf	Procedure Manual for Phase III

ee. Assignment of Responsibilities

Details of the procedure used for managing the assignment of responsibilities for monitoring and reporting within the installation and for managing the competencies of responsible personnel in accordance with Article 58(3)(c) of the MRR:

This procedure identifies how the monitoring and reporting responsibilities for the roles identified above are assigned and how training and reviews are undertaken.

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 2 of the EU ETS Procedures Manual describes the roles and responsibilities of the key personnel involved in the process. Section 2 explains those responsible for the assignment of responsibilities and the systems in place to ensure personnel are competent in accordance with Article 58(3)(c) of the MRR. The Competence Assessment & Assurance Manual (COR-52-SH-0003) and Corrib Operations Staff Competence Manual (COR-52-SH-0005) are supporting documents.
Post or department responsible for the procedure and for any data generated	Gas Plant Manager
Location where records are kept	Shell Electronic Document Management System
Name of IT system used	N/A
List of EN or other standards applied	N/A

ff. Monitoring Plan Appropriateness

Details of the procedure used for regular evaluation of the monitoring plan's appropriateness covering in particular any potential measures for the improvement of the monitoring methodology:

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 10 of the EU ETS Procedures Manual describes the management review process. The appropriateness of the Monitoring Plan will be reviewed during management reviews and to ensure that potential measures for improvement of the monitoring methodology are applied.
Post or department responsible for the procedure and for	Gas Plant Manager supported by the Production Co-

any data generated	ordinator
Location where records are kept	HSE department
Name of IT system used	N/A
List of EN or other standards applied	N/A

gg. Data Flow Activities

Details of the procedures used to manage data flow activities in accordance with Article 57 of the MRR:

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	Corrib EU ETS Data Flow & Reporting Diagram - September 2018
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 3 of the EU ETS Procedures Manual describes the Data Flow and Risk Management Activities. Section 3 presents 'Review and Validation of Data' so as to manage data flow activities in accordance with Article 57 of the MRR.
Post or department responsible for the procedure and for any data generated	Process Engineer
Location where records are kept	Shell Electronic Document Management System
Name of IT system used	N/A
List of EN or other standards applied	N/A
List of primary data sources	Refer to attached Corrib EU ETS Data Flow & Reporting Diagram Refer to section 3 of COR-14-SH-0150 Rev 6 for full details of the CO2 Reporting Calculation Methodology.
Description of the relevant processing steps for each specific data flow activity.	Refer to attached Corrib EU ETS Data Flow & Reporting Diagram - September 2018
Identify each step in the data flow and include the formulas and data used to determine emissions from the primary data. Include details of any relevant electronic data processing and storage systems and other inputs (including manual inputs) and confirm how outputs of data flow activities are recorded	Refer to section 3 of COR-14-SH-0150 for full details of the CO2 Reporting Calculation Methodology. Key activities relating to Data Review and Checking: 1. Review Permit / Monitoring Plan and ensure up to date 2. Acquire LP fuel gas analyses and HP fuel gas analyses 3. Ensure accuracy of data & calculations 4. Provision of metered volumes of fuel gas, flared gas and quantities of diesel consumed

5. Maintenance & calibration of equipment

6. Application for Trading Allowances

7. Conduct independent verification

Submit relevant documents to record data flow activities

Attachment	**Description**
Corrib EU ETS Data Flow.pdf	Corrib EU ETS Data Flow & Reporting Diagram - September 2018

hh. Assessing and Controlling Risks

Details of the procedures used to assess inherent risks and control risks in accordance with Article 58 of the MRR:

Title of procedure	Procedures Manual for Phase III of EU ETS.
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 3.3 of the EU ETS Procedures Manual describes the Risk Assessment process. The Corrib EU ETS Risk Assessment presents the risks, consequences and the controls in place to manage the risks and to assess inherent risks and control risks in accordance with Article 58 of the MRR.
Post or department responsible for the procedure and for any data generated	Production Co-ordinator
Location where records are kept	SEPIL electronic document management system
Name of IT system used	SEPIL electronic document management system
List of EN or other standards applied	N/A

ii. Quality Assurance of Metering / Measuring Equipment

Details of the procedures used to ensure quality assurance of measuring equipment in accordance with Article 58 and 59 of the MRR.

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 5 of the EU ETS Procedures Manual describes Quality Assurance of Measurement Activity to ensure quality assurance of measuring equipment in accordance with Article 58 and 59 of the MRR.
Post or department responsible for the procedure and for any data generated	Maintenance Co-ordinator
Location where records are kept	Maintenance Co-ordinator's Office
Name of IT system used	SAP System
List of EN or other standards applied	N/A

jj. Quality Assurance of Information Technology used for Data Flow Activities

Details of the procedures used to ensure quality assurance of information technology used for data flow activities in accordance with Article 58 and 60 of the MRR:

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 6 of the EU ETS Procedures Manual describes the systems in place governing Information Technology to ensure quality assurance of information technology used for data flow activities in accordance with Article 58 and 60 of the MRR. The key IT systems are: (a) Plant Information (PI) This ensures that information technology is tested and controlled, including access control, back-up, recovery and security.

Post or department responsible for the procedure and for any data generated	SEPIL IT Department for Software Applications; Maintenance Department for Plant Information (PI) system
Location where records are kept	IT Department and Maintenance Department
Name of IT system used	SAP
List of EN or other standards applied	N/A

kk. Review and Validation of Data

Details of the procedures used to ensure regular internal reviews and validation of data in accordance with Articles 58 and 62 of the MRR.

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 3.4 of the Procedures Manual describes general data review and checking activities. The procedure ensures regular internal reviews and validation of data in accordance with Articles 58 and 62 of the MRR. The review and validation process includes a check on whether data is complete, comparisons with data over previous years and criteria for rejecting data.
Post or department responsible for the procedure and for any data generated	Process Engineer
Location where records are kept	HSE department
Name of IT system used	N/A
List of EN or other standards applied	N/A

ll. Corrections and Corrective Actions

Details of the procedures used to handle corrections and corrective actions in accordance with Articles 58 and 63 of the MRR:

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 3.5 describes the activities associated with data corrections so as to handle corrections and corrective actions in accordance with Articles 58 and 63 of the MRR. The principal Shell procedure is PMA Data Correction EPE.PMA.PR.02. Any major non-compliance or data error shall be handled with reference to the SEPIL EMS Procedure: "Non-Conformance, Corrective and Preventive Action"

Post or department responsible for the procedure and for any data generated	Process Enginneer
Location where records are kept	Electronic document management system
Name of IT system used	N/A
List of EN or other standards applied	N/A

mm. Control of Outsourced Activities

Details of the procedures used to control outsourced processes in accordance with Articles 59 and 64 of the MRR.

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The main controlled outsourced processes, in accordance with Articles 59 and 64 of the MRR are; - Fuel gas sample analysis - Calibration & maintenance of gas chromatographs - Meter maintenance and calibration

Post or department responsible for the procedure and for any data generated	Metering Enginner
Location where records are kept	Electronic document management system
Name of IT system used	N/A
List of EN or other standards applied	N/A

nn. Record Keeping and Documentation

Details of the procedures used to manage record keeping and documentation:

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 8 discusses record keeping and documentation management in relation to the data and information stipulated in Annex IX of the MRR and for a minimum of 10 years.

Post or department responsible for the procedure and for any data generated	Environmental Advisor
Location where records are kept	Electronic document management system
Name of IT system used	N/A
List of EN or other standards applied	N/A

oo. Risk Assessment

The results of a risk assessment that demonstrates that the control activities and procedures are commensurate with the risks identified:

Attachment	Description
Feb 2016 EU-ETS Risk Assessment BBGT (COR-14-0150 RA 02).xlsx	Feb 2016 EU-ETS Risk Assessment BBGT (COR-14-0150 RA 02).xlsx

pp. Environmental Management System

Does your organisation have a documented Environmental Management System?	Yes
Is the Environmental Management System certified by an accredited organisation?	Yes
The standard to which the Environmental Management System is certified:	ISO14001: 2015

12. Changes in Operation

qq. Changes in Operation

Article 24(1) of Commission Decision 2011/278/EC requires that Member States must ensure that all relevant information about any planned or effective changes to the capacity activity level and operation of an installation is submitted by the operator to the competent authority by 31 December each year. Article 12(3) of the MRR further provides that Member States may require information to be included in the monitoring plan of an installation for the purposes of meeting these requirements.

Details of the procedure used to ensure regular reviews are carried out to identify any planned or effective changes to the capacity activity level and operation of the installation that have an impact on the installation's allocation:

The procedure specified below cover the following:

- planning and carrying out regular checks to determine whether any planned or effective changes to the capacity activity level and operation of an installation are relevant under Commission Decision 2011/278/EC; and
- Procedures to ensure such information is submitted to the competent authority by 31 December of each year.

Title of procedure	Procedures Manual for Phase III of EU ETS
Reference for procedure	Document No: COR-14-SH-0150
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 9.1 discusses management of change and notification procedures arising from changes and to ensure such information is submitted to the competent authority by 31 December of each year. The Terminal Manager, in conjunction with the CO2 Focal Point, is responsible for ensuring that reviews are periodically carried out to capture planned or effective changes which may impact the site's position under the EU ETS regulations. Section 9.2 discusses notification requirements for Significant Capacity Decreases, Closures and Partial Cessation Section 9.3 covers notification for amending allocations of CO2.
Post or department responsible for the procedure and for any data generated	Production Co-ordinator
Location where records are kept	HSE Department
Name of IT system used	N/A

13. Abbreviations

rr. Abbreviations Acronyms or definitions

Abbreviations acronyms or definitions that have been used in this monitoring plan:

Abbreviation	Definition
SEPIL	Shell E & P Ireland Ltd
UI	Upstream International
GHG	Greenhouse Gas
MRR	Monitoring & Reporting Regulations

14. Additional Information

Any other information:

Attachment	Description
N/A	N/A

15. Confidentiality

ss. Confidentiality Statement

It is the Environmental Protection Agency's policy to make information received by it in the course of its work open to inspection by any person on request. This is in accordance with the provisions of the European Communities (Access to Information on the Environment) Regulations 2007 to 2011.

In the event that you considered that some of the information being submitted of a confidential nature, then the nature of this information and the reasons why it should be considered confidential, with reference to the European Communities (Access to Information on the Environment) Regulations 2007 to 2011 and any amendments must be explicitly requested using the facility below. The Board of the Environmental Protection Agency will consider the requests and if the information can be deemed as confidential and necessary.

Notwithstanding any request for confidentiality, the Environmental Protection Agency explicitly reserves the right to release data to the Commission, including emissions and allocations to the public, on the basis that the data will be used for the purposes foreseen in Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC.

Please tick this box if you consider that any part of your false

form should be treated as commercially confidential/sensitive:

END of Appendix I.