



Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

GREENHOUSE GAS EMISSIONS PERMIT

Permit Register Number:	IE-GHG020-10350-2
Operator:	PSE Kinsale Energy Limited Mahon Industrial Estate Blackrock Cork
Installation Name:	Kinsale Head Gas Field
Site Name:	Kinsale Head Gas Field
Location:	Platform Alpha Kinsale Head Gas Field Celtic Sea 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 N^o IE-GHG020-10350.

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):

Status Log

Current Permit

Permit number	Date application received	Date Permit issued	Comment
IE-GHG020-10350-2	01 July 2016	30 January 2018	<ol style="list-style-type: none"> 1. Removal of emission source S4 (G100A Gas Turbine). 2. Removal of emission source S3 (T7000 Gas Turbine). 3. Removal of Source Stream F2 (grid gas). 4. Update of Measurement Devices Table to remove MD7, MD8 and MD9 and to update uncertainty and range of meters.

Previous Permits

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG020-10350-1	GHG Permit Application	16 January 2014	16 January 2014	

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)	PSE Kinsale Energy 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:

PSE Kinsale Energy Limited
Mahon Industrial Estate
Blackrock
Cork

Company Registration Number: 904997

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)
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at the following installation(s):

Kinsale Head Gas Field **Installation number: 18**

located at

Platform Alpha
Kinsale Head Gas Field
Celtic Sea
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.: 18

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
N/A

- 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 T1000	17.7	MW
S2	Gas Turbine T3000	17.7	MW
S5	Gas Turbine G100B	3.8	MW
S6	Gas Turbine G100C	3.8	MW
S7	Gas Burner X110	1.95	MW
S8	Diesel Fire Pump P170	0.79	MW
S9	Diesel Foam Pump AFFF	0.06	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S10	Diesel Generator G110	1.9	MW
S11	Diesel Crane 90T	1.1	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 30 January 2018:

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-GHG020-10350

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	Kinsale Head Gas Field
Site name	Kinsale Head Gas Field
Address	Platform Alpha Kinsale Head Gas Field Celtic Sea Ireland

Grid reference of site main entrance	E 573444, N 5691708
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Licence held pursuant to the Environmental Protection Agency Act 1992, as amended.	No
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Has the regulated activity commenced at the Installation? Yes

Date of Regulated Activity commencement	01 January 2008
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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 PSE Kinsale Energy Limited

Company Registration Number 904997

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

Details of the individual authorised to submit this application on behalf of the company / corporate body.

Title	[REDACTED]
Forename	[REDACTED]
Surname	[REDACTED]
Position	HES Manager

Registered office address

Address Line 1	Mahon Industrial Estate
Address Line 2	N/A
City/Town	Blackrock
County	Cork
Postcode	N/A

Principal office address

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

Address Line 1	Mahon Industrial Estate
Address Line 2	Blackrock
City/Town	Cork
County	N/A
Postcode	N/A
Company registration number	904997

Holding company

Does the company belong to a holding company? Yes

Holding company name PSE Ireland Limited

Holding company address

Address Line 1	Mahon Industrial Estate
Address Line 2	Blackrock
City/Town	Cork
County	N/A
Postcode	N/A
Company registration number	906183

Is the holding company principal address different to the holding company address? Yes

Holding company principal address

Address Line 1	171 Main Street
Address Line 2	PO Box 92, Road Town, Tortola,
City/Town	British Virgin Islands,
County	N/A
Postcode	VG1110
Company registration number	1513071

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

4. Service Contact

e. Service Contact

Name	
Address / Email Address	Mahon Industrial Estate Blackrock Cork

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.

The Kinsale Head gas field is located in the Celtic Sea, 50 km south of County Cork. Operational facilities comprise of two gas production platforms – Kinsale Alpha and Kinsale Bravo. Kinsale Bravo is a Normally Unmanned Installation (NUI). A number of fields are produced through the Kinsale facilities.

For EU-ETS Phase II 2008-2012 emissions from Platform Bravo were not reported to the EPA due to its distance from Kinsale Alpha and because the total installed power on Bravo is less than 20MW. This remains the case for Phase III.

Gas arrives at Kinsale Alpha from the Kinsale Head Alpha and Seven Heads fields. The gas is commingled with gas from the Kinsale Head Bravo, Greensands and Ballycotton fields. The commingled gas stream is then compressed via the export compression train, C-1000, which is driven by gas turbine T-1000. C-1000 has three-stage compression.

Gas from the Southwest Kinsale reservoir arrives at Kinsale Alpha and is compressed via the C-3000 train, which is driven by gas turbine T-3000. C-3000 has two-stage compression.

T-1000 and T-3000 turbines are driven by combustion fuel gas.

The combined gas stream is dried by contact with tri-ethylene glycol in a dehydration unit. The wet glycol from the dehydration unit is regenerated and re-used. Fuel gas is used in a direct-fired boiler, X-110, which boils off the water from the glycol. The evaporated water is vented to atmosphere.

Power is generated on Kinsale Alpha for use on the platform. Two power generators are available on the platform. G100B is a gas-only machine. G-100C is dual-fuel and can be run on diesel or fuel gas. Normal operation is on fuel gas. G100B and G100C are run in duty/standby mode, with one machine running to supply adequate power. Fuel gas for the generators and for the export and injection compressors is supplied from the export gas stream. Diesel for the generators is pumped from the diesel storage tank, which is periodically filled from tote tanks. There is an emergency generator (G-110) which is diesel driven and can supply essential power in the event of failure of the main power generators. There is no electricity exported from the platform.

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:

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 T1000
S2	Gas Turbine T3000
S5	Gas Turbine G100B
S6	Gas Turbine G100C
S7	Gas Burner X110
S8	Diesel Fire Pump P170
S9	Diesel Foam Pump AFFF
S10	Diesel Generator G110
S11	Diesel Crane 90T

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 T1000
S2	Gas Turbine T3000
S5	Gas Turbine G100B
S6	Gas Turbine G100C
S7	Gas Burner X110
S8	Diesel Fire Pump P170
S9	Diesel Foam Pump AFFF
S10	Diesel Generator G110
S11	Diesel Crane 90T

l. 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
KHA-T1000	Exhaust Stack T1000
KHA-T3000	Exhaust Stack T3000

Emission Point Reference	Emission Point Description
KHA-G100B	Exhaust Stack G100B
KHA-G100C	Exhaust Stack G100C
KHA-X110	Exhaust Stack X110
KHA-P170	Exhaust Stack P170
KHA-AFFF	Exhaust Stack AFFF
KHA-G110	Exhaust Stack G110
KHA-90T	Exhaust 90T Crane

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 (NG -Inch)	Combustion: Other gaseous & liquid fuels	Natural Gas - Inch
F6 (Gas Oil)	Combustion: Commercial standard fuels	Gas/Diesel Oil

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 (NG -Inch)	S1,S2,S5,S6,S7	KHA-G100B,KHA-G100C,KHA-T1000,KHA-T3000,KHA-X110	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 (Gas Oil)	S10,S11,S8,S9	KHA-90T,KHA-AFFF,KHA-G110,KHA-P170	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)

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? No

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 CO₂ but exclude CO₂ 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 ₂ O	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 CO₂ emissions:

Approach Description

For emissions arising from combustion activities for each source stream (Kinsale Head (Inch) natural gas and (gas oil) diesel), the activity data is first summed up and then CO₂ emissions are calculated by the formula according to Article 24(1). The totals from each stream are finally summed to give the total CO₂ emissions. The calculation approach used at this installation is as follows:

Activity data x Emission Factor x Oxidation Factor = CO₂ Emissions:

Activity data = Fuel consumed (Nm³) * NCV (TJ/Nm³)

Natural gas

The Fuel consumed is used in 2 x gas turbines driving gas export compressors, 2 x gas turbines driving power generators and 1 x reboiler.

The fuel gas actual volume flow is measured by orifice plate flowmeters. Temperature and pressure measurement is included on each stream to convert from actual volume flow to standard volume flow. Instantaneous data is recorded in SCADA and cumulated to generate daily totals. The daily data is transferred from SCADA to Excel via the SQL server and summed to give monthly totals in mmscf. The monthly totals are converted to m³ and summed to give the annual total. This is converted to Nm³ by the equation

$$V_s \text{ (Nm}^3\text{)} = (V_a * 273.15) / 288.15$$

where V_s is the standardised gas volume and V_a is the recorded volume.

The calculation factors used are the Tier 2a country specific NCV and the country specific Emission Factor for Inch Natural Gas (source: the EPA). The Tier 1 Oxidation factor of 1.0 is applied.

Gas Oil

The Fuel consumed is used in a fire pump, a foam pump, a diesel-driven power generator and a crane engine. It is measured by level transmitter on the diesel tank TK-130. The opening and closing diesel level for the year are manually recorded and are converted to volumes based on the tank geometry. The volume of diesel imported is manually recorded and the total diesel used is calculated by the equation:

Annual Volume of Diesel/Gas oil consumed = Opening Stock + Imports- closing stock

The volume of gas oil consumed is converted to mass using the density value taken from the product data sheet. The NCV and the Emission Factor applied are country specific Tier 2a for diesel/gas oil.

The Tier 1 Oxidation factor of 1.0 is applied.

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 (NG -Inch)	S1	MD1	Orifice meter	0-100	inches H2O	5.00	FT-1001
F1 (NG -Inch)	S1	MD2	Pressure gauge	0-300	psig	N/A	PT-1002
F1 (NG -Inch)	S1	MD3	Temperature gauge	0-170	degrees F	N/A	TT-1004
F1 (NG -Inch)	S2	MD4	Orifice meter	0-100	inches H2O	5.00	FT-3001
F1 (NG -Inch)	S2	MD5	Pressure gauge	0-300	psig	N/A	PT-3002
F1 (NG -Inch)	S2	MD6	Temperature gauge	0-170	degrees F	N/A	TT-3004
F1 (NG -Inch)	S5,S6	MD10	Orifice meter	0-100	inches H2O	5.00	FT-19
F1 (NG -Inch)	S5,S6	MD11	Pressure gauge	0-300	psig	N/A	PT-19
F1 (NG -Inch)	S5,S6	MD12	Temperature gauge	32-100	degrees F	N/A	TT-19
F1 (NG -Inch)	S7	MD13	Orifice meter	0-100	inches H2O	5.00	FT-20
F1 (NG -Inch)	S7	MD14	Pressure gauge	0-100	psig	N/A	PT-20
F1 (NG -Inch)	S7	MD15	Temperature gauge	32-100	degrees F	N/A	TT-20
F6 (Gas Oil)	S10,S11,S8,S9	MD16	Level gauge	0-100	% level	n/a	LG-079

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 (NG -Inch)	MD1	Continual	Operator	N/A	N/A	N/A

Source Stream Refs.	Measurement Device Ref.	Determination Method	Instrument Control Of	Under	Conditions Of Article 29(1) Satisfied	Invoices Used To Determine Amount Of Fuel Or Material	Trade Partner And Operator Independent
F1 (NG -Inch)	MD2	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD3	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD4	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD5	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD6	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD10	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD11	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD12	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD13	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD14	Continual	Operator		N/A	N/A	N/A
F1 (NG -Inch)	MD15	Continual	Operator		N/A	N/A	N/A
F6 (Gas Oil)	MD16	Batch	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 (NG -Inch)	S1,S2,S5,S6,S7	MD1, MD2, MD3, MD4, MD5, MD6, MD10, MD11, MD12, MD13, MD14	<5.0%	Standard	2	2a	2a	N/A	1	N/A	N/A	23500	98.43	Major	Yes	n/a	n/a
F6 (Gas)	S8,S9,S	MD16	N/A	Standard	No tier	2a	2a	N/A	1	N/A	N/A	375	1.57	De-	Yes	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)
Oil)	10,S11			rd										minimis			

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

23875

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
2012 Kinsale Head Alpha platform Fuel Metering Uncertainty Review.pdf	2012 Uncertainty Review

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 (NG -Inch)	S1,S2,S5,S6,S7	2	2a	2a	N/A	1	N/A	N/A
F6 (Gas Oil)	S8,S9,S10,S11	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)
N/A	N/A	N/A	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 (NG -Inch)	S1,S2,S5,S6,S7	NCV and Emission Factor	Ireland's National Greenhouse Gas Inventory (via EPA)	n/a
F6 (Gas Oil)	S8,S9,S10,S11	NCV and Emission Factor	Ireland's National Greenhouse Gas Inventory	n/a
F1 (NG -Inch),F6 (Gas Oil)	S1,S2,S5,S6,S7,S8,S9,S10,S11	OxF	MRR	1.0

Sampling and Analysis

Do you undertake sampling and analysis of any of the parameters used in the calculation of your CO₂ emissions? No

11. Management

y. 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
HES Manager	The HES manager has overall responsibility for the greenhouse gas monitoring and reporting system. Responsibilities include submitting data to the EPA, ownership of the relevant internal documents and notification of any changes to the EPA
Production Engineer	The Production Engineer collates the data and performs the calculations for greenhouse gas monitoring and reporting.
Onshore Production Technician	The onshore production technician compiles the data that is used in the greenhouse gas monthly calculations.
Offshore Installation Manager (OIM)	The OIM is responsible for ensuring that offshore equipment and instruments relating greenhouse gas emissions are maintained as per the relevant procedures. The OIM is also responsible for manual records are correctly maintained.

Attachment	Description
N/A	N/A

z. 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	General Procedures for Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	KH-18-PR-HES-00410
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 1 of this procedure describes responsibilities related to greenhouse gas emissions and reporting, including responsibilities for the HES Manager, Onshore Production Engineer, Onshore Production Technician, Offshore Installation Manager and Engineering and Maintenance Supervisor. This is to manage the competencies of responsible personnel in accordance with Article 58(3)(c) of the MRR.
Post or department responsible for the procedure and for any data generated	HES Manager
Location where records are kept	Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES
Name of IT system used	Fusion
List of EN or other standards applied	N/A

aa. 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	General Procedures for Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	KH-18-PR-HES-00410
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 2 of this procedure describes the procedure for annual reviews of the monitoring plan by the HES manager to ensure that it accurately reflects plant status and conditions.
Post or department responsible for the procedure and for any data generated	HES Manager
Location where records are kept	Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES

Name of IT system used Fusion
 List of EN or other standards applied N/A

bb. Data Flow Activities

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

<p>Title of procedure</p>	<p>Data Flow Activities for Greenhouse Gas Monitoring and Reporting</p>
<p>Reference for procedure</p>	<p>KH-18-PR-HES-00050</p>
<p>Diagram reference</p>	<p>N/A</p>
<p>Brief description of procedure. The description should cover the essential parameters and operations performed</p>	<p>The purpose of this document is to record the data flow activities for Greenhouse Gas emissions measurement, recording and reporting to be undertaken by KEL so as to manage data flow activities in accordance with Article 57 of the MRR.</p>
<p>Post or department responsible for the procedure and for any data generated</p>	<p>HES Manager</p>
<p>Location where records are kept</p>	<p>Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES</p>
<p>Name of IT system used</p>	<p>Fusion</p>
<p>List of EN or other standards applied</p>	<p>N/A</p>
<p>List of primary data sources</p>	<p>Refer to Section 4.1 of attached procedure.</p>
<p>Description of the relevant processing steps for each specific data flow activity.</p>	<p>For emissions arising from combustion activities for each source stream (Kinsale Head (Inch) natural gas and (gas oil) diesel), the activity data is first summed up and then CO2 emissions are calculated by the formula according to Article 24(1). The totals from each stream are finally summed to give the total CO2 emissions. The calculation approach used at this installation is as follows:</p>
<p>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</p>	<p>Activity data x Emission Factor x Oxidation Factor = CO2 Emissions:</p> <p>Activity data = Fuel consumed (Nm3) * NCV (TJ/Nm3)</p> <p>Natural gas</p> <p>The Fuel consumed is used in 2 x gas turbines driving gas export compressors, 2 x gas turbines driving power generators and 1 x reboiler.</p> <p>The fuel gas actual volume flow is measured by orifice plate flowmeters. Temperature and pressure measurement is included on each stream to convert from actual volume flow to standard volume flow. Instantaneous data is recorded in SCADA and cumulated to generate daily totals. The daily data is transferred from SCADA to Excel via the SQL server and summed to give monthly totals in mmscf.</p>

The monthly totals are converted to m3 and summed to give the annual total. This is converted to Nm3 by the equation

$$V_s \text{ (Nm3)} = (V_a * 273.15) / 288.15$$

where V_s is the standardised gas volume and V_a is the recorded volume.

The calculation factors used are the Tier 2a country specific NCV and the country specific Emission Factor for Inch Natural Gas (source: the EPA). The Tier 1 Oxidation factor of 1.0 is applied.

Gas Oil

The Fuel consumed is used in a fire pump, a foam pump, a diesel-driven power generator and a crane engine. It is measured by level transmitter on the diesel tank TK-130. The opening and closing diesel level for the year are manually recorded and are converted to volumes based on the tank geometry. The volume of diesel imported is manually recorded and the total diesel used is calculated by the equation:

$$\text{Annual Volume of Diesel/Gas oil consumed} = \text{Opening Stock} + \text{Imports} - \text{closing stock}$$

The volume of gas oil consumed is converted to mass using the density value taken from the product data sheet. The NCV and the Emission Factor applied are country specific Tier 2a for diesel/gas oil.

The Tier 1 Oxidation factor of 1.0 is applied. For additional details refer to Sections 4.2 to 5.6 of attached procedure.

Submit relevant documents to record data flow activities

Attachment	Description
KH-18-PR-HES-00050 H7.pdf	Data flow activities for greenhouse gas emissions monitoring and reporting. Updated December 2017

cc. 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	General Procedures for Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	KH-18-PR-HES-00410
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 4 of this document describes the risks associated with greenhouse gas emissions and reporting and the controls that are in place to manage and control these risks. The data flow activities have been assessed and each system or input that could result in an error has been recorded. Control measures that are in place to mitigate the risks are described so as 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	HES Manager
Location where records are kept	Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES
Name of IT system used	Fusion
List of EN or other standards applied	N/A

dd. 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	General Procedures for Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	KH-18-PR-HES-00410
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 6 of this document describes the procedures in place to ensure quality and accuracy of the instruments relevant to greenhouse gas emissions. A list of the relevant instruments is provided. The procedure refers to PEMAC, Kinsale Energy's maintenance routine management system, which provides a schedule and procedure for annual calibrations of the relevant instruments so as 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	HES Manager
Location where records are kept	Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES
Name of IT system used	Fusion
List of EN or other standards applied	N/A

ee. 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	General Procedures for Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	KH-18-PR-HES-00410
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 4 of this document describes the risks associated with greenhouse gas emissions and reporting and the controls that are in place to manage and control these risks. The data flow activities have been assessed and each IT system that could result in an error has been recorded. Control measures that are in place to mitigate the risks are described so as to ensure quality assurance of information technology used for data flow activities in accordance with Article 58 and 60 of the MRR.
Post or department responsible for the procedure and for any data generated	HES Manager
Location where records are kept	Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES
Name of IT system used	Fusion
List of EN or other standards applied	N/A

ff. 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	General Procedures for Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	KH-18-PR-HES-00410
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 4 of this document describes the risks associated with greenhouse gas emissions and reporting and the controls that are in place to manage and control these risks. The controls described in Section 4 include details of the internal reviews performed on the data to ensure accuracy. A number of internal checks are performed on the data, including internal audits, cross-checking against manual records and checking against previous years' results so as to ensure regular internal reviews and validation of data in accordance with Articles 58 and 62 of the MRR.
Post or department responsible for the procedure and for any data generated	HES Manager
Location where records are kept	Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES
Name of IT system used	Fusion
List of EN or other standards applied	N/A

gg. 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	General Procedures for Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	KH-18-PR-HES-00410
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 5 of this document describes the steps to be taken in the event that errors are suspected in the data. Potential errors are identified through the checks and audits performed under the "Review and Validation of Data" section. Potential errors must be investigated and errors identified must be corrected if possible. If it is not possible to correct the data from another source, the Production Engineer should make a reasonable estimate based on previous, accurate data so as to handle corrections and corrective actions in accordance with Articles 58 and 63 of the MRR.
Post or department responsible for the procedure and for any data generated	HES Manager
Location where records are kept	Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES
Name of IT system used	Fusion
List of EN or other standards applied	N/A

hh. 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	Not relevant
Reference for procedure	Not relevant
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Not relevant - no activities are out-sourced, however this will be kept under review so as to control outsourced processes in accordance with Articles 59 and 64 of the MRR.
Post or department responsible for the procedure and for any data generated	Not relevant
Location where records are kept	Not relevant
Name of IT system used	N/A
List of EN or other standards applied	N/A

ii. Record Keeping and Documentation

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

Title of procedure	General Procedures for Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	KH-18-PR-HES-00410
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 7 describes how documents relating to greenhouse gas emissions and reporting are stored. Procedures, verified reports and correspondence with the EPA are stored in Fusion. Data reports, downloads and calculation spreadsheets are stored in the company's network drive as stipulated in Annex IX of the MRR (minimum 10 years).
Post or department responsible for the procedure and for any data generated	HES Manager
Location where records are kept	Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES
Name of IT system used	Fusion
List of EN or other standards applied	N/A

jj. Risk Assessment

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

Attachment	Description
Environmental Risk Assessment.pdf	Risk assessment for greenhouse gas reporting

kk. Environmental Management System

Does your organisation have a documented Environmental Management System? Yes

Is the Environmental Management System certified by an accredited organisation? No

12. Changes in Operation

II. 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	General Procedures for Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	KH-18-PR-HES-00410
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 3 of this document describes the requirements to review the monitoring plan on an annual basis. It also specifies the requirement for the HES manager to determine if any planned changes to be made under the company's management of change process are relevant under Commission Decision 2011/278/EC to ensure that it is submitted by the operator to the competent authority by 31 December each year.
Post or department responsible for the procedure and for any data generated	HES Manager
Location where records are kept	Fusion Document Management System, Controlled Documents, Kinsale Head/Environmental/Production/HES
Name of IT system used	Fusion

13. Abbreviations

mm. Abbreviations Acronyms or definitions

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

Abbreviation	Definition
N/A	N/A

14. Additional Information

Any other information:

Attachment	Description
2017 Instrument Calibrations Collated.pdf	2017 Instrument Calibrations Collated
KH-18-TR-ENG-00473 - Kelton Uncertainty Review of Fuel Gas Meters EU-ETS Phase 3 2012.pdf	Uncertainty assessment

15. Confidentiality

nn. 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 form should be treated as commercially confidential/sensitive: false

END of Appendix I.