

# Headquarters, Johnstown Castle Estate, County Wexford, Ireland

# **GREENHOUSE GAS EMISSIONS PERMIT**

remmi kegister Number.	IE-GHG109-10404-4
Operator:	Kerry Ingredients (Ireland) Limited
	Princes Street
	Tralee
	Kerry

Installation Name: Kerry Ingredients (Ireland) Limited

Site Name: Kerry Ingredients (Ireland) Limited

**Location:** Kilmallock Road

Charleville

Cork 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-GHG109-10404.

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 <u>ETSWAP</u>.

#### 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**

P0386-04

# **Status Log**

# **Current Permit**

Permit number	Date application received	Date Permit issued	Comment
IE-GHG109-10404-4	11 December 2018	19 June 2019	Installation of 2 x fire water pumps, emission sources AEP60 and AEP61 each with a thermal input capacity of 203.5 kw operating on gas oil;
			Replacement of N3 Thermal Oil Burner emission source AEP8 (2.25 MW ).

# **Previous Permits**

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG109- 10404-1	GHG Permit Application	28 May 2013	04 June 2013	
IE-GHG109- 10404-2	GHG Variation	14 November 2014	26 February 2015	The replacement of AEP1 Niro 1 Burner (1.6 MW) with a 4.9 MW burner and its relocation at the site  Addition of 1.1 MW Boiler AEP 58  Inclusion of acetylene gas as a source stream and the associated emission source.  Update of Procedures.
IE-GHG109- 10404-3	GHG Variation	15 February 2017	06 December 2017	Low Nox burners have been installed on Boiler 4 (AEP3) that have reduced Thermal input capacity from 21.9MW to 19 MW

# **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.

Any act or omission by the Operator, either intentional or unintentional, Non-conformity

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)

Kerry Ingredients (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

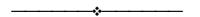
2012 (S.I. No 490 of 2012) and any amendments or revisions thereto.

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.

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# **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:

Kerry Ingredients (Ireland) Limited Princes Street Tralee Kerry

Company Registration Number: 206782

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):

Kerry Ingredients (Ireland) Limited Installation number: 85

located at

Kilmallock Road Charleville Cork 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.: 85

#### **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
AEP 2	Boiler 2	14.6	MW
AEP 3	Boiler 4	19	MW
AEP 4	Boiler 5	12.76	MW
AEP 7	Niro 2 Burner	1.2	MW
AEP 8	Niro 3 Thermal Heater	2.25	MW
AEP 54	CHP exh boiler	26.27	MW
AEP 9	Cooker and hob	0.05	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
AEP 10	Domestic-type boiler	0.3	MW
AEP 32	Admin Building Boiler	0.34	MW
AEP 56	Laboratory	0.1	MW
AEP 57	House Boiler	0.04	MW
AEP 1	Niro 1 Burner	4.9	MW
AEP58	IMF Boiler	1.11	MW
AEP59	Welding operations	0.01	tonnes/day
AEP60	Fire Water Pump No.1	0.2	MW
AEP61	Fire Water Pump No.2	0.2	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.
- 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

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 19 June 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-GHG109-10404

# **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: <a href="http://ec.europa.eu/clima/policies/ets/index">http://ec.europa.eu/clima/policies/ets/index</a> en.htm

Monitoring and Reporting in the EU ETS: <a href="http://ec.europa.eu/clima/policies/ets/monitoring/index\_en.htm">http://ec.europa.eu/clima/policies/ets/monitoring/index\_en.htm</a>

#### **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 Kerry Ingredients (Ireland) Limited

Site name Kerry Ingredients (Ireland) Limited

Address Kilmallock Road

Charleville Cork Ireland

Grid reference of site main entrance 154270E, 123230N

Licence held pursuant to the Environmental Protection Yes Agency Act 1992, as amended.

IPC/IE Licence Register Number	Licence holder	Competent body
P0386-04	Kerry Ingredients (Ireland) Limited	EPA Ireland

Has the regulated activity commenced at Yes the Installation?

Date of Regulated Activity commencement 01 January 1948

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 Kerry Ingredients (Ireland) Limited

Company Registration Number 206782

**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?

# Registered office address

Address Line 1 Princes Street

No

No

Address Line 2 N/A
City/Town Tralee
County Kerry
Postcode N/A

#### **Principal office address**

Is the principal office address different to the registered

office address?

## **Holding company**

Does the company belong to a holding company? Yes

Holding company name Kerry Group plc

#### **Holding company address**

Address Line 1 Princes Street

Address Line 2 N/A
City/Town Tralee
County Kerry
Postcode N/A
Company registration number 111471

Is the holding company principal address different to the No

holding company address?

## (d) Operator Authority

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

 manage site operations through having day-to-day control of plant operation including the manner and rate of operation Yes

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

Address

Kerry Ingredients (Ireland) Limited Kilmallock Road Charleville 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.

Dairy Processing site located on the Kilmallock Road, Charleville Co. Cork. Main processes on site are Milk Intake, Separation, Spray Drying, Processed Cheese and Cheestrings. There is a third party CHP on site to which the operator sells natural gas and purchases steam and electricity with excess electricity sold to the grid. There are three steam boilers, two thermal oil burners linked to spray drying plants and a direct gas fired burner linked to third dryer. Minor thermal emissions are laboratory bunsen burners, canteen equipment, local heating boilers and welding.

#### 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)	83.33	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
Site Meter Locations Phase 2.pdf	Site Drawing Showing Metering Locations
GHG Permit Emission Points Dec 2018.pdf	Updated Emission Pt drawing

#### 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<sub>2(e)</sub>) 41923

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
AEP 1	Niro 1 Burner
AEP 2	Boiler 2
AEP 3	Boiler 4
AEP 4	Boiler 5
AEP 7	Niro 2 Burner
AEP 8	Niro 3 Thermal Heater
AEP 54	CHP exh boiler
AEP 9	Cooker and hob
AEP 10	Domestic-type boiler
AEP 32	Admin Building Boiler
AEP 56	Laboratory
AEP 57	House Boiler
AEP58	IMF Boiler
AEP59	Welding operations
AEP60	Fire Water Pump No.1
AEP61	Fire Water Pump No.2

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

Emission Source Reference	Emission Source Description
AEP 2	Boiler 2
AEP 3	Boiler 4
AEP 4	Boiler 5
AEP 7	Niro 2 Burner
AEP 8	Niro 3 Thermal Heater
AEP 54	CHP exh boiler
AEP 9	Cooker and hob
AEP 10	Domestic-type boiler
AEP 32	Admin Building Boiler
AEP 56	Laboratory

Emission Source Reference	Emission Source Description
AEP 57	House Boiler
AEP 1	Niro 1 Burner
AEP58	IMF Boiler
AEP59	Welding operations
AEP60	Fire Water Pump No.1
AEP61	Fire Water Pump No.2

#### 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
EP1	Niro 1 Burner
EP2	Boiler 2 Stack
EP3	Boiler 4 Stack
EP4	Boiler 5 Stack
EP7	Niro 2 Burner
EP8	Niro 3 Burner
EP54	CHP Plant
EP9	Canteen exhaust
EP32	Admin Block stack
EP56	Lab exhaust
EP57	House Boiler Stack
EP10	Lab Boiler House Stack
EP58	IMF Boiler Stack
EP59	Welding
AEP60	Fire Water Pump no.1
AEP61	Fire Water Pump No.2

# 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		
NG1	Combustion: Other gaseous & liquid fuels	Natural Gas		

Source Stream Reference	Source Stream Type	Source Stream Description
GO1	Combustion: Commercial standard fuels	Gas/Diesel Oil
LPG1	Combustion: Other gaseous & liquid fuels	Liquefied Petroleum Gases
A1	Combustion: Other gaseous & liquid fuels	Acetylene

## 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
NG1	AEP 1,AEP 2,AEP 3,AEP 4,AEP 7,AEP 8,AEP 54,AEP 9,AEP 32,AEP58	EP1,EP2,EP3,EP4,EP7,EP8,E P54,EP9,EP32,EP58	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)
G01	AEP 10,AEP 57,AEP60,AEP61	EP57,EP10,AEP60,AEP61	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)
LPG1	AEP 1,AEP 56	EP1,EP56	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)
A1	AEP59	EP59	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?

# 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<sub>2</sub> but exclude CO<sub>2</sub> stemming from biomass.

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

# 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.

#### 9. Calculation

#### r. Approach Description

The calculation approach including formulae used to determine annual CO<sub>2</sub> emissions:

The calculation approach used at the installation is as follows:

- (a) For the main source stream i.e. Natural Gas (NG1) the activity data is derived form Bord Gais Monthly invoices in KWh in gross calorific value and a conversion factor from gross to net is then applied and the value is then converted to TJ by multiplying by 3.6 x 10-6. The Emission Factor for Natural Gas (from Ireland's National Greenhouse Gas Inventory) and oxidation factor of 1.0 are then applied to calculate the CO2 emissions arising from combustion of Natural Gas.
- (b) For heating gas oil/LPG minor source streams the opening and closing stocks and deliveries are used to derive activity data and again these are converted to tonnes CO2 using the Country Specific Net Calorific Values and CO2 Emission Factors for use in the Annual Installation Emissions Report as supplied by the EPA for specific year and the oxidation factor of 1.0.
- (c) For acetylene invoices will be used to derive activity data and again these are converted to tonnes CO2 using the Tier 1 Net Calorific Values and CO2 Emission Factors for use in the Annual Installation Emissions Report as supplied by the EPA for specific year and the oxidation factor of 1.0.

#### 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
NG1	AEP 1,AEP 2,AEP 3,AEP 32,AEP 4,AEP 54,AEP 7,AEP 8,AEP 9,AEP58	NGM01(80043930/ 1999)	Turbine meter	20 - 650	Nm3/h	1.4	Bord Gais AGI
NG1	AEP 1,AEP 2,AEP 3,AEP 32,AEP 4,AEP 54,AEP 7,AEP 8,AEP 9,AEP58	NGM-02 (80043929/1999)	Turbine meter	20 - 650	Nm3/h	1.4	Bord Gais AGI
NG1	AEP 1,AEP 2,AEP 3,AEP 32,AEP 4,AEP 54,AEP 7,AEP 8,AEP 9,AEP58	NGM-03 (66619)	Turbine meter	80 - 1600	Nm3/h	1.4	Bord Gais AGI
GO1,LPG1	AEP 1,AEP 10,AEP 56,AEP 57,AEP60,AEP61	MD4	Truck/Supplier Meter	n/a	n/a	n/a	Delivery Trucks/Supplier
A1	AEP59	MD5	Suppliers gas bottle measurement	n/a	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
NG1	NGM01(80043930/199	Continual	Trade partner	Yes	Yes	Yes

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
	9)					
NG1	NGM-02 (80043929/1999)	Continual	Trade partner	Yes	Yes	Yes
NG1	NGM-03 (66619)	Continual	Trade partner	Yes	Yes	Yes
GO1,LPG1	MD4	Batch	Trade partner	Yes	Yes	Yes
A1	MD5	Batch	Trade partner	Yes	Yes	Yes

#### 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.

<sup>\*</sup> 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.	Emissi on Source Refs.	Measu remen t Device Refs.	Overall Meteri ng Uncert ainty (less than +/- %)	Applie d Monit oring Appro ach	Activit y Data Tier Applie d	Net Calorifi c Value Tier Applie d	Emissi on Factor Tier Applie d	Carbon Conten t Tier Applie d	Oxidat ion Factor Tier Applie d	Conver sion Factor Tier Applie d	Bioma ss Fractio n Tier Applie d	Estima ted Emissi ons tCO <sub>2(e)</sub>	% of Total Estima ted Emissi ons	Source Catego ry	Highes t Tiers Applie d	Justific ation for not applyi ng the highes t tiers	Improv ement Plan Refere nce (where applica ble)
NG1	AEP 1,AEP 2,AEP 3,AEP 4,AEP 7,AEP 8,AEP 54,AEP 9,AEP 32,AEP 58	NGM0 1(8004 3930/1 999),N GM-02 (80043 929/19 99),NG M-03 (66619 )	<1.5%	Standa rd	4	2b	2a	N/A	1	N/A	N/A	38645	99.9	Major	Yes	n/a	n/a
G01	AEP 10,AEP 57,AEP 60,AEP 61	MD4	N/A	Standa rd	No tier	2a	2a	N/A	1	N/A	N/A	38	0.1	De- minimi s	N/A	n/a	n/a
LPG1	AEP 1,AEP 56	MD4	N/A	Standa rd	No tier	2a	2a	N/A	1	N/A	N/A	0.1	0	De- minimi s	N/A	n/a	n/a

<sup>\*</sup> 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.

<sup>\*</sup> 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.

Source Stream Refs.	Emissi on Source Refs.	Measu remen t Device Refs.	Overall Meteri ng Uncert ainty (less than +/- %)	Applie d Monit oring Appro ach	Activit y Data Tier Applie d	Net Calorifi c Value Tier Applie d	Emissi on Factor Tier Applie d	Carbon Conten t Tier Applie d	Oxidat ion Factor Tier Applie d	Conver sion Factor Tier Applie d	Bioma ss Fractio n Tier Applie d	Estima ted Emissi ons tCO <sub>2(e)</sub>	% of Total Estima ted Emissi ons	Source Catego ry	Highes t Tiers Applie d	Justific ation for not applyi ng the highes t tiers	Improv ement Plan Refere nce (where applica ble)
A1	AEP59	MD5	N/A	Standa rd	No tier	1	1	N/A	1	N/A	N/A	0.5	0	De- minimi s	N/A	n/a	n/a

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

38683.6

# 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
uncertainity calculations.xls	Uncertainty Calculations

# 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
NG1	AEP 1,AEP 2,AEP 3,AEP 4,AEP 7,AEP 8,AEP 54,AEP 9,AEP 32,AEP58	4	2b	2a	N/A	1	N/A	N/A
G01	AEP 10,AEP 57,AEP60,AEP61	No tier	2a	2a	N/A	1	N/A	N/A
LPG1	AEP 1,AEP 56	No tier	2a	2a	N/A	1	N/A	N/A
A1	AEP59	No tier	1	1	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)
NG1,GO1,LPG1	AEP 1,AEP 2,AEP 3,AEP 4,AEP 7,AEP 8,AEP 54,AEP 9,AEP 10,AEP 32,AEP 56,AEP 57,AEP58,AEP60,AEP61	EF	Ireland's National Greenhouse Gas Inventory	n/a
GO1,LPG1	AEP 1,AEP 10,AEP 56,AEP 57,AEP60,AEP61	NCV	Ireland's National Greenhouse Gas Inventory	n/a
A1	AEP59	NCV and EF	Tier 1 NCV and EF on EPA Website	n/a

## **Sampling and Analysis**

Do you undertake sampling and analysis of any of the No parameters used in the calculation of your CO<sub>2</sub> emissions?

# 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
EHS Manager	Responsible for data acquisition of invoices, Bord Gais calibration certificates and opening and closing stock.
	Responsible for completion of the monthly GHG emissions spreadsheet and AIER.
	Liasing with verification company.
	Implementation of ISO 14001 procedures that apply to GHG Permit
Site Engineering Manager	Overall responsibilty for compliance with GHG Permit and M&R Proposal and ensuring competence of persons assigned responsibilites in relation to M&R Plan.

Attachme	nt	Description
N/A		N/A

#### **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.

EP42 GHG Emissions Monitoring and Reporting and EP15 Title of procedure

**Environmental Training** 

Reference for procedure EP42 and EP15

Diagram reference N/A

Brief description of procedure. The description should cover the essential parameters and operations performed

EP42 -The purpose of this procedure is to formalise the data acquisition, calculations, measurements, reporting and

reviewing of information required to comply with Monitoring and Reporting Plan associated with GHG Permit. 6.2 The Site Engineering Manager shall ensure the competence of all persons assigned responsibilities in relation to GHG Emissions compliance, in line with

procedure EP15 Environmental Training.

EP15 - The purpose of this procedure is to ensure that environmental training needs are identified and that all

such training is recorded.

Post or department responsible for the procedure and for EHS Dept

any data generated

Location where records are kept **EHS Dept** Name of IT system used N/A 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 **EP42 GHG Emissions Monitoring** 

Reference for procedure EP42 Diagram reference N/A

Brief description of procedure. The description should cover the essential parameters and operations performed

EP42- the purpose of this procedure is to formalise the data acquisition, calculation, measurements, reporting and reviewing of information required to comply with the Monitoring Plan associated with the GHG permit. The procedure shall also include checking the list of emissions sources and sources streams and all relevant changes in the

nature and functioning of the installation to ensure completeness of the monitoring plan. The procedure also includes assessment of compliance with the uncertainty thresholds for activity data for the applied tiers for each source stream and emission source and assessment of potential measures for improvement of the monitoring methodology applied.

Post or department responsible for the procedure and for EHS Dept

any data generated

Location where records are kept EHS Dept
Name of IT system used N/A
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:

Title of procedure EP42 GHG Emissions Monitoring

Reference for procedure EP42

Diagram reference GHG emissions Data Flow Activities

Brief description of procedure. The description should cover the essential parameters and operations performed

EP42 -The purpose of this procedure is to formalise the data acquisition, calculations, measurements, reporting and

reviewing of information required to comply with Monitoring and Reporting Plan associated with GHG

Permit.

Post or department responsible for the procedure and for EHS Dept

any data generated

Location where records are kept EHS Dept
Name of IT system used N/A
List of EN or other standards applied N/A

List of primary data sources Natural Gas Invoices

Gas Oil Delivery Dockets/Invoices

LPG Delivery Dockets/Invoices

Opening and Closing stocks

Country Specific Net Calorific Values and CO2 Emission Factors for use in the Annual Installation Emissions Report

as supplied by the EPA for specific year

Description of the relevant processing steps for each

specific data flow activity.

Natural Gas (NG1) The natural gas activity is derived from monthly Bord Gais Invoices in Kwh, which are converted to

NCV by multiplying by the gross to net conversion factor

Identify each step in the data flow and include the formulas and then converted to TJ by multiplying by 3.6 x 10-6. The

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 Calculation: (Kwh x gross to net conversion factor x 3.6 X manual inputs) and confirm how outputs of data flow activities are recorded

emission factor for natural gas will be country specific from annual EPA published data. Oxidation factor will be 1. 10-6) x Emission Factor x Oxidation Factor = tCO2

Gas Oil (GO 1) is a deminimis source stream. Quantity will be estimated by mass balance (deliveries less difference between opening and closing stocks). Stocks will be determined by dipsticks. A density from supplier data sheet will be used to convert to tonnes. NCV and Emission factor will be from EPA published data. Calculation: (Tonnes x NCV (TJ/kt))/1000 x Emission Factor x Oxidation Factor = tCO2

LPG1 is a deminimis source stream. Quantity will be based on Lab purchases of LPG for bunsen burners and on estimate by mass balance (deliveries less difference between opening and closing stocks with stock determined by tank guage). A density of 507.05 kg/m3 will be used to convert to tonnes (from EPA data). NCV and Emission factor will be from EPA published data. Calculation: (Tonnes x NCV(TJ/kt))/1000 x Emission Factor x Oxidation Factor = tCO2

A1 is a deminimis source stream. Quantity will be based on purchases of Acetylene for welding and on estimate by mass balance (deliveries less difference between opening and closing stocks with stock determined by tank guage). NCV and Emission factor will be from EPA published data. Calculation: (Tonnes x NCV(TJ/kt))/1000 x Emission Factor x Oxidation Factor = tCO2

Submit relevant documents to record data flow activities

Attachment	Description
GHG emissions Data Flow Activities Feb 2015.xlsx	Data Flow Activities

#### 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 **EP42 GHG Emissions Monitoring** Reference for procedure EP42 Diagram reference N/A

Brief description of procedure. The description should cover the essential parameters and operations performed

EP42- the purpose of this procedure is to formalise the data acquisition, calculation, measurements, reporting and reviewing of information required to comply with the Monitoring Plan associated with the GHG permit. An assessment of inherent risks and controls is carried out in accordance with Article 58 of MRR. The risk assessment is reviewed annually.

Post or department responsible for the procedure and for EHS Dept

any data generated

Location where records are kept EHS Dept
Name of IT system used N/A
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 EP34 Calibration

Reference for procedure EP34
Diagram reference N/A

Brief description of procedure. The description should

The purpose of this procedure is to ensure that all

cover the essential parameters and operations performed treatment/abatement, control and monitoring equipment of an environmental nature is calibrated on a routine basis.

Post or department responsible for the procedure and for EHS Dept

any data generated

Location where records are kept EHS Dept
Name of IT system used N/A
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 EP42 GHG Emissions Monitoring

Reference for procedure EP42
Diagram reference N/A

Brief description of procedure. The description should cover the essential parameters and operations performed

6.11 All information technology systems used in conjunction with GHG emissions monitoring and reporting

will be tested and controlled, including access control,

back-up, recovery and security to Kerry IT

procedures/polices to ensure compliance with the

requirements of Article 60 of the Monitoring and Reporting

Regulation.

Post or department responsible for the procedure and for IT Dept

any data generated

Location where records are keptIT DeptName of IT system usedN/AList of EN or other standards appliedN/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 EP42 GHG Emissions Monitoring

Reference for procedure EP42
Diagram reference N/A

Brief description of procedure. The description should cover the essential parameters and operations performed

6.7 The Site Engineering Manager will review and validate contents of Annual Installation Emissions Report and sign report on behalf of the company. Review and validation of data will involve as a minimum a check that all relevant data has been included, a comparison check with previous years data and a check that fuel purchases are consistent with audited annual accounts. In the event of any

discrepancies being identified, the Site Engineering will not sign off on report and a full review will be carried out.

Post or department responsible for the procedure and for EHS Dept

any data generated

Location where records are kept EHS
Name of IT system used N/A
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 EP05 Environmental Non-Compliance

Reference for procedure EP05
Diagram reference N/A

Brief description of procedure. The description should cover the essential parameters and operations performed

To identify and document environmental non-compliances so that compliance is restored as quickly as possible and

reoccurrence is prevented.

Post or department responsible for the procedure and for EHS Dept

any data generated

Location where records are kept EHS Dept
Name of IT system used N/A
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.

No outsourced Activities.

No outsourced Activities

Title of procedure No outsourced Activities Reference for procedure No outsourced Activities

Diagram reference N/A

Brief description of procedure. The description should

cover the essential parameters and operations performed

Post or department responsible for the procedure and for

any data generated

Location where records are kept No outsourced Activities

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 EP42 GHG Emissions Monitoring

Reference for procedure EP42
Diagram reference N/A

Brief description of procedure. The description should 7.0 RECORDS

cover the essential parameters and operations performed

The Environment Manager will maintain all records and data relating to GHG Emissions stipulated in Annex IX of the MRR for a minimum period of ten years, in accordance with Article 66 and Annex IX of the Monitoring and Reporting

Regulation.

Post or department responsible for the procedure and for EHS DEpt

any data generated

Location where records are kept EHS DEpt
Name of IT system used N/A
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
Risk Assessment Dec 2014.doc	Risk Assessment

#### kk. Environmental Management System

Does your organisation have a documented Environmental Yes Management System?

Is the Environmental Management System certified by an Yes accredited organisation?

The standard to which the Environmental Management ISO 14001 System is certified:

#### 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 EP42 GHG Emissions Monitoring Reference for procedure EP42
Diagram reference N/A

Brief description of procedure. The description should cover the essential parameters and operations performed

6.14 Annually a review will be carried out to determine whether any planned or effective changes to the capacity, activity level or operation of the installation are relevant under Commission Decision 2011/278/EC and if the review determines that there has been a change in capacity or activity in that year, a NER template will be completed and

submitted to the EPA by 31st December of that year.

Post or department responsible for the procedure and for EHS Dept

any data generated

Location where records are kept EHS Dept
Name of IT system used N/A

# 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
Microsoft Word - Queries Raised in GHG109 Permit application Review 23.pdf	Queries rasied in Permit Review 23/05/13
Kerry Ingredients Golden Vale Metering summary 11- Jan-2013.pdf	Bord Gais Metering System Summary
EP42 - GHG Emissions rev 03.doc	Monitoring and Reporting Procedure
AEP 1 Thermal Input capactiy.pdf	AEP 1 Thermal Input Capacity
AEP58 Thermal Input Capacity.pdf	AEP 58 Thermal Input Capacity
Boiler 4 Nameplate 1.jpg	Nameplate 1 on Boiler 4 Burner
Boiler 4 Nameplate 2.jpg	Nameplate 2 on boiler 4 Burner
Fire Pumps Data Sheet.pdf	Fire Pumps Data Sheets
N3 Thermal Oil Burner.pdf	N3 Thermal Oil Burner Spec

# 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 false form should be treated as commercially confidential/sensitive:

**END of Appendix I.**