Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

GREENHOUSE GAS EMISSIONS PERMIT

Permit Register Number:	IE-GHG086-10391-3
Operator:	Tipperary Co-Operative Creamery Limited Station Road Tipperary Town
Installation Name:	Tipperary Co-Operative Creamery Limited
Site Name:	Tipperary Co-Operative Creamery Limited
Location:	Station Road Tipperary 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-GHG086-10391.

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

Email: help.ets@epa.ie

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

Updating of the permit:

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

Surrender of the permit:

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

Transfer of the permit or part of the permit:

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

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

IPC/IE Licence Register Number
PO801-01

Status Log

Current Permit

Permit number	Date application received	Date Permit issued	Comment
IE-GHG086-10391-3	21 October 2016	15 February 2017	Addition of emission source S8 (generator). Update to site contact and to responsible post for Monitoring and Reporting Management Procedures .

Previous Permits

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG086-10391-1	GHG Permit Application	17 June 2013	19 June 2013	
IE-GHG086-10391-2	GHG Variation	16 June 2014	25 August 2014	The inclusion of two emission sources (acetylene welding equipment and diesel pump) and related source streams; updating of the Measurement Devices to include the level gauges for the gas oil tank; Updating the change of source stream for Emission Source S4 Gas Burner from gas oil to Natural Gas; Updates to Applied Tiers table and to the Management Section.

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)	Tipperary Co-Operative Creamery 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:

Tipperary Co-Operative Creamery Limited
Station Road
Tipperary Town

Company Registration Number: 3502R

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):

Tipperary Co-Operative Creamery Limited **Installation number:** 67

located at

Station Road
Tipperary
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.: 67

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	Boiler 1	11	MW
S2	Boiler 2	10.87	MW
S3	Boiler 3	10	MW
S4	Burner	2	MW
S5	Office Boiler	0.1	MW
S6	Diesel Pump	0.02	MW
S7	Welding Equipment	0	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S8	Diesel Generator	0.07	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 15 February 2017:

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-GHG086-10391

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	Tipperary Co-Operative Creamery Limited
Site name	Tipperary Co-Operative Creamery Limited
Address	Station Road Tipperary Ireland
Grid reference of site main entrance	188950E 135400N
Licence held pursuant to the Environmental Protection Agency Act 1992, as amended.	Yes

IPC/IE Licence Register Number	Licence holder	Competent body
PO801-01	Tipperary Co-Operative Creamery Limited	Environmental Protection Agency

Has the regulated activity commenced at the Installation?	Yes
Date of Regulated Activity commencement	01 January 2008

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	Tipperary Co-Operative Creamery Limited
Company Registration Number	3502R

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	
Surname	
Position	Milk Payments Manager

Registered office address

Address Line 1	Station Road
Address Line 2	N/A
City/Town	Tipperary Town
County	N/A
Postcode	N/A

Principal office address

Is the principal office address different to the registered office address?	No

Holding company

Does the company belong to a holding company?	No

(d) Operator Authority

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

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

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

4. Service Contact

e. Service Contact

Name	[redacted]
Address / Email Address	Tipperary Co-Operative Creamery Limited Station Road Tipperary 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.

Tipperary Co-Operative Creamery is a milk processing plant which manufactures dairy products such as milk powders, butter, cheese, along with skim and whey concentrates. The key processes carried out on site include evaporation and drying. Steam is provided to these main processes from the boilers in the boiler house located at the centre of the site. Two of these boilers (boilers 1 and 2) can operate on natural gas or marked gas oil. Boiler 3 runs only on MGO and is a standby boiler. Due to the high temperatures required in the drier there is an additional burner (NG) located at the drier. This increases the inlet air to the required temperature for the drying process to make powders. Steam from the main boilers is also used in the cheese and butter manufacturing processes and CIP runs across the site. The office building is heated by its own natural gas boiler. Diesel/gas oil is used by the backup diesel pump & the backup generator, a drum of diesel is taken from the lorry diesel tank when needed. Acetylene is used on site for 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)	34.06	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
5 Source Stream Diagram.pdf	Source Stream Diagram

i. Estimated Annual Emissions

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

Estimated Annual Emissions (tonnes $CO_{2(e)}$) 21500

Installation Category: A

6. Emissions Details

j. About your emissions

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

k. Emission Sources

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

Emission Source Reference	Emission Source Description
S1	Boiler 1
S2	Boiler 2
S3	Boiler 3
S4	Burner
S5	Office Boiler
S6	Diesel Pump
S7	Welding Equipment
S8	Diesel Generator

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

Emission Source Reference	Emission Source Description
S1	Boiler 1
S2	Boiler 2
S3	Boiler 3
S4	Burner
S5	Office Boiler
S6	Diesel Pump
S7	Welding Equipment
S8	Diesel Generator

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
A1.1	Boiler Stack 1
A1.2	Boiler Stack 2
A1.3	Boiler Stack 3
A1.4	Burner Stack
A1.5	Office Boiler Stack
A1.6	Diesel Pump

Emission Point Reference	Emission Point Description
A1.7	Welding Equipment
A1.8	Diesel Generator

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 (Natural Gas 1)	Combustion: Other gaseous & liquid fuels	Natural Gas
F2 (Gas Oil 1)	Combustion: Commercial standard fuels	Gas/Diesel Oil
F3 (LPG)	Combustion: Other gaseous & liquid fuels	Liquefied Petroleum Gases
F4 (Natural Gas 2)	Combustion: Other gaseous & liquid fuels	Natural Gas
F5 (Gas Oil 2)	Combustion: Commercial standard fuels	Gas/Diesel Oil
F6 (Acetylene)	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
F1 (Natural Gas 1)	S1,S2,S4	A1.1,A1.2,A1.4	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)
F2 (Gas Oil 1)	S1,S2,S3	A1.1,A1.2,A1.3	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F3 (LPG)	S1,S2,S3	A1.1,A1.2,A1.3	Combustion of fuels in installations with a total

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Annex 1 Activity
			rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F4 (Natural Gas 2)	S5	A1.5	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
F5 (Gas Oil 2)	S6,S8	A1.6,A1.8	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 (Acetylene)	S7	A1.7	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 CO_2 but exclude CO_2 stemming from biomass.

Does the installation satisfy the criteria for installations with low emissions (as defined by Article 47 of the MRR)?	Yes

If the installation is an installation with low emissions as defined above there are a number of special provisions which may be applied to provide a simplified monitoring plan. These provisions are set out in 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.

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

9. Calculation

r. Approach Description

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

Natural Gas invoices will be used to obtain the gross kWh which is then converted to Net Calorific Value by multiplying by gross/net conversion factor listed on the EPA website. This figure is then converted to TJ by multiplying by 3.6 X 10 -6. The country specific emission factor for Natural Gas (tCO2/TJ) as listed in the "Country Specific Net Calorific Values and CO2 Emission Factors for use in the Annual Installation Emissions Report" for the year being reported on is available on the EPA website and is updated every year. An oxidation factor of 1 is then applied. There are two Natural Gas source streams, F1 which is major source stream and F4 which is a de minimis source stream (office heating).

Marked Gas Oil is used on site and comes on site by truckload. Each truck is weighed on & off the site over the weighbridge. The weighbridge is calibrated by the Legal Meterology Service in accordance with the Meterology Acts 1908 - 1998. The net usage (tonnes) is based on Opening Stock (financial stock take) + Purchases (weighbridge records and supplier invoices) - closing stock (financial stock take). The volume indicated (by installed level meters) in the oil tanks is recorded on a numbered stock sheet.

LPG comes on site in 33kg bottles, these are counted. A no-tier approach has been adopted.

Diesel (Gas Oil 2) is used in the Backup diesel pump & the backup diesel generator. A drum of diesel is taken from the Lorry diesel tank. As this is a de minimis source stream a no-tier approach has been adopted.

Acetylene is used for welding. Bottles are counted. A no-tier approach has been adopted.

The Country Specific emission factor, net calorific values and oxidation factor which are contained on the EPA website for the year being reported (and may be updated from year to year) are utilised to calculate CO2 emissions for Marked Gas Oil, Diesel, LPG and Acetylene.

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 (Natural Gas 1)	S1,S2,S4	Gas Meter 1 (3400361603)	Turbine meter	32 - 650	Cubic Meters/hr	1.41	Tipperary Co-op Gas Skid
F2 (Gas Oil 1)	S1,S2,S3	Weighbridge SN168596	Weighbridge	0 - 50000	kg	0.12	Adjacent to main gate
F4 (Natural Gas 2)	S5	Gas Meter 2 (Office)	Bellows meter	0.1 - 16	Cubic Meters/hr	4.5	Tipperary Co-op Office Building
F3 (LPG)	S1,S2,S3	Deliveries	N/A	N/A	N/A	N/A	N/A
F2 (Gas Oil 1)	S1,S2,S3	LT-MGO	Level Transmitter	0-100	%	2.5	MGO Tank Boilers
F5 (Gas Oil 2)	S6,S8	Conservative estimations	N/A	N/A	N/A	N/A	N/A
F6 (Acetylene)	S7	Bottle Deliveries	N/A	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
F1 (Natural Gas 1)	Gas Meter 1 (3400361603)	Continual	Trade partner	Yes	Yes	Yes
F2 (Gas Oil 1)	Weighbridge SN168596	Batch	Operator	N/A	N/A	N/A
F4 (Natural Gas 2)	Gas Meter 2 (Office)	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
F3 (LPG)	Deliveries	Batch	Operator	N/A	N/A	N/A
F2 (Gas Oil 1)	LT-MGO	Batch	Operator	N/A	N/A	N/A
F5 (Gas Oil 2)	Conservative estimations	Batch	Operator	N/A	N/A	N/A
F6 (Acetylene)	Bottle Deliveries	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 (Natural Gas 1)	S1,S2,S4	Gas Meter 1 (34003 61603)	<1.5%	Standard	4	2b	2a	N/A	1	N/A	N/A	18000	97.24	Major	Yes	n/a	n/a
F2 (Gas Oil 1)	S1,S2,S3	LT-MGO, Weighbridge SN168 596	<5.0%	Standard	2	2a	2a	N/A	1	N/A	N/A	500	2.7	Minor	Yes	n/a	n/a
F4 (Natural Gas 2)	S5	Gas Meter 2 (Office)	<5.0%	Standard	2	2b	2a	N/A	1	N/A	N/A	6	0.03	De-minimis	N/A	n/a	n/a
F3 (LPG)	S1,S2,S3	Deliveries	N/A	Standard	No tier	2a	2a	N/A	1	N/A	N/A	2	0.01	De-minimi	N/A	n/a	n/a

Source Stream Refs.	**Emission Source Refs.**	**Measurement Device Refs.**	**Overall Metering Uncertainty (less than +/- %)**	**Applied Monitoring Approach**	**Activity Data Tier Applied**	**Net Calorific Value Tier Applied**	**Emission Factor Tier Applied**	**Carbon Content Tier Applied**	**Oxidation Factor Tier Applied**	**Conversion Factor Tier Applied**	**Biomass Fraction Tier Applied**	**Estimated Emissions $tCO_{2(e)}$**	**% of Total Estimated Emissions**	**Source Category**	**Highest Tiers Applied**	**Justification for not applying the highest tiers**	**Improvement Plan Reference (where applicable)**
														s			
F5 (Gas Oil 2)	S6,S8	Conservative estimations	N/A	Standard	No tier	2a	2a	N/A	1	No tier	N/A	1	0.01	De-minimis	N/A	n/a	n/a
F6 (Acetylene)	S7	Bottle Deliveries	N/A	Standard	No tier	1	1	N/A	1	No tier	N/A	1	0.01	De-minimis	N/A	n/a	n/a

Total Estimated Emissions for Calculation (tonnes $CO_{2(e)}$) 18510

u. 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 (Natural Gas 1)	S1,S2,S4	4	2b	2a	N/A	1	N/A	N/A
F2 (Gas Oil 1)	S1,S2,S3	2	2a	2a	N/A	1	N/A	N/A
F4 (Natural Gas 2)	S5	2	2b	2a	N/A	1	N/A	N/A
F3 (LPG)	S1,S2,S3	No tier	2a	2a	N/A	1	N/A	N/A
F5 (Gas Oil 2)	S6,S8	No tier	2a	2a	N/A	1	No tier	N/A
F6 (Acetylene)	S7	No tier	1	1	N/A	1	No tier	N/A

v. 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

w. 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 (Natural Gas 1),F4 (Natural Gas 2)	S1,S2,S4,S5	EF	EPA: Ireland Specific NCV and CO2 Emission Factors for use in AIER	n/a
F1 (Natural Gas 1),F4 (Natural Gas 2)	S1,S2,S4,S5	OxF	MRR Annex II	1
F3 (LPG)	S1,S2,S3	NCV and Emission Factor	EPA: Ireland Specific NCV and CO2 Emission Factors for use in AIER	n/a
F3 (LPG)	S1,S2,S3	OxF	MRR Annex II	1
F2 (Gas Oil 1)	S1,S2,S3	NCV and Emission Factor	EPA: Ireland Specific NCV and CO2 Emission Factors for use in AIER	n/a
F2 (Gas Oil 1)	S1,S2,S3	OxF	MRR Annex II	1
F5 (Gas Oil 2)	S6,S8	NCV and Emission Factor	EPA: Ireland Specific NCV and CO2 Emission Factors for use in AIER	n/a
F5 (Gas Oil 2)	S6,S8	OxF	MRR Annex II	1
F6 (Acetylene)	S7	NCV and Emission Factor	EPA: Ireland Specific NCV and CO2 Emission Factors for use in AIER	n/a
F6 (Acetylene)	S7	OxF	MRR Annex II	1

Sampling and Analysis

Do you undertake sampling and analysis of any of the parameters used in the calculation of your CO_2 emissions?	No

11. Management

x. 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**
Milk Payment Manager	Contact Person and Principle Officer Ensuring site compliance with the GHG Permit Ensuring site compliance with the Directive Compiling AEM and submitting to EPA Surrendering of Allowances Overall Responsibility for CO2 Emissions Monitoring and Reporting

Attachment	**Description**
N/A	N/A

y. 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	Assignment of Responsibilities
Reference for procedure	Emissions Trading Manual Section 3
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	This procedure assigns the responsibilities of the personnel involved in the emissions trading scheme. It lists the officers, their responsibility, their position in the company and their function regarding the emissions trading on site. The procedure also list the competency which the Contact person & principal officer must have in order to understand and meet the requirements under the EU Emissions Trading Scheme.
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A
List of EN or other standards applied	N/A

z. 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	Monitoring Plan Appropiatness
Reference for procedure	Emissions Trading Manual Section 4
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The monitoring plan should be checked to see if any of the following require updating: Emission sources; Source streams; Function of the Installation;Metering devices; Metering Uncertainties and applied tiers. Where possible the monitoring methodology should be improved.
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A

List of EN or other standards applied	N/A

aa. Data Flow Activities

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

Title of procedure	Data Flow Activities
Reference for procedure	Emissions Trading Manual Section 6
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	This procedure shows the flow of data for the emissions trading calculations. The procedure is demonstrated as a flow diagram and includes both marked gas oil and natural gas source streams.Gas oil invoices are checked against the weighbridge delivery report. These figures along with the opening and closing stocks are entered into the calculation sheet. From the Natural Gas invoices the monthly kWhrs and m3 are entered in to the calculation sheet. Consumption trends are monitored continuously to identify corrupt data.
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A
List of EN or other standards applied	N/A
List of primary data sources	Natural Gas Invoices Truck Weighbridge report Opening and Closing Stocks
Description of the relevant processing steps for each specific data flow activity. 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	Natural Gas invoices will be used to obtain the gross kWh which is then converted to Net Calorific Value by multiplying by gross/net conversion factor listed on the EPA website. This figure is then converted to TJ by multiplying by 3.6 X 10 -6.The country specific emission factor for Natural Gas (tCO2/TJ) as listed in the "Country Specific Net Calorific Values and CO2 Emission Factors for use in the Annual Installation Emissions Report" for the year being reported on is available on the EPA website and is updated every year. An oxidation factor of 1 is then applied.There are two Natural Gas source streams, F1 which is major source stream and F4 which is a de minimis source stream (office heating). Marked Gas Oil is used on site and comes on site by truckload. Each truck is weighed on & off the site over the weighbridge. The weighbridge is calibrated by the Legal Meterology Sevice in accordance with the Meterology Acts

1908 - 1998. The net usage (tonnes) is based on Opening Stock (financial stock take) + Purchases (weighbridge records and supplier invoices) - closing stock (financial stock take). The volume indicated in the oil tanks (from the installed level meters) is recorded on a numbered stock sheet.

LPG comes on site in 33kg bottles, these are counted. A no-tier approach has been adopted.The Country Specific emission factor, net calorific values and oxidation factor which are contained on the EPA website for the year being reported (and may be updated from year to year) are utilised to calculate CO2 emissions for Marked Gas Oil and LPG. Diesel is used in the Backup diesel pump and the backup diesel generator. A drum of diesel is taken from the Lorry diesel tank. As this is a de minimis source stream a no-tier approach has been adopted.

Acetylene is used for welding. Bottles are counted. A no-tier approach has been adopted.

The Country Specific emission factor, net calorific values and oxidation factor which are contained on the EPA website for the year being reported (and may be updated from year to year) are utilised to calculate CO2 emissions for Marked Gas Oil, Diesel, LPG and Acetylene.

Submit relevant documents to record data flow activities

Attachment	**Description**
N/A	N/A

bb. 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	Assessing and Controlling Risks
Reference for procedure	Emissions Trading Manual Section 7
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	This procedure lists the hazards associated with the EU ETS. The hazards identified include: gas meter failure, weighbridge failure, incorrect factors used in calculations and corrupted formula used in the calculation workbook. Each of the hazards risks are rated as high, medium or low depending on the how likely it is that this hazard could

	happen. For each of the hazards there are controls in place to reduce the risk of losses/errors in the data.
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A
List of EN or other standards applied	N/A

cc. 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	Quality Assurance of Metering/Measuring Equipment
Reference for procedure	Emissions Trading Manual Section 8
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Details of the meters used on site to calculate the activity data. The meters used are the two Bord Gais gas meters and the weighbridge. Details of the calibration schedule and the emission points influenced by each meter is included in the procedure.
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A
List of EN or other standards applied	N/A

dd. 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	Quality Assurance of Information Technology Used for Data Flow Activities
Reference for procedure	Emissions Trading Manual 9
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	This procedure outlines where the EU ETS data is kept on file, the personnel who have access to the data and how the data is backed up to ensure the safety of the data. Details of recording data errors is also included in this procedure. It is necessary to record an error in the data flow process and the solution/corrective actions taken as this data will be required when carrying out annual CO2 calculations and will ensure no error goes unaccounted.
Post or department responsible for the procedure and for	Milk Payments Manager

any data generated	
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A
List of EN or other standards applied	N/A

ee. 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	Review and Validation of Data
Reference for procedure	Emissions Trading Manual Section 10
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	There are three gas meters on site (on the front of boilers 1 and 2 and on the burner) which are compared to the Bord Gais meter readings. Although these meters are not pressure and temperature adjusted the maximum difference that should be between the different readings is 2.5%. Any difference greater than this will identify an issue with one of the metering devices. This will be investigated and corrective action taken where necessary. Gas Oil Invoices are used to compare to weighbridge deliveries. this will identify if any loads have been missed from the calculations. To validate the data, fuel consumption is compared to previous years values while taking into account any increase or decrease in production. Any deviation from expected results will identify the need to review the data.
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A
List of EN or other standards applied	N/A

ff. 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	Corrections and Corrective Actions
Reference for procedure	Emissions Trading Manual Section 11
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Daily gas usage is monitored from the Bord Gais meter and the three gas meters on site (on boiler 1, 2 and Burner). The Bord Gais meter should equal the sum of the three on site meters. The meters on the two boilers and on the burner are not pressure and temperature adjusted but the

	readings should be within 2.5%. If the figures are not within 2.5% there must be an issue with one of the meters and this will need to be investigated. Gas oil invoices are compared to the weighbridge deliveries. If there is any differences corrective action will need to be taken in line with this procedure to ensure any effected data in the emission report is corrected.
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A
List of EN or other standards applied	N/A

gg. 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	Control Of Outsourced Activities
Reference for procedure	Emissions Trading Manual Section 12
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Tipperary Co-op Outsourced Processes include: Meter Calibration;Energy Consultant;Verifier Gas Meters Calibrations: These meters are third party meters and are out of the control of Tipperary Co-op.The operation and calibration of these meters is the responsibility of Bord Gais Networks.Calibration certificates can be requested from Bord Gais Networks during EU ETS verification. Weighbridge Calibrations: A certificate of calibration is available for the weighbridge. The weighbridge is calibrated by legal metrology service in accordance with the Metrology Act 1980 – 1998. This certificate is available for inspection during the EU ETS verification. Our Energy Consultant carries out updates of the CO2 calculations throughout the year. At the end of the year the consultant completes the calculations. These are compared to ongoing calculations carried out by the Management Services Manager. If there is more than a 2% difference an investigation is carried out. Our verifier will also check the CO2 calculations carried out during the verification audit.This ensures that all data has been checked several times and verified before being submitted to the EPA in the

	AIER. We check that our Verifier is fully accredited to provide verification for installations.
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A
List of EN or other standards applied	N/A

hh. Record Keeping and Documentation

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

Title of procedure	Record Keeping and Documentation
Reference for procedure	Emissions Trading Manual Section 13
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Details of the location for all documentation to be kept for the EU ETS. The manual is recorded at the address below. When the manual is updated the version number will be changed. This will ensure that the most recent Manual is being used. Each year a new folder to record the documentation is created called 20XX EU ETS Verification. a list of the documentation to be kept in the folder is listed in the procedure. The documents to be archived are: • Most up to date GHG Permit • Most up to date Monitoring Plan • Where possible calibration certificates for the Bord Gais Gas meters • Weighbridge calibration certificate • Fuel Invoices (MGO and NG) • CO2 Calculation workbook • EPA Correspondence for that year • Verifier correspondence for that year • Verifier reports • AIER In accordance with Article 66 of the M&R Regulation the

	operator shall keep records of all relevant data and information, including information as listed in Annex IX, for at least 10 years.
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A
List of EN or other standards applied	N/A

ii. Risk Assessment

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

Attachment	Description
N/A	N/A

jj. 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

kk. 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	Changes in Operation
Reference for procedure	Emissions Trading Manual Section 15
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Throughout the year reviews will be carried out to identify any planned or effective changes to the capacity, activity level and operation of the installation that have will an impact on the installation's allocation. The following should be considered in the event of a proposed change: • Will there be a change in the Installed capacity on site? • Will there be a large increase/decrease in activity level? • Is the activity of the installation changing? If yes, is the answer to any of the above, the EPA should be notified and subsequently any information which the EPA request from the installation should be passed on as soon as possible. If it is determined that there has been a change in capacity or activity level in that year, an NER template should be filled in by the responsible person and submitted to the EPA by 31 December each year in accordance with Article 24(1) of the Commission Decision 2011/278/EC
Post or department responsible for the procedure and for any data generated	Milk Payments Manager
Location where records are kept	kieran maguire\My Documents\Carbon File KM\GHG EUETS
Name of IT system used	N/A

13. Abbreviations

II. 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
Turbine calibration Jul 12.pdf	Gas Calibration
W bridge calib 2012.pdf	Weighbridge Calibration
Diesel Generator.pdf	Diesel Generator

15. Confidentiality

mm. 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.