



Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

GREENHOUSE GAS EMISSIONS PERMIT

Permit Register Number:	IE-GHG037-10360-4
Operator:	College Proteins Unlimited Company College Road Nobber Meath
Installation Name:	Farragh Proteins
Site Name:	Farragh Proteins
Location:	Monery Crossdoney Cavan Ireland

Introductory Note

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

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

Contact with Agency:

If you contact the Agency about this Greenhouse Gas Emissions Permit please quote the following reference: Greenhouse Gas Emissions Permit N^o IE-GHG037-10360.

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
P0025-05

Status Log

Current Permit

Permit number	Date application received	Date Permit issued	Comment
IE-GHG037-10360-4	08 August 2019	21 January 2020	<p>Thermal oxidiser (CS3) was removed.</p> <p>Boiler CS4 removed and replaced by two boilers (C4.1 and CS4.2) of 0.03MW on Natural Gas.</p> <p>Total capacity has reduced to 46.2MW.</p>

Previous Permits

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG037-10360-1	GHG Permit Application	23 December 2013	03 February 2014	
IE-GHG037-10360-2	GHG Variation	16 December 2014	27 February 2015	<p>1. Revision of the thermal input capacities for Boiler 1 & 2 and smaller units.</p> <p>2. Addition of a new boiler (No. 3), two small LPG heat exchangers, propane cutters and kerosene.</p> <p>3. Update to management procedures.</p> <p>4. Inclusion of de minimis source stream propane.</p>

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG037-10360-3	GHG Variation	28 January 2018	18 October 2018	<p>Three new emergency generators are to be installed in 2018.</p> <p>Total Capacity has increased to 52.45 MW.</p> <p>Two new de-minimis source streams have been added: Other Liquid Biofuels and Gas/Diesel Oil.</p> <p>LPG has changed from a minor to major source category.</p> <p>HFO has changed from a major to a de-minimis source category.</p>

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)	College Proteins Unlimited Company
“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 transfers this Greenhouse Gas Emissions Permit, subject to any subsequent revisions, corrections or modifications it deems appropriate, to:

The Operator:

College Proteins Unlimited Company
College Road
Nobber
Meath

Company Registration Number: 136971

from

The Former Operator:

Meath Proteins
College Road

Nobber
Meath

to carry out the following

Categories of activity:

Annex 1 Activity

Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
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at the following installation(s):

Farragh Proteins **Installation number:** 30

located at

Monery
Crossdoney
Cavan
Ireland

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

In accordance with Joint Declaration made to the Agency on 27 August 2009, *College Proteins Unlimited Company* is deemed to have assumed and accepted all liabilities, requirements and obligations provided for in or arising under the permit, regardless of how and in respect of what period, including the period 2005-2008, prior to the transfer of the permit, that may arise.

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.: 30

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
CS1	Boiler 1	12.6	MW
CS2	Boiler 2	12.6	MW
CS5	Canteen Boiler	0.03	MW
CS7	Boiler 3	15.3	MW
CS6.1	LPG Heat Exchanger #1	0.1	MW
CS6.2	LPG Heat Exchanger #2	0.1	MW
CS8	Workshop Propane Cutters (Various)	0	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
CS9	Power Generator No. 1	0.52	MW
CS10	Power Generator No. 2	0.67	MW
CS11	Power Generator No. 3	0.62	MW
CS4.1	Laundry boiler No. 1	0.03	MW
CS4.2	Laundry boiler No. 2	0.03	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. This shall include all annual emissions reports submitted by the Former Operator(s) in respect of the installation.
- 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.
- 3.16 Any discrepancies with regard to reports submitted by the Former Operator(s) in respect of this installation become the liability of the Operator.

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,

including any liabilities arising from the period before the permit was transferred. 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:	<i>To provide for the surrendering, holding, transfer and cancellation of allowances in respect of reported emissions.</i>
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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 21 January 2020:

PRESENT when the seal of the Agency was affixed hereto:

Dr Suzanne Monaghan
Inspector/ Authorised Person

Appendix 1 to Greenhouse Gas Emissions Permit Number IE-GHG037-10360

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	Farragh Proteins
Site name	Farragh Proteins
Address	Monery Crossdoney Cavan Ireland

Grid reference of site main entrance	236342E, 302108N
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Licence held pursuant to the Environmental Protection Agency Act 1992, as amended.	Yes
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IPC/IE Licence Register Number	Licence holder	Competent body
P0025-05	Farragh Proteins	Environmental Protection Agency

Has the regulated activity commenced at the Installation? Yes

Date of Regulated Activity commencement	01 January 2008
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This information is only required to identify the first relevant reporting year of an installation. If the installation was in operation from the beginning of 2008 and held a Greenhouse Gas Emissions Permit from this point, 1 January 2008 will be used where the actual date of commencement is not readily known.

3. About the Operator

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

(b) Operator Details

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

Operator name	College Proteins Unlimited Company
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Company Registration Number	136971
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Operator Legal status

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

Is the trading / business name different to the operator name? Yes

Trading / business name Farragh Proteins

Registered office address

Address Line 1	College Road
Address Line 2	N/A
City/Town	Nobber
County	Meath
Postcode	N/A

Principal office address

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

Address Line 1	College Road
Address Line 2	N/A
City/Town	Nobber
County	Meath
Postcode	N/A
Company registration number	169768

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

4. Service Contact

e. Service Contact

Address	College Proteins College Road Nobber County Meath Ireland
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5. Installation Activities

f. Installation Description

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

The installation and its activities:

Farragh Proteins has operated at the site in Crossdoney, Co. Cavan since 1951. Formerly known as Monery by-Products, it came under new ownership in December 2004 and is currently known as Farragh Proteins, a category 3 rendering plant. The company manufactures Processed Animal Protein (PAP), Feather Meal, Category 3 Meat & Bone Meal, Blood Meal, Tallow and Poultry Oil. These products are used in the manufacture of pet food and as an ingredient for the animal feed industry.

Boilers: There are 3 steam boilers, Boiler No. 1 (12.6 MW), boiler No. 2 (12.6 MW) and boiler No. 3 (15.3 MW) on site which generate the steam for the process. Boiler No. 3 is the main steam generator; the other 2 boilers are kept as a standby. These are capable of operating on a variety of liquid fuels including biomass. The canteen boiler (33.5 kW) uses kerosene. Two laundry boilers (30 kW each) use LPG. Also two boilers (100 kW) at the LPG tank for a heat exchanger are running on LPG. The LPG gas supply for these boilers is taken from the same large LPG tank that supplies the main boilers.

Fuels: The steam boilers run on LPG, HFO, Bio Heating Oil (BHO) or tallow. Kerosene is used only in the canteen boiler. Propane gas (bottles) is used as ignition fuel for the boilers and for cutting equipment by the engineering department. Diesel oil is used in the power generators.

Biomass in the form of tallow and bio heating oil (BHO) will only be sourced from sources meeting the criteria set out in Article 17(1) of the RES-D. Sustainability certs are obtained for the bio-fuels and bio-liquids that are consumed and are zero-rated for greenhouse gas emissions. This certification is renewed annually.

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)	42.6	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
Farragh Proteins Site Map (July 2019).pdf	Site map (July 2019)

i. Estimated Annual Emissions

Detail of the estimated annual emission of CO₂ 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 CO₂ excluding CO₂ from biomass.

Estimated Annual Emissions (tonnes CO_{2(e)}) 14000

Justification for the use of a conservative estimate of CO₂ emissions. The fuel usage to date was calculated and then estimated for the rest of the year then the carbon emissions were calculated based on this figure.

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
CS1	Boiler 1
CS2	Boiler 2
CS5	Canteen Boiler
CS6.1	LPG Heat Exchanger #1
CS7	Boiler 3
CS6.2	LPG Heat Exchanger #2
CS8	Workshop Propane Cutters (Various)
CS9	Power Generator No. 1
CS10	Power Generator No. 2
CS11	Power Generator No. 3
CS4.1	Laundry boiler No. 1
CS4.2	Laundry boiler 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
CS1	Boiler 1
CS2	Boiler 2
CS5	Canteen Boiler
CS7	Boiler 3
CS6.1	LPG Heat Exchanger #1
CS6.2	LPG Heat Exchanger #2

Emission Source Reference	Emission Source Description
CS8	Workshop Propane Cutters (Various)
CS9	Power Generator No. 1
CS10	Power Generator No. 2
CS11	Power Generator No. 3
CS4.1	Laundry boiler No. 1
CS4.2	Laundry boiler 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
A1-2	Boiler No. 1 Stack
A1-3	Boiler No. 2 Stack
A3-2	Canteen Boiler Flue
A3-3	LPG Heat Exchanger #1 Flue
A1-4	Boiler No. 3 Stack
A3-4	LPG Heat Exchanger #2 Flue
A3-5	Workshop Propane Cutters (Various)
A4-1	Power Generator No. 1
A4-2	Power Generator No. 2
A4-3	Power Generator No. 3
A3-6	Laundry boiler No. 1 flue
A3-7	Laundry boiler No. 2 flue

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 Heavy Fuel Oil	Combustion: Other gaseous & liquid fuels	Heavy fuel oil
F2 Tallow	Combustion: Other gaseous & liquid fuels	Tallow
F3 LPG	Combustion: Other gaseous & liquid fuels	Liquefied Petroleum Gases
F4 Kerosene	Combustion: Other gaseous & liquid	Kerosene (other than jet kerosene)

Source Stream Reference	Source Stream Type	Source Stream Description
	fuels	
F5 Propane	Combustion: Other gaseous & liquid fuels	Propane gas bottles
F6 Gas/Diesel Oil	Combustion: Other gaseous & liquid fuels	Gas/Diesel Oil
F7 Bio Heating Oil	Combustion: Other gaseous & liquid fuels	Bio Heating Oil

n. Emissions Summary

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

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Annex 1 Activity
F1 Heavy Fuel Oil	CS1,CS2,CS7	A1-2,A1-3,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 Tallow	CS1,CS2,CS7	A1-2,A1-3,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)
F3 LPG	CS1,CS2,CS4.1,CS4.2,CS6.1,CS6.2,CS7	A1-2,A1-3,A1-4,A3-3,A3-4,A3-6,A3-7	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)
F4 Kerosene	CS5	A3-2	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 Propane	CS1,CS2,CS7,CS8	A1-2,A1-3,A1-4,A3-5	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Annex 1 Activity
			or municipal waste)
F6 Gas/Diesel Oil	CS10,CS11,CS9	A4-1,A4-2,A4-3	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)
F7 Bio Heating Oil	CS1,CS2,CS7	A1-2,A1-3,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)

o. Excluded Activities

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

Do you have any excluded activities which need to be identified in your monitoring plan? No

7. Low Emissions Eligibility

p. Low Emissions Eligibility

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

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

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

Note: the above data shall include transferred CO₂ but exclude CO₂ stemming from biomass.

Does the installation satisfy the criteria for installations with low emissions (as defined by Article 47 of the MRR)? 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 ₂ O	No
Monitoring of PFC	No
Monitoring of transferred / inherent CO ₂	No

9. Calculation

r. Approach Description

The calculation approach including formulae used to determine annual CO₂ emissions:

The Net Calorific Value and Emission Factor for all fossil fuels used on-site are country specific values as published by the EPA & 1 for Oxidation Factor.

HFO: HFO is one of the fuels used on site in the steam boilers. HFO consumption is determined using a mass balance approach. Opening stock + invoiced purchases - closing stock. Each year confirmation of the calibration of the meter used in invoicing the installation is requested from the supplier. Opening and closing stocks are measured by tank dip by an independent consultant. Consumption in volume is converted to mass using a density factor from the supplier. HFO is a de-minimis source stream and a no tier approach is used for measuring activity data.

LPG: LPG is burned in our 3 steam boilers, two laundry boilers and two LPG boilers used on the LPG tank heat exchanger. LPG consumption is determined using a mass balance approach. Opening stock + invoiced purchases - closing stock. Each year confirmation of the calibration of the truck meters used in invoicing the installation is requested from the supplier. Consumption in volume is converted to mass using a density factor from the supplier. Opening and closing stocks are measured using float gauges in the LPG storage tanks. These gauges are controlled by the supplier.

Kerosene: Kerosene is used in the canteen boiler. Kerosene consumption is determined using a purchase record approach: Invoiced purchases are added up for the year from the 1st January to the 31st December. Consumption in

volume is converted to mass using a density factor. Each year confirmation of the calibration of the meters used in invoicing the installation is requested from the supplier.

Diesel: Diesel is supplied for power generators. The consumption is determined using a purchase record approach: Invoiced purchases are added up for the year from the 1st January to the 31st December. Consumption in volume is converted to mass using a density factor. Each year confirmation of the calibration of the meters used in invoicing the installation is requested from the supplier.

Propane gas bottles: Propane gas consumption is determined using a purchase record approach: Invoiced purchases are added up for the year from the 1st January to the 31st December.

Tallow: Tallow is a de-minimis source stream. It is classified as Group 2 CO₂ neutral biomass fuel under Article 38 of the MMR and therefore has an Emission Factor of zero. We have an SGS sustainability certificate for tallow to confirm that it is a carbon neutral fuel with an Emission Factor of zero. The tier for emission factor for tallow oil is Tier 1 (Ref. Article 38.2 of the Monitoring and Reporting Regulation). Tallow is Tier 1 for NCV (based on past analysis as per Article 31(1) of the MRR). We still sample tallow once per year. The samples are sent to Eurofins laboratory in Sweden for determination of gross/net calorific value. Tallow consumption is monitored using a mass balance approach. All tallow brought on-site (either from our plant or off-site plants) is measured using the on-site weighbridge. The on-site weighbridge is calibrated annually. Opening and closing stocks are measured by tank dip by an independent consultant.

Bio Heating Oil: Bio Heating Oil is not currently used on-site but it is planned for use as a de-minimis source stream for the steam boilers. Bio Heating Oil is classified as neutral biomass fuel and therefore has an emission factor of zero. The tier for emission factor for Bio Heating Oil is Tier 1 (Ref. Article 38.2 of the Monitoring and Reporting Regulation). A sustainability certificate will be provided annually once the fuel is being used on-site. Bio Heating Oil is Tier 3 for NCV, we will sample this fuel 4 times per year and test for both gross/net calorific value to determine the heat value of the fuel. The samples are to be sent to Eurofins laboratory in Sweden for calorific values. Consumption will be monitored using a mass balance approach. All Bio Heating Oil brought on-site will be measured using the on-site weighbridge. The on-site weighbridge is calibrated annually. Usage calculation: Opening stock + invoiced purchases- closing stock. Opening and closing stocks are measured by tank dip by an independent consultant.

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 Heavy Fuel Oil,F4 Kerosene,F5 Propane,F6 Gas/Diesel Oil	CS1,CS10,CS11,CS2,CS5,CS7,CS8,CS9	MD1	Invoices/ delivery dockets (truck metres)	0-30,000	litres	1	On-site and suppliers metering checked annually
F2 Tallow,F7 Bio Heating Oil	CS1,CS2,CS7	MD2	Monnery (on-site) Weighbridge	400-50,000	kgs	0.4	Main Gate
F3 LPG	CS1,CS2,CS6.1,CS7,CS6.2,CS4.1,CS4.2	MD3	Incoices/Delivery Dockets and Truck meters	0-50,000	Kgs	0.4	On-site and suppliers vehicles
F1 Heavy Fuel Oil,F2 Tallow,F7 Bio Heating Oil	CS1,CS2,CS7	MD4	Tank dip	N/A	N/A	3.6	Independent consultant
F3 LPG	CS1,CS2,CS6.1,CS7,CS6.2,CS4.1,CS4.2	MD5	Level gauge controlled by supplier	0-111,170	litres	2	On-site LPG Tanks

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 Heavy Fuel Oil,F4 Kerosene,F5 Propane,F6 Gas/Diesel	MD1	Batch	Trade partner	Yes	Yes	Yes

Source Stream Refs.	Measurement Device Ref.	Determination Method	Instrument Control Of	Under	Conditions Of Article 29(1) Satisfied	Invoices Used To Determine Amount Of Fuel Or Material	Trade Partner And Operator Independent
Oil							
F2 Tallow,F7 Bio Heating Oil	MD2	Batch	Operator		N/A	N/A	N/A
F3 LPG	MD3	Batch	Trade partner		Yes	Yes	Yes
F1 Heavy Fuel Oil,F2 Tallow,F7 Bio Heating Oil	MD4	Batch	Operator		N/A	N/A	N/A
F3 LPG	MD5	Batch	Operator		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.

* 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 Heavy Fuel Oil	CS1,CS2,CS7	MD1, MD4	<5.0%	Standard	2	2a	2a	N/A	1	N/A	N/A	0	0	De-minimis	Yes	n/a	n/a
F2 Tallow	CS1,CS2,CS7	MD2, MD4	<5.0%	Standard	2	1	1	N/A	1	N/A	N/A	0	0	De-minimis	Yes	n/a	n/a
F3 LPG	CS1,CS2,CS4.1,CS4.2,CS6.1,CS6.2,CS7	MD3, MD5	<1.5%	Standard	4	2a	2a	N/A	1	N/A	N/A	14658.539	99.55	Major	Yes	n/a	n/a
F4 Kerosene	CS5	MD1	<7.5%	Standard	1	2a	2a	N/A	1	N/A	N/A	20	0.14	De-minimis	Yes	n/a	n/a

Source Stream Refs.	Emission Source Refs.	Measurement Device Refs.	Overall Metering Uncertainty (less than +/- %)	Applied Monitoring Approach	Activity Data Tier Applied	Net Calorific Value Tier Applied	Emission Factor Tier Applied	Carbon Content Tier Applied	Oxidation Factor Tier Applied	Conversion Factor Tier Applied	Biomass Fraction Tier Applied	Estimated Emissions tCO _{2(e)}	% of Total Estimated Emissions	Source Category	Highest Tiers Applied	Justification for not applying the highest tiers	Improvement Plan Reference (where applicable)
ne														s			
F5 Propane	CS1,CS2,CS7,CS8	MD1	<7.5%	Standard	1	2a	2a	N/A	1	N/A	N/A	2	0.01	De-minimis	Yes	n/a	n/a
F6 Gas/Diesel Oil	CS9,CS10,CS11	MD1	<7.5%	Standard	1	2a	2a	N/A	1	N/A	N/A	45	0.31	De-minimis	Yes	n/a	n/a
F7 Bio Heating Oil	CS1,CS2,CS7	MD2,MD4	<5.0%	Standard	2	3	1	N/A	1	N/A	N/A	0	0	De-minimis	Yes	n/a	n/a

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

14725.539

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 Heavy Fuel Oil	CS1,CS2,CS7	2	2a	2a	N/A	1	N/A	N/A
F2 Tallow	CS1,CS2,CS7	2	1	1	N/A	1	N/A	N/A
F3 LPG	CS1,CS2,CS4.1,CS4.2,CS6.1,CS6.2,CS7	4	2a	2a	N/A	1	N/A	N/A
F4 Kerosene	CS5	1	2a	2a	N/A	1	N/A	N/A
F5 Propane	CS1,CS2,CS7,CS8	1	2a	2a	N/A	1	N/A	N/A
F6 Gas/Diesel Oil	CS9,CS10,CS11	1	2a	2a	N/A	1	N/A	N/A
F7 Bio Heating Oil	CS1,CS2,CS7	2	3	1	N/A	1	N/A	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 Heavy Fuel Oil,F3 LPG,F4 Kerosene,F5 Propane,F6 Gas/Diesel Oil	CS1,CS10,CS11,CS2,CS4.1,CS4.2,CS5,CS6.1,CS6.2,CS7,CS8,CS9	NCV & EF	Country specific values as published by the EPA	n/a
F1 Heavy Fuel Oil,F3 LPG,F4 Kerosene,F5 Propane,F6 Gas/Diesel Oil	CS1,CS10,CS11,CS2,CS4.1,CS4.2,CS5,CS6.1,CS6.2,CS7,CS8,CS9	OxF	Annex II MRR 601/2012	n/a
F2 Tallow,F7 Bio Heating Oil	CS1,CS2,CS7	OxF, EF	MRR 601/2012	n/a

Sampling and Analysis

Do you undertake sampling and analysis of any of the parameters used in the calculation of your CO₂ emissions? Yes

x. Analysis

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

Source Stream Refs.	Emission Source Refs.	Parameter	Method of Analysis	Frequency	Laboratory Name	Laboratory ISO17025 Accredited	Evidence Reference
F2 Tallow,F7 Bio Heating Oil	CS1,CS2,CS7	NCV	Oxygen bomb combustion	Quarterly (BHO), Annually (Tallow)	Eurofins Environment Testing Sweden AB (Lidköping)	Yes	n/a

Detail about the written procedures for the above analysis.

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

Title of procedure	Determination of calorific value of Tallow and BHO (Oxygen Bomb Calorimetry)
Reference for procedure	GHG (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The procedure is carried out in accordance with EN 14918:2010, EN 15400:2011, EN14918/15400/ISO1928. Eurofins Environment Testing Sweden AB (Lidköping) is accredited for determining calorific value of recovered fuels. The accreditation cert has been added to 'Additional Information' (Varmevarde=Calorific Value, Atervunna branslen=Recovered Fuel). The bomb calorimeter is a classic device used to determine the heating or calorific value of solid and liquid fuel samples at constant volume. Basically, this device burns a fuel sample and transfers the heat into a known mass of water. From the weight of the fuel sample and temperature rise of the water, the calorific value can be calculated. The calorific value obtained in a bomb calorimeter test represents the gross heat of combustion per unit mass of fuel sample. This is the heat produced when the sample burns, plus the heat given up when the newly formed water vapour condenses and cools to the temperature of the bomb.
Post or department responsible for the procedure and for any data generated	Eurofins Environment Testing Sweden AB (Lidköping)
Location where records are kept	Eurofins Environment Testing Sweden AB (Lidköping)
Name of IT system used	N/A
List of EN or other standards applied	EN14918/15400/ISO1928

y. Sampling Plan

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

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

Attachment	Description
Green House Gas Procedure FP- Rev. 14.doc	GHG Procedure Rev. 14

Title of procedure	Sampling of tallow and BHO for Calorific Value & Sampling Plan Appropriateness
Reference for procedure	GHG (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	A composite sample is taken quarterly (Tallow = 1 time per year, BHO = 4 times per year) and sent for calorific value

analysis to Eurofins Laboratories in Finglas, Co. Dublin.

Eurofins Ireland do not carry out the Calorific Value analysis themselves so the sample is sent to their sister lab in Lidköping, Sweden.

The following procedure is used in sampling tallow and BHO:

1. A sample of minimum 300 ml is taken from the fuel line by the Environmental officer when this fuel used on-site. Before the sample is taken 3-4 liters is let drain out into a bucket to ensure that no old fuel residue is trapped in the valve line before sampling. The sample is then taken in a clean container.
2. The container is stored in the fridge in laboratory.
3. The sample is sent to Eurofins Laboratories in Finglas, Co. Dublin. Eurofins Ireland do not carry out the Calorific Value analysis themselves, so the sample is sent to their sister lab in Lidköping, Sweden. A suitable chain of custody is in place for this transportation.

4. Samples are taken quarterly (4 times per year) for analysis.

Post or department responsible for the procedure and for any data generated

Environmental Department

Location where records are kept

Laboratory

Name of IT system used

N/A - Stored as hard copy on file

List of EN or other standards applied

ISO 14001:2015

z. Sampling Plan Appropriateness

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

Title of procedure

Sampling of tallow and BHO for Calorific Value & Sampling Plan Appropriateness

Reference for procedure

GHG (Revision No. 15)

Diagram reference

N/A

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

The following procedure is used in sampling tallow and BHO:

1. A sample of minimum 300 ml is taken from the fuel line by the Environmental officer when this fuel used on-site. Before the sample is taken 3-4 liters is let drain out into a bucket to ensure that no old fuel residue is trapped in the valve line before sampling. The sample is then taken in a clean container.
2. The container is stored in the fridge in laboratory.
3. The sample is sent to Eurofins Laboratories in

	Finglas, Co. Dublin. Eurofins Ireland do not carry out the Calorific Value analysis themselves, so the sample is sent to their sister lab in Lidköping, Sweden. A suitable chain of custody is in place for this transportation.
Post or department responsible for the procedure and for any data generated	4. Samples are taken quarterly (4 times per year) for analysis. Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015
Are stock estimates carried out as part of the emission calculations?	Yes

aa. Year-end reconciliations

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

Title of procedure	Procedure for Estimating Fuel Stocks
Reference for procedure	GHG (Revision No. 15)
Diagram reference	N/A
Brief description of procedure.	<p>1. A stock take of the fuel storage tanks is carried out in early January each year.</p> <p>2. An independent witness (our auditor) is present for this to verify the stock quantities.</p> <p>3. A record of this stock take is retained on file and can be verified by our auditors.</p> <p>4. There is an Independent Audit carried out in early January each year to verify fuel stocks.</p> <p>5. The stocks are checked by dipping the Tallow, BHO and HFO tanks.</p> <p>6. The stocks of LPG is checked by the contractor (Calor gas); reading of the LPG level (%) in the tank (opening and closing stock) is taken by monitoring device installed at the tank. This mechanical device works like a float gauge: moves with the liquid level in the tank. Telemetry system is linked to this float gauge and transmits readings electronically to the Calor computer systems where it is used as an input.</p> <p>7. In relation to the Kerosene, Diesel and propane bottles there is no stock reading taken. The invoices are used to determine the usage during the year as the stock amounts</p>

Post or department responsible for the procedure and for any data generated	of the kerosene and diesel are miniscule and it is hard to know what is in a used Propane bottle. Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

bb. Tracking Instruments

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

Title of procedure	Quality Assurance of Metering / Measuring Equipment/ Information Technology
Reference for procedure	GHG (Revision No. 15)
Diagram reference	N/A
Brief description of procedure.	The on-site weighbridge is used to weigh fuel entering and leaving the site. This weighbridge is calibrated annually and the certificate is verified by SGS.

Post or department responsible for the procedure and for any data generated	Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

11. Management

cc. 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
Environmental Officer	Implementing Green House Gas Procedures. Training staff on monitoring & recording. Getting machines & monitoring equipment maintained & calibrated e.g. boilers & weighbridge Assisting the financial Manager in calculating the overall fuel usage & carbon emissions. Ensuring that the information and documentation is in place for the verifiers. Getting the fuel analysed and checked and getting certs of the fuel suppliers.
Financial Director	Keeping records of all the fuel invoices. Recording all the weekly fuel usage figures in the KPI document. Calculating the annual fuel usage & carbon emissions.

Attachment	Description
Organisational chart.pdf	Organisational chart 2019

dd. 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	Procedure for assignment of responsibilities
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The GHG monitoring and reporting responsibilities are identified as follows:

- * 1. Fuel Quantities incoming to be recorded and monitored (Financial Director).

Procedure: As a load of fuel arrives on site, it is weighed on our weighbridge. The weighbridge dockets and invoices are kept and crosschecked to ensure the weights on both the weighbridge docket and invoice correspond with each other. The financial director ensures that staffs involved are trained in crosschecking these documents. Should any issues or discrepancies arise they must inform the financial director immediately to investigate the matter.

- * 2. Annual stock takes of the storage tanks at the beginning of each year (Financial Director).

Procedure: The Financial Director is responsible for keeping track of the daily, weekly and monthly fuel usage on site, while also noting the fuel stock on site to order more fuel when running low. An electronic sensor is used to measure the diesel going out which then gives a remaining counter stock of the diesel tank. OSK are contracted to determine our closing stock at the end of each year. A stamped closing stock report is provided from OSK following their visit. This information is used to determine the stock of the fuel storage tanks on site at beginning of each year.

- * 3. Record keeping of all invoices and delivery dockets for all fuel coming on site (Financial Director).

Procedure: All invoices of incoming fuels are crosschecked with their weighbridge dockets to ensure they have corresponding weights. These are kept on file for review

and in order to look back on previous deliveries should any issues arise.

* 4. Cross checking the weights on the delivery dockets with our own weighbridge (Financial Director).

Procedure: When a delivery of fuel arrives, it is weighed on our own weighbridge. The staffs are trained in examining the weighbridge docket and invoice from the fuel company of each delivery to ensure they correlate with each other. These documents are also kept on file for review should any issues arise.

* 5. Service and calibration of steam boilers (Environmental Officer).

Procedure: Saacke Combustion Services Ltd. are contracted to undertake services on the burners and adjust them if necessary. Calibrations of the equipment installed in the steam boilers are carried out by O'Mahony annually.

* 6. Calibration of Weighbridge. (Transport Manager).

Procedure: Precia Molen (NSAI accredited) are contracted to calibrate the weighbridge on site. They bring calibrated weights onsite and weigh them again using our weighbridge to calibrate the weighbridge itself.

* 7. Calculation of annual emissions (Financial Director).
See methods of calculation in section 3.0 Data flow activities.

* 8. Training on Procedures to relevant personnel (Environmental Officer).

The responsibilities are assigned to the most relevant people to the task. For example the person whose work relates to the task most i.e. Financial director has all the fuel usage reports and invoices available to him so he keeps records of these.

All employees are fully briefed on the Standard Operating Procedure for all their duties. All records of training and briefs carried out on site are the responsibility of the Human Resource Manager and Environmental Officer. The Environmental Officer is also responsible for preparing and submitting any revision of the Monitoring and Reporting Plan. Furthermore, he must ensure that the M&R Plan along with the GHG permits are up to date and that all changes/notifications are made to the EPA. All procedures are reviewed if any major changes are made. In accordance

with article 58, 61 & 62 on the segregation of duties and the review of data all relevant information recorded by the financial director and data is reviewed by the Environmental Officer. The data is cross checked with previous years data.

Post or department responsible for the procedure and for any data generated	Replacements: Should either the Financial Director or Environmental Officer be unavailable to carry out any of the above duties Environmental Technical Project Manager will stand in for the Environmental Officer while the Accounts Manager will stand in for the Financial Director. Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

ee. 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	Procedure for Monitoring Plan Appropriateness.
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	In reference to Chapter II Section 1 Article 11 of the Monitoring and Reporting Regulation (EU) No 601/2012, the Directive 2003/87/EC and the European Communities Regulations 2012 (SI 490 of 2012), procedures are reviewed for changes (Source Streams, Emission Sources or Monitoring and Reporting arrangements) and improvements that can be made. During the review, all relevant changes regarding the nature & functioning of the installation are included in the Monitoring Plan. The method of monitoring is run by the management of the company to see if they are happy to continue with the monitoring process as it is or if they can suggest new and improved methods for monitoring. The emissions for the site must be estimated at the end of each year if the site is falling into the low emissions category (<25,000 t CO ₂ /annum) then the lower tier methodology can be used.
Post or department responsible for the procedure and for any data generated	Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

ff. Data Flow Activities

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

Title of procedure	Procedure for Data Flow activities
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	Data flow schematic
Brief description of procedure. The description should cover the essential parameters and operations performed	A monitoring procedure is set up for all greenhouse gas emissions. This is recorded and reported as part of the AEM and the AER. Relevant processing steps related to each specific data flow activity including the formulas and data are used to determine the emissions in accordance with Section 2 Subsection 3 of the Monitoring and Reporting Regulation (EU) No 601/2012, the Directive 2003/87/EC and the European Communities Regulations 2012 (SI 490 of 2012).
Post or department responsible for the procedure and for any data generated	Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015
List of primary data sources	All primary data sources are identified as per our Monitoring and reporting plan.
	These include the following:
	<ul style="list-style-type: none"> • Calibration records & Certification • Fuel usage records on the Weekly KPI (Key process Indicator's) of Tallow, BHO, Heavy Fuel Oil, LPG, Kerosene, Diesel and Propane • Fuel usage trends are reviewed at the management meetings. • Annual reporting of the fuel usage & CO2 emissions. • Verification of the emissions by the Verifiers.
Description of the relevant processing steps for each specific data flow activity.	Sequence and interaction between data flow activities: A monitoring procedure is set up for all greenhouse gas emissions. This will be recorded and reported as part of the AIER and the AER.
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	Relevant processing steps related to each specific data flow activity including the formulas and data used to determine the emissions
	Methods of Calculations:
	CO2 Emissions (tonnes) = Activity Data*Emission Factor

*Oxidation Factor

Certificates of Analysis for all fuels used on site are kept on the GHG Emissions file in the Laboratory.

Methods of calculations/measurements used: A meter will be used as a way of presenting and updating meter data. This will show the location, manufacturer, type, model number, serial number, calibration status etc of all meters used on site relevant to GHG reporting. The on-site weighbridge is used to weigh fuel entering and leaving the site. This weighbridge is calibrated annually.

Relevant electronic data processing and storage systems used as well as the interaction between such systems and other inputs including manual input

Reporting and records: All fuel quantities are recorded at intake and their usage recorded on a weekly basis, recording opening and closing stocks. All delivery dockets will be checked and verified for authenticity and approval and matched with relevant invoices. Fuel Delivery Invoices will be kept in the Accounts Department.

A stock take of the fuel storage tanks is carried out in early January each year. An independent witness (our auditor) is present for this to verify the stock quantities. A record of this stock take is retained on file and can be verified by our auditors.

The way outputs of data flow activities are recorded:

Records and Documentation: Records of all Calibrations are kept on file (Calibration Records). Records of Fuel usage are kept on file (Weekly KPI Report).

The total fuel usage is reviewed (for unusual trends) weekly at the Management Meeting.

Fuel Usage is also reviewed annually. Annual reporting and calculation of CO₂ Emissions and report are verified by the approved verifier and recorded as the AIER. Responsibility Financial Director.

All spreadsheets are also stored on computer. The computer system is backed up each night. We have more than adequate storage for all documentation involved.

Environmental Records are retained for a minimum of 10 years. College Proteins can make available at any time relevant records for evaluation by the public or other

interested parties. All Environmental related documents not on the Environmental Record list shall be retained for a sufficient time to provide evidence that the documented environmental system is being followed.

Submit relevant documents to record data flow activities

Attachment	Description
CO2 Emissions Monery 2018 Final.xls	CO2 Emissions Monery 2018

gg. 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	Procedure for assessing and controlling risks
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	<p>College Proteins carry out all the necessary training to ensure that employees are aware of all environmental aspects and the risks to the environment. We train our staff to ensure that they understand the importance of conforming with our IEL license and to the requirements of our Environmental Management System. We ensure that the staff understand that the correct operation of all equipment which is vital to ensuring that the fuel is used efficiently and recorded correctly. We have established and will maintain training procedures for each operation relevant to the environment and will maintain records of all training given.</p> <p>All delivery dockets are checked and verified for authenticity and approval and matched with relevant invoices. Fuel Delivery Invoices are kept in the Accounts Department in College Proteins (Nobber site) and are cross checked with the weights of the fuel tankers coming into the site.</p> <p>The on-site weighbridge is used to weigh all fuel entering and leaving the site. This weighbridge is calibrated annually. A procedure is in place in order to remind the Project Manager of upcoming calibration and maintenance checks due for the metering devices and combustion units on site to ensure all equipment is functioning correctly.</p> <p>Assessing & Controlling IT risks: We use windows server</p>

	2008. The server is located in College Proteins Main office (Nobber site) in a key locked room and the server is backed up daily on a tape in accordance with Article 58 and 60 of the Monitoring and Reporting Regulation (EU) No 601/2012, the Directive 2003/87/EC and the European Communities Regulations 2012 (SI 490 of 2012). We have a Nord 32 antivirus system and firewall on all the PCs. The KPI system for the fuel usage and carbon emissions recording and calculations has a password which only management have access to.
Post or department responsible for the procedure and for any data generated	Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

hh. 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	Procedure for Quality Assurance of Metering / Measuring Equipment/ Information Technology
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Boilers are serviced by Saacke Combustion Services Ltd and any maintenance required is carried out. Details of each service and work carried out are kept on File (Boiler Maintenance Records). The Boilers are tested for their overall efficiency at least annually. Emissions testing is carried out biannually. The responsibility for ensuring the emissions are compliant with the IEL License lies with the Environmental Officer.
	The boiler which heats the canteen and laundry is serviced by a local Plumber.
	This weighbridge is calibrated annually.
	If the results of any of the surveys indicate that emissions exceed the statutory limits or a piece of equipment is reading out of specification then a Corrective Action Request is raised so as to ensure quality assurance of measuring equipment in accordance with Article 58 and 59 of the Monitoring and Reporting Regulation (EU) No 601/2012, the Directive 2003/87/EC and the European Communities Regulations 2012 (SI 490 of 2012).
	The on-site weighbridge for incoming loads of fuel is

Post or department responsible for the procedure and for any data generated	calibrated annually by outside contractors. Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

ii. 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	Procedure for Quality Assurance of Metering / Measuring Equipment/ Information Technology
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The IT administrator must ensure that the IT systems used for the dataflow activities are secure and failure safe. College Proteins operates a Windows server 2008 (64 bits). This system must be checked and maintained by the in house IT administrator. The server is kept locked in its own room. The CEO & IT administrator are the only people with keys. The server is backed up on tape every night. Each computer must be kept up to date with latest Nord 32 antivirus and firewall. Each PC & server has different passwords and user names for security. There is an in house IT administrator whom looks after all the IT quality assurance and security of the system so as to ensure quality assurance of information technology used for data flow activities in accordance with Article 58 and 60 of the MRR.
Post or department responsible for the procedure and for any data generated	IT Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

jj. 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	Procedure for Review and Validation of Data
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The Environmental Officer is responsible for scheduling and conducting Management Review meeting annually and for ensuring that necessary data is collected prior to the

meetings. In relation to Chapter V, Data Management and Control Articles 58 & 62 of the Monitoring and Reporting Regulation (EU) No 601/2012, the Directive 2003/87/EC and the European Communities Regulations 2012 (SI 490 of 2012), the financial director collects data in order to undertake a number of checks to validate it by recording the amount of each fuel used, opening & closing stock levels, invoices, receipts from suppliers and match this data with the weekly usage. At the end of each month, the usage is compared with invoices with respect to daily usage to ensure it corresponds with invoices and energy (kilowatt per tonne raw material processed) used. This also ensures that there are invoices to support each receipt on the KPI report and therefore no discrepancies among the data. In the event of a false reading due to e.g. a faulty gas flow meter, this incorrect reading is rejected, and an estimation of the usage would be used instead, based on previous usage for the same period. The Project Manager then reviews this data and that of previous years to examine the overall use of energy, production of carbon emissions and effectiveness of the environmental policy and procedures in relation to keeping energy usage and carbon emissions to a minimum. If there are any major differences in the overall fuel usage and emissions, this is checked to ensure the values are justified and if not, they are investigated further through crosschecking all documents i.e. invoices, weighbridge dockets, stock takes, etc. At a minimum each review meeting will consider the following: the usage of energy and carbon emission production; the suitability, adequacy and effectiveness of the environmental policy, objectives and EMS; the status of corrective and preventative actions; the results of audits since previous review meeting;

The meeting will also establish and maintain a procedure and programme for Internal Audits to be carried out. These Audits ensure that College Proteins are compliant with the E.M.S. and are compliant with the IEL License.

Post or department responsible for the procedure and for any data generated

Financial department

Location where records are kept

Financial Directors office

Name of IT system used

Windows server 2008

List of EN or other standards applied

ISO 14001:2015

kk. 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

Procedure for Corrections and Corrective actions

Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Each year the data flow activities and steps carried must be questioned and assessed for validity. This is carried out by Environmental Officer who assess each piece of monitoring equipment and recording process to determine if there is a better way of doing it. If any malfunctioning occurs in terms of monitoring and reporting data it must be investigated thoroughly and the cause found and addressed so as to handle corrections and corrective actions in accordance with Articles 58 and 63 of the MRR.
	Corrective action is initiated in CPL using the Corrective Action Notice (CAN) document for communication purposes. The Environmental Officer is responsible for reviewing issues affecting the EMS, for logging the CAN and tracking and recording submission of solutions in the CPL database. The Environmental Officer raises and completes a Corrective Action Notice then meets with the relevant manager to initiate the corrective action. The corrective action will correspond to the risks encountered. The corrective action request is left with the relevant manager. A discussion is had with the relevant manager to decide on a close out date for the issue. If the issue is not closed out by this date then the issue is to be raised with Top Management and brought up at the weekly management meetings.
Post or department responsible for the procedure and for any data generated	Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

II. 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	Procedure for Control of out sourced activities
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	A Procedure to Approve and Monitor Contractors is in place to ensure that contractors are familiar with and adhere to College Proteins Safety, Health and Environmental Rules and Conditions for Contractors.
	The outsourced data flow activities are the fuel invoices and weighbridge weights of fuel suppliers. College Proteins requests the weighbridge calibration certs from these companies to ensure they are correct. College Proteins also

double checks the fuel weights on the weighbridge on site. The weighbridge is calibrated annually.

The external contractors used in relation to the data flow activities are certified and checked to ensure that their calibration processes are correct to control outsourced processes in accordance with Articles 59 and 64 of the MRR.

Post or department responsible for the procedure and for any data generated	Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

mm. Record Keeping and Documentation

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

Title of procedure	Data Flow Activities
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	All spreadsheets are stored on computer. The computer system is backed up each night.
	More than adequate storage for all documentation involved is provided.
	Environmental Records are retained for a minimum of 10 years as per the EMS.
	All spreadsheets are also stored on computer and the server is backed up each night.
	We have more than adequate storage for all documentation involved.
	Certificates of Analysis and/or specification/MSDS from fuel suppliers for all fuels used on site are kept on the GHG Emissions file in the Laboratory/ on the Server.
	All fuel quantities are recorded at intake and their usage recorded on a weekly basis, recording opening and closing stocks. All delivery dockets are checked and verified for authenticity and approval and matched with relevant invoices. Fuel Delivery Invoices are kept in the Accounts Department in College Proteins (Nobber site).
	The Net Calorific Value and Emission Factor for all fossil fuels used on-site are country specific values as published

Post or department responsible for the procedure and for any data generated	by the EPA & 1 for Oxf. Financial Department
Location where records are kept	Financial managers office
Name of IT system used	Windows server 2008
List of EN or other standards applied	ISO 14001:2015

nn. 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

oo. Environmental Management System

Does your organisation have a documented Environmental Management System? Yes

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

The standard to which the Environmental Management System is certified: ISO 14001:2015

12. Changes in Operation**pp. 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	Procedure to monitor changes in the operation
Reference for procedure	GHG Procedure (Revision No. 15)
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	In reference to Chapter II Section 1 Articles 14 & 15 of the Monitoring and Reporting Regulation (EU) No 601/2012, the Directive 2003/87/EC and the European Communities Regulations 2012 (SI 490 of 2012), annually the process should be reviewed to see if there has being any changes in production levels. This meeting should take place in September and should be part of the management meeting. Changes forecast need to be discussed also. If there are changes that have happened during the year or are proposed to happen which could change the thermal energy used on site, this needs to be brought to the attention of the EPA via the HAL form which is filled out on line on the ETS web page. This information needs to be submitted by the 31st December each year in order to be compliant with the GHG permit. If however, there are any changes throughout the year such as capacity, new equipment, fuel changes, the EPA are notified immediately.
Post or department responsible for the procedure and for any data generated	Environmental Department
Location where records are kept	Laboratory
Name of IT system used	Windows server 2008

13. Abbreviations

qq. 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
Farragh Proteins Reg. Cert. (2).pdf	CRO change of name for Farragh Proteins
Farragh Proteins Thermal Input request.pdf	Farragh Proteins CS1 CS2 and TEAP Thermal input capacities
Emo PS Low Sulphur Residue Heavy Fuel Oil updated.doc	HFO Spec Sheet
F3 LPG suppliers weighbridge cert 2018 Calor.pdf	LPG 2018 Calor weighbridge Cert
F4 Kero F6 Diesel supplier metering 2016 Jones oil.pdf	Kerosene and Diesel metering cert 2016
HFO F1 Suppliers metering 2018 Emo.pdf	HFO supplier metering cert 2018
Accreditation Cert Eurofins.pdf	Accreditation Cert Tallow and BHO (Eurofins Lab)
2018-2019 BHO sustainability cert till 6.7.19.pdf	2018-2019 BHO Sustainability Cert
Cert of Name Change 16.11.16.pdf	Cert of Name Change
ISCC EU 2019 certificate College Proteins 19.3.8.pdf	ISCC Tallow Sustainability Cert
Calc of Generators Thermal Capacity.xlsx	Thermal Input Capacity
WBTU Weights T313169 0320.pdf	Monnery Weighbridge Calibration
SO4637J.pdf	Monnery Weighbridge Calibration
DT1-17 28486 exp 311019.pdf	Monnery Weighbridge Calibration
OSK closing stock 2018.pdf	Independant stock report
Laundry gas boiler.pdf	Laundry gas boilers
Letter from Aylward.pdf	TO removed (letter with confirmation)
IMG_0373.JPG	TO removed
IMG_0374.JPG	TO removed
IMG_0375.JPG	TO removed
IMG_0376.JPG	TO removed
IMG_0382.JPG	TO removed
IMG_0383.JPG	TO removed
IMG_0384.JPG	TO removed
IMG_0392.JPG	TO removed
IMG_0389.JPG	TO removed
Removal of CS4 pic1.JPG	Removal of CS4
Removal of CS4 pic 2.JPG	Removal of CS4
Green House Gas Procedure FP- Rev. 15.doc	GHG Procedure v15

Attachment	Description
Calor fleet and weighbridge calibration Certs.pdf	F3 LPG Calor fleet and weighbridge certs

15. Confidentiality

rr. 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.