Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

GREENHOUSE GAS EMISSIONS PERMIT

Permit Register Number:	IE-GHG057-10372-4
Operator:	Pfizer Ireland Pharmaceuticals Operations Support Group Ringaskiddy Cork
Installation Name:	Pfizer Ireland Pharmaceuticals (Newbridge)
Site Name:	Pfizer Ireland Pharmaceuticals (Newbridge)
Location:	Buckley's Cross Roads Old Connell Newbridge Kildare Ireland

Introductory Note

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

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

Contact with Agency:

If you contact the Agency about this Greenhouse Gas Emissions Permit please quote the following reference: Greenhouse Gas Emissions Permit Nº IE-GHG057-10372.

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
P0153-05

Status Log

Current Permit

Permit number	Date application received	Date Permit issued	Comment
IE-GHG057-10372-4	05 December 2019	19 March 2020	Replacement of the current CHP unit (Emission Point Reference No. A1-10 B) with a new CHP (Combined Cooling Heat & Power) unit at a new location (Emission Point Reference No. A1-10(c)) 10.01 MW. Replacement of the existing boiler at A1-3 with a new boiler of 2.11 MW capacity. Addition of a new gas meter 80125405. Removal of the gas meter 7406701001/B.

Previous Permits

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG057-10372-1	GHG Permit Application	19 April 2013	20 May 2013	
IE-GHG057-10372-2	GHG Variation	08 December 2016	01 February 2017	New metering arrangement (Truck meter, Level Probe) included for D-001 combustion in A 4-121. The Approach Description has been updated.
IE-GHG057-10372-3	GHG Variation	12 December 2017	14 February 2018	Replacement CHP installed at Emission Source Reference A1-10(b) reducing the thermal input capacity from 6.45 MW to 6.16 MW.

End of Introductory Note

Glossary of Terms

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

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

Installation with low emissions	As defined in Article 47 of the M&R Regulation.
Major Source Streams	As defined in Article 19.3 (c) of the M&R Regulation.
M&R Regulation	Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council and any amendments or revisions thereto.
Mis-statement	An omission, misrepresentation or error in the Operators reported data, not considering the uncertainty permissible pursuant to Article 12(1)(a) of Regulation (EU) no 601/2012.
N/A	Not applicable.
Monitoring Plan	The Plan submitted and approved in accordance with Condition 3.1 of this permit and attached at Appendix 1.
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)	Pfizer Ireland Pharmaceuticals
"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:

Pfizer Ireland Pharmaceuticals
Operations Support Group
Ringaskiddy
Cork

Company Registration Number: 490938

from

The Former Operator:

AHP Manufacturing B.V Trading as Wyeth Medica Ireland
Old Connell

Newbridge
Kildare

to carry out the following

Categories of activity:

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

at the following installation(s):

Pfizer Ireland Pharmaceuticals (Newbridge) **Installation number:** 44

located at

Buckley's Cross Roads
Old Connell
Newbridge
Kildare
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 04 January 2011, *Pfizer Ireland Pharmaceuticals* 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 2005-2010, 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.: 44

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
A1-3	Hot Water Boiler (Danstoker) - Building 5 (Boiler House)	2.11	MW
A1-4	Hot Water Boiler (Hartley & Sugden HX140W) - Building 5 (Boiler House)	4.72	MW
A1-5	Steam Boiler (HDS) - Building 5 (Boiler House)	2.4	MW
A1-6	Steam Boiler (HDS) - Building 5 (Boiler House)	3.13	MW
A1-7	Hot Water Boiler (Cochrane) - Building 5 (Boiler House)	4.72	MW
A1-8	MTHW Boiler (Cochrane) - Building 5 (Boiler House)	6.33	MW
A1-11	Steam Boiler (Wellman Robey) - Building 5 (Boiler House)	5.26	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
A3-317	Condensing Boiler - Wastewater Pre-Treatment Plant	0.04	MW
A3-324	Air Handling Unit 1 - Wastewater Pre-Treatment Plant	0.13	MW
A3-325	Air Handling Unit 2 - Wastewater Pre-Treatment Plant	0.09	MW
A3-335	Air Handling Unit 1 - Waste Management Facility	0.16	MW
A3-336	Air Handling Unit 2 - Waste Management Facility	0.04	MW
A4-101	Emergency Stand-By Generator - Building 3 (Electrical Plant Room 2nd floor); Model: P160; WMI No: GE0354	0.34	MW
A4-102	Emergency Stand-By Generator - Building 1 (behind canteen); Model: P165E1; WMI No: GE42797	0.37	MW
A4-103	Emergency Stand-By Generator - Building 9; Model: P100; WMI No: GE12357	0.13	MW
A4-104	Emergency Stand-By Generator - Building 5; Model: P200H; WMI No: GE13427	0.26	MW
A4-105	Emergency Stand-By Generator - Building 3 (Electrical Plant Room 2nd floor); Model: P135; WMI No: GE12076	0.47	MW
A4-121	Electrical Generator - Building 3C (beside MHT electrical room); Model: Caterpillar 3516HD; WMI No: GE 41726	5.18	MW
A4-122	Electrical Generator - Wastewater Pre-Treatment Plant; Model: Perkins 1006TAG; WMI No: GE45524	0.37	MW
A4-123	Electrical Generator - Wastewater Pre-Treatment Plant; Model: Perkins 2806C-E18TAG2; WMI No: GE45525	1.45	MW
A4-124	Fire Pump - Building 6 (Fire Pump House); WMI No: PU1114	0.42	MW
A4-125	Fire Pump - Building 7 (Fire Pump House); WMI No: PU1117	0.42	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
A4-140	Electrical Generator - Building 5 (beside A4-104); Model: FG Wilson P220HE	0.47	MW
A4-232	Electrical Generator - Building 9 Cold Store; Model: FG Wilson P150-1	0.37	MW
A1-10(c)	Combined Cooling Heat & Power Unit	10.01	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: *To provide for the surrendering, holding, transfer and cancellation of allowances in respect of reported emissions.*

Condition 5. Penalties

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

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

Sealed by the seal of the Agency on this the 19 March 2020:

PRESENT when the seal of the Agency was affixed hereto:

_____

Ms. Annette Prendergast
Inspector/ Authorised Person

Appendix 1 to Greenhouse Gas Emissions Permit Number IE-GHG057-10372

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	Pfizer Ireland Pharmaceuticals (Newbridge)
Site name	Pfizer Ireland Pharmaceuticals (Newbridge)
Address	Buckley's Cross Roads Old Connell Newbridge Kildare Ireland
Grid reference of site main entrance	281700E, 215800N
Licence held pursuant to the Environmental Protection Agency Act 1992, as amended.	Yes

IPC/IE Licence Register Number	Licence holder	Competent body
P0153-05	Pfizer Ireland Pharmaceuticals	Environmental Protection Agency

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

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

3. About the Operator

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

(b) Operator Details

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

Operator name	Pfizer Ireland Pharmaceuticals
Company Registration Number	490938

Operator Legal status

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

(c) Company / Corporate Body

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

Registered office address

Address Line 1	Operations Support Group
Address Line 2	N/A
City/Town	Ringaskiddy
County	Cork
Postcode	N/A

Principal office address

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

Holding company

Does the company belong to a holding company?	No

(d) Operator Authority

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

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

4. Service Contact

e. Service Contact

Address	Pfizer Ireland Pharmaceuticals-Newbridge Buckley's Cross Roads Old Connell Newbridge County Kildare Ireland

5. Installation Activities

f. Installation Description

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

The Pfizer Ireland Pharmaceuticals Newbridge facility produces a variety of pharmaceutical products. Operations are based on formulation activities, consisting of blending of raw materials, granulation, drying and coating processes, with subsequent filling and packaging operations and product distribution from the site.

Significant energy usage derived from provision of utilities to support processing & site activities e.g. Steam, Medium Temperature Hot Water, Chillers, HVAC. Moderate energy usage from heating and lighting requirements.

Emissions to atmosphere occur from on-site boilers and the Combined Heat & Power plant and include carbon dioxide, carbon monoxide and nitrous oxides, some of which contribute towards the greenhouse effect. These emissions are created from the direct combustion of fossil fuel sources including natural gas, diesel / gas oil and propane).

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

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)	49.39	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
IP-S-AE-016 Rev2.PDF	Updated Site Plan

i. Estimated Annual Emissions

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

Estimated Annual Emissions (tonnes $CO_{2(e)}$) 20000

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
A1-3	Hot Water Boiler (Danstoker) - Building 5 (Boiler House)
A1-4	Hot Water Boiler (Hartley & Sugden HX140W) - Building 5 (Boiler House)
A1-5	Steam Boiler (HDS) - Building 5 (Boiler House)
A1-6	Steam Boiler (HDS) - Building 5 (Boiler House)
A1-7	Hot Water Boiler (Cochrane) - Building 5 (Boiler House)
A1-8	MTHW Boiler (Cochrane) - Building 5 (Boiler House)
A1-11	Steam Boiler (Wellman Robey) - Building 5 (Boiler House)
A3-317	Condensing Boiler - Wastewater Pre-Treatment Plant
A3-324	Air Handling Unit 1 - Wastewater Pre-Treatment Plant
A3-325	Air Handling Unit 2 - Wastewater Pre-Treatment Plant
A3-335	Air Handling Unit 1 - Waste Management Facility
A3-336	Air Handling Unit 2 - Waste Management Facility
A4-101	Emergency Stand-By Generator - Building 3 (Electrical Plant Room 2nd floor); Model: P160; WMI No: GE0354
A4-102	Emergency Stand-By Generator - Building 1 (behind canteen); Model: P165E1; WMI No: GE42797
A4-103	Emergency Stand-By Generator - Building 9; Model: P100; WMI No: GE12357
A4-104	Emergency Stand-By Generator - Building 5; Model: P200H; WMI No: GE13427
A4-105	Emergency Stand-By Generator - Building 3 (Electrical Plant Room 2nd floor); Model: P135; WMI No: GE12076
A4-121	Electrical Generator - Building 3C (beside MHT electrical room); Model: Caterpillar 3516HD; WMI No: GE 41726
A4-122	Electrical Generator - Wastewater Pre-Treatment Plant; Model: Perkins 1006TAG; WMI No: GE45524
A4-123	Electrical Generator - Wastewater Pre-Treatment Plant; Model: Perkins 2806C-E18TAG2; WMI No: GE45525
A4-124	Fire Pump - Building 6 (Fire Pump House); WMI No: PU1114
A4-125	Fire Pump - Building 7 (Fire Pump House); WMI No: PU1117
A4-140	Electrical Generator - Building 5 (beside A4-104); Model: FG Wilson P220HE
A4-232	Electrical Generator - Building 9 Cold Store; Model: FG Wilson P150-1

Emission Source Reference	**Emission Source Description**
A1-10(c)	Combined Cooling Heat & Power Unit

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

Emission Source Reference	**Emission Source Description**
A1-3	Hot Water Boiler (Danstoker) - Building 5 (Boiler House)
A1-4	Hot Water Boiler (Hartley & Sugden HX140W) - Building 5 (Boiler House)
A1-5	Steam Boiler (HDS) - Building 5 (Boiler House)
A1-6	Steam Boiler (HDS) - Building 5 (Boiler House)
A1-7	Hot Water Boiler (Cochrane) - Building 5 (Boiler House)
A1-8	MTHW Boiler (Cochrane) - Building 5 (Boiler House)
A1-11	Steam Boiler (Wellman Robey) - Building 5 (Boiler House)
A3-317	Condensing Boiler - Wastewater Pre-Treatment Plant
A3-324	Air Handling Unit 1 - Wastewater Pre-Treatment Plant
A3-325	Air Handling Unit 2 - Wastewater Pre-Treatment Plant
A3-335	Air Handling Unit 1 - Waste Management Facility
A3-336	Air Handling Unit 2 - Waste Management Facility
A4-101	Emergency Stand-By Generator - Building 3 (Electrical Plant Room 2nd floor); Model: P160; WMI No: GE0354
A4-102	Emergency Stand-By Generator - Building 1 (behind canteen); Model: P165E1; WMI No: GE42797
A4-103	Emergency Stand-By Generator - Building 9; Model: P100; WMI No: GE12357
A4-104	Emergency Stand-By Generator - Building 5; Model: P200H; WMI No: GE13427
A4-105	Emergency Stand-By Generator - Building 3 (Electrical Plant Room 2nd floor); Model: P135; WMI No: GE12076
A4-121	Electrical Generator - Building 3C (beside MHT electrical room); Model: Caterpillar 3516HD; WMI No: GE 41726
A4-122	Electrical Generator - Wastewater Pre-Treatment Plant; Model: Perkins 1006TAG; WMI No: GE45524
A4-123	Electrical Generator - Wastewater Pre-Treatment Plant; Model: Perkins 2806C-E18TAG2; WMI No: GE45525
A4-124	Fire Pump - Building 6 (Fire Pump House); WMI No: PU1114
A4-125	Fire Pump - Building 7 (Fire Pump House); WMI No: PU1117
A4-140	Electrical Generator - Building 5 (beside A4-104); Model: FG Wilson P220HE

Emission Source Reference	Emission Source Description
A4-232	Electrical Generator - Building 9 Cold Store; Model: FG Wilson P150-1
A1-10(c)	Combined Cooling Heat & Power Unit

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
A1-3	Hot Water Boiler (Danstoker) - Building 5 (Boiler House)
A1-4	Hot Water Boiler (Hartley & Sugden HX140W) - Building 5 (Boiler House)
A1-5	Steam Boiler (HDS) - Building 5 (Boiler House)
A1-6	Steam Boiler (HDS) - Building 5 (Boiler House)
A1-7	Hot Water Boiler (Cochrane) - Building 5 (Boiler House)
A1-8	MTHW Boiler (Cochrane) - Building 5 (Boiler House)
A1-11	Steam Boiler (Wellman Robey) - Building 5 (Boiler House)
A3-317	Condensing Boiler - Wastewater Pre-Treatment Plant
A3-324	Air Handling Unit 1 - Wastewater Pre-Treatment Plant
A3-325	Air Handling Unit 2 - Wastewater Pre-Treatment Plant
A3-335	Air Handling Unit 1 - Waste Management Facility
A3-336	Air Handling Unit 2 - Waste Management Facility
A4-101	Emergency Stand-By Generator - Building 3 (Electrical Plant Room 2nd floor); Model: P160; WMI No: GE0354
A4-102	Emergency Stand-By Generator - Building 1 (behind canteen); Model: P165E1; WMI No: GE42797
A4-103	Emergency Stand-By Generator - Building 9; Model: P100; WMI No: GE12357
A4-104	Emergency Stand-By Generator - Building 5; Model: P200H; WMI No: GE13427
A4-105	Emergency Stand-By Generator - Building 3 (Electrical Plant Room 2nd floor); Model: P135; WMI No: GE12076
A4-121	Electrical Generator - Building 3C (beside MHT electrical room); Model: Caterpillar 3516HD; WMI No: GE 41726
A4-122	Electrical Generator - Wastewater Pre-Treatment Plant; Model: Perkins 1006TAG; WMI No: GE45524
A4-123	Electrical Generator - Wastewater Pre-Treatment Plant; Model: Perkins 2806C-E18TAG2; WMI No: GE45525
A4-124	Fire Pump - Building 6 (Fire Pump House); WMI No: PU1114

Emission Point Reference	Emission Point Description
A4-125	Fire Pump - Building 7 (Fire Pump House); WMI No: PU1117
A4-140	Electrical Generator - Building 5 (beside A4-104); Model: FG Wilson P220HE
A4-232	Electrical Generator - Building 9 Cold Store; Model: FG Wilson P150-1
A1-10(c)	Combined Cooling Heat & Power Unit

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
NG-001	Combustion: Other gaseous & liquid fuels	Natural Gas
D-001	Combustion: Commercial standard fuels	Gas/Diesel Oil
LPG-001	Combustion: Other gaseous & liquid fuels	Liquefied Petroleum Gases

n. Emissions Summary

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

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Annex 1 Activity
NG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A3-317,A3-324,A3-325,A3-335,A3-336,A1-10(c)	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A3-317,A3-324,A3-325,A3-335,A3-336,A1-10(c)	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)
D-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A4-101,A4-102,A4-103,A4-104,A4-105,A4-121,A4-122,A4-123,A4-124,A4-125,A4-140,A4-232	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A4-101,A4-102,A4-103,A4-104,A4-105,A4-121,A4-122,A4-123,A4-124,A4-125,A4-140,A4-232	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)
LPG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except

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

o. Excluded Activities

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

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

7. Low Emissions Eligibility

p. Low Emissions Eligibility

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

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

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

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

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

If the installation is an installation with low emissions as defined above there are a number of special provisions which may be applied to provide a simplified monitoring plan. These provisions are set out in Article 47 of the MRR.

8. Monitoring Approaches

q. Monitoring Approaches

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

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

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

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

9. Calculation

r. Approach Description

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

The primary calculation for CO2 emissions is as follows:

CO2 emissions = Activity data (related to amount of fuel combusted expressed as terajoules based on net calorific value (NCV)) *Emission Factor*Oxidation Factor as given in the The Monitoring and Reporting Regulation (Commission Regulation (EU) No. 601/2012 of 21 June 2012) (hereinafter the "MRR"). The installation can avail of the provisions set out in Article 47 of the MRR as its emissions are less than 25,000 tonnes per annum. The data collection and calculation of installation CO2 emissions is governed by site EMS Procedures, SOP - 24808 – “Greenhouse Gas Emissions Monitoring and Reporting".

For natural gas (NG-001) data collection, supplier bills are collected and the gas consumption in gross kWh is used as the initial basis for activity data. Reference is also made to the corresponding monthly volumetric value (m^3) from the gas supplier. For net calorific value conversion of natural gas, the gross to net gas calorific value conversion method specified by the Agency is used. Emission factors and oxidation factors are taken from the annual "Country Specific Net Calorific Values and CO2 Emission Factors for use in the Annual Installation Emissions Report" document issued by the Agency. Natural gas is metered at several metering points with consumption amounts detailed in the monthly bill for the site.

Diesel / Gas Oil (D-001) is classified as a de minimis source. Diesel is accounted for by systematically recording all deliveries and metered distribution to the various points of use. For the Building 5 Bowser Diesel Tank, Measurement Device Reference: WMI 16849, the annual diesel consumption shall be determined from fuel transfers out of the tank, recorded in stock logs. For all other diesel tanks listed below, a mass balance approach shall be used, where the annual fuel consumption is determined from stock level changes and purchased fuel.

- Old CUB Diesel Tank (Plant ID: TA-25142). Measurement Device Reference: WMI 13218.

- New CUB Diesel Tank (Plant ID: TA-40509). Measurement Device Reference: WMI 15747.

- Generator Diesel Tank (TA-41726). Measurement Device Reference: (Level Probe).

Density for diesel is taken from supplier Data Sheet. Net calorific value, emission factor and oxidation factor are taken from the annual "Country Specific Net Calorific Values and CO2 Emission Factors for use in the Annual Installation Emissions Report" document issued by the Agency.

For LPG (LPG-001), the total annual CO2 emission for LPG is generally expected to be in the order of .5 tonne out of a typical site emission of ~ 15,000 tonnes of CO2 and is thus a de-minimis source. Approved purchase orders are used for the tracking of deliveries of LPG cylinders as this is the only place the quantities of LPG appears on Pfizer's data collection system. Annual consumption of LPG at the site is conservatively estimated at 68 kg (i.e. 2 x 34 kg bottles) per year. Net calorific value, emission factor and oxidation factor are taken from the annual "Country Specific Net Calorific Values and CO2 Emission Factors for use in the Annual Installation Emissions Report" document issued by the Agency.

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
NG-001	A1-11,A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A3-317,A3-324,A3-325,A3-335,A3-336	Serial No. 3401129433	Turbine meter	0-5000	standard cubic meters/h	1.414	Bord Gais Boiler supply meter
D-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11	WMI 13218	Level gauge	0-100	%	5	Old CUB Diesel Tank (Plant ID: TA-25142)
D-001	A4-101,A4-102,A4-103,A4-104,A4-105,A4-122,A4-123,A4-124,A4-125,A4-140,A4-232	WMI 16849	Liquid flowmeter	20-80	litres	5	Building 5 Bowser Diesel Tank
LPG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11	N/A	2 Cylinders per annum	N/A	N/A	N/A	N/A
D-001	A4-121	Truck meter	Flow Meter	0 - 15,000	Litre	5	Commercial Supply Tanker on-board meter
D-001	A4-121	Level Probe	Level Probe	0 - 6000	Litre	5	Generator Diesel Tank (TA41726)
NG-001	A1-10(c)	80125405	Turbine meter	32-650	Standard cubic meters /h	1.414	Gas Networks Ireland CCHP supply meter.

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
NG-001	Serial No. 3401129433	Continual	Trade partner	Yes	Yes	Yes
D-001	WMI 13218	Continual	Operator	Yes	N/A	N/A
D-001	WMI 16849	Batch	Operator	Yes	Yes	Yes
LPG-001	N/A	Batch	Operator	Yes	Yes	Yes
D-001	Truck meter	Batch	Trade partner	Yes	Yes	Yes
D-001	Level Probe	Batch	Operator	Yes	N/A	N/A
NG-001	80125405	Continual	Trade partner	Yes	Yes	Yes

t. Applied Tiers

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

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

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

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

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

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

* 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)
NG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A3-317,A3-324,A3-325,A3-335,A3-336,A1	80125405,Serial No. 34011 29433	<1.5%	Standard	4	2b	2a	N/A	1	N/A	N/A	19995	99.85	Major	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)
	-10(c)																
D-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A4-101,A4-102,A4-103,A4-104,A4-105,A4-121,A4-122,A4-123,A4-124,A4-	Level Probe, Truck meter, WMI 13218, WMI 16849	N/A	Standard	No tier	2a	2a	N/A	1	N/A	N/A	30	0.15	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)
	125,A4-140,A4-232																
LPG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11	N/A	N/A	Standard	No tier	2a	2a	N/A	1	N/A	N/A	0.5	0	De-minimis	Yes	n/a	n/a

Total Estimated Emissions for Calculation (tonnes $CO_{2(e)}$) 20025.5

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
NG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A3-317,A3-324,A3-325,A3-335,A3-336,A1-10(c)	4	2b	2a	N/A	1	N/A	N/A
D-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A4-101,A4-102,A4-103,A4-104,A4-105,A4-121,A4-122,A4-123,A4-124,A4-125,A4-140,A4-232	No tier	2a	2a	N/A	1	N/A	N/A
LPG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11	No tier	2a	2a	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)
NG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A3-317,A3-324,A3-325,A3-335,A3-336,A1-10(c)	EF	Ireland's National Greenhouse Gas Inventory	n/a
NG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A3-317,A3-324,A3-325,A3-335,A3-336,A1-10(c)	OxF	Ireland's National Greenhouse Gas Inventory	1
D-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A4-101,A4-102,A4-103,A4-104,A4-105,A4-121,A4-122,A4-123,A4-124,A4-125,A4-140,A4-232	NCV	Ireland's National Greenhouse Gas Inventory	n/a
D-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A4-101,A4-102,A4-103,A4-104,A4-105,A4-121,A4-122,A4-123,A4-124,A4-125,A4-140,A4-232	EF	Ireland's National Greenhouse Gas Inventory	n/a
D-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11,A4-101,A4-102,A4-103,A4-104,A4-105,A4-121,A4-122,A4-123,A4-124,A4-125,A4-140,A4-232	OxF	Ireland's National Greenhouse Gas Inventory	1
LPG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-8,A1-11	NCV	Ireland's National Greenhouse Gas Inventory	n/a
LPG-001	A1-3,A1-4,A1-5,A1-6,A1-7,A1-	EF	Ireland's National Greenhouse	n/a

Source Stream Refs.	Emission Source Refs.	Parameter	Reference Source	Default Value applied (where appropriate)
	8,A1-11		Gas Inventory	
LPG-001	A1-11,A1-3,A1-4,A1-5,A1-6,A1-7,A1-8	OxF	Ireland's National Greenhouse Gas Inventory	1

Sampling and Analysis

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

11. Management

x. Monitoring and Reporting Responsibilities

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

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

Job Title / Post	**Responsibilities**
Engineering - Energy Lead	The Energy Lead is responsible for: (1) In association with the Utilities Department and the EHS Department: (a) Reviewing all atmospheric emission points at the site to include an assessment of the contents of the associated exhaust gases to identify any GHG emissions which are within the scope of the GHG Emissions Permit. (b) determining whether any proposed changes to activities associated with the combustion of natural gas, diesel and propane may impact on the CO2 allocation for the site (2) Maintaining the Annual Emissions Monitoring Plan. (3) Monitoring and reviewing natural gas bills on a monthly basis to ensure that there are no anomalies in the data. (4) Calculation of monthly carbon dioxide emissions in accordance with Section 4E of this procedure. (5) Reviewing the monthly CO2 emissions and comparing to CO2 allowances for the given 12 month period for the Newbridge site. (6) Preparation of reports required by the GHG Emissions Permit including. (a) Checking information contained on the Environmental Protection Agency (EPA) Emissions Trading website for new and updates in particular revised fuel factors for industrial users. (b) Appointing the external verifier to ensure all reported results are in compliance with the GHG Emissions Permit.

Job Title / Post	**Responsibilities**
	(7) Maintaining a GHG Risk Assessment. (8) Identifying and implementing energy saving projects where feasible.
Engineering - Utilities Department	The Utilities Department is responsible for: (1) Ensuring that all GHG emission sources at the site are identified and that this information is presented to the Energy Lead. (2) Ensuring that all fuel metering equipment associated with this procedure (equipment listed in the Annual Emissions Monitoring Plan Annual Emissions Monitoring Plan) is on the site calibration management system and properly maintained. (3) Ensuring that diesel usage is recorded and forwarded to the Energy Lead.
EHS Department	The EHS Department is responsible for: (1) Issue of reports, including the Annual Installation Emissions Report, required by the GHG Emissions Permit to the EPA. (2) Liaising with the EPA on any issues and correspondence relating to the GHG Emissions Permit including any proposed changes to activities associated with the combustion of natural gas, diesel and propane which may impact on the CO2 allocation for the site. (3) Co-ordinating the surrender and transfer of allowances to ensure compliance with the GHG Emissions Permit. (4) Providing representatives as signatories for the Emissions Trading Registry Account.

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

y. Assignment of Responsibilities

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

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 2 of SOP-24808 outlines the assignment of responsibilities for greenhouse gas emissions monitoring and reporting. Section 4A 'Assignment of Responsibilities' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: (1) In accordance with SOP-24442 (procedure for management of training) personnel with responsibilities assigned to them within a written procedure (Standard Operating Procedure - SOP) are trained following reading and subsequent sign-off of understanding the content of the procedure. (2) In accordance with SOP-24352 and SOP-25208 (procedures for maintaining documentation systems) SOPs are updated on a pre-determined time interval or following changes to roles or activities associated with the SOP.
Post or department responsible for the procedure and for any data generated	Training Department, Energy Lead
Location where records are kept	Training
Name of IT system used	PLS (training records), PDOCS (procedures)
List of EN or other standards applied	N/A

z. Monitoring Plan Appropriateness

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A

Brief description of procedure. The description should cover the essential parameters and operations performed	Section 2B 'Responsibilities' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: The Energy Lead is responsible for: (1) In association with the Utilities Department and the EHS Department: (a) Reviewing all atmospheric emission points at the site to include an assessment of the contents of the associated exhaust gases to identify any GHG emissions which are within the scope of the GHG Emissions Permit. (b) determining whether any proposed changes to activities associated with the combustion of natural gas, diesel and propane may impact on the CO2 allocation for the site Section 4B 'Changes in Operation' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: (1) In accordance with SOP-24359 (procedure for managing change on site) the Engineering and EHS Departments will be notified of any change to the nature of on-site atmospheric emissions, abatement/treatment or recovery systems, range of processes or fuels used, by the individual initiating the change. These changes will be reviewed by the EHS Department and an appropriate response initiated. Any changes that require an update to the GHG Emissions Permit will be coordinated by the Energy Lead. (2) Any changes in legislation dealing with Greenhouse Gases or Emissions Trading will be captured by SOP-24119 (procedure for maintaining the register of EHS legislation) and SOP-25024 (procedure for maintaining the energy management system) and. These changes will be reviewed by the EHS and Engineering Department and an appropriate response initiated. Any changes that require an update to the site GHG Emissions Permit will be co-ordinated by the Energy Lead. (3) Any proposed changes to activities associated with the combustion of natural gas, diesel and propane which may impact on the CO2 allocation for the site will be submitted to the EPA by 31st December each year.
Post or department responsible for the procedure and for any data generated	Energy Lead, EHS Department
Location where records are kept	Engineering, EHS
Name of IT system used	PDOCS (procedures), Trackwise (change control)
List of EN or other standards applied	N/A

aa. Data Flow Activities

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' outlines the requirements for recording, collection, calculation & quality assurance of data relating to the monitoring and reporting of Greenhouse Gas (carbon dioxide) which is created wherever there is combustion of a fossil fuel source i.e. for the Newbridge site the applicable fossil fuels include natural gas, diesel & propane. This procedure is required to ensure compliance with the site GHG Emissions Permit. Items addressed in the procedures include: (i) Responsibilities; (ii) Assignment of Responsibilities; (iii) Changes in Operation; (iv) Measurements; (v) Annual Installation Emissions Report; (vi) Calculations - Natural Gas, Diesel, Propane; (vii) Maintenance and Calibration of Measurement Equipment - Diesel, Natural Gas; (viii) Data Management & Record Keeping; (ix) Corrective and Preventative Action; (x) Surrender of Allowances.
Post or department responsible for the procedure and for any data generated	Energy Lead
Location where records are kept	Engineering, EHS
Name of IT system used	Microsoft Excel
List of EN or other standards applied	N/A
List of primary data sources	Natural Gas - supplier invoices Diesel - calculation based on a combination of supply tanker meter readings, holding tank level measurements by probe and correlation of supplier invoices / delivery documentation as supporting information. Propane - calculations based on worst case usage with supplier invoices as supporting information
Description of the relevant processing steps for each specific data flow activity.	Section 4E 'Calculations' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states:
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	(1) Activity Data In accordance with Article 19 of the Commission Monitoring and Reporting Regulation the Newbridge site is a 'Category A' installation i.e. average reported annual emissions equal to or less than 50,000 tonnes of CO2. The calculations outlined herein are therefore in accordance with the Tiers to be applied for calculation-based methodologies in the case of category A installations i.e.

Annex V of the Commission Monitoring and Reporting Regulation for 'Combustion of fuels' for the activity 'commercial standard fuels' and, where applicable, sections 1, 2.1, 2.2 and 2.3 of Annex II of the Commission Monitoring and Reporting Regulation.

(2) In accordance with Article 24(1) of the Commission Monitoring and Reporting Regulation combustion emissions are calculated per source stream (i.e. natural gas, diesel and propane) by multiplying the activity data related to the amount of fuel combusted, expressed as terajoules based on net calorific value (NCV), with the corresponding emission factor, expressed as tonnes CO2 per terajoule (t CO2 /TJ) consistent with the use of NCV, and with the corresponding oxidation factor.

(3) Natural Gas (calculations based on supplier invoices)

(4) Diesel (calculation based on a combination of supply tanker meter readings, holding tank level measurements by probe and correlation of supplier invoices / delivery documentation as supporting information.)

(5) Propane (calculations based on worst case usage with supplier invoices as supporting information)

All calculations will be completed on an Excel spreadsheet.

Submit relevant documents to record data flow activities

Attachment	**Description**
WMIF3805 Fuel Level Checks_8th December 2016 .doc	Fuel Level Checks

bb. Assessing and Controlling Risks

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 2B 'Responsibilities' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: (1) The Energy Lead is responsible for Maintaining a GHG Risk Assessment.

Post or department responsible for the procedure and for any data generated	Energy Lead
Location where records are kept	Engineering
Name of IT system used	Microsoft Word
List of EN or other standards applied	N/A

cc. Quality Assurance of Metering / Measuring Equipment

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 4F 'Maintenance & Calibration of Measurement Equipment' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: (1) Diesel Calibration (and maintenance) of diesel storage/supply tanks (equipment listed in the Annual Emissions Monitoring Plan document) is controlled under the site calibration management system. The calibrations will be initiated when the site calibration management system issues the work order to carry out the calibration. The calibration frequency will be entered into the site calibration management system and the calibrations will be executed at that frequency. An integrated level probe, used at Emissions Point A4-121 / TA41726 (Electrical Generator - 3C), will be verified annually by volumetric testing; Reference Pfizer Maintenance Document 'Verification of Diesel Tank Measurement : WMI No: GE 41726 / TA41726 (3C Generator)' (2) Natural Gas Bord Gais are responsible for the maintenance, calibration and repair where required of the: site (a) Natural gas supply meters; and, (b) Above Ground Installation(s),
Post or department responsible for the procedure and for any data generated	Engineering (Calibration)
Location where records are kept	Engineering
Name of IT system used	EAMS
List of EN or other standards applied	N/A

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

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 4G 'Data Management & Record Keeping' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: (4) In addition to corporate policy WTSO-0958 (relates to disaster recovery management) the site has established and maintains procedures relating to Quality Assurance of Information Technology (IT) products and services, including SOP-24864 and SOP-24364 (procedures for the control of IT Applications), SOP-24885 (procedure for controlling security access to information assets). These procedures cover the initial development, testing and implementation of new IT products and services as well as the production support and maintenance of these products and services which includes: (a) access control (user access, change of roles, disabling of users who no longer warrant access rights to the system, or updating the user's access level) & security (includes physical entry into areas in which computerised systems are located and physical connections to computerised systems). (b) data back-up (for accidental or malicious loss of data). (c) disaster recovery.
Post or department responsible for the procedure and for any data generated	Business Technology
Location where records are kept	Business Technology
Name of IT system used	Various
List of EN or other standards applied	N/A

ee. Review and Validation of Data

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting

Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 2B 'Responsibilities' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: The Energy Lead is responsible for: (2) Maintaining the Annual Emissions Monitoring Plan. (3) Monitoring and reviewing natural gas bills on a monthly basis to ensure that there are no anomalies in the data. (4) Calculation of monthly carbon dioxide emissions in accordance with Section 4E of this procedure. (5) Reviewing the monthly CO2 emissions and comparing to CO2 allowances for the given 12 month period for the Newbridge site. (7) Checking information contained on the Environmental Protection Agency (EPA) Emissions Trading website for new and updates in particular revised fuel factors for industrial users.
Post or department responsible for the procedure and for any data generated	Energy Lead
Location where records are kept	Engineering
Name of IT system used	N/A
List of EN or other standards applied	N/A

ff. Corrections and Corrective Actions

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 4H 'Corrective and Preventative Action' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: (1) Areas of non-conformance against the GHG Emissions Permit may be identified through: (a) Results of monitoring, measurement, calibration or calculation conducted as per the requirements of the site GHG Emissions Permit.

	(b) Results of external and internal audits and inspections. (c) Deviations from Energy and EHS Management Programmes including any associated Energy and EHS targets. (d) Trends observed during the analysis of energy data including monitoring data and audit findings. (2) Non-conformances associated with the site GHG Emissions Permit are documented through an appropriate recording system (via a tracking database or spreadsheet for internal recording and follow up purposes or centralised management system). (3) Closure of non-conformances via appropriate investigation, corrective and/or preventive actions are tracked by the Energy Lead and the EHS Department.
Post or department responsible for the procedure and for any data generated	Engineering, EHS
Location where records are kept	Engineering, EHS
Name of IT system used	N/A
List of EN or other standards applied	N/A

gg. Control of Outsourced Activities

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 2F 'Responsibilities' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: The Calibration Department is responsible for: (1) Ensuring that all fuel metering equipment associated with this procedure (equipment listed in the Annual Emissions Monitoring Plan Annual Emissions Monitoring Plan) is calibrated in accordance with Section 4F of this procedure.
Post or department responsible for the procedure and for any data generated	Engineering (Calibration)
Location where records are kept	Engineering
Name of IT system used	N/A
List of EN or other standards applied	N/A

hh. Record Keeping and Documentation

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 4G 'Data Management & Record Keeping' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: (1)The site has established and maintains procedures on documentation control in accordance with SOP-24352 and SOP-25208 (procedures for maintaining documentation systems). Records control is an integral part of the site energy management system (SOP-25024). Records associated with the GHG Emissions Permit include natural gas bills, diesel bills, fuel consumption logs (WMIF 3805 "Fuel Level Checks"), calibration records, training records and the results of audits. (2) All records must be legible, dated, identifiable and traceable to the product or service involved. (3) All documentation relating to the GHG Emissions Permit (as listed in Annex IX of the Monitoring and Reporting Regulation) is retained for a period of no less than 10 years after which this information is disposed in accordance with site waste management procedures.
Post or department responsible for the procedure and for any data generated	Engineering (Utilities), EHS
Location where records are kept	Engineering, EHS
Name of IT system used	N/A
List of EN or other standards applied	N/A

ii. Risk Assessment

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

Attachment	Description
N/A	N/A

jj. Environmental Management System

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

12. Changes in Operation

kk. Changes in Operation

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

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

The procedure specified below cover the following:

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

Title of procedure	Greenhouse Gas Emissions Monitoring and Reporting
Reference for procedure	SOP-24808
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Section 2B 'Responsibilities' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: The Energy Lead is responsible for: (1)In association with the Utilities Department and the EHS Department:

	(a)Reviewing all atmospheric emission points at the site to include an assessment of the contents of the associated exhaust gases to identify any GHG emissions which are within the scope of the GHG Emissions Permit. (b)determining whether any proposed changes to activities associated with the combustion of natural gas, diesel and propane may impact on the CO2 allocation for the site Section 4B 'Changes in Operation' of SOP-24808 'Greenhouse Gas Emissions Monitoring and Reporting' states: (1) In accordance with SOP-24359 (procedure for managing change on site) the Engineering and EHS Departments will be notified of any change to the nature of on-site atmospheric emissions, abatement/treatment or recovery systems, range of processes or fuels used, by the individual initiating the change. These changes will be reviewed by the EHS Department and an appropriate response initiated. Any changes that require an update to the GHG Emissions Permit will be coordinated by the Energy Lead. (2) Any changes in legislation dealing with Greenhouse Gases or Emissions Trading will be captured by SOP-24119 (procedure for maintaining the register of EHS legislation) and SOP-25024 (procedure for maintaining the energy management system) and. These changes will be reviewed by the EHS and Engineering Department and an appropriate response initiated. Any changes that require an update to the site GHG Emissions Permit will be co-ordinated by the Energy Lead. (3) Any proposed changes to activities associated with the combustion of natural gas, diesel and propane which may impact on the CO2 allocation for the site will be submitted to the EPA by 31st December each year using the application form for amending amounts allocated free of charge, located on the EPA website.
Post or department responsible for the procedure and for any data generated	Engineering, EHS
Location where records are kept	Engineering, EHS
Name of IT system used	N/A

13. Abbreviations

ll. 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
Diesel Tank_Verification of Tank Level Measurement.docx	Verification of Diesel Tank Measurement (TA41726)
Wyeth Newbridge Metering Summary 2017.pdf	2017 NG Meter calibration Report
Evidence of Decommissioning.pdf	Evidence of Decommissioning MTHW Boiler for A1-3
SOP-24808 V9.pdf	Greenhouse Gas Emissions Monitoring & Reporting SOP
Technical Specifications A1-3 & A1-10(c).pdf	Evidence of Thermal Input Capacity
Elster TRZ2 Datasheet EN(1).pdf	New turbine gas meter (Elster® TRZ2) technical specification sheet
Meter 80125405.pdf	Meter Serial No. 80125405 Installation Certificate
Gas meters uncertainty calculations 08-11-19.xls	Gas meters uncertainty calculations
Final GHG Variation Summary Pfizer 05-12-19.pdf	Summary of variation changes and anticipated start dates for CCHP and boiler

15. Confidentiality

mm. Confidentiality Statement

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

In the event that you considered that some of the information being submitted of a confidential nature, then the nature of this information and the reasons why it should be considered confidential, with reference to the European Communities (Access to Information on the Environment) Regulations 2007 to 2011 and any

amendments must be explicitly requested using the facility below. The Board of the Environmental Protection Agency will consider the requests and if the information can be deemed as confidential and necessary.

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

Please tick this box if you consider that any part of your form should be treated as commercially confidential/sensitive:	false

END of Appendix I.