Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

GREENHOUSE GAS EMISSIONS PERMIT

Permit Register Number: IE-GHG004-10337-3

Operator: Medite Europe Designated Activity Company
Redmondstown
Clonmel
Tipperary
E91V584

Installation Name: Medite Europe DAC

Site Name: MEDITE Europe DAC

Location: Redmondstown
Clonmel
Tipperary
Ireland

Introductory Note

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

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

Contact with Agency:

If you contact the Agency about this Greenhouse Gas Emissions Permit please quote the following reference: Greenhouse Gas Emissions Permit Nº IE-GHG004-10337.

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
P0027-04

Status Log

Current Permit

Permit number	Date application received	Date Permit issued	Comment
IE-GHG004-10337-3	09 October 2017	14 February 2018	Include 4 source streams; Wax, MDI - Methylene diphenyl diisocyanate, UF Resin and Release Agent. Update the Operator name to Medite Europe Designated Activity Company and installation name to Medite Europe DAC.

Previous Permits

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG004-10337-1	GHG Permit Application	05 July 2013	06 September 2013	
IE-GHG004-10337-2	GHG Variation	12 October 2015	15 January 2016	Wood biomass source stream split into 4 source streams WB-1,WB-2,WB-3,WB-4. The activity data tier for De-minimis LPG has been updated to no tier.

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)	Medite Europe Designated Activity 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 issues this Greenhouse Gas Emissions Permit, subject to any subsequent revisions, corrections or modifications it deems appropriate, to:

The Operator:

Medite Europe Designated Activity Company
Redmondstown
Clonmel
Tipperary
E91V584

Company Registration Number: 80984

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):

Medite Europe DAC **Installation number:** 4

located at

Redmondstown
Clonmel
Tipperary
Ireland

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

Conditions

Condition 1. The Permitted Installation

1.1 This permit is being granted in substitution for the previous GHG permit granted to the Operator as listed in the Status Log of this GHG permit.

1.2 The Operator is authorised to undertake the activities and/or the directly associated activities specified in Table 1 below resulting in the emission of carbon dioxide:

Table 1 - Activities which are listed in Schedule 1 of the Regulations and other directly associated activities carried out on the site:

Installation No.: 4

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
(S1) Wastewater Treatment

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
WB-01	Boiler No.1 Line 1	21.9	MW
WB-02	Boiler No.2 Line 1	21.9	MW
WB-03	Wood Biomass Boiler Line 2	19.2	MW
NG-01	Natural Gas Fuelled Heater	7	MW
FP-01	Diesel Engine Fire Pump	0.16	MW
EG-01	Diesel Engine Generator Line 1	0.31	MW
HP-01	Diesel Engine Hydraulic Pump Line 2	0.03	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
CP-01	Diesel Engine Thermal Oil Cooling Pump Line 2	0.02	MW

1.4 The activity shall be controlled, operated and maintained so that emissions of carbon dioxide shall take place only as set out in this GHG Emissions Permit. The permit does not control emissions of gases other than carbon dioxide. All agreed plans, programmes and methodologies required to be carried out under the terms of this permit, become part of this permit.

1.5 This GHG Permit is for the purposes of GHG emissions permitting under the European Communities (Greenhouse Gas Emissions Trading) Regulations 2012 and any amendments to the same only and nothing in this permit shall be construed as negating the Operator's statutory obligations or requirements under any other enactments or regulations unless specifically amended by the Regulations.

1.6 Any reference in this permit to 'installation' shall mean the installation as described in the Greenhouse Gas Emissions Permit application and any amendments approved by the Agency.

Reason: To describe the installation and clarify the scope of this permit.

Condition 2. Notification

2.1 No alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in a change in:

2.1.1 the nature or functioning of the installation;

2.1.2 the capacity of the installation as detailed in this permit;

2.1.3 the fuels used at the installation;

2.1.4 the range of activities to be carried out at the installation

that may require updating of the GHG permit shall be carried out or commenced without prior notice to and without the prior written agreement of the Agency.

2.2 The Operator shall notify the Agency in writing of the cessation of all or part of any activity listed in Table 1 of this permit no later than one month from the date of cessation or by 31 December of the year of cessation, whichever is sooner.

2.3 The Operator shall apply for an update of this GHG Permit where there is a change to the Operator name and/or registered address of the Operator, within seven days of the change.

2.4 For installations or parts of installations which have not come into operation when the application for this permit was made the Operator shall notify the Agency of the date of commencement of the activity within seven days of commencement.

2.5 The Operator shall notify the Agency in writing within three days of becoming aware of any factors which may prevent compliance with the conditions of this permit.

2.6 The Operator shall submit to the Agency by 21 January of each year a declaration of operability. The declaration submitted shall be in the format required by the Agency.

2.7 All notifications required under Condition 2 above shall be made to the address given in the Explanatory Note included with this permit.

2.8 The Operator shall submit to the Agency by 31 December of each year all relevant information about any planned or effective changes to the capacity, activity level and operation of an installation. The information submitted shall be in the format required by the Agency.

Reason: To provide for the notification of updated information on the activity.

Condition 3. Monitoring and Reporting

3.1 The Operator shall monitor and record greenhouse gas emissions on site in accordance with the M&R Regulation and the approved Monitoring Plan attached at Appendix 1 to this GHG permit and in compliance with any other guidance approved by the Agency for the purposes of implementing the Directive and/or the Regulations.

3.2 The Operator shall modify the monitoring plan in any of the following situations:

3.2.1 new emissions occur due to new activities carried out or due to the use of new fuels or materials not yet contained in the monitoring plan;

3.2.2 the change of availability of data, due to the use of new measurement instrument types, sampling methods or analysis methods, or for other reasons, leads to higher accuracy in the determination of emissions;

3.2.3 data resulting from the previously applied monitoring methodology has been found incorrect;

3.2.4 changing the monitoring plan improves the accuracy of the reported data, unless this is technically not feasible or incurs unreasonable costs;

3.2.5 the monitoring plan is not in conformity with the requirements of the M&R Regulation and the Agency requests a change;

3.2.6 it is necessary to respond to the suggestions for improvement of the monitoring plan contained in the verification report.

The Operator shall notify any proposals for modification of the monitoring plan to the Agency without undue delay. Any significant modifications of the monitoring plan, as defined in Article 15 of the M&R Regulation, shall be subject to approval by the Agency. Where approved these changes shall be implemented within a timeframe agreed by the Agency.

3.3 Temporary changes to the monitoring methodology:

3.3.1 Where it is for technical reasons temporarily not feasible to apply the tier in the monitoring plan for the activity data or each calculation factor of a fuel or material stream as approved by the Agency, the Operator shall apply the highest achievable tier until the conditions for application of the tier approved in the monitoring plan have been restored. The Operator shall take all necessary measures to allow the prompt restoration of the tier in the approved monitoring plan. The Operator shall notify the temporary change to the monitoring methodology without undue delay to the Agency specifying:

(i) The reasons for the deviation from the tier;

(ii) in detail, the interim monitoring methodology applied by the Operator to determine the emissions until the conditions for the application of the tier in the monitoring plan have been restored;

(iii) the measures the Operator is taking to restore the conditions for the application of the tier in the approved monitoring plan;

(iv) the anticipated point in time when application of the approved tier will be resumed.

3.3.2 A record of all non-compliances with the approved monitoring plan shall be maintained on-site and shall be available on-site for inspection by authorised persons of the Agency and/or by the Verifier at all reasonable times.

3.4 The Operator shall appoint a Verifier to ensure that, before their submission, the reports required by Condition 3.5 below are verified in accordance with the criteria set out in Schedule 5 of the Regulations, the A&V Regulation and any more detailed requirements of the Agency.

3.5 The written report of the verified annual reportable emissions and the verification report in respect of each calendar year shall be submitted to the Agency by the Operator no later than 31 March of the following year. The reports shall be in the format required by the Agency and meet the criteria set out in the M&R and A&V Regulations.

3.6 The Operator shall enter the verified annual reportable emissions figure for the preceding year into the Registry no later than 31 March of the following year. This figure shall be electronically approved by the Verifier in the registry no later than 31 March of each year.

3.7 Where an Operator is applying the Fall-Back methodology, the Operator shall assess and quantify each year the uncertainties of all parameters used for the determination of the annual emissions in accordance with the ISO Guide to the Expression of Uncertainty in Measurement or another equivalent internationally accepted standard and include the verified results in the written report of the verified annual reportable emissions to be submitted to the Agency by 31 March each year.

3.8 An Operator shall submit to the Agency for approval a report containing the information detailed in (i) or (ii) below, where appropriate, by the following deadlines:

(a) for a category A installation, by 30 June every four years;

(b) for a category B installation, by 30 June every two years;

(c) for a category C installation, by 30 June every year.

(i) Where the Operator does not apply at least the tiers required pursuant to the first subparagraph of Article 26(1) and to Article 41(1) of the M&R Regulation, the Operator shall provide a justification as to why it is technically not feasible or would incur unreasonable costs to apply the required tiers. Where evidence is found that measures needed for reaching those tiers have become technically feasible and do not incur unreasonable costs, the Operator shall notify the Agency of appropriate modifications to the monitoring plan and submit proposals for implementing appropriate measures and its timing.

(ii) Where the Operator applies a fall-back monitoring methodology, the Operator shall provide a justification as to why it is technically not feasible or would incur unreasonable costs to apply at least tier 1 for one or more major or minor source streams. Where evidence is found that measures needed for reaching at least tier 1 for those source streams have become technically feasible and do not incur unreasonable costs, the Operator shall notify the Agency of appropriate modifications to the monitoring plan, submit proposals and a timeframe for implementing appropriate measures.

3.9 Where the verification report states outstanding non conformities, misstatements or recommendations for improvements the Operator shall submit a report to the Agency for approval by 30 June of the year in which the verification report is issued. This requirement does not apply to the Operator of an installation with low emissions where the verification report contains recommendations for improvements only. The report shall describe how and when the Operator has rectified or plans to rectify the non-conformities identified and to implement recommended improvements. Where recommended improvements would not lead to an improvement of the monitoring methodology this must be justified by the Operator. Where the recommended

improvements would incur unreasonable costs the Operator shall provide evidence of the unreasonable nature of the costs. The Operator shall implement the improvements specified by the Agency in response to the report submitted in accordance with this Condition in accordance with a timeframe set by the Agency.

3.10 The Operator shall make available to the Verifier and to the Agency any information and data relating to emissions of carbon dioxide which are required in order to verify the reports referred to in Condition 3.5 above or as required by the Agency to facilitate it in establishing benchmarks and/or best practice guidance.

3.11 Provision shall also be made for the transfer of environmental information, in relation to this permit, to the Agency's computer system, as may be requested by the Agency.

3.12 The Operator shall retain all information as specified in the M&R Regulation for a period of at least 10 years after the submission of the relevant annual report.

3.13 A record of independent confirmation of capacities listed in this permit shall be available on-site for inspection by authorised persons of the Agency at all reasonable times.

3.14 The Operator shall keep records of all modifications of the monitoring plan. The records shall include the information specified in Article 16.3 of the M&R Regulation.

3.15 The Operator shall ensure that members of the public can view a copy of this permit and any reports submitted to the Agency in accordance with this permit at all reasonable times. This requirement shall be integrated with the requirements of any public information programme approved by the Agency in relation to any other permit or licence held by the Operator for the site.

Reason: To provide for monitoring and reporting in accordance with the Regulations.

Condition 4. Allowances

4.1 Surrender of Allowances

4.1.1 The Operator shall, by 30 April in each year, surrender to the Agency, or other appropriate body specified by the Agency, allowances equal to the annual reportable emissions in the preceding calendar year.

4.1.2 The number of allowances to be surrendered shall be the annual reportable emissions for the preceding calendar year plus such allowances as may be necessary to cover any earlier calendar year in respect of which allowances remain outstanding and due. This includes allowances to cover the amount of any annual reportable emissions in respect of which allowances were not surrendered in accordance with Condition 4.1.1 in the previous year, and the amount of any reportable emissions which were discovered during the previous year to have been unreported in reports submitted under Condition 3 in that or in earlier years.

4.1.3 In relation to activities or parts of activities which have ceased to take place and have been notified to the Agency in accordance with Condition 2.2 above, the Operator shall surrender to the Agency allowances equal to the annual reportable emissions from such activities in the preceding calendar year or part thereof, together with such allowances as may be necessary to cover any earlier calendar year in respect of which allowances remain outstanding and due as described in Condition 4.1.2 above.

4.1.4 The Operator may, from 2008 onwards, subject to the provisions of the Regulations and the relevant National Allocation Plan for that compliance year, surrender emission reduction units (ERUs) and certified emission reduction units (CERs) in place of allowances.

4.2 The holding, transfer, surrender and cancellation of allowances shall be in accordance with the requirements of any Regulations adopted as provided for under Article 19.3 of Directive 2003/87/EC, any amendment or revision to the same and any guidance issued by the Agency or the National Administrator.

4.3 The Operator shall provide the National Administrator with all the necessary information for the opening of an Operator holding account for the installation described in Condition 1 of this permit within twenty working days of the issue of this permit, unless such an account is already open.

Reason: *To provide for the surrendering, holding, transfer and cancellation of allowances in respect of reported emissions.*

Condition 5. Penalties

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

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

Sealed by the seal of the Agency on this the 14 February 2018:

PRESENT when the seal of the Agency was affixed hereto:

_____

Ms. Annette Prendergast
Inspector/ Authorised Person

Appendix 1 to Greenhouse Gas Emissions Permit Number IE-GHG004-10337

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	Medite Europe DAC
Site name	MEDITE Europe DAC
Address	Redmondstown Clonmel Tipperary Ireland
Grid reference of site main entrance	E224232 N123976
Licence held pursuant to the Environmental Protection Agency Act 1992, as amended.	Yes

IPC/IE Licence Register Number	Licence holder	Competent body
P0027-04	MEDITE Europe DAC	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	Medite Europe Designated Activity Company
Company Registration Number	80984

Operator Legal status

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

(c) Company / Corporate Body

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

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

Title	[redacted]
Forename	[redacted]
Surname	[redacted]
Position	Environmental Manager

Registered office address

Address Line 1	Redmondstown
Address Line 2	N/A
City/Town	Clonmel
County	Tipperary
Postcode	E91V584

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?	Yes
Holding company name	Coillte Cuideachta Ghniomhaiochta Ainmnithe

Holding company address

Address Line 1	Dublin Road
Address Line 2	N/A
City/Town	Newtownmountkennedy
County	Wicklow
Postcode	N/A
Company registration number	138108
Is the holding company principal address different to the	No

holding company address?

(d) Operator Authority

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

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

4. Service Contact

e. Service Contact

Name [redacted]

Address / Email Address [redacted]

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:

Carbon dioxide emissions from the Medite Europe Medium Density Fibreboard (MDF) manufacturing plant in Clonmel, Co.Tipperary are generated by combustion in process heating installations for each of two production lines. The process heating installations are as follows:-

1. Boiler No:1, supplying heat to Production Line:1

2. Boiler No:2, supplying heat to Production Line:1

3. Thermal oil Heater, supplying heat to Production Line:1

4. Combined Energy Plant supplying heat to Production Line:2

Technology used. Boiler No:1, Boiler No:2 are not exclusively Wood Biomass solid fuel burning installations as they also have the capability to burn fossil fuels e.g. LPG Propane to provide a significant proportion of the total heat input to these boilers. The LPG propane gas burner has the potential to provide up to 50% of the boiler output. The Production line 2 Combined Energy Plant is exclusively a wood biomass boiler with no capability to burn fossil fuels. Thermal oil Heater. This unit is fuelled by natural gas.

The complete Flue gas stream from the Wood Biomass fuelled energy sources is directed into the wood fibre drying process thereby using the balance of heat energy available before discharge to atmosphere. The final dryer exhaust temperature is typically 60 degrees Celsius. The flue stacks from these units are used only for stand-up or in an emergency should the need arise.

Each system is computer controlled to maintain continuous predetermined energy outputs and efficient combustion.

Heating systems capacity.

The installed capacity for the process heating units is as follows:-

Boiler No:1. 21.9MW

Boiler No:2. 21.9MW

Energy Plant 19.2MW

Thermal oil heater. 7MW

Total Biomass fuelled heating systems 63MW

Total Fossil fuelled heating systems. 50.8MW

The heat streams to process are:-

Production Line:1 Boiler No:1 + 2 and Thermal oil Heater.

- Steam for heating used in the wood refining process
- Flue gas used in the wood fibre drying process.
- High temperature Fluid (HTF), used for heating the Board Press.

Production Line:2 Combined Energy Plant.

- Steam for heating used in the wood refining process.
- Flue gas used in the wood fibre drying process.
- High temperature Fluid (HTF), used for heating the Board Press.

The fuels used are:-

- Wood Biomass generated on site and off site
- Propane gas used as a heat input in Boiler No:1 and Boiler No:2
- Natural gas used in Production Line:1 Thermal oil Heater and also used in a safety pilot flame in Boiler No:1 and Boiler No:2

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)	70.52	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
EN-000-IPPC-003.pdf	Plant Process Flow Daiagram
EN-000-IPPC-004.pdf	Site layout with Emission points and sources

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 $CO_{2(e)}$) 9000

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
WB-01	Boiler No.1 Line 1
WB-02	Boiler No.2 Line 1
WB-03	Wood Biomass Boiler Line 2
NG-01	Natural Gas Fuelled Heater
FP-01	Diesel Engine Fire Pump
EG-01	Diesel Engine Generator Line 1
HP-01	Diesel Engine Hydraulic Pump Line 2
CP-01	Diesel Engine Thermal Oil Cooling Pump Line 2
S1	Wastewater Treatment

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

Emission Source Reference	Emission Source Description
WB-01	Boiler No.1 Line 1
WB-02	Boiler No.2 Line 1
WB-03	Wood Biomass Boiler Line 2
NG-01	Natural Gas Fuelled Heater
FP-01	Diesel Engine Fire Pump
EG-01	Diesel Engine Generator Line 1
HP-01	Diesel Engine Hydraulic Pump Line 2
CP-01	Diesel Engine Thermal Oil Cooling Pump Line 2

l. Emission Points

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

Emission Point Reference	Emission Point Description
A2-5	Core Dryer Discharge Line 1
A4-1	Emergency Stack Boiler No.1 Line 1
A2-6	Face Dryer Discharge Line 1
A4-2	Emergency Stack Boiler No.2 Line 1
A2-21	Dryer Discharge Line 2
A4-5	Emergency Stack Boiler Line 2
A4-4	Start Up Stack Boiler Line 2
A2-30	Line 1 Press Thermal Fluid Heater
A4-8	Fire Pump
A4-3	Generator
A4-6	Hydraulic Pump
A4-7	Thermal Oil Cooling Pump
WWTP	Wastewater Treatment

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
WB-1	Combustion: Solid fuels	Wood Bark
NG-1	Combustion: Other gaseous & liquid fuels	Natural Gas

Source Stream Reference	Source Stream Type	Source Stream Description
LPG-1	Combustion: Other gaseous & liquid fuels	Liquefied Petroleum Gases
D-1	Combustion: Commercial standard fuels	Diesel
F1	Other	WWTP
WB-2	Combustion: Solid fuels	Purchased Wood Fuel
WB-3	Combustion: Solid fuels	Wood Chip Fines
WB-4	Combustion: Solid fuels	Wood sander dust and trim waste
Wax	Combustion: Other gaseous & liquid fuels	Fossil Fraction of Biomass
MDI - Methylene diphenyl diisocyanate	Combustion: Other gaseous & liquid fuels	Fossil Fraction of Biomass
UF Resin	Combustion: Other gaseous & liquid fuels	Fossil Fraction of Biomass
Release Agent	Combustion: Other gaseous & liquid fuels	Fossil Fraction of Biomass

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
WB-1	WB-01,WB-02,WB-03	A2-21,A2-5,A2-6,A4-1,A4-2,A4-4,A4-5	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
NG-1	NG-01,WB-01,WB-02	A2-30,A2-5,A2-6,A4-1,A4-2	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)
LPG-1	WB-01,WB-02	A2-5,A2-6,A4-1,A4-2	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)
D-1	CP-01,EG-01,FP-01,HP-01	A4-3,A4-6,A4-7,A4-8	Combustion of fuels in

Source streams (Fuel / Material)	**Emission Source Refs.**	**Emission Point Refs.**	**Annex 1 Activity**
			installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
WB-2	WB-01,WB-02,WB-03	A2-21,A2-5,A2-6,A4-1,A4-2,A4-4,A4-5	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
WB-3	WB-01,WB-02,WB-03	A2-21,A2-5,A2-6,A4-1,A4-2,A4-4,A4-5	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
WB-4	WB-01,WB-02,WB-03	A2-21,A2-5,A2-6,A4-1,A4-2,A4-4,A4-5	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
Wax	WB-01,WB-02,WB-03	A2-21,A2-5,A2-6,A4-1,A4-2,A4-4,A4-5	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
MDI - Methylene diphenyl diisocyanate	WB-01,WB-02,WB-03	A2-21,A2-5,A2-6,A4-1,A4-2,A4-4,A4-5	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
UF Resin	WB-01,WB-02,WB-03	A2-21,A2-5,A2-6,A4-1,A4-2,A4-4,A4-5	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)
Release Agent	WB-01,WB-02,WB-03	A2-21,A2-5,A2-6,A4-1,A4-2,A4-4,A4-5	Combustion of fuels in installations with a total

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Annex 1 Activity
			rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)

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? Yes

Detail of these activities:

Source Stream Refs	Emission Source Ref	Emission Point Ref
F1	S1	WWTP

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:

Annual CO2 emissions are calculated as follows: Natural Gas (major source stream), LPG (de-minimis source stream), Diesel (de-minimis source stream), Wood Biomass (de-minimis source stream)

- Natural Gas invoices show kWh based on Gross Calorific Value. The conversion factor from gross to net calorific value is to multiply the kWh value from the invoices by the current conversion factor on the EPA website and then convert to TJ by multiplying by 3.6 x 10-6. Gas Bills show volume in m3 corrected to 288.15 Kelvin.Convert the annual actual gas volume to the standardised gas volume (Nm3) as follows:

Vs (Nm3) = (Va*273.15)/288.15

Where Vs is the standardised gas volume and Va is the actual gas volume determined from the gas bills.(Bills report at standardised pressure of 101,325 Pa, therefore no pressure correction required)

Calculate the net calorific value of the fuel (TJ/Nm3) as follows:

TJ/Nm3 = Annual TJ (as calculated above)/Annual standardised gas volume (as calculated above)

Country specific emission factors apply for natural gas. Thus the formula used for natural gas is: Activity data (TJ) x Country specific emission factor (tCO2/TJ) x Country specific oxidation factor

- LPG Propane: Weights in tonnes will be taken at site weighbridge (comparison will be made with vendor dockets which show volume delivered - average density of LPG is 507.05kg/m3). Thus the formula used for LPG Propane is:

Activity data (kilotonnes) x country specific NCV (TJ/kt) x country specific emission factor (tCO2/TJ) x country specific oxidation factor

The stocktake for LPG is taken from the Medite storage tank at the beginning of the year and again at the end of the year by the delivery person who takes the level reading in the storage tank and inserts this % tank level on the delivery docket. Medite Environmental Manager then calculates the volume in the storage tank at the beginning of the year and again at the start of the year and either subtracts or adds this volume to the volume received during the year.

- Diesel usage is de minimis <6 tonnes CO2 per year: It's formula is based on the input capacity of the pumps x operating hours. Country specific net calorific value, emission factor and oxidation factors will be used for the diesel. It is confirmed that the thermal input capacity for the diesel generator and 3 diesel pumps is based on thermal input capacity (NCV).

-Wood Biomass: The tonnes of wood biomass fuel are calculated as follows: The net calorific value (NCV) of the different fractions of the wood biomass fuel are calculated using formula below – this method of calculating the NCV has changed from the procedure used in the AIER 2005-2010. The reason for the change is as follows: Previous NCV was calculated from one grab sample of each wood biomass fraction taken once a year and sent to an external laboratory for analysis. This method was not representative of the wood biomass fuel for the whole year.

To determine a more accurate and representative NCV, it is now proposed to calculate the NCV using a measured daily moisture content of the wood biomass fuel averaged for the year, Gross Calorific Values (independently recognised GCV for wood biomass) and concentration of hydrogen as % of weight (dry basis). All values for the individual fractions of wood biomass fuel are input into formula below to determine the NCV

The net calorific value of the wood biomass fuel is determined by the following equation:

NCV = GCV (1-w/100) – 2.444(w/100) – 2.444(h/100) x 8.936(1-w/100) ----- MJ / kg

where,

NCV: net calorific value in MJ/kg fuel (wet basis)

GCV: gross calorific value in MJ/kg fuel (dry basis)

w: water content of fuel as percentage of weight

h: concentration of hydrogen as percentage of weight (dry basis).

The first term simply converts the gross calorific value to the wet basis. The second term is due to the latent heat of vaporization of the water contained in the wood. The specific latent heat of vaporization of water at 25 oC and constant pressure is 2.444 MJ/kg. The third term is due to the vaporization of the water produced when the hydrogen in the wood is combusted. The concentration of hydrogen in woody biomass is typically about 6.1 – 6.2% (dry basis).

References: Handbook of Biomass Combustion and Co-Firing, Sjaak van Loo and Jaap Koppejan, 2008. IS EN 14961 Solid Biofuels – Fuel specification and classes; IS EN 14918 Solid Biofuels – Method of the determination of calorific value

The annualised Terrajoules of energy from the wood biomass is calculated as follows:

A. The annual tonnages of wood biomass multiplied by the NCV (GJ/Tonne) of the individual fractions resulting in GJ of energy

B. The individual energy values are added together to give the total energy value (GJ). Convert to TJ by dividing by 1000

The different fractions of wood biomass fuel are wood bark, purchased wood fuel, wood chip fines and wood sander dust / trim waste. Each fraction is calculated as follows:

Wood Bark: % of wood log which has been weighed over weighbridge

Sander dust /trim: % of final MDF panel produced

Wood chip fines: % of wood chip which has been weighed over weighbridge

Purchased wood fuel: Direct weight over weighbridge

To account for the fossil fuel fraction of Medite's wood biomass - Medite has to calculate and report the CO2 emissions from the fossil fuel fraction of its wood biomass. The fossil fuel fraction of its wood biomass is the resin glue, wax and release agent added as an ingredient into Medite's MDF product - this then relates directly to the sander dust and trim waste from Medite's MDF product which is one of the constituents of its wood biomass fuel mix burned in its 3 boilers to generate energy. To calculate the CO2 emission from this fossil fuel fraction the following calculation is used:

1. The monthly % sander dust / trim waste in an MDF panel is taken from the menu 'sander waste trim dust PRM000A' and used to calculate the yearly % figure.

2. The annual quantity (tonnes) of UF and MDI resin glue and wax and release agent purchased is reported by the Medite accounts department (minus the resin and wax used to produce flame retardant panels)

3. To calculate the tonnage of UF resin and MDI resin in the sander dust - Multiply the annual % of sander dust in an MDF panel by the annual tonnage of resin by the resin addition concentration (UF resin only) in the sander dust e.g. 2013 UF Resin: 40,937 x 8.97% x 0.40 = 1469 tonnes; 2013 MDI Resin: 570 x 8.97% = 51.13 tonnes

4.To calculate the tonnage of UF resin and MDI resin in the trim waste - Multiply the annual % of trim waste in an MDF panel by the annual tonnage of resin e.g. 2013 UF Resin: 40,937 x 1% = 409 tonnes; 2013 MDI Resin = 570 x 1% = 5.70 tonnes

5. To calculate the tonnage of UF Resin in sander dust / trim waste, add both figures calculated in 3. and 4. e.g. 2013 tonnage = 1469 + 409 = 1878 tonnes

6.To calculate the tonnage of MDI Resin in sander dust / trim waste, add both figures calculated in 3. and 4. e.g. 2013 tonnage = 51.13 + 5.70= 56.83 tonnes

7. To calculate the tonnage of wax (minus the wax used in flame retardant panels) in the sander dust / trim waste - Multiply the annual % of sander dust and trim waste by the annual tonnage of wax e.g. 2013 Wax: 3976 x 9.97% = 396 tonnes - 17 tonnes (wax in flame retardant panels) = 379 tonnes

8. To calculate the tonnage of release agent in the sander dust / trim waste - Take the tonnage of release agent used e.g. 2013 Release agent: 70 x 100% = 70 tonnes (all release agent is used in the face of the panel)

9. From supplier data it is shown that the % carbon in UF resin is 32.45%, MDI Resin is 70% and the % carbon in wax is 42%; % carbon in release agent is 30%

10. From supplier data it is shown that the NCV of UF resin is 27.4, MDI resin is 29.5, Wax is 21.276, Release agent is 45 GJ/Tonne

- The NCV and carbon content are based on samples as received not on dry weight, therefore invoiced deliveries are not adjusted for water content.

11. Total TJ of energy from each fossil fuel fraction is determined by multiplying the NCV by tonnes fuel combusted.

12. Add the annual tonnes of CO2 emissions from UF and MDI resin to the CO2 emissions from wax and to the CO2 emissions from release agent = annual tonnes of CO2 emissions from the fossil fuel fraction of Medite's wood biomass :

For the fossil fuel fraction the NCV and EF is determined from manufacturer's data and this will be reconfirmed annually with the manufacturer. Annually it will be checked that the biomass fraction is greater than 97%; this confirmation and detailed calculations will be attached to AEM each year.

Emissions are then calculated using the formula: EM x EF x OF

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
LPG-1,MDI - Methylene diphenyl diisocyanate,Release Agent,UF Resin,Wax,WB-1,WB-2,WB-3,WB-4	WB-01,WB-02,WB-03	W-01	Weighbridge	50	Tonne	0.50	At factory entrance - incoming weight
LPG-1,MDI - Methylene diphenyl diisocyanate,Release Agent,UF Resin,Wax,WB-1,WB-2,WB-3,WB-4	WB-01,WB-02,WB-03	W-02	Weighbridge	50	Tonne	0.50	At factory Entrance - outgoing weight
NG-1	WB-01,WB-02,NG-01	BGE-26622	Turbine meter	50 to 1000	m3/hour	1.41	Beside interceptor surface water lagoons
D-1	CP-01,EG-01,FP-01,HP-01	M1	Operational hours	N/A	N/A	N/A	N/A

Source Stream Refs.	Measurement Device Ref.	Determination Method	Instrument Under Control Of	Conditions Of Article 29(1) Satisfied	Invoices Used To Determine Amount Of Fuel Or Material	Trade Partner And Operator Independent
LPG-1,MDI - Methylene	W-01	Batch	Operator	N/A	N/A	N/A

Source Stream Refs.	Measurement Device Ref.	Determination Method	Instrument Under Control Of	Conditions Of Article 29(1) Satisfied	Invoices Used To Determine Amount Of Fuel Or Material	Trade Partner And Operator Independent
diphenyl diisocyanate,Release Agent,UF Resin,Wax,WB-1,WB-2,WB-3,WB-4						
LPG-1,MDI - Methylene diphenyl diisocyanate,Release Agent,UF Resin,Wax,WB-1,WB-2,WB-3,WB-4	W-02	Batch	Operator	N/A	N/A	N/A
NG-1	BGE-26622	Continual	Trade partner	Yes	Yes	Yes
D-1	M1	Batch	Operator	N/A	N/A	N/A

t. Applied Tiers

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

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

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

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

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

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

* Note 1: For commercial standard fuels the minimum tiers listed in Annex V of the MRR may be applied for all activities in all installations.

* Note 2: If you are intending to apply a fall-back approach please complete the table below and select "n/a" for the tiers to be applied for each source stream where a fall-back approach is used. Section 10 "Fall-back" must also be completed for these source streams.

* Note 3: For biomass or mixed fuels the emission factor is the preliminary emission factor as defined in Definition 35 Article 3 of the MRR.

Source Stream Refs.	**Emission Source Refs.**	**Measurement Device Refs.**	**Overall Metering Uncertainty (less than +/- %)**	**Applied Monitoring Approach**	**Activity Data Tier Applied**	**Net Calorific Value Tier Applied**	**Emission Factor Tier Applied**	**Carbon Content Tier Applied**	**Oxidation Factor Tier Applied**	**Conversion Factor Tier Applied**	**Biomass Fraction Tier Applied**	**Estimated Emissions $tCO_{2(e)}$**	**% of Total Estimated Emissions**	**Source Category**	**Highest Tiers Applied**	**Justification for not applying the highest tiers**	**Improvement Plan Reference (where applicable)**
MDI - Methylene diphenyl diisocyanate, Release Agent, UF Resin, Wax	WB-01,WB-02,WB-03	W-01,W-02	<1.5%	Standard	No tier	No tier	No tier	N/A	1	N/A	N/A	3000	32.94	Minor	N/A	n/a	n/a

Source Stream Refs.	Emission Source Refs.	Measurement Device Refs.	Overall Metering Uncertainty (less than +/- %)	Applied Monitoring Approach	Activity Data Tier Applied	Net Calorific Value Tier Applied	Emission Factor Tier Applied	Carbon Content Tier Applied	Oxidation Factor Tier Applied	Conversion Factor Tier Applied	Biomass Fraction Tier Applied	Estimated Emissions $tCO_{2(e)}$	% of Total Estimated Emissions	Source Category	Highest Tiers Applied	Justification for not applying the highest tiers	Improvement Plan Reference (where applicable)
NG-1	WB-01,WB-02,NG-01	BGE-26622	<1.5%	Standard	4	2b	2a	N/A	1	N/A	N/A	6000	65.88	Major	Yes	n/a	n/a
LPG-1	WB-01,WB-02	W-01,W-02	N/A	Standard	No tier	2a	2a	N/A	1	N/A	N/A	102	1.12	De-minimis	Yes	n/a	n/a
D-1	FP-01,EG-01,HP-01,CP-01	M1	N/A	Standard	No tier	2a	2a	N/A	1	N/A	N/A	6	0.07	De-minimis	Yes	n/a	n/a
WB-1,WB-2,WB-3,WB-4	WB-01,WB-02,WB-03	W-01,W-02	<1.5%	Standard	No tier	No tier	No tier	N/A	1	N/A	N/A	0	0	De-minimis	Yes	n/a	n/a

Total Estimated Emissions for Calculation (tonnes $CO_{2(e)}$) 9108

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
MDI - Methylene diphenyl diisocyanate,Release Agent,UF Resin,Wax	WB-01,WB-02,WB-03	No tier	No tier	No tier	N/A	1	N/A	N/A
NG-1	WB-01,WB-02,NG-01	4	2b	2a	N/A	1	N/A	N/A
LPG-1	WB-01,WB-02	No tier	2a	2a	N/A	1	N/A	N/A
D-1	FP-01,EG-01,HP-01,CP-01	No tier	2a	2a	N/A	1	N/A	N/A
WB-1,WB-2,WB-3,WB-4	WB-01,WB-02,WB-03	No tier	No tier	No tier	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-1	WB-01,WB-02,NG-01	EF, Oxidation Factor	Ireland's National Greenhouse Gas Inventory	n/a
LPG-1	WB-01,WB-02	NCV, EF, Oxidation Factor	Ireland's National Greenhouse Gas Inventory	n/a
D-1	FP-01,EG-01,HP-01,CP-01	NCV, EF, Oxidation Factor	Ireland's National Greenhouse Gas Inventory	n/a
MDI - Methylene diphenyl diisocyanate,Release Agent,UF Resin,Wax	WB-01,WB-02,WB-03	NCV, EF	Supplier's technical data information	N/A
MDI - Methylene diphenyl diisocyanate,Release Agent,UF Resin,Wax	WB-01,WB-02,WB-03	OxF	MRR	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**
Environmental Manager	Responsible for monitoring and reporting greenhouse gas emissions
Electrical Supervisor	Responsible for organising the maintenance and calibration of relevant metering and measurement devices
Senior Book-keeper	Management of natural gas, wood biomass, UF resin, MDI resin, release agent and wax accounts.
Process Engineer and wood supply supervisor	Tabulating, recording and trending energy from wood biomass usage and natural gas usage

Attachment	**Description**
D10 CPP Medite Ogr chart Sep.pdf	Medite Org Chart

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	GHG Assignment of responsibilities
Reference for procedure	GHG-01
Diagram reference	GHG-01
Brief description of procedure. The description should cover the essential parameters and operations performed	This procedure identifies how the monitoring and reporting responsibilities for the roles identified are assigned and how training and reviews are undertaken. Responsibilities: Accounts Department: - Receiving natural gas invoices from vendor, forwarding electronic monthly natural gas invoice to Environmental Manager, reading natural gas meter beginning of each month, cross check meter readings with vendor invoices - Gather, tabulate and deliver wood biomass usage figures each month to the process engineer - Gather, tabulate and deliver resins, release agent and wax tonnages each year to the Environmental Manager Responsibilities: Process Engineer and wood supply supervisor: - Beginning of each month enter wood biomass usage and wood biomass moisture figures in calculation spreadsheet to calculate energy usage from wood biomass - Forward updated wood biomass spreadsheet to the Environmental Manager Responsibilities: Weighbridge Operator: - Assign each load of LPG Propane delivered to the relevant storage tank - Mark on weighbridge docket storage tank LPG Propane is

	pumped into (Boiler or forklift) - Forward a hard copy of weighbridge docket and vendor docket to the Environmental Manager Responsibilities: Environmental Manager - Input usage of natural gas, LPG propane and wood biomass (including fossil fuel from sander dust and trim waste) into ETS MRV file - Obtain up to date annual NCV and carbon content of resins, release agent and wax from suppliers - Check and record NCV, EF and OF default factors from CA website - Calculate annual emissions from natural gas, LPG propane,wood biomass (including fossil fuel emission from sander dust and trim waste), diesel - Input figures into AER template and send AER to verifier - Check annually that the biomass fraction is greater than 97% Responsibilites: Electrical Supervisor - Manage and organise annual calibration of on site weighbridges and natural gas meter - Ongoing maintaintenance of weighbridges and natural gas meter when / if required
Post or department responsible for the procedure and for any data generated	Environment
Location where records are kept	Environment Department Folder
Name of IT system used	File and Print server - Windows server 2003
List of EN or other standards applied	N/A

z. Monitoring Plan Appropriateness

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

Title of procedure	Monitoring Plan Appropriateness
Reference for procedure	GHG-02
Diagram reference	GHG-02
Brief description of procedure. The description should	The procedure covers frequency of checks carried out by

cover the essential parameters and operations performed	Environmental Manager to ensure monitoring plan remains relevant, checks and frequency to be carried out include: - list of emission sources: annual check - list of source streams: annual check - NCV, EF and Oxidation factor: annual check - Biomass fraction greater than 97% Annual confirmation - Uncertainty threshold: annual check of metering devices and scales - Applied tiers for each source stream and emission source: annual check - Assessment of improvement potential: annual check or if recommended by external verifier A full review of the monitoring plan would be commenced in circumstances where a change of operation or process deemed it appropriate. All checks carried out will be covered within the existing ISO14001 EMS Audit schedule.
Post or department responsible for the procedure and for any data generated	Environment
Location where records are kept	Environment Department Folder
Name of IT system used	File and Print server - Windows server 2003
List of EN or other standards applied	N/A

aa. Data Flow Activities

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

Title of procedure	Data flow activities / Assignment of responsibilities
Reference for procedure	GHG-03, GHG-01
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	See attachments
Post or department responsible for the procedure and for any data generated	Environment
Location where records are kept	Environment Department
Name of IT system used	File and Print server - Windows server 2003
List of EN or other standards applied	N/A
List of primary data sources	See attachment
Description of the relevant processing steps for each	See Attachment. Annual CO2 emissions are calculated as follows: Natural Gas (major source stream), LPG (de-

specific data flow activity. Identify each step in the data flow and include the formulas and data used to determine emissions from the primary data. Include details of any relevant electronic data processing and storage systems and other inputs (including manual inputs) and confirm how outputs of data flow activities are recorded	minimis source stream), Diesel (de-minimis source stream), Wood Biomass (de-minimis source stream) - Natural Gas invoices show kWh based on Gross Calorific Value. The conversion factor from gross to net calorific value is to multiply the kWh value from the invoices by the current conversion factor on the EPA website and then convert to TJ by multiplying by 3.6 x 10-6. Gas Bills show volume in m3 corrected to 288.15 Kelvin. Convert the annual actual gas volume to the standardised gas volume (Nm3) as follows: Vs (Nm3) = (Va*273.15)/288.15 Where Vs is the standardised gas volume and Va is the actual gas volume determined from the gas bills.(Bills report at standardised pressure of 101,325 Pa, therefore no pressure correction required) Calculate the net calorific value of the fuel (TJ/Nm3) as follows: TJ/Nm3 = Annual TJ (as calculated above)/Annual standardised gas volume (as calculated above) Country specific emission factors apply for natural gas. Thus the formula used for natural gas is: Activity data (TJ) x Country specific emission factor (tCO2/TJ) x Country specific oxidation factor - LPG Propane: Weights in tonnes will be taken at site weighbridge (comparison will be made with vendor dockets which show volume delivered - average density of LPG is 507.05kg/m3). Thus the formula used for LPG Propane is: Activity data (kilotonnes) x country specific NCV (TJ/kt) x country specific emission factor (tCO2/TJ) x country specific oxidation factor. The stocktake for LPG is taken from the Medite storage tank at the beginning of the year and again at the end of the year by the delivery person who takes the level reading in the storage tank and inserts this % tank level on the delivery docket. Medite Environmental Manager then calculates the volume in the storage tank at the beginning of the year and again at the start of the year and either subtracts or adds this volume to the volume received during the year. - Diesel usage is de minimis <6 tonnes CO2 per year: It's formula is based on the input capacity of the pumps x

operating hours. Country specific net calorific value, emission factor and oxidation factors will be used for the diesel.

-Wood Biomass: The tonnes of wood biomass fuel are calculated as follows: The net calorific value (NCV) of the different fractions of the wood biomass fuel are calculated using formula below – this method of calculating the NCV has changed from the procedure used in the AIER 2005-2010. The reason for the change is as follows: Previous NCV was calculated from one grab sample of each wood biomass fraction taken once a year and sent to an external laboratory for analysis. This method was not representative of the wood biomass fuel for the whole year.

To determine a more accurate and representative NCV, it is now proposed to calculate the NCV using a measured daily moisture content of the wood biomass fuel averaged for the year, Gross Calorific Values (independently recognised GCV for wood biomass) and concentration of hydrogen as % of weight (dry basis). All values for the individual fractions of wood biomass fuel are input into formula below to determine the NCV

The net calorific value of the wood biomass fuel is determined by the following equation:

NCV = GCV (1-w/100) – 2.444(w/100) – 2.444(h/100) x 8.936(1-w/100) ----- MJ / kg

where,

NCV: net calorific value in MJ/kg fuel (wet basis)

GCV: gross calorific value in MJ/kg fuel (dry basis)

w: water content of fuel as percentage of weight

h: concentration of hydrogen as percentage of weight (dry basis).

The first term simply converts the gross calorific value to the wet basis. The second term is due to the latent heat of vaporization of the water contained in the wood. The specific latent heat of vaporization of water at 25 oC and constant pressure is 2.444 MJ/kg. The third term is due to the vaporization of the water produced when the hydrogen in the wood is combusted. The concentration of hydrogen in woody biomass is typically about 6.1 – 6.2% (dry basis).

References: Handbook of Biomass Combustion and Co-

Firing, Sjaak van Loo and Jaap Koppejan, 2008. IS EN 14961 Solid Biofuels – Fuel specification and classes; IS EN 14918 Solid Biofuels – Method of the determination of calorific value

The annualised Terrajoules of energy from the wood biomass is calculated as follows:

A. The annual tonnages of wood biomass multiplied by the NCV (GJ/Tonne) of the individual fractions resulting in GJ of energy

B. The individual energy values are added together to give the total energy value (GJ). Convert to TJ by dividing by 1000

The different fractions of wood biomass fuel are wood bark, purchased wood fuel, wood chip fines and wood sander dust / trim waste. Each fraction is calculated as follows:

Wood Bark: % of wood log which has been weighed over weighbridge

Sander dust /trim: % of final MDF panel produced

Wood chip fines: % of wood chip which has been weighed over weighbridge

Purchased wood fuel: Direct weight over weighbridge

To account for the fossil fuel fraction of Medite's wood biomass - Medite has to calculate and report the CO2 emissions from the fossil fuel fraction of its wood biomass. The fossil fuel fraction of its wood biomass is the resin glue, wax and release agent added as an ingredient into Medite's MDF product - this then relates directly to the sander dust and trim waste from Medite's MDF product which is one of the constituents of its wood biomass fuel mix burned in its 3 boilers to generate energy. To calculate the CO2 emission from this fossil fuel fraction the following calculation is used:

1. The monthly % sander dust / trim waste in an MDF panel is taken from the menu 'sander waste trim dust PRM000A' and used to calculate the yearly % figure.

2. The annual quantity (tonnes) of UF and MDI resin glue and wax and release agent purchased is reported by the Medite accounts department (minus the resin and wax

used to produce flame retardant panels)

3. To calculate the tonnage of UF resin and MDI resin in the sander dust - Multiply the annual % of sander dust in an MDF panel by the annual tonnage of resin by the resin addition concentration (UF resin only) in the sander dust e.g. 2013 UF Resin: 40,937 x 8.97% x 0.40 = 1469 tonnes; 2013 MDI Resin: 570 x 8.97% = 51.13 tonnes

4.To calculate the tonnage of UF resin and MDI resin in the trim waste - Multiply the annual % of trim waste in an MDF panel by the annual tonnage of resin e.g. 2013 UF Resin: 40,937 x 1% = 409 tonnes; 2013 MDI Resin = 570 x 1% = 5.70 tonnes

5. To calculate the tonnage of UF Resin in sander dust / trim waste, add both figures calculated in 3. and 4. e.g. 2013 tonnage = 1469 + 409 = 1878 tonnes

6.To calculate the tonnage of MDI Resin in sander dust / trim waste, add both figures calculated in 3. and 4. e.g. 2013 tonnage = 51.13 + 5.70= 56.83 tonnes

7. To calculate the tonnage of wax (minus the wax used in flame retardant panels) in the sander dust / trim waste - Multiply the annual % of sander dust and trim waste by the annual tonnage of wax e.g. 2013 Wax: 3976 x 9.97% = 396 tonnes - 17 tonnes (wax in flame retardant panels) = 379 tonnes

8. To calculate the tonnage of release agent in the sander dust / trim waste - Take the tonnage of release agent used e.g. 2013 Release agent: 70 x 100% = 70 tonnes (all release agent is used in the face of the panel)

9. From supplier data it is shown that the % carbon in UF resin is 32.45%, MDI Resin is 70% and the % carbon in wax is 42%; % carbon in release agent is 30%

10. From supplier data it is shown that the NCV of UF resin is 27.4, MDI resin is 29.5, Wax is 21.276, Release agent is 45 GJ/Tonne

- The NCV and carbon content are based on samples as received not on dry weight, therefore invoiced deliveries are not adjusted for water content.

11. Total TJ of energy from each fossil fuel fraction is determined by multiplying the NCV by tonnes fuel combusted.

12. Add the annual tonnes of CO2 emissions from UF and MDI resin to the CO2 emissions from wax and to the CO2 emissions from release agent = annual tonnes of CO2 emissions from the fossil fuel fraction of Medite's wood biomass :

For the fossil fuel fraction the NCV and EF is determined from manufacturer's data and this will be reconfirmed annually with the manufacturer. Annually it will be checked that the biomass fraction is greater than 97%; this confirmation and detailed calculations will be attached to AEM each year.

Emissions are then calculated using the formula: EM x EF x OF

Submit relevant documents to record data flow activities

Attachment	**Description**
GHG-01 Assignment of Responsibilities.pdf	Assignment of responsibilities
GHG-03 Data Flows.pdf	Data Flows

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	GHG Risk Assessment
Reference for procedure	GHG-04
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Potential risks identified cover such items as: - failure to receive dockets - failure to record data - errors in collection and recording of data - failure to calibrate meters or scales

	- failure or malfunction of meters or scales - error or omissions in AER - error in formulas used in calculations - incorrect default factors used - incorrect net calorific values used - computer faults - failure to complete AER or data gathering Controls in place include: - cross checking of data on a monthly basis - calibration frequencies are included in existing calibration check lists - calibration of natural gas meter and weighbridge are a legal requirement and performed by third party independents - external verifier carries out 2 visits over 12 month period - personnel accross different departments cross check data
Post or department responsible for the procedure and for any data generated	Environment
Location where records are kept	Environment Department Folder
Name of IT system used	File and Print server - Windows server 2003
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	ISO14001 Calibration Procedures
Reference for procedure	ISO14001 ENSOP0143
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Natural Gas meter is calibrated annually by Boird Gais, weighbridges are calibrated annually (subject to national legal metrological control)

	Electrical Supervisor orders external experts (calibration) when it is required, he keeps records of calibration and reports back to the Environmental Manager. Where non compliance occurs it is dealt with under the current ISO14001 procedure - non compliance is recorded, corrective and preventive action taken - the competent authority are notified upon the occurrence of the non compliance.
Post or department responsible for the procedure and for any data generated	Environment
Location where records are kept	Environment Department Folder
Name of IT system used	File and Print server - Windows server 2003
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	I.T Back up and recovery
Reference for procedure	GHG I.T Back up and recovery
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The procedure describes how information technology used for data flow activities is tested and controlled, including access control, back-up, recovery and security. Two back-up servers exist: All data is backed up nightly to a tape which is stored off-site (sotware used: symantec back-up exec 2010). Disaster recovery server takes snapshots of all servers every couple of hours, this server is also located off site (software used: Veeam Back-up and Replication V4)
Post or department responsible for the procedure and for any data generated	Information Technology (I.T)
Location where records are kept	Internal server, external server offsite
Name of IT system used	File and Print server - Windows server 2003
List of EN or other standards applied	N/A

ee. Review and Validation of Data

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

Title of procedure	Review and Validation of data
Reference for procedure	GHG-05

Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The review and validation process includes a check on whether data is complete, comparisons with data over previous years, comparison of fuel consumption reported with purchase records and factors obtained for fuel suppliers with country specific reference factors. The accounts department, process engineer, wood supply supervisor and environmental department will partake in this review and validation process. Where data is deemed to be incorrect a full review will take place to identify the source of the error if applicable.
Post or department responsible for the procedure and for any data generated	Environment
Location where records are kept	Environment Department Folder
Name of IT system used	File and Print server - Windows server 2003
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	ISO14001 Corrective and Preventive Action
Reference for procedure	ISO14001 QCSOP0054
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The ISO14001 procedure details what action is taken: Step 1: Full review of data by Environmental Manager Step 2: Comparison of data with previous years data Step3: Where there is a deviation from previous years - all data, formulas, factors used are re-checked Step4: Where identified a corrective and preventive form is completed detailing corrective action taken and preventive action taken to stop a re-occurrence
Post or department responsible for the procedure and for any data generated	Environment
Location where records are kept	Environment Department Folder
Name of IT system used	File and Print server - Windows server 2003
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	See Quality Assurance of Metering/Measurement Equipment above for control of natural gas meter.
Reference for procedure	N/A
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	N/A
Post or department responsible for the procedure and for any data generated	N/A
Location where records are kept	N/A
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	ISO14001 Document and Data Control; ISO14001 Record Control
Reference for procedure	ISO14001 QCSOP0004, QCSOP0149
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	All documentation is legible, identifiable, traceable, stored and maintained within the existing ISO14001 EMS. The GHG documentation is retained for a period of 10 years. The procedure details that in accordance with Article 66 of the MRR data and information stipulated in Annex IX of relevance to the installation is stored on site for 10 years and made readily available upon request of the EPA or Verifier.
Post or department responsible for the procedure and for any data generated	Environment
Location where records are kept	Environment Department Folder
Name of IT system used	File and Print server - Windows server 2003
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	Changes in operation
Reference for procedure	ISO14001 Environmental Aspects ENSOP0106
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	This procedure is 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 GHG allocation. This procedure covers 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. This review will be included in ISO14001 procedure Environmental Aspects - the GHG allowance will now be included in this procedure as a significant aspect / impact - this procedure is reviewed annually or if there is a significant change in process or plant operation which will enact an immediate review.
Post or department responsible for the procedure and for any data generated	Environment
Location where records are kept	Environment Department Folder
Name of IT system used	File and Print server - Windows server 2003

13. Abbreviations

II. Abbreviations Acronyms or definitions

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

Abbreviation	Definition
N/A	N/A

14. Additional Information

Any other information:

Attachment	Description
Natural Gas Heater Specification Sheet.pdf	ET6000 6075kW Natural Gas Heater Spec Sheet
Natural Gas Meter Calibration 28-01-13.pdf	NG Calibration Sheet (Accuracy 1 - 2%)
Medite calculation natural gas burner.pdf	Natural Gas Burner efficiency
ENSOP0140 Appendix 1 Methodology for the preperation of test samples.pdf	Wood Biomass Sampling Procedure

Attachment	Description
ENSOP0140Rev0 Moisture Content.pdf	Procedure for determination of Moisture Content of wood biomass samples
100207 Calibration Cert Natural Gas Meter 2018.pdf	Natural Gas Calibration cert 2018
Weighbridge SFR47 Verification Notice outbridge 071117.pdf	Weighbridge calibration cert 2017
Weighbridge SFR47 Verification Notice inbridge 071117.pdf	Weighbridge calibration cert 2017

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.