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## **Permit with introductory note**

The Environmental Permitting (England & Wales) Regulations 2016

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**North West Biomass Limited**

**Tir Llwyd  
Units B & C  
Tir Llwyd Enterprise Park  
Kinmel Bay  
Conwy  
LL18 5JH**

Permit number

**PAN-005139**

# North West Biomass Limited

## Permit number PAN-005139

### Introductory note

#### This introductory note does not form a part of the permit

This permit will allow the operator:

- One or more small waste incineration plant that is also a Tranche B Specified Generator aggregated to <50MWth

The small waste incineration plant is listed as an installation activity in the EP Regulations Schedule 1, Part 2, Chapter 5, Section 5.1 Part B(a)(v). The plant incinerates clean untreated waste wood with an individual unit capacity of 1 MW thermal input or greater, (~ 225 kg/hr of waste wood) but less than 3 tonnes per hour (~ 13.33 MW thermal input). Note: the relationship between wood input and thermal capacity is based on a calorific value of 16 KJ/kg and an 85% thermal efficiency, but actual values may be application specific.

The operator is intending to store up to 125 tonnes of waste wood at any one time prior to incineration.

This permit allows North West Biomass Limited to operate one 5.2 MWth CHP Biomass Boiler Plant, which is used for the purposes of electricity and heat generation. This plant is also a Specified Generator and Schedule 25B of the EP Regulations apply. The plant is an existing medium combustion plant (MCP) on the basis that it was operational before 20 December 2018, with the final operation of the facility commencing in mid-2018; as such it has been permitted as a Tranche B Specified Generator.

The details of the units and associated limits and monitoring requirements are specified in Tables S1.1 and S3.1.

An assessment of the impact on nearby sensitive ecological sites has been completed, showing that the impact on airborne NOx concentrations and nitrogen and acid deposition at the sensitive habitats was determined to be insignificant.

The air quality modelling and impact assessments have also shown that exceedances of any air quality objective are unlikely at the local receptors identified to protect human health.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application PAN-005139 received	25/03/19	Application for new Specified Generator permit.
Application Payment	31/05/19	Payment for permit application made on 31/05/19
Additional Information Received	10/07/19	Part B3 form submitted as part of permit application.
Additional Information Received	09/08/19	Revised Part F1 form and Revised Air Quality modelling/report encompassing the full screening area submitted.
Application PAN-005139 Duly Made	09/08/19	Application for new Specified Generator permit Duly Made

**Status log of the permit**

<b>Description</b>	<b>Date</b>	<b>Comments</b>
Permit determined	16/12/19	Permit issued to North West Biomass Limited

End of introductory note

# Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

**PAN-005139**

The Natural Resources Body for Wales (“Natural Resources Wales”) authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

**North West Biomass Limited** (“the operator”),

whose registered office is

**Blazers Fuels  
Brickfield Lane  
Denbigh Road  
Ruthin  
Denbighshire  
LL15 2TN**

company registration number **10188625**

to operate to operate one Part B installation small waste incineration plant and Specified Generator at:

**North West Biomass Limited  
Tir Llwyd  
Units B & C  
Tir Llwyd Enterprise Park  
Kinmel Bay  
Conwy  
LL18 5JH**

to the extent authorised by and subject to the conditions of this permit.

Signed	Date
<b>Holly Noble</b>	<b>16/12/19</b>

Authorised on behalf of Natural Resources Wales

# Conditions

## 1 Management

### 1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, so far as is reasonably practicable, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

## 2 Operations

### 2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1, table S1.1 (the “activities”).

### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

### 2.3 Operating techniques

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by Natural Resources Wales.

2.3.2 If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

2.3.3 Waste shall only be accepted for incineration if:

- (a) it is of a type and quantity listed in schedule 2 table S2.1; and
- (b) it conforms to the description in the documentation supplied by the producer and holder.

## **3 Emissions and monitoring**

### **3.1 Emissions to air**

3.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

There shall be no point source emissions to air except from the sources and emission points listed in schedule 3 tables S3.1.

3.1.2 The limits given in schedule 3 shall not be exceeded.

### **3.2 Emissions of substances not controlled by emission limits**

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 There must be no persistent emission of ‘dark smoke’ as defined in section 3(1) of the Clean Air Act 1993.

### **3.3 Odour**

3.3.1 The operator shall:

- (a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

### **3.4 Monitoring**

3.4.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1.

3.4.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.4.3 The operator shall, if notified by Natural Resources Wales, undertake additional monitoring for the parameters in Schedule 3, table 3.1.

3.4.4 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales

- 3.4.5 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 table 3.1 unless otherwise agreed in writing by Natural Resources Wales.
- 3.4.6 Monitoring shall not take place during periods of start up or shut down.
- 3.4.7 The first monitoring measurements shall be carried out within four months of the issue date of the permit or the date when the generator is first put into operation, whichever is later.
- 3.4.8 The operator shall maintain records of all monitoring including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, test and surveys and any assessment or evaluation made on the basis of such data.

## **4 Information**

### **4.1 Records**

- 4.1.1 All records required to be made by this permit shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by Natural Resources Wales, for at least 6 years from the date when the records were made.
- 4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by this permit.
- 4.1.3 The operator shall maintain a record of the type and quantity of fuel used and the total annual hours of operation for each generator.
- 4.1.4 The operator shall maintain a record of any events of non-compliance and the measures taken to ensure compliance is restored in the shortest possible time

### **4.2 Reporting**

- 4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by the Natural Resources Wales.
- 4.2.2 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
  - (a) in respect of the parameters and emission points specified in schedule 4, table S4.1;
  - (b) for the reporting periods specified in schedule 4, table S4.1 and using the forms specified in schedule 4, table S4.2; and
  - (c) giving the information from such results as required by the forms specified in those tables.

## 4.3 Notifications

### 4.3.1 In the event:

- (a) of a breach of any of the permit conditions the operator must immediately—
  - (i) inform Natural Resources Wales, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (b) of a breach of any of the permit conditions which causes a significant degradation of local air quality, the operator must immediately suspend the operation of the activities or the relevant part of them until compliance with the conditions has been restored.

### 4.3.2 Any information provided under condition 4.3.1 shall be confirmed in writing within 24 hours.

### 4.3.3 Where Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.

### 4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (c) any change in the operator's name or address; and
- (d) any steps taken with a view to the dissolution of the operator.

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

## 4.4 Interpretation

### 4.4.1 In this permit the expressions listed in schedule 5 shall have the meaning given in that schedule.

### 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

# Schedule 1 – Operations

<b>Table S1.1 activities</b>				
<b>National Grid Reference and or activity reference/ emission point</b>	<b>Activity listed in the EP Regulations</b>	<b>Description of Specified Generator</b>	<b>Fuel</b>	<b>Limit of Activities</b>
Biomass CHP Plant Exhaust NGR: SH 98602 78872	Schedule 1 Ch5 5.1 Part B, and Schedule 25B – Specified Generator	1 x 5.2MWth CHP Biomass Boiler	Virgin wood- chip and Untreated waste wood listed in Schedule 2 - Table S2.1	<8000 Operating hours limit per Specified Generator

<b>Table S1.2 Operating techniques for Schedule 1 Pt2 Ch5 5.1 Part B and Specified Generators</b>
<p>(a) Unless otherwise agreed in writing, the small waste incineration plant must comply with the requirements of Environmental Permitting Technical Note 5/1(18), Final Draft, dated 15/08/18 which will serve as statutory guidance under Regulation 65(1) of The Environmental Permitting Regulations 2016 once finalised.</p> <p>(b) Each generator must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.</p> <p>(c) The operator must keep periods of start-up and shut down of the generators as short as possible</p> <p>(d) There must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.</p> <p>(e) Where secondary abatement is required to ensure compliance with the NO<sub>x</sub> ELV it must be met within 10 minutes from when the generator commences operation or within 20 minutes when the generator was a Tranche A and is now a Tranche B generator.</p> <p>(f) The stack must be vertical and unimpeded by cowls or caps.</p> <p>(g) The operating regime of the generator(s) must be in line with document reference Tir Llwyd-EP Supporting Information- R2298E-R01-v1-Appendix D – submitted on 25/03/2019.</p>

<b>Table S1.3 Pre-operational measures</b>	
<b>Reference</b>	<b>Pre-operational measures</b>
PO1	Within 1 month of permit issue, the Operator shall submit to Natural Resources Wales and obtain written approval for a report detailing the proposed method for undertaking the monitoring of dark smoke, as specified in Table S3.1.

## Schedule 2 – Waste types, raw materials and fuels

<b>Table S2.1 Permitted waste types and quantities for the incineration of wood in a Sch1 Pt2 5.1 Part B</b>	
<b>Maximum quantity</b>	<b>The total quantity of waste accepted at the site for the above activity shall be less than 26,280 tonnes a year.</b>
<b>Waste code</b>	<b>Description</b>
<b>02</b>	<b>Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing</b>
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
<b>02 01 03</b>	<b>Plant tissue waste only</b>
<b>02 01 07</b>	<b>Waste from forestry, untreated wood only</b>

## Schedule 3 – Emissions and monitoring

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements for plants rated a thermal input of 5 MWth or more but less than 3 tonnes per hour input.</b>						
<b>Emission point as referred to in table S1.1</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method Note 1</b>
Biomass CHP Plant Exhaust NGR: SH 98602 78872	Sch1 Ch5 5.1 Part B and Sch 25B Specified Generator	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	475 mg/Nm <sup>3</sup>	Periodic (average over one hour)	Annual extractive	MCERTS BS EN 14792
		Carbon monoxide	225 mg/Nm <sup>3</sup>	Periodic (average over one hour)	Annual extractive	MCERTS BS EN 15058
		Dust (Particulate Matter)	50 mg/Nm <sup>3</sup>	Periodic (average over one hour)	Annual extractive	MCERTS BS EN 13284-1
		TVOC	30 mg/Nm <sup>3</sup>	Periodic (average over one hour)	Annual extractive	MCERTS BS EN 12619
		Dark Smoke	No visible dark smoke	Daily when in operation	Daily when in operation	Ringelmann Chart Shade 1. Methodology as approved in accordance with pre-operational measure PO1.
<p>Note 1: Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O<sub>2</sub> content of 6%</p>						

## Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Emissions to air Parameters as required by condition 3.2.1.	Biomass CHP Plant Exhaust NGR: SH 98602 78872	Annually	Date of permit issue or the date when the generator is first put into operation, whichever is later.

<b>Table S4.2 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Air	Form air 1 or other form as agreed in writing by Natural Resources Wales.	16/12/2019

# Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

## Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

<b>(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution</b>	
<b>To be notified within 24 hours of detection</b>	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

## **Part B – to be submitted as soon as practicable**

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Natural Resources Wales under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“CHP” means Combined Heat and Power or Cogeneration means the simultaneous generation in one process of thermal energy and electrical or mechanical energy

“EA TGN M1” means the ‘Environment Agency Technical Guidance Note M1: Sampling Requirements for stack emissions monitoring’, published on Gov.UK.

“EA TGN M2” means the ‘Environment Agency Technical Guidance Note M2: Monitoring of stack emissions to air, published on Gov.UK.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations. As amended by the Environmental Permitting (England and Wales) (Amendment Regulations 2018 SI 2018 No. 110

“First put into operation” means when fuel is first combusted in the MCP.

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“Medium Combustion Plant” or “MCP” means a combustion plant with a rated thermal input equal to or greater than 1 MW but less than 50 MW.

“Medium Combustion Plant Directive” or “MCPD” means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants.

“Operating hours” means the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods.

“Specified generator” has the meaning given in paragraph 2(1) of Schedule 25B of The Environmental Permitting (England and Wales) (Amendment) Regulations 2018.

“Waste code” means the six-digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

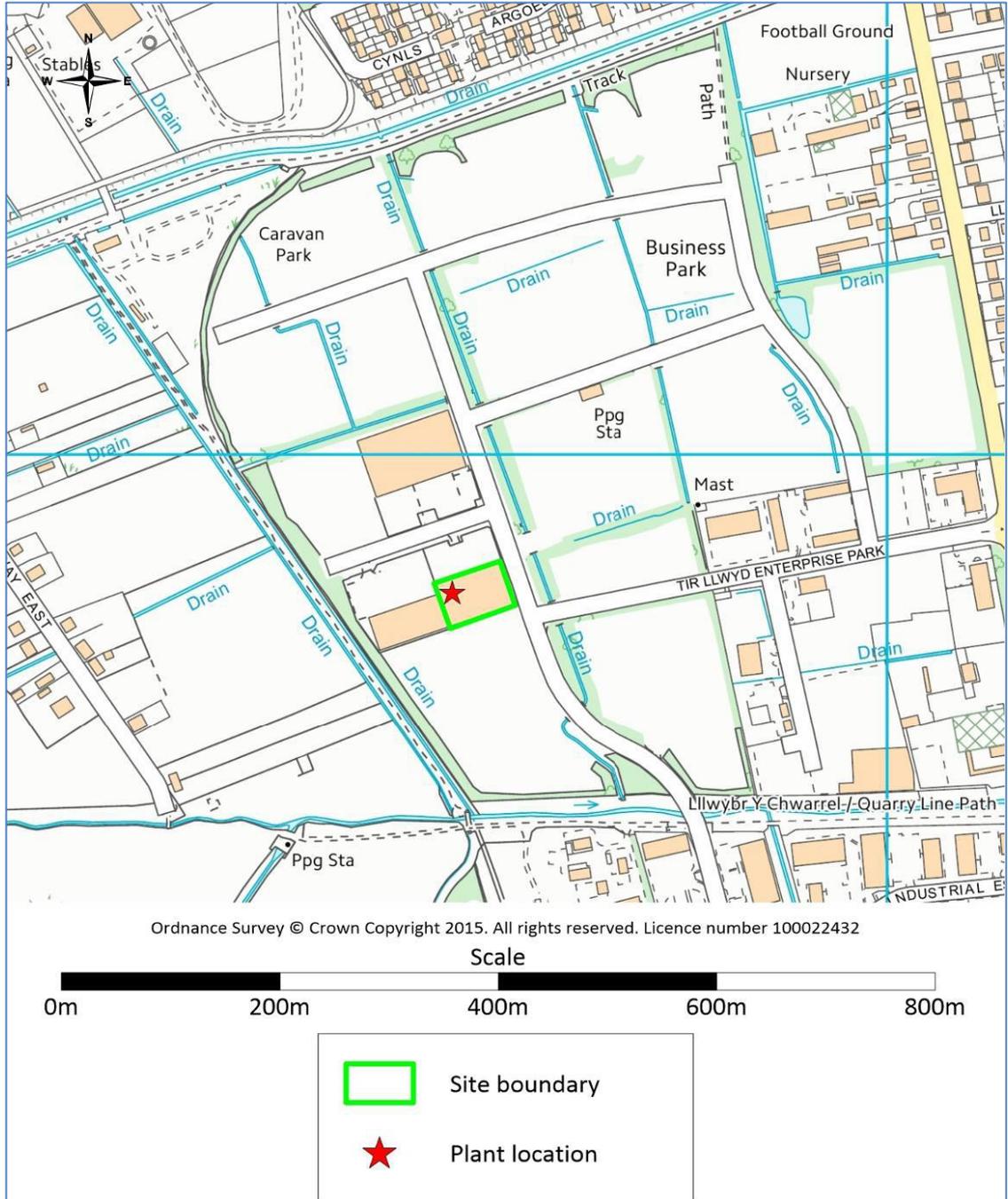
“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

“year” means calendar year ending 31 December.

When the following terms appear in the waste code list in Schedule 2, table S2.1, for that table they have the meaning given below:

“hazardous substance” means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008.

# Schedule 7 – Site plan



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END OF PERMIT

Permit Number: PAN-005139

Operator: North West Biomass Limited

Facility: Tir Llwyd

Form Number: Air1 / 16/12/19

**Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY**

Emission Point	Substance / Parameter	Emission Limit Value*	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty <sup>[4]</sup>
Biomass CHP Plant Exhaust	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	475 mg/m <sup>3</sup>	Periodic (average over one hour)		MCERTS BS EN 14792		
	Dust (Particulate matter)	50 mg/Nm <sup>3</sup>			MCERTS BS EN 13284-1		
	Carbon Monoxide	225 mg/Nm <sup>3</sup>			MCERTS BS EN 15058		
	TVOC	30 mg/Nm <sup>3</sup>			MCERTS BS EN 12619		

\* At reference conditions of a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O<sub>2</sub> content of 6% for solid fuel fired boilers

- [1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with Natural Resources Wales is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....  
(Authorised to sign as representative of Operator)

Date.....