



**POLLUTION PREVENTION AND CONTROL ACT 1999
ENVIRONMENTAL PERMITTING (ENGLAND & WALES) REGULATIONS 2016**

**Permit Number: 5.1/087935/JT
MHH Biomass Limited
408 Petre Street
SHEFFIELD
S4 8LU**

In accordance with Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2016, MHH Biomass Limited is hereby permitted to operate two scheduled activities at the address detailed above, namely the incineration in a small waste incineration plant with an aggregate capacity of 50kg or more per hour of wood waste, with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coatings, as described in Schedule 1, Part 2, Chapter 5, Section 5.1, Part B, (a)(v) and the directly associated activity of heating of mineral product as described in Schedule 1, Part 2, Chapter 3, Section 3.5, Part B (a) and subject to the following Permit conditions.

Signed

Dated this day: 22nd March 2017

**Assistant Manager
Authorised by Sheffield City Council to sign on their behalf**

The Secretary of States Process Guidance Notes PG 1/12 and PG3/18 have provided the framework for the conditions in this Permit.

Name & Address of Operator:

**MHH Biomass Limited
408 Petre Street
Sheffield
S4 8LU**

Contact: Rachel Hague, Director, Tel : 2213805 Mob:07917 030602
info@mhhbiomass.co.uk

Registered Office:

**MHH Biomass Limited
559 Carlisle Street East
Sheffield
S4 8DT**

Company Registration number: 101092259

Address of Permitted Installation:

**MHH Biomass Limited
408 Petre Street
Sheffield
S4 8LU**

Holding Company: NO

Talking to Us

Any communication with Sheffield City Council should be made to the following address quoting the Permit Number: **5.1/087935/JT**

**ENVIRONMENTAL PROTECTION SERVICE
FLOOR 5 NORTH HOWDEN HOUSE
1 UNION STREET
SHEFFIELD
S1 2SH**

Alternatively Email: epsadmin@sheffield.gov.uk or ippc@sheffield.gov.uk
Telephone: (0114) 273 4651
Fax: (0114) 273 6464

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Explanatory Note to Pollution Prevention and Control Permit for Part B Installations.

(This note does not form a part of the Permit)

The following Permit is issued under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016 No.1154), as amended, (“the EP Regulations”) to operate an installation carrying out activities covered by the description in Sections 3.5 and 5.1 Part B of Schedule 1 of those Regulations, to the extent authorised by the Permit:

Process Changes

Under the provisions of the EP Regulations, you are required to notify the Council of any proposed change in operation at least 14 days before making the change. This must be in writing and must contain a full description of the proposed change in operation and the likely consequences. Failure to do so is an offence.

If you consider that a proposed change could result in the breach of the existing permit conditions or is likely to require the variation of permit conditions then you may apply in writing under Regulation 20(1) of the EP Regulations. Additionally, if this involves a SUBSTANTIAL CHANGE to the installation you will be required to submit an application, pay the relevant fee and advertise the application accordingly. You may serve a Notice on the Council requesting that they determine whether any change that is proposed would constitute a substantial change before you proceed with application.

Variations to the Permit

The Permit may be varied in the future by the Council serving a Variation Notice on the Operator. If the Operator wishes any of the Conditions of the Permit to be changed, a formal Application must be submitted.

Surrender of the Permit

Where the Operator of a Part A2 installation or mobile plant ceases or intends to cease the operation of the activity the Operator may notify the regulator of the surrender of the whole permit, in any other case, notify the regulator of the surrender of the permit in so far as it authorises the operation of the installation or mobile plant which he/she has ceased or intends to cease operating. The notification shall contain information as described in Regulation 24 or 25 of the EP Regulations.

Transfer of the Permit or Part of the Permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 21 of the EP Regulations. A transfer will be allowed unless Sheffield City Council considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit.

Annual Subsistence Fee

In accordance with Regulation 65 of the EP Regulations, the holder of a permit is required to pay a fee for the subsistence of the Permit. This fee is payable annually on 1st April. You are advised that under the provisions of Regulation 65 (5) of the EP Regulations, if you fail to pay the fee due promptly, Sheffield City Council may revoke the Permit. You will be contacted separately each year in respect to this payment.

Public Register

The Council is required by Regulation 46 of the EP Regulations to maintain a Public Register containing information on all LAPPC installations and mobile plant. The register is available for inspection by the public free of charge during office hours (Monday to Friday 9.00 am to 5.00 pm) at the following address:

Environmental Protection Service
Sheffield City Council
Floor 5 North Howden House
1 Union Street
Sheffield
S1 2SH

Tel: 0114 273 4651 or email epsadmin@sheffield.gov.uk

Confidentiality

Sheffield City Council has a duty to consider the question of confidentiality of information supplied to it. If any information supplied is considered confidential, a statement of which information this applies to and the reasons why it is considered confidential should be specified. The Operator is reminded that he may apply to Sheffield City Council for the exclusion of information from the public register under the provisions of the Environmental Permitting (England and Wales) Regulations 2016.

Appeals

Under Regulation 31 of the EP Regulations Operators have the right of appeal against the conditions attached to their permit. Schedule 6 of the EP Regulations sets out the detailed procedures.

Appeals against a Variation Notice do not have the effect of suspending the operation of the Notice. Appeals do not have the effect of suspending Permit conditions.

Notice of appeal against the conditions attached to the permit must be given within six months of the date of the Notice, which is the subject matter of the appeal.

How to Appeal

There are no forms or charges for appealing. However, for an appeal to be valid, appellants (the person/Operator making the appeal) are legally required to provide:

- Written notice of the appeal;
- A statement of the grounds of appeal;
- A statement indicating whether the appellant wishes the appeal to be dealt with by written representations procedure or a hearing – a hearing must be held if either the appellant or enforcing authority requests this, or if the Planning Inspector or the Secretary of State decides to hold one.
- (Appellants must copy the above three items to the local authority when the appeal is made)
- A copy of any relevant application;
- A copy of any relevant permit;
- A copy of any relevant correspondence between the appellant and the regulator; and
- A copy of any decision or notice, which is the subject matter of the appeal.

Where to Send Your Appeal Documents

Appeals should be addressed to:

**The Planning Inspectorate
Environmental Appeals Administration
Room 4/19 – Eagle Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN**

In the course of an Appeal process the main parties will be informed of procedural steps by the Planning Inspectorate.

To withdraw an appeal the appellant must notify the Planning Inspectorate in writing and copy the notification to the local authority.

Enforcement

An **Enforcement Notice** may be served if the Local Authority believes an Operator has contravened, is contravening or is likely to contravene any condition of his Permit.

A **Suspension Notice** may be served if in the opinion of the Local Authority the operation of an installation involves an imminent risk of serious pollution. This applies whether or not the Operator has breached a Permit condition.

The Local Authority can revoke a Permit by written notice at any time by serving a **Revocation Notice**. The Permit then ceases to authorise the operation of the installation.

Offences

A limited summary of the offences is listed below:

- a) operation of an installation without a Permit
- b) failure to comply with or contravene a Permit condition
- c) failure to comply with the requirements of an enforcement or suspension notice

A full list is available under Regulation 38 of the Environmental Permitting (England & Wales) Regulations 2016.

Penalties

The maximum penalties for the above offences are a fine not exceeding £50,000 and/or up to twelve months imprisonment per offence for a summary conviction (in a Magistrates Court); and a fine and/or up to five years imprisonment for conviction on indictment (in a Crown Court).

Definitions

In relation to this Permit, the following expressions shall have the following meanings:

“Application” means the application for this Permit, together with any response to a notice served under Schedule 4 to the EPR Regulations and any operational change agreed under the conditions of this Permit.

“EPR Regulations” means the Environmental Permitting (England and Wales) Regulations S.I .2016 No. 1154 and words and expressions defined in the EPR Regulations shall have the same meanings when used in this Permit save to the extent they are explicitly defined in this Permit.

“Permitted Installation” means the activities and the limits to those activities described in this Permit.

“Monitoring” includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

“Regulator” means any officer of Sheffield City Council who is authorised 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(1) of that Act.

“BAT” means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the bases for emission limit values designed to prevent, and where that is not practical, generally to reduce emissions and the impact on the environment as a whole. For those purposes:

“available techniques” means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the Operator;

“best” means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole; “techniques” include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned. Schedule 2 of the Regulations shall have effect in relation to the determination of best available techniques, and;

“Fugitive Emission” means an emission to air from the permitted installation that is not controlled by an emission limit imposed by a condition of this Permit.

Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the document with the most recent publication date shall be taken to be the most appropriate document to be used.

DESCRIPTION OF ACTIVITIES.

This Permit covers the incineration in a small waste incineration plant with an aggregate capacity of 250kg per hour of Grade A clean wood waste, with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coatings. The plant permitted is an Aritem Bio 1MW Arimax boiler, with a multijet 1MW burner and the abatement is a JM 250 2x2 multicyclone.

Storage and Delivery of Woodchip

The feedstock for the boiler consists of recycled woodchip produced from uncontaminated waste wood which includes Grade A wooden pallets and wooden cable drums. Grade A wood includes EWC 15 01 03 “wooden packaging not containing hazardous substances such as halogenated compounds or heavy metals”. Woodchip is imported to site in trailers and stored inside a building. It is calculated that 42 tonnes of woodchip per week will be required to operate the boiler.

Operation of the Boiler.

The boiler is started using virgin wood. It will operate continuously except for periods of maintenance, in order to minimise start up and shutdown. It is anticipated the boiler will run for 75% of the time (6570 hours per year) due to maintenance. The chimney height will be 12m from the ground and shall extend 4.2m above the ridge height of the building.

Operation of the Drying Floor.

The heat produced by the boiler will be used to operate 2 drying floors to dry sand and aggregate products for use in the construction industry. This activity occurs outside the building. The drying floors are suspended, underlain with ducting that carries warm air from the boiler. Warm air is dispersed through perforations in the floor.

Storage and Removal of Ash.

It is anticipated that up to 2.5 tonnes of ash per week will be generated from the boiler. This will be emptied from the ash box into a 1 tonne bag and stored inside the building prior to removal from site by a registered waste carrier.

This Permit covers the receipt, storage, handling and transporting of raw materials, the treatment and storage of waste materials on site, handling and storage of finished product.

CONDITIONS OF PERMIT.

The following conditions shall be complied with immediately unless otherwise stated.

Section 1 – Upgrading.

- 1.1 Stack emissions shall be tested for the pollutants listed in Table 1, and oxides of nitrogen, within 6 weeks of installation and commissioning of the boiler.
- 1.2 Where contaminated wood chip is burnt, such as painted wood chip, the emissions of pollutants in Tables 1 and 2, plus oxides of nitrogen, shall be tested within 6 weeks of installation and commissioning of the boiler.
- 1.3 If stack testing determines that the efflux velocity is below 15m/s, an accelerator cone shall be fitted to the chimney termination point within 6 weeks of the results of the testing being received.
- 1.4 Prior to the fitting of the accelerator cone, if required, details of the cone and associated calculations shall be submitted to the Regulator for approval in writing.

Section 2 – Plant and Equipment.

- 2.1 The activities at the installation shall be carried out within the boundary outlined in red as indicated on the Installation Location and Boundary plan in Schedule 1 of this Permit.
- 2.2 Permitted activities shall only be carried on using the plant and equipment as detailed in the Description of Activities and on the Installation Layout in Schedule 2 of this Permit.
- 2.3 The Operator shall ensure that the Regulator is notified of any proposed operational changes including any alterations to the process involving the provision of new plant, equipment, fuels, substances or processes which may affect emissions. The information shall be submitted at least 14 days before the changes take place.
- 2.4 No plant or equipment used for any activity shall be operated with an extraction point direct to atmosphere unless specifically noted within this Permit or specifically agreed in writing with the Regulator.

Section 3 – Emission Limits and Controls.

- 3.1 All emissions to air from the combustion plant, other than steam or condensed water vapour shall be free from persistent visible emissions and free from droplets.
- 3.2 All emissions to air from the minerals drying activity, shall be free from dust and visible emissions.
- 3.3 Emissions to air shall be free from offensive odour beyond the installation boundary as perceived by the Regulator.
- 3.4 The emissions from the final point of discharge to atmosphere serving the appliance shall be vertically upwards.
- 3.5 All reasonably practicable steps shall be taken to minimise the duration and visibility of emissions during start up and shut down of the combustion appliance.
- 3.6 Emissions from the combustion appliance shall be free from visible smoke. During start up and shut down the emissions shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742:2009.
- 3.7 Woodchip to fuel the boiler shall only be sourced from reliable suppliers registered with Biomass Suppliers List (BSL), in order to prevent contaminated woodchip from being burnt.
- 3.8 Feedstock for the boiler shall only consist of Grade A clean recycled woodchips such as wood that conforms to EWC 15 01 13 “Wooden Packaging Not Containing Hazardous Substances such as Halogenated Compounds or Heavy Metals”.
- 3.9 Woodchip feedstock size shall be 30mm to 50mm and the moisture content shall be below 30%.
- 3.10 Woodchip shall be inspected upon delivery in accordance with a written procedure to identify potential contamination such as stains, plastics, metals, foreign objects or odorous materials.
- 3.11 Contaminated wood shall not be burnt, but shall be segregated from the good quality woodchip, labelled, quarantined and returned to supplier in order to prevent use. A record of quarantined and returned woodchip shall be kept, in order to identify trends in suppliers.
- 3.12 Woodchip shall be stored inside the building or under cover.
- 3.13 The ash storage area shall be separate from the woodchip store.

- 3.14 The boiler shall only be started up using virgin wood, and adjusted for clean operation in accordance with manufacturer's instructions.
- 3.15 A Lambda flue gas analyser probe located after the cyclone shall continuously monitor oxygen and carbon monoxide emissions and feed the results back to the boiler control panel.
- 3.16 Target values for oxygen of between 7-9% and 100-400ppm for carbon monoxide shall be achieved to ensure even combustion.
- 3.17 To achieve the target values laid down in condition 3.16, adjustments to the grate and the fan speed can be made.
- 3.18 The boiler shall only be operated and adjusted by trained and competent operatives.
- 3.19 The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this Permit.
- 3.20 Emissions from the chimney serving the combustion appliance shall not exceed the following emission limit values as laid down in Table 1;

Table 1:

Pollutant	Emission Limit Value mg/m³	Frequency of Stack Emissions Testing
Carbon monoxide	150	Annual
Total particulate matter	60	Annual
Organic compounds	20	Annual

- 3.21 In the event that any painted or coated fuels, melamine-faced fuels, plywood, chipboard, fibreboard or similar products are burnt, the emission limits in Table 1 and 2 shall apply and shall not be exceeded;

Table 2:

Pollutant	Emission Limit Value mg/m³	Frequency of Stack Emissions Testing
Chloride expressed as hydrogen chloride	100	Annual
Hydrogen cyanide	5	Annual
Formaldehyde	5	Annual

- 3.22 Emissions of oxides of nitrogen (NO_x) shall be tested to check compliance with an emission limit of 400mg/m³ within 6 weeks of commissioning, and after any substantial change to the plant.

- 3.23 The number of start-ups and shut downs shall be kept to a minimum.
- 3.24 All appropriate precautions shall be taken to minimise emissions during start-up and shutdown.
- 3.25 The Risk Management methods detailed in the Permit Application report number 16783/1 dated October 2016 prepared by The Arley Consulting Company Limited, shall be implemented in full, in order to control emissions to atmosphere.

Section 4 – Monitoring, Sampling and Measurement of Emissions.

- 4.1 The Operator shall ensure that a visual assessment of emissions from the chimney serving the boiler is carried out at least once a day when it is operational. The duration of the assessment shall be for a minimum of one minute. All results of observations shall be recorded in accordance with condition 4.23 of this Permit.
- 4.2 The Operator shall ensure that an olfactory assessment of emissions from the chimney serving the boiler is carried out at least once a day when the boiler is operational, at a point on the boundary downwind of the stack. The duration of the assessment shall be for a minimum of one minute. All results of observations shall be recorded in accordance with condition 4.23 of this Permit.
- 4.3 Emissions of total particulate matter from the stack serving the boiler shall be tested at least once in every 12 month period in order to determine compliance with the emission limit of 60mg/m³.
- 4.4 Emissions of carbon monoxide shall be tested at least once in every twelve month period in order to determine compliance with the emission limit of 150mg/m³.
- 4.5 Emissions of organic compounds shall be tested at least once in every twelve month period in order to determine compliance with the emission limit of 20mg/m³.
- 4.6 In the event that any painted or coated fuels, melamine-faced fuels, plywood, chipboard, fibreboard or similar products are burnt, the pollutants in Table 2 shall be tested at least once in every twelve month period.
- 4.7 The introduction of dilution air into duct systems in order to comply with emission limits is not permitted.
- 4.8 The Operator shall ensure that adequate facilities for sampling are provided on vents or ducts. Sampling points on new plant shall be designed to comply with the British or equivalent standards.

- 4.9 Prior to undertaking any emissions monitoring, the Operator shall submit an emissions site monitoring protocol detailing the pollutants to be tested, stacks to be tested, the methods to be used and the proposed date of testing, at least 7 days before the testing is to take place to the Regulator for approval in writing.
- 4.10 The results of annual non-continuous monitoring tests shall be forwarded to the Regulator within 8 weeks of completion of the testing.
- 4.11 Where the results of any non-continuous monitoring are adverse, or exceed the emission concentration limit, the Operator shall inform the Regulator no later than 10:00 hours the following working day after receipt of the results of the emissions testing.
- 4.12 Stack emissions monitoring shall be carried out in accordance with methods described in M1 "Sampling requirements for monitoring stack emissions to air from industrial installations"¹ and M2 "Monitoring of stack emissions to air"², or by another method agreed in writing by the Regulator.
- 4.13 Non-continuous emissions monitoring of particulate matter shall be carried out in accordance with the main procedural requirements of BS EN 13284:Part 1 unless otherwise agreed in writing with the Regulator.
- 4.14 Non-continuous emissions monitoring of organic compounds shall be carried out in accordance with the main procedural requirements of BS EN 12619:2013 unless otherwise agreed in writing with the Regulator.
- 4.15 Non-continuous emissions monitoring of carbon monoxide shall be carried out in accordance with the main procedural requirements of BS EN 15058 unless otherwise agreed in writing with the Regulator.
- 4.16 Non-continuous emissions monitoring of oxygen shall be carried out in accordance with the main procedural requirements of BS EN 14789 unless otherwise agreed in writing with the Regulator.
- 4.17 Non-continuous emissions monitoring of oxides of nitrogen, chloride, hydrogen cyanide and formaldehyde shall be carried out in accordance with the relevant BS EN standards as agreed in writing with the Regulator.

¹ Environment Agency, January 2016, or any re-issue or update

² Environment Agency, January 2014, or any re-issue or update

- 4.18 Results of non-continuous monitoring shall include details of process conditions at the time of monitoring, monitoring uncertainty and any deviations from the procedural requirements of standard reference methods and any error invoked from such deviations.
- 4.19 The monitoring reports shall record all pollutant concentrations expressed at reference conditions, 273K, 101.3kPa and 11% oxygen.
- 4.20 Stack emissions shall be tested for the pollutants listed in Table 1, and oxides of nitrogen, within 6 weeks of installation and commissioning of the boiler.
- 4.21 The Operator shall inform the Regulator immediately in cases where:
- An emission is likely to have an effect on neighbouring premises; or
 - There is a failure of any arrestment plant.

The report to the Regulator shall include:

- The date and time of the incident;
 - The cause and nature of the incident;
 - Details of any abnormal emissions;
 - Details of remedial action taken.
- 4.22 In the event of results from any monitoring activity demonstrating an adverse emission, approach to a limit, or a breach of emissions limit, the Operator shall undertake the following actions:
- Cease the activity or process causing the adverse emission immediately;
 - Investigate the cause immediately;
 - Carry out corrective action as soon as is practicably possible;
 - Record in the recording system required by condition 5.18 as much detail as possible regarding the cause and extent of the problem and the action taken to rectify the situation;
 - Undertake emissions re-testing to demonstrate compliance as soon as possible;
 - Only re-start the activity in question when it is compliant with emission limits and Permit requirements;
 - Notify the Regulator within one day of becoming aware of the results.

- 4.23 The Operator shall ensure that records containing the details and results of all visual assessments and records of all inspections, observations and maintenance made in accordance with Permit conditions are kept. These records shall include the time and date of inspection, the nature, colour, persistency and intensity of any emission and the name of the person carrying out the assessment. For visual and olfactory assessments the weather conditions, including wind speed and direction, shall be logged. The records shall be kept on the permitted premises and made available for inspection by the Regulator. Such records shall be kept for a minimum of two years and shall be submitted in writing to the Regulator on demand.

Section 5 – Continuous Monitors.

- 5.1 Emissions of oxygen and carbon monoxide from the boiler shall be continuously monitored.
- 5.2 Emissions of total particulate matter shall be continuously indicatively monitored using an EDAS Tribo.dsp U3600 monitor or equivalent.
- 5.3 The continuous indicative particulate emissions monitor shall be fitted with a visual display, and visual and audible alarms, situated appropriately to warn the operator of arrestment plant failure or malfunction.
- 5.4 The alarms serving the continuous particulate monitor shall be set to trigger at a reference level equivalent to 52mg/m^3 .
- 5.5 All alarm events from the continuous indicative particulate monitoring systems shall be automatically recorded and logged.
- 5.6 Any continuous monitor used shall provide reliable data >95% of the operating time, (i.e. availability >95%). A manual or automatic procedure shall be in place to detect instrument malfunction and to monitor instrument availability.
- 5.7 Continuously monitored data and alarm events of O₂, CO and particulates shall be sent via telemetry to the service contractor and the plant senior managers.
- 5.8 The Operator shall ensure that a visual assessment of the continuous indicative monitors and associated alarms is carried out at least once in every three month period for any signs of damage. Any defects shall be repaired as soon as possible. Details of the checks and any repair work shall be recorded in the log book or recording system required by condition 5.18 of this Permit.

- 5.9 The Operator shall ensure that all continuous monitors are serviced and calibrated at least once in every 12 month period by a competent person. Details of the servicing or maintenance shall be recorded in the log book or recording system kept in accordance with condition 5.18 of this Permit.
- 5.10 New or replacement continuous indicative monitors shall be designed for less than 5% down time over any 3 month period. Details of any proposed replacement equipment shall be submitted to the Regulator for written approval prior to installation.
- 5.11 No daily mean of all 15 minute emission concentrations shall exceed the specified emission limit during normal operation.
- 5.12 No 15 minute mean emission concentration shall exceed twice the specified emission concentration limit during normal operation.
- 5.13 A six monthly summary of emissions and alarm events from the continuous particulate monitor shall be submitted. The first summary shall be submitted by 30th September 2017.

Section 6 – Maintenance.

- 6.1 A written audit of items of plant and equipment shall be undertaken. The audit shall identify all plant and equipment that is critical to prevent, reduce or control emissions to air from the boiler. A copy of the audit shall be submitted to the Regulator for written approval within 4 weeks of the date of this Permit.
- 6.2 A written preventative maintenance schedule shall be produced for all critical plant and equipment identified from the audit required by condition 6.1. A copy of the maintenance schedule shall be submitted to the Regulator for written approval within 4 weeks of the date of this Permit.
- 6.3 The maintenance schedule shall be revised and updated upon provision, removal or alteration of plant or equipment. Once approved by the Regulator, the maintenance schedule shall be implemented by the Operator and adhered to.
- 6.4 The Operator shall ensure that all abatement plant is operated and maintained in accordance with manufacturer's recommendations and serviced at least once in every 12 month period. Details of the maintenance and servicing shall be recorded and made available for inspection by the Regulator on demand.

- 6.5 The Operator shall ensure that pollution abatement plant such as cyclones, filters, associated monitors, control panels, alarms, data loggers and control systems shall be checked and maintained in good working order as part of an ongoing written planned preventative maintenance programme, to ensure sound operation. Details of these checks shall be recorded and made available for inspection by the Regulator on demand.
- 6.6 The Operator shall ensure that a visual inspection of all abatement plant such as the cyclone and associated ductwork is carried out at least once in every 6 month period under normal operating conditions for any signs of wear, tear or damage. Any damage or defects shall be repaired as soon as possible. Details of inspections including any remedial action shall be recorded and made available for inspection by the Regulator on demand.
- 6.7 The Operator shall ensure that the oxygen and carbon monoxide monitors serving the boiler stack are serviced and calibrated in accordance with manufacturer's recommendations.
- 6.8 The Operator shall ensure that the continuous indicative particulate monitor, associated alarm and datalogger serving the boiler stack is checked daily to ensure sound operation. Details of these checks shall be recorded and made available for inspection by the Regulator on demand.
- 6.9 All continuous monitoring readings shall be on display to operating staff.
- 6.10 The chimney, flue and ductwork shall be internally swept at a period recommended by the manufacturer. A record of the cleaning shall be kept.
- 6.11 An adequate supply of spares and consumables shall be kept on site or made available within 1 day from guaranteed suppliers for all items of plant and equipment identified as being critical as a result of the audit carried out in compliance with condition 6.1.
- 6.12 Records of breakdowns and plant failure shall be kept and analysed in order to eliminate common failures. The records shall be made available for inspection by the Regulator on demand.
- 6.13 For plant and equipment identified in the audit required by condition 6.1, alarms or other warning systems shall be provided as appropriate to indicate equipment malfunction or breakdown by a date agreed with the Regulator.

- 6.14 The alarms or warning systems required by condition 6.12 for plant and equipment shall be checked as part of a preventative maintenance schedule and maintained in accordance with manufacturer's instructions. A record of such checks and maintenance shall be noted. Details shall be made available for inspection by the Regulator on demand.
- 6.15 Buildings, housings and structures including roofs and guttering shall be inspected at least once per year for any signs of accumulations of dusty material or ash that may become wind-whipped. Repairs and cleaning shall be carried out immediately and details of inspections shall be recorded and made available for inspection by the Regulator on demand.
- 6.16 Roadways, storage areas and yards shall be inspected at least once per month for any signs of accumulations of dusty material that may become wind-whipped. Cleaning shall be carried out immediately and details of inspections shall be recorded and made available for inspection by the Regulator on demand.
- 6.17 Combustion chambers, casings, ductwork and ancillary equipment shall be made and maintained as practicable.

Section 7 – Materials Handling.

- 7.1 Ash shall be automatically screw fed from the boiler into the ash pan. The ash pan shall be emptied daily when the boiler is operational in order to prevent ash touching the burner head.
- 7.2 Bags containing ash or dust shall be tied or fastened securely and stored inside a building in order to prevent emissions to atmosphere. Any split bags shall be double bagged.
- 7.3 Storage and handling of particulate matter including ash shall be carried out indoors so as to prevent or minimise dust emissions.
- 7.4 Spillages of potentially dusty materials shall be dealt with in accordance with a written Spill Procedure which is approved in writing by the Regulator.
- 7.5 Cleaning operations shall be carried out by wet sweeping methods or vacuuming in order to minimise emissions of particulate matter to air.
- 7.6 Waste skips shall be covered with tarpaulin or other suitable material or their contents shall be treated with water in order to prevent emissions of particulate matter to the air.

- 7.7 Dust emissions from the drying of minerals shall be kept under control in all weather conditions and shall not cross the installation boundary.
- 7.8 The loading and unloading of aggregates and other materials to the drying floors shall be done in a manner which prevents the emission of dust. Drop heights shall be minimised.
- 7.9 Stockpiles of aggregates and other materials shall be stored in protected areas of the site, suitably profiled or covered with materials in order to prevent dust emissions or wind whipping. Extra precautions shall be taken to control and minimise dust emissions during dry and windy weather.

Section 8 – General Conditions.

- 8.1 The stack serving the boiler shall be adequately insulated to minimise cooling of waste gases and steam to prevent liquid condensation. Stacks and ductwork shall be leak proof.
- 8.2 The stack shall not be fitted with any restriction at the final opening to exit velocity such as a plate, cap or cowl other than an accelerator cone or low resistance cowl.
- 8.3 Staff at all levels shall receive training and instructions necessary for their duties and shall include the following:
- Responsibilities under the Permit;
 - Minimisation of emissions at start up and shut down;
 - Actions during abnormal emissions including minimisation of emissions.
- 8.4 Boiler operatives shall be trained by Barden Energy during the commissioning process, using written operating procedures.
- 8.5 The training records and operating procedures required by condition 8.4 shall be available to the Regulator on demand.
- 8.6 The Operator shall keep and maintain a statement of training requirements for each operational post and keep a record of the training received by each employee whose actions may have an impact on emissions to atmosphere. These documents shall be made available to the Regulator upon request.
- 8.7 The Operator shall manage and operate the activities in accordance with a written system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the Operators as a result of complaints, and using sufficient competent persons and resources.

8.8 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the permitted process shall:-

- a) be made available for inspection by the Regulator at any reasonable time;
- b) be supplied to the Regulator on demand and without charge;
- c) be legible;
- d) be made as soon as reasonably practicable;
- e) indicate any amendments which have been made and shall include the original record wherever possible, and;
- f) be retained at the Permitted installation, or other location agreed by the Regulator in writing, for a minimum period of 2 years from the date when the records were made, unless otherwise agreed in writing.

8.9 The Operator shall notify the Regulator **without delay** of:-

- a) The detection of an emission of any substance, which exceeds any limit or criterion in this Permit, specified in relation to the substance;
- b) The detection of any fugitive emission that has caused, is causing or may cause significant pollution, unless the quantity emitted is so trivial that it would be incapable of causing significant pollution;
- c) The detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution;
- d) Any accident, which has caused, is causing or has the potential to cause significant air pollution.

8.10 The Operator shall give written notification to the Regulator in the following instances;

- a) Permanent cessation of the operation of any part of, or all of the Permitted Installation;
- b) Cessation of the operation of any part of, or all of the Permitted Installation for a period, likely to exceed 1 year;
- c) Resumption of the operation of any part of, or all of the permitted installation after a cessation notified under (b) above.

8.11 All reports and notifications required by this Permit, or under any Regulation under the Environmental Permitting (England and Wales) Regulations 2016, as amended, shall be sent to the Regulator. Unless notified in writing, all reports, notifications and communications in respect of this Permit shall be sent to:

epsadmin@sheffield.gov.uk or jppc@sheffield.gov.uk
or

**Sheffield City Council,
Environmental Protection Service,
Floor 5 Howden House
1 Union Street
Sheffield
S1 2SH.**

END OF PERMIT CONDITIONS

Please Note.

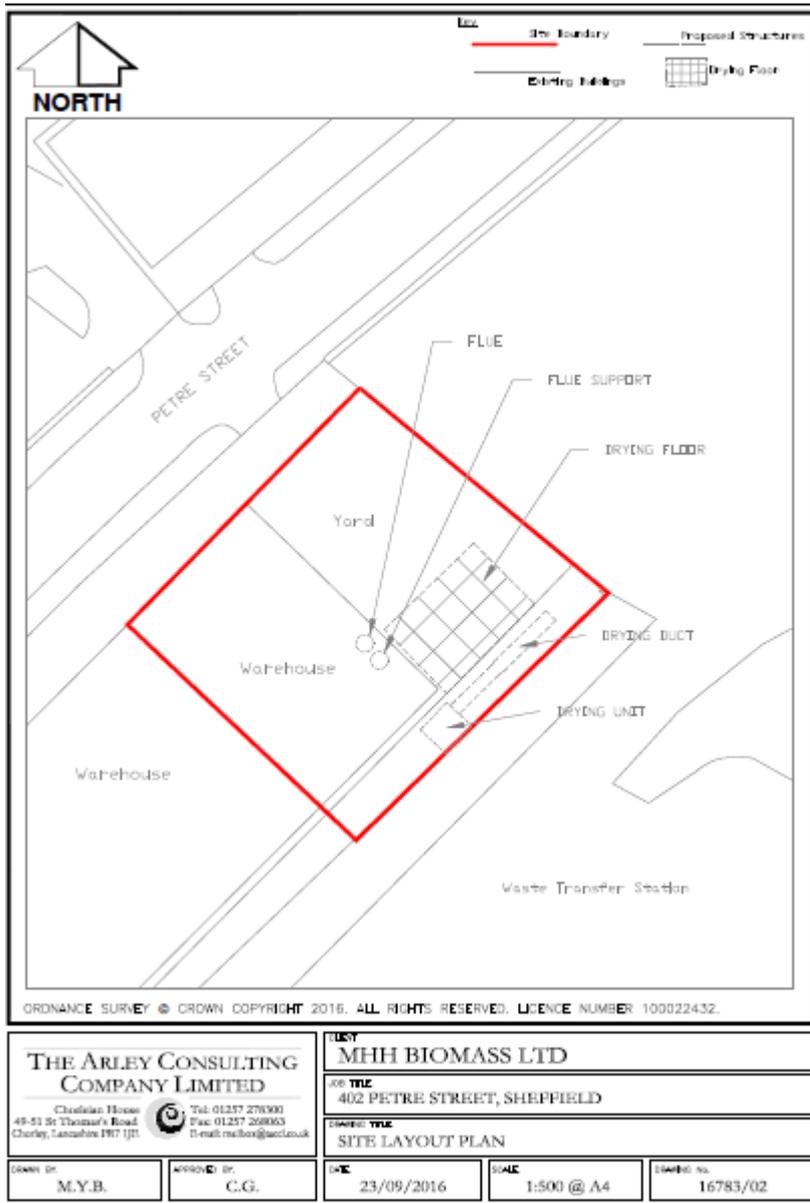
Where complaint is attributable to the operation of the installation and is, in the opinion of the Local Authority, justified, or if new knowledge develops on the potential for harmful effects from emissions, an immediate review of the Permit shall be undertaken. The Local Authority shall subsequently specify any new requirements and compliance time scales.

An annual subsistence fee as prescribed by the Secretary of State for the Environment shall be payable, for this Permit, by the process Operator, to this Authority within 2 weeks of the 1st April of each year.

In the event that the Permit has been issued after the 1st April in the initial year then the subsistence fee shall be pro rata for the complete months remaining and shall be due within 2 weeks of the Permit issue date.

If the relevant payment is not received by Sheffield City Council's Environmental Protection Service then Permit revocation procedures shall be initiated in accordance with Section 22 of the Environmental Permitting (England & Wales) Regulations 2016 or any statutory re-enactment of the same.

The requirements of this Permit are not to be taken as planning permission. Where any structural alterations are necessary to ensure compliance with this Permit then the normal planning channels should be followed.



Schedule 1 Installation Location.

