



Barrow-in-Furness Borough Council

POLLUTION PREVENTION AND CONTROL ACT 1999
ENVIRONMENTAL PERMITTING (ENGLAND AND WALES)
REGULATIONS 2016, SI1154

Part B Permit with Introductory Note

Ref: PPC/B/33

Brian Armistead Ltd.

Installation Address:

Sinkfall Farm
Rakesmoor Lane
Barrow-in-Furness
Cumbria
LA14 4QE

Application First Received: 15th May 2017
Current Part B Permit Issued: 10th August 2017

EXPLANATORY NOTES

These notes do not form part of the Permit

This Permit is issued under Regulation 13 of the Environmental Permitting (England & Wales) Regulations 2016 (2016 Regulations) to operate an installation carrying out one or more of the activities listed in Part 2, Section 5.1(v) to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The Permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions, are subject to the Operator using the best available techniques (BAT) for preventing or, where that is not practical, reducing emissions from the installation.

Article 2(11) of the IPPC Directive defines — “best available techniques” as follows:

- a) ‘Best available techniques’ shall mean the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole.
- b) ‘techniques’ shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned,
- c) ‘available’ techniques shall mean those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator,
- d) ‘best’ shall mean most effective in achieving a high general level of protection of the environment as a whole.

In determining the best available techniques, special consideration should be given to the items listed in Annex IV.

Brief Description of the Installation Regulated by the Permit

The installation boundary and location of the boiler house and stack are shown in Appendices 1-3 ‘Site Plan’.

The combustion of fuel manufactured from, or comprised of, waste wood in two (*Boiler 1 & 2*) 999kW Arterm Biomass Boilers used to dry virgin wood chip at Sinkfall Farm.

The combustion of virgin wood does not require a permitting, but the combustion of waste wood is subject to regulation under the Environmental Permitting (England Wales) Regulations 2016 and this is the main fuel used in the process.

Each Arterm 999kW boiler with Arterm Multijet 999kW burner is fitted with cyclone when burning wood chip (including Grade A wood waste) have a clean air act exemption which means they are permitted for

use within a Clean Air Act Smoke Control Area. The appliances operate with wood being transferred to a walking floor fuel feed system. Each boiler is continuously loaded at a rate of up to 250kg/hour, and fitted with a cyclone for emission reduction. No other emission abatement technology is required for this equipment.

Hot water from the boilers travels through a heat exchanger to provide warm air for the drying of virgin wood chip on outside drying beds. This activity is not permitted by this Environmental Permit.

1) Responsibility under Workplace Health and Safety Legislation - This permit is given in relation to the requirements of Environmental Permitting Regulations 2016 and subordinate regulations. It must not be taken to replace any responsibilities you may have under workplace health and safety legislation.

2) Other responsibilities - This permit, in that it regulates only air pollution matters, does not absolve you of the responsibility of any other statutory requirement, such as any need to obtain planning permission, hazardous substances consent or Building Regulations approval from the Council.

3) Enforcement and Offences - It is an offence to operate a regulated facility without a current permit. The operator will be liable to enforcement action where;

- a) a new activity (as defined within the Environmental Permitting (England & Wales) Regulations 2016) is carried on without a proper permit, and
- b) any of the conditions of the permit are breached.

4) Subsistence Charge - An annual fee (subsistence charge) due on 1st April each year (currently chargeable per activity per annum but subject to change by statutory instrument) is payable to Barrow-in-Furness Borough Council.

5) Confidentiality - The Permit requires the Operator to provide information to Barrow-in-Furness Borough Council. The Council will place the information onto the public registers in accordance with the requirements of the 2016 Regulations. If the Operator considers that any information provided is commercially confidential, it may apply to the Council to have such information withheld from the register as provided in the 2016 Regulations. To enable Barrow Borough Council to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

6) Variations to the permit - This Permit may be varied in the future. If at any time the activity, or any aspect of the activity regulated by the following conditions changes such that the conditions no longer reflect the activity and require alteration, the Regulator should be contacted.

7) Surrender of the permit - Where an Operator intends to cease the operation of an installation (in whole or in part) the regulator should be informed in writing, such notification must include the information specified in Regulation 24 of the 2016 Regulations.

8) 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 2016 Regulations. A transfer will be allowed unless the Authority 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.

9) **Appeal against permit conditions** - Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment, Food and Rural Affairs. Appeals must be made in accordance with the requirements of Regulation 31 and Schedule 6 of the 2016 Regulations.

Appeals should be sent to the Secretary of State for the Environment, Food and Rural Affairs. The address is as follows:-

The Planning Inspectorate
Environmental Appeals Administration
Room 3/H - Hawk Wing
Temple Quay House
2 The Square
Temple Quay
Bristol
BS1 6PN

Please Note - an appeal brought under Regulation 31 Paragraph (1) (b) and Schedule 6 in relation to the conditions in a permit will not suspend the effect of the conditions appealed against; the conditions must still be complied with. In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal and to direct the regulator either to vary any of these other conditions or to add new conditions.

10) **Contact Details** - If you are required to contact the Environmental Protection Unit of the Environmental Health Department at Barrow-in-Furness Borough Council, please telephone 01229 876366 during office hours and ask for Geoff Dowker (Environmental Protection Officer).

End of Explanatory Note



Permit reference: PPC/B/33

Barrow-in-Furness Borough Council (the “regulator”) in exercise of its powers under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016, hereby permits

Brian Armistead Limited (“the operator”)

whose registered office is

**Wolf Howe
Whinfell
Kendal
Cumbria
LA8 9EL**

to operate an installation undertaking the incineration in a small duplex waste incineration plant with an aggregated capacity of 50kg or more per hour of wood waste but less than 3MW thermal capacity as defined in sections 5.1 Part B, Paragraph (a)(iv) of Schedule 1, part 2 of the above Regulations, at

**Sinkfall Farm
Rakesmoor Lane
Barrow-in-Furness
Cumbria
LA14 1QE**

subject to the conditions of this Permit and within the boundary shown in red on the attached plan in Appendix A.

.....
Environmental Health Manager
An authorised officer of the Council

Date: 10th August 2017

STANDARD CONDITIONS

Best Available Techniques

1. 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.

Notification Procedure

2. If the operator proposes to make a change to the operation of the installation, the operator must, at least 14 days before making the change, notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition 'Change of operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment, such as the potential to lead to increased VOC emissions.

EMISSION LIMITS, MONITORING AND OTHER PROVISIONS

3. The following emission limits specified in Table 1 shall apply to both Boiler No. 1 & 2:

PPC/B/33 Table 1 - Emission limits, monitoring and other provisions					
Row	Substance	Source	Emission limits/provisions	Type of monitoring	Monitoring frequency
1	Carbon monoxide	Other processes less than 1MW	250 mg/m ³	Manual extractive testing Disregard: • 30 minutes from cold start	Annual
2	Total particulate matter	All processes	New Plant and replacement plant: 60 mg/m ³	Manufacturers' guarantee OR Manual extractive testing	Annual
3	Oxides of Nitrogen (NO _x)	All processes	New Plant: • 400 mg/m ³	Demonstrable upon commissioning and after any subsequent substantial change to the installation	
4	Oxygen	All processes where continuous carbon monoxide monitoring is provided	Continuous quantitative monitoring and record		
5	Organic compounds	All processes	20 mg/m ³	Manual extractive testing	Annual

4. The reference conditions for the emission limits in condition 3 shall be 273.1K, 101.3kPa, the oxygen and water references shall be that which corresponds to the normal operating conditions in the process concerned.

RECORDING OF INFORMATION

5. Emissions from the biomass boilers (1 & 2) shall be monitored annually in line with the provisions of table 1.

6. The operator shall notify the regulator a least 7 working days in advance of any periodic monitoring exercise. The operator shall state the provisional time and date of monitoring, pollutants to be tested and methods to be used. Monitoring shall be undertaken by a competent person.
7. The results of non-continuous emission testing shall be forwarded to the regulator within 8 weeks of the completion of sampling.
8. For extractive testing, no result of monitoring shall exceed the emission limit concentrations specified in table 1.
9. Adverse results from any monitoring activity shall be investigated promptly by the operator.
The operator shall:
 - 1/ Identify the cause and take corrective action.
 - 2/ Record as much detail as possible regarding the cause and extent of the problem, and the action taken by the operator to rectify the situation.
 - 3/ Retest to demonstrate compliance as soon as possible; and,
 - 4/ Notify the regulator
10. The operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. The records shall be:
 - 1/ kept on site,
 - 2/ Kept by the operator for at least two years and,
 - 3/ Made available for examination by the regulator upon request.

Visible Emissions

11. Emissions under normal operations shall be free from visible smoke and shall not exceed the equivalent of Ringlemann Shade 1 as described in British Standard 2742:2009 during start up and shut down.
 - 1/ All other releases to air, other than condensed water vapour, shall be free from persistent visible emissions.
 - 2/ All emissions to air shall be free from droplets and offensive odour.
12. Where there are problems that, in the opinion of the regulator, may be attributable to the installation, such as local complaints of odour or where odour from the installation is being detected beyond the site boundary, the operator should investigate in order to find out which part of their operation is the cause.

Abnormal Events

13. In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator shall:
 - 1/ Investigate and undertake remedial action immediately,
 - 2/ Adjust the process or activity to minimise those emissions; and
 - 3/ Promptly record the events and actions taken.
14. The regulator shall be informed without delay, whether or not there is related monitoring showing an adverse result:

- 1/ If there is an emission that is likely to have an effect on the local community; or
- 2/ In the event of failure of key arrestment plant, ie. bag filtration plant or scrubber units

On: Telephone 01229 876366
Fax 01229 976411
Office Hours (Mon-Fri) 9.00am-4.00pm
Out of Hours (Evenings, Sat & Sun) Telephone 01229 833311

15. The operator shall have a written procedure for dealing with failure of key arrestment plant.

Start up and Shutdown

16. The number of start-ups and shutdowns shall be kept to the minimum that is reasonably practical and all appropriate precautions shall be taken to minimise emissions during start up and shutdown.
17. All appropriate precautions must be taken to minimise emissions during start up and shutdown.

Continuous Monitoring

18. The concentration of oxygen in the flue gas of 'boiler 1 & 2' shall be measured continuously:
- 1/ All continuous monitoring readings shall be on display to appropriately trained operating staff.
 - 2/ Instruments shall be fitted with audible and visual alarms, situated appropriately to warn the operator of arrestment plant failure or malfunction.
 - 3/ The activation of alarms shall be automatically recorded; and,
 - 4/ All indicative continuous monitors shall be operated, maintained and referenced in accordance with manufacturers instructions, which shall be made available for inspection by the regulator.

Calibration and compliance Monitoring

19. Non-continuous, extractive, emissions monitoring to determine compliance with the emission limit values in table 1, shall be carried out within 6 weeks of the date of this permit, and at least once every 12 months thereafter.
20. Sampling data required shall be obtained over a minimum period of 2 hours in total. No result of monitoring shall exceed the emission limit concentrations specified.
21. The introduction of dilution air to achieve emission concentration limits is not permitted.
22. Within 6 months of the date of this permit, the regulator will carry out an installation 'spot check' on the types of Grade A wood being used as fuel to determine operator compliance with the conditions herein. The operator will make provision to allow officer access to the installation when required when carrying out this inspection.

Varying of Monitoring Frequency

23. The frequency of monitoring may be varied with written permission of the regulator where there is consistent compliance with emission limits. Consistent compliance should be demonstrated using the results from at least;
- 1/ three or more monitoring exercise's within two years; or
 - 2/ two or more monitoring exercises in on year supported by continuous monitoring.

Sampling Provisions

24. Sampling points shall be designed to comply with the appropriate British or equivalent standards e.g. BS EN 13284-1 or BS ISO 12141:2002 for sampling particulate matter in stacks.
25. The operator shall ensure that adequate facilities for sampling are provided on stacks and ducts, in order to facilitate access to the stacks or ducts.

Control Techniques

26. Combustion chambers, casings, ductwork and ancillary equipment shall be made and maintained as gas tight as is practical.
27. Boiler idling is not permitted. The operator shall justify to the regulator if this is not technically feasible.
28. The shredded Grade A waste wood shall have a moisture of less than 30% prior to being used to fuel the boilers.
29. Automatic fuel feed systems shall be used at all times.
30. All waste fuels and all processed dusty or potentially dusty materials shall be stored in covered containers, purpose built silos or undercover.
31. All spillages shall be cleaned up promptly by vacuum cleaning, wet methods, or other appropriate techniques. Dry sweeping of dusty spillages is prohibited. Wet material from spillages shall be dried before being burnt.
32. All ductwork and piping used to deliver fuel to the storage system and combustion plant shall be leak-proof to prevent the emission of particular matter.
33. A high standard of housekeeping shall be maintained at all times.
34. Silos and supply hoppers shall be fitted with high level alarms or volume indicators to warn of overfilling. The delivery system shall be provided with an interlock to prevent the silo or supply hopper being overfilled. The interlock mechanism should cause material to be discharged to an alternative storage container, where necessary vented to suitable arrestment plant.

Air Quality

35. The chimney stacks serving combustion boilers 1 & 2 shall discharge at a minimum 12 meters above ground level.
36. Flues and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.

Management

37. Spares and consumable- in particular those subject to continual wear – shall be held on site, or shall be available at short notice from guaranteed suppliers, so the plant breakdowns can be rectified rapidly.
38. All staff whose function could impact upon air emissions shall receive appropriate training on those functions, including;
- 1/ Awareness of responsibilities under this permit,
 - 2/ Steps that are necessary to minimise emissions during start-up and shutdown,
 - 3/ Actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled result in emissions, and
 - 4/ Inspection of incoming fuel for signs of contamination by wood chip that contains significant amounts of coatings, laminates, or other surface treatments, as well as obvious signs of the presence of PVC and other chlorinated organic polymeric compounds.
39. The operator shall maintain a statement of training requirements for each operational post and keep a record of training received by each person whose actions may have an impact on the environment. These documents shall be made available to the regulator upon request.

Maintenance

40. The operator shall have the following available for inspection by the regulator:
- 1/ a written maintenance programme for all pollution control equipment; and
 - 2/ a record of maintenance that has been undertaken.

In this permit, the following expressions shall have the following meaning:

Authorised officer	An officer authorised to carry out duties under the 2016 Regulations and subordinate regulations.
Installation	Any reference to an installation shall be taken to include “mobile plant”, stockpiles and associated roadways unless otherwise stated.
Logbook	Includes any means of storage of the required information as agreed by the regulator.

Operator

The person who has control over the operation of the installation. The installation need not be in operation for there to be an operator. The operator must demonstrably have the authority and ability to ensure compliance with the permit.

Regulator

Barrow-in-Furness Borough Council. The Environmental Protection Section of the Environmental Health Department, Town Hall, Duke Street, Barrow-in-Furness, Cumbria, LA14 2LD of this Council has responsibility for pollution control regulation.

END OF PERMIT

Appendix A- Installation Site Boundary

PPC/B/33- Sinkfall Farm

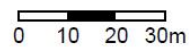


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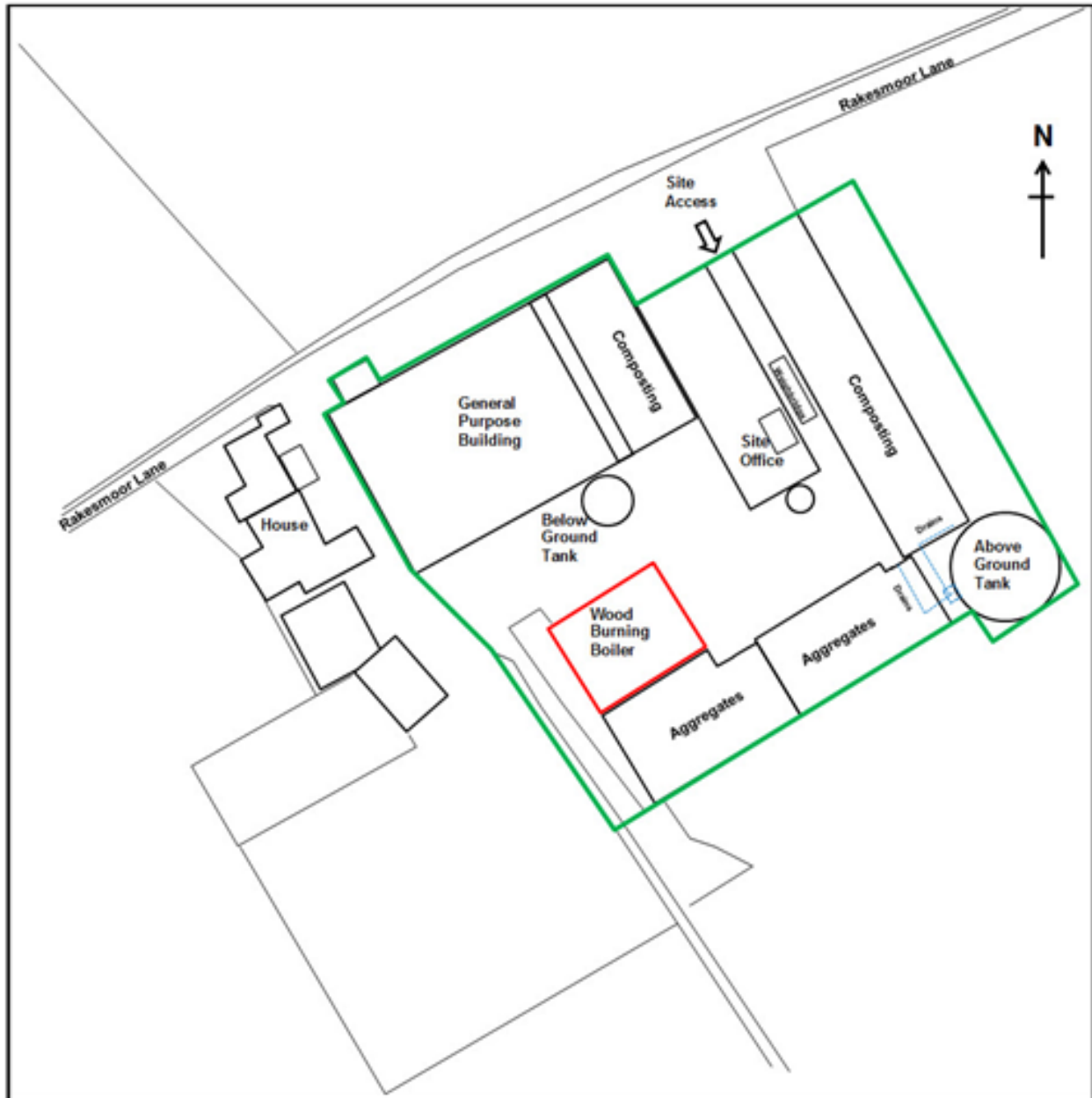
Created 19.07.2017



Appendix B

Site Plan Showing Boiler System Location

Site Plan including External Pad areas (outlined green ink). Boiler Installation within red lined area.



**SINKFALL RECYCLING
ENVIRONMENTAL PERMIT BOUNDARY (green line)**

Brian Armistead Ltd.
Rakesmoor Lane
Barrow-in-Furness
Cumbria
LA 14 4QE

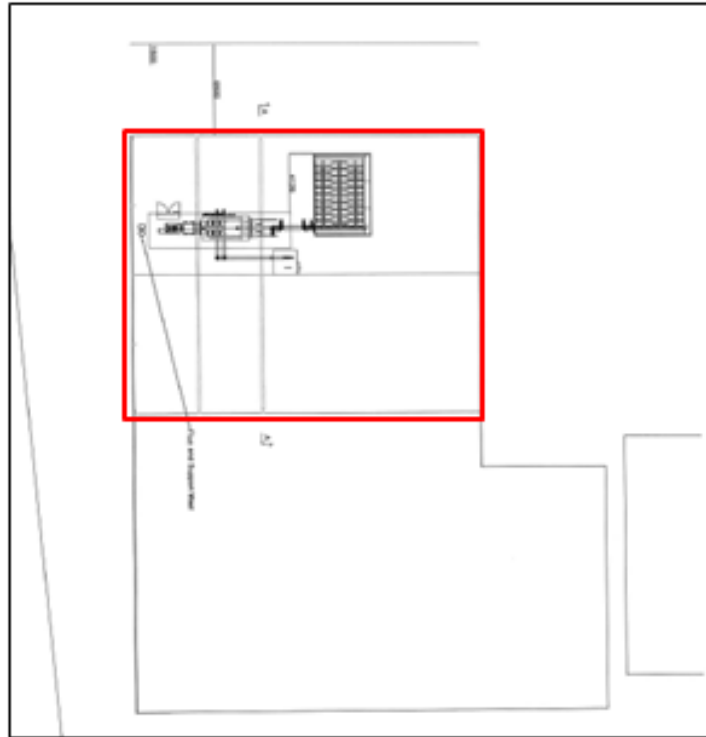
SCALE



Drawn by: D J Baldwin
Recogen Ltd.
SHREWSBURY Tel: 01743 340630
Date: 30th January 2017

Appendix C

Site Plan including Boiler Installation within red lined area.



Site Elevation showing the Twinned Stacks of Boiler Installation.

