

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Bio-Bean Limited

Alconbury Used Coffee to Advanced Biofuel Demonstration Centre
Building 4002
Alconbury Airfield
Huntingdon
PE28 4WX

Variation application number

EPR/KP3133AS/V004

Permit number

EPR/KP3133AS

Alconbury Used Coffee to Advanced Biofuel Demonstration Centre Permit number EPR/KP3133AS

Introductory note

This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. Only the variations specified in schedule 1 are subject to a right of appeal.

Changes introduced by this variation notice:

This permit variation has been issued to implement the following guidance “Non-hazardous and inert waste: appropriate measures for permitted facilities” and to implement the relevant requirements of the Best Available Techniques (BAT) Conclusions set out in implementing decision (EU) 2018/1147 of 10 August 2018.

The Industrial Emissions Directive (IED) came into force on 7 January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision.

Article 21(3) of the IED requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions. The BAT Conclusions for Waste Treatment (the BREF) was published on 17 August 2018 following a European Union wide review of BAT, implementing decision (EU) 2018/1147 of 10 August 2018.

The non-hazardous and inert waste: appropriate measures for permitted facilities guidance was published on the gov.uk website on 12 July 2021. This guidance sets out the standards that are relevant to regulated facilities with a permit to store, treat or transfer (or both) non-hazardous and inert wastes.

This variation has consolidated the original permit and subsequent variations where appropriate.

Brief summary of the process

Alconbury Used Coffee to Advanced Biofuel Demonstration Centre site is an installation facility that recycles waste coffee grounds (WCGs) into dried spent grounds (DCG), which are then used in the manufacture of a range of bio-based materials, including coffee logs and biomass pellets. These pellets are subsequently used as biomass fuel.

The environmental permit allows Bio-Bean limited to operate the following installation and directly associated activities (DAA):

- S5.5 A(1)(a) - making solid fuel (other than charcoal) from waste by any process involving the use of heat- using waste coffee grounds.
- Storage of waste prior to treatment.
- Pre-screening of waste to remove the contaminants.
- Drying of coffee grounds in an external low temperature belt dryer; and
- 2MW Medium Combustion Plant (biomass boiler) fuelled by virgin woodchip to provide the heat to the belt dryer.
- Storage of raw materials (virgin biomass)

The solid fuel making process involves drying, cutting, pressing and cooling of WCGs. Segregated WCGs which are accepted at the site have a moisture content of approximately 58%. The WCGs are subjected to a number of pre-acceptance and waste acceptance checks in Building 4003 before being moved into the pile using telehandler. From the pile, they are then scooped up and deposited in a shredder to break up large fractions and then through a trommel to remove any contaminants. Once the contaminants are removed the WCGs are fed by belt into the belt dryer. A vac system is used in transferring the dried coffee grounds into Building 4002 where they are subjected to a screening process using 2mm rotex sieve before being used to make coffee logs or pellets. The log is a mixture of virgin sawdust and dried WCG while the pellet is a mixture of WCG and a sugary starch (Roux) that is compressed in a briquetting machine.

The annual throughput of the site is 25,000 tonnes.

There are potential risks of dust and particulate matter emissions from the drying process and the operation of the boiler. The belt dryer is designed to emit into atmosphere via two vents that are connected to a 17m high common exhaust stack (emission point A1). Dust cyclones are fitted to the dust filtration system on the pellet cooler exhaust (emission point A2) to minimise dust emissions while the biomass boiler stack is fitted with the emission release point A3. Fugitive emissions at the site are minimised through a number of process control measures. All of the site operations are carried out within enclosed buildings with doors that are kept closed when deliveries and collections are not being made. All vehicles delivering waste or transporting waste from the site are covered. The site has a housekeeping procedure that includes regular maintenance of site surfaces to remove litter and debris.

The site does not generate wastewater and there are no channelled emissions to land or water. Discharge from the site is limited to uncontaminated roof water and surface water drainage from non-waste handling areas of the site which is released to the public sewer.

The site is situated on an old RAF airbase (NGR: 521329 277090) and is located 1.5km to the north of the Little Stukeley village and 2km southwest of Abbots Ripton. It comprises two buildings - Building 4002 and Building 4003, covering an approximate area of 2000m². The nearest residential properties are located 1.1km to the north of the site. There is a SSSI (Great Stukeley Railway Cutting) located within 2km of the site.

Bio-Bean Limited operate an ISO14001 Management System at the site.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	Date	Comments
Application received EPR/KP3133AS/A001	Duly made 10/04/15	Application for an Installation to use waste coffee grounds to make biomass fuel pellets.
Schedule 5 Notice - Additional information received	09/06/15	Schedule 5 response received providing updated environmental risk assessment and details on the risk of noise.
Permit determined EPR/KP3133AS	30/06/15	Permit issued to Bio-Bean Limited.
Application EPR/KP3133AS/V002 (variation and consolidation)	Duly made 04/04/16	Application to vary annual throughput to 100,000 tonnes per annum, increase the permitted site area and operational changes.
Variation determined EPR/KP3133AS	11/07/16	Varied and consolidated permit issued in modern condition format.
Application EPR/KP3133AS/V003 (variation and consolidation)	Duly made 21/05/18	Application to vary permit to include additional coffee storage, a biomass boiler and a new belt dryer.

Status log of the permit		
Description	Date	Comments
Schedule 5 Notice dated 16/07/18 - Additional information received	31/08/18	Revised Fire Prevention Plan
Variation determined EPR/KP3133AS (Billing ref: KP3131JG)	20/09/18	Varied and consolidated permit issued.
Environment Agency Non-hazardous Waste Sector Review Variation number EPR/KP3133AS/V004	17/09/21	Non-hazardous waste Sector Review – documents received in response to the Regulation 61 Notice dated 28/04/2021.
Additional information	02/11/22	Email from the operator advising the Environment Agency to remove the following waste codes from Table S2.2 of the permit: 02 03 01, 02 03 03, 02 03 99, 02 06 01, 02 07 01, 02 07 02, 02 07 99, 20 03 01, 20 03 02.
Environment Agency Non-hazardous Waste Sector Review Variation number EPR/KP3133AS/V004 Permit determined EPR/KP3133AS (Billing Reference - AP3404MT).	22/11/22	Varied and consolidated permit issued in modern condition format.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulations 19 and 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/KP3133AS

Issued to

Bio-Bean Limited (“the operator”)

whose registered office is

Unit 4002

Alconbury Weald Enterprise Park

Alconbury

Huntingdon

PE28 4WX

company registration number 08378657

to operate a regulated facility at

Alconbury Used Coffee to Advanced Biofuel Demonstration Centre

Building 4002

Alconbury Airfield

Huntingdon

PE28 4WX

to the extent set out in the schedules.

The notice shall take effect from 22/11/2022.

Name	Date
Peter Maksymiw	22/11/2022

Authorised on behalf of the Environment Agency

Schedule 1

The following conditions and tables were varied as a result of Environment Agency Initiated Variation:

- Condition 1.1.4 added because it is a relevant condition.
- Condition 2.5.1 has been deleted because the pre-operational condition is no longer relevant.
- Condition 3.1.3 has been reworded to make it site/operation specific.
- Table S1.1 as referenced in Condition 2.1.1 has been amended by applying relevant limits to the activities.
- Table S1.2 as referenced in Conditions 2.3.1 and 2.3.2 has been amended to incorporate operating techniques documents received in response to the Regulation 61 Notice.
- Table S1.3 as referenced in Condition 2.4.1 has been amended to incorporate IC2 (previously PO1).
- Table S1.4 has been deleted because pre-operation condition PO1 has been moved into Table S1.3 as improvement condition IC2.
- Table S2.2 as referenced in Condition 2.3.4 has been amended by removing waste codes that are not appropriate for the installation activity.
- Table S3.1 as referenced in Condition 3.5.1(a) has been amended to include relevant monitoring parameters and limits.
- Table S4.1 as referenced in Conditions 4.2.3 (a) and (b) has been amended to include appropriate reporting requirements.
- Tables S4.2 – S4.3 as referenced in Conditions 4.2.2 (b) and (c) respectively have been amended to include appropriate reporting requirements.
- Schedule 5 as referenced in conditions 4.3.2 and 4.3.4 has been amended by adding a new paragraph (c) to Part A requiring notification of breach of permit conditions not relating to limits.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/KP3133AS

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/KP3133AS/V004 authorising,

Bio-Bean Limited (“the operator”),

whose registered office is

Unit 4002

Alconbury Weald Enterprise Park

Alconbury

Huntingdon

PE28 4WX

company registration number 08378657

to operate an installation at

Alconbury Used Coffee to Advanced Biofuel Demonstration Centre

Building 4002

Alconbury Airfield

Huntingdon

PE28 4WX

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

Name	Date
Peter Maksymiw	22/11/2022

Authorised on behalf of the Environment Agency

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, 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.

1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

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 the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency 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 the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.2; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once in every 5 years for groundwater and every 10 years for soil unless otherwise agreed in writing by the Environment Agency.

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 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency 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 the Environment Agency.

3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:

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

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
 - (a) point source emissions specified in tables S3.1 and S3.2.
- 3.5.2 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.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 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 tables S3.1 and S3.2 unless otherwise agreed in writing by the Environment Agency.

3.6 Pests

- 3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.6.2 The operator shall:
 - (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
 - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.7 Fire prevention

- 3.7.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.
- 3.7.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
 - (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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 the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) the annual production /treatment data set out in schedule 4 table S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, 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 S4.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1(a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

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

4.3.4 The Environment Agency 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:

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

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) 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.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
 - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
 - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 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

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
S5.5 A(1)(a)	Making solid fuel (other than charcoal) from waste by any process involving the use of heat-using waste coffee grounds to produce coffee logs, pellets and briquettes to be used as biomass fuel. R3 Recycling/reclamation of organic substances which are not used as solvents	From receipt of source segregated waste coffee grounds to the export of coffee logs, pellets and briquettes for use as a biomass fuel off site. The processing is limited to drying, pressing, cutting and cooling of waste coffee grounds. Waste types as specified in Table S2.2
Directly Associated Activity		
Waste storage	Receipt and storage of source segregated waste coffee grounds R13 Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)	No more than 5,000 tonnes of waste shall be stored prior to treatment on site at any one time.
Waste initial processing	Initial processing of source segregated waste coffee grounds.	Processing limited to shredding to break up large fractions and trommelling to remove physical contaminants.
Steam and heat supply	Medium Combustion Plant MCP1: 2MW thermal input biomass boiler	Virgin biomass fuel or coffee pellets as specified in table S2.1
Storage of raw materials	Handling and storage of raw materials for use in the production of biomass pellets, cleaning, fuelling and equipment maintenance.	Receipt and storage of virgin biomass.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/KP3133AS/A001	Parts B2 and B3 of the application form and referenced supporting information	Duly Made 10/04/15
Additional information	Email detailing fire breaks will be in line with our guidance	08/05/15
	Email providing further details on the process	14/05/15
	Email detailing pre-acceptance and waste acceptance measures	05/06/15
Schedule 5 response	Updated environmental risk assessment and email providing details on noise risk and control measures	09/06/15

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/KP3133AS/V002	Part C3 of the application form and referenced supporting information	04/04/16
Application EPR/KP3133AS/V003	Part C3 of the application form and referenced supporting information including: <ul style="list-style-type: none"> • Non-technical summary – version 4 • Operating techniques • Fire Prevention Plan • Environmental Risk Assessment Excluding all references to use of waste as a fuel for the biomass boiler.	Duly made 21/05/18
Schedule 5 response EPR/KP3133AS/V003	Revised Fire Prevention Plan, Version 6, dated July 2018	31/08/18
Regulation 61 Notice Response EPR/KP3133AS/V004	Documents received in response to the Regulation 61 Notice.	17/09/21
Additional information	Email from the operator advising the Environment Agency to remove waste codes that are not appropriate to the installation activity from Table S2.2: 02 03 01, 02 03 03, 02 03 99, 02 06 01, 02 07 01, 02 07 02, 02 07 99, 20 03 01, 20 03 02.	02/11/22

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>The Operator shall undertake air emission monitoring of particulate releases from emission point A2 as defined in table S3.1.</p> <p>The monitoring schedule shall be designed to provide data representative of typical and worst-case operating conditions. However, as a minimum the monitoring shall be for the duration of a full shift and shall be repeated for two such shifts and shall include measurement of concentration and efflux velocity. The Operator shall submit a written report to the Environment Agency detailing the monitoring undertaken and results obtained.</p> <p>The Operator shall carry out an assessment of the environmental risk of particulates released from emission point A2, using the results obtained from the monitoring. A written report detailing the assessment methodology used and findings of the environmental risk assessment shall be submitted to the Environment Agency.</p> <p>If the environmental risk assessment shows that particulate emissions are potentially significant and could impact upon air quality, habitats or species, submit a plan for improvement works to reduce particulate releases from A2 to the Environment Agency for approval and a proposed timetable for completion.</p>	Completed
IC2	<p>The operator shall demonstrate that the coffee pellets have been granted End of Waste status and shall submit evidence of certification to the Environment Agency prior to their use as fuel in the biomass boiler.</p> <p>The operator shall cease to use the coffee pellets as fuel in the biomass boiler where they are not able to secure an End of Waste certification for the coffee pellets.</p>	30/11/2023

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Fuel for biomass boiler	Virgin biomass
	Coffee pellets in line with improvement condition IC2.

Table S2.2 Permitted waste types and quantities for coffee log, biomass pellet and briquette production.	
Maximum quantity	25,000 tonnes per year throughput
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 04	materials unsuitable for consumption or processing (spent coffee grounds only)
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 08	biodegradable kitchen and canteen waste (spent coffee grounds only)

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 dryer stack Point A1 on the site plan in Schedule 7	Two exhausts emitting through the belt dryer stack	Water vapour	No limit set	-	6 monthly or as agreed in writing with the Environment Agency	-
		Dust				
A2 vent Point A2 on the site plan in Schedule 7	Dry Filtration System at pellet cooler	Dust	5mg/m ³	Hourly average		BS EN 13284-1 or other method as agreed in writing with the Environment Agency
A3 biomass boiler stack Point A3 on the site plan in Schedule 7	Biomass boiler stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	650mg/m ³	Hourly average	Every 3 years	As agreed in writing with the Environment Agency
		Particulate matter	50mg/m ³	Hourly average	Every 3 years	
		Carbon monoxide	No limit set	Hourly average	Every 3 years	

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
SW1-6 and SW 8 - 13 public surface water drainage system on site plan in Schedule 7	Uncontaminated roof water and surface water drainage from non-waste handling areas of the site	-	-	-	-	-

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	A1, A2	Every 6 months	1 January, 1 July.
Emissions to air Parameters as required by condition 3.5.1.	A3	Every 3 years	1 January

Table S4.2 Annual production/treatment	
Parameter	Units
Coffee log, pellets and briquettes produced	tonnes
Other fractions produced	tonnes

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	20/09/18
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	30/06/15
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	30/06/15

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	

(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	
To be notified within 24 hours of detection	
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) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the breach of permit conditions not related to limits	
To be notified within 24 hours of detection	
Condition breached	
Date, time and duration of breach	
Details of the permit breach i.e. what happened including impacts observed.	
Measures taken, or intended to be taken, to restore permit compliance.	

(d) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
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 Environment Agency 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.

“emissions to land” includes emissions to groundwater.

“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.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“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, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“Pests” means Birds, Vermin and Insects.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“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.

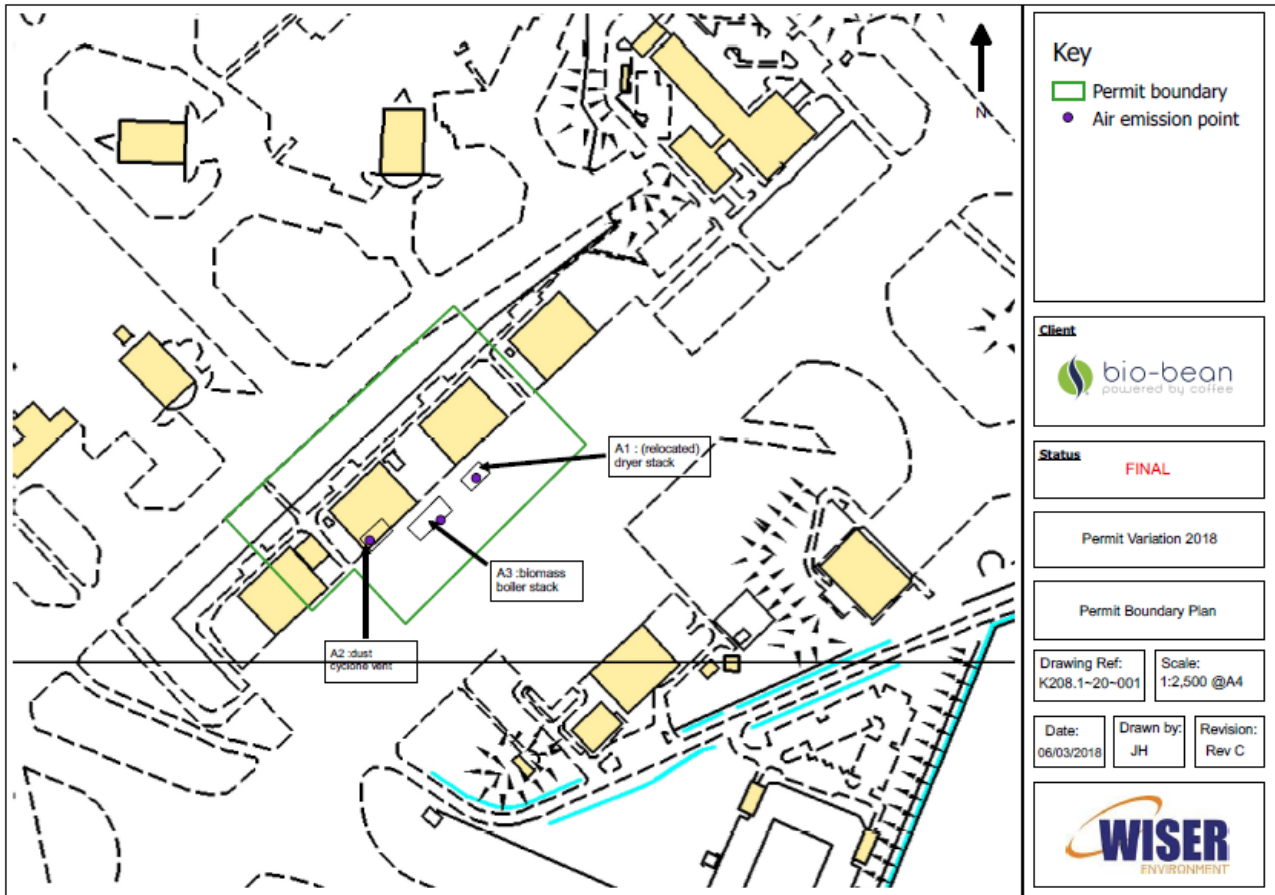
“year” means calendar year ending 31 December.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

Schedule 7 – Site plan



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