

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Mr Simon Mitchell
Phoenix Green Solutions
Mays Hill Industrial Estate
Frampton Cotterell
Bristol
South Gloucestershire
BS36 2NS

Variation application number

EPR/KB3031AV/V005

Permit number

EPR/KB3031AV

Phoenix Green Solutions

Permit number EPR/KB3031AV

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. All the conditions of the permit have been varied and are subject to the right of appeal.

The main features of the permit are given below.

The site is located on the northern outskirts of Bristol, on Mays Hill Industrial Estate. The purpose of the facility is the composting of biodegradable waste utilising an In-Vessel Composting system where composting materials are contained within large polythene tubes known as an Ag-Bag system. The system is designed to reduce odour, bioaerosols and litter, and is not accessible by vermin.

The purpose of this permit variation is to increase the total quantity of biodegradable waste accepted at the site to 60,000 tonnes per annum.

The composting facility previously met the description of a waste operation as defined by the Environmental Permitting Regulations, and was permitted as such (ref. EAWML 104560). However, as a result of the increase in waste capacity, the site now meets the definition of an installation, specifically Section 5.4, Part A(1)(b)(i):

“Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC— (i) biological treatment.....”.

This permit is therefore for an installation activity. As an installation, the activity will have to be undertaken in accordance with best available techniques (BAT).

Biodegradable material for composting will be delivered to a reception area with an impermeable surface, where it will be inspected, litter picked, stored and shredded. The shredded material is mechanically fed straight into the Ag-Bags, where the active composting phase takes place over a period of 8 to 10 weeks. During the composting phase air is periodically forced into the composting material via a tube that is laid in the base of the polythene outer bag. This air maintains aerobic conditions within the Ag-bag.

Once the compost is ready and Ag-Bag opened, the material is screened to separate out any over-size, which is returned to the start of the composting process. The compost product is then removed off site for agricultural use.

An on-site lagoon receives run-off water from the waste reception pad. This water is used in the composting process to provide the correct level of moisture in order to achieve an ideal composting rate.

The monitoring of bioaerosol emissions from the facility is a condition of this permit.

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/KB3031AV/A001	Duly made 07/08/2012	Application for In-Vessel green waste composting facility.
Permit Issued	31/10/2012	Permit issued to Mr Simon Mitchell.
Application received EPR/KB3031AV/V002	06/06/2016	Application to vary the permit to increase tonnage accepted on site.
Application returned EPR/KB3031AV/V002	Returned 04/08/2016	Application returned to applicant in order to complete Fire Prevention Plan.
Application received EPR/KB3031AV/V005	Received 09/11/2016	Application to vary the permit to increase tonnage accepted on site.
Application EPR/KB3031AV/V005	Duly made 09/11/2016	
Variation determined EPR/KB3031AV/V003	21/04/2017	Varied permit issued.
Application EPR/KB3031AV/V005	Duly made 01/03/2018	Application to vary the permit to add one waste code.
Variation determined EPR/KB3031AV/V004	23/03/2018	Varied permit issued.
Application EPR/KB3031AV/V005	Duly made 13/10/2020	Application for an In-Vessel Composting Installation.
Additional information received	20/10/2020	Updated site condition report.
Additional information received	25/02/2021	Updated site boundary plan (ref: SOL1604PGS01) Updated site condition report (ref: Annex D Site Condition Report v.3).
Permit determined Billing reference (GP3108SQ)	10/03/2021	Permit issued to Mr Simon Mitchell.

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 regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/KB3031AV

Issued to

Mr Simon Mitchell ("the operator")

of

Southcroft Farm
Old Sodbury
South Gloucestershire
BS37 6RH

to operate an installation at

Phoenix Green Solutions
Mays Hill Industrial Estate
Frampton Cotterell
Bristol
South Gloucestershire
BS36 2NS

to the extent set out in the schedules.

The notice shall take effect from 10/03/2021.

Name	Date
Louise Hann	10/03/2021

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/KB3031AV

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/KB3031AV/V005 authorising,

Mr Simon Mitchell (“the operator”),

of

**Southcroft Farm
Old Sodbury
South Gloucestershire
BS37 6RH**

to operate an installation at

**Phoenix Green Solutions
Mays Hill Industrial Estate
Frampton Cotterell
Bristol
South Gloucestershire
BS36 2NS**

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

Name	Date
Louise Hann	10/03/2021

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").
- 2.1.2 The activities shall be undertaken in accordance with best available techniques.
- 2.1.3 All process plant and equipment shall be commissioned, operated and maintained and shall be fully documented and recorded in accordance with the manufacturer's recommendations.

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 S2.1; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder; and
 - (c) the facility has sufficient free capacity to store and treat the waste.
- 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.
- 2.3.7 Waste pre-acceptance and acceptance procedures shall be undertaken in accordance with best available techniques.

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 table 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 every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

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 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.

3.4 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) process monitoring specified in table S3.1;
 - (b) bioaerosols monitoring specified in table 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 Bioaerosols

- 3.6.1 The operator shall take all appropriate measures, to prevent or where that is not practicable to minimise the release of bioaerosols. Emissions of bioaerosols from the operational activities shall not exceed the emission action levels specified in table S3.2.
- 3.6.2 The operator shall where the emission action levels are exceeded:
- (a) notify the Environment Agency and investigate and take remedial action;
 - (b) submit to the Environment Agency for approval within the period specified, a bioaerosols management plan which identifies and minimises the risks of pollution from bioaerosols; and
 - (c) implement the bioaerosols management plan from the date of approval and revise the plan periodically, unless otherwise agreed in writing by the Environment Agency.

3.7 Pests

- 3.7.1 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.
- 3.7.2 The operator shall:
- (a) only use approved products for pest control;
 - (b) treat pest infestations promptly;
 - (c) reject pest-infected incoming waste;
 - (d) 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;
 - (e) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.8 Fire prevention

3.8.1 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.

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.
- 4.2.6 The operator shall keep records of non-waste materials leaving the site, including the type of material, the batch number, the date of export off-site and the tonnage exported on that date. These records shall be maintained for at least 2 years.

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 Following the detection of an issue listed in condition 4.3.1, the operator shall review and revise the management system and implement any changes as necessary to minimise the risk of reoccurrence of the issue.

4.3.4 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.

4.3.5 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.

4.3.6 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.

4.3.7 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.

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 reference	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
AR1	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste through to composting and recovery of by-products. Composting of waste under aerobic conditions in closed composting Ag-Bags on impermeable surface with a sealed drainage system. Waste types suitable for acceptance are limited to those specified in Table S2.2.
Directly Associated Activity			
AR2	Storage of waste pending recovery or disposal	R13: Storage of waste pending the R3 operation (excluding temporary storage, pending collection, on the site where it is produced)	From the receipt of waste to despatch for composting or despatch off site for recovery and/or disposal. Storage of waste on an impermeable surface with a sealed drainage system. Waste types suitable for acceptance are limited to those specified in Table S2.2.
AR3	Physical treatment for the purposes of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents	From the receipt of waste to despatch for composting or despatch off site for recovery. Pre-treatment of waste (including shredding and screening) prior to composting on an impermeable surface with a sealed drainage system. Post-treatment of processed compost on an impermeable surface with a sealed drainage system including screening to remove contraries.

Table S1.1 Activities			
Activity reference	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
			Waste types suitable for acceptance are limited to those specified in Table S2.2.
AR4	Raw material storage	Storage of raw materials including lubrication oil, diesel.	From the receipt of raw materials to despatch for use within the facility.
AR5	Storage of finished compost and non-composted fraction	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	From the receipt of processed uncertified compost and non-composted fraction produced at the facility to treatment on site and despatch for use off-site. Storage of processed uncertified compost on an impermeable surface with a sealed drainage system.
AR6	Process water collection and storage	Collection and storage of compost liquor/leachate in one lagoon. R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	From the receipt of compost leachate produced at the facility to despatch for use at the facility or despatch off site for recovery or disposal. Collection and storage of compost liquor/leachate in one storage lagoon.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Response to section 3a – technical standards, Part C3 of the application form	06/08/2020
Application	<ul style="list-style-type: none"> • Odour management plan (reference SOL2006PGS01_OMP, v1, dated August 2020) in response to section 3b Part C3 of the application form • Dust and emissions management plan (reference SOL2006S01_DEMP, v1, dated August 2020) in response to section 3b Part C3 of the application form • Fire prevention plan (reference SOL2006S01, v5, dated August 2020) in response to section 5d and e of Part C2 of the application form 	06/08/2020

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>The operator shall submit a written 'site containment plan' and shall obtain the Environment Agency's written approval to it. The report shall contain the results of a review conducted by a competent person (i.e. qualified civil or structural engineer).</p> <p>The review shall be undertaken in accordance with the risk assessment methodology detailed within CIRIA C736 – "<i>Containment Systems for the Prevention of Pollution – secondary, tertiary and other measures for industrial and commercial premises</i>" (2014) guidance or other relevant industry standard, of the design, construction method, extent and integrity of containment systems where all polluting liquids and solids are being stored, treated, and/or handled. The review shall consider, but not limited to storage vessels (including AgBags), bunds, loading and unloading areas, transfer pipework/pumps, temporary storage areas, and liners underlying the site. The plan must contain completion dates for the implementation of individual improvement measures necessary for the containment systems to adhere to the standards detailed/referenced within CIRIA C736 (2014) guidance, or equivalent in addition to meeting the BAT Conclusions for Waste Treatment 19(c) and 19(g) compliance by the compliance date of 17th August 2022.</p> <p>The review shall include:</p> <ul style="list-style-type: none"> • physical condition of on-site containment methods i.e. compost leachate storage lagoon, Ag-bags • any work required to ensure compliance with the standards detailed in CIRIA C736 or other relevant industry standard; • address compliance with BAT Conclusions for Waste Treatment BAT conclusion 19, with regard to <ul style="list-style-type: none"> i) BAT 19(c) impermeable surface - <i>depending on the risks posed by the waste in terms of soil and/or water contamination, the surface of the whole waste treatment area (e.g. waste reception, handling, storage, treatment and dispatch areas) is made impermeable to the liquids concerned; and</i> ii) BAT 19(g) adequate drainage infrastructure – <i>the waste treatment area is connected to an adequate drainage infrastructure</i> • a maintenance and inspection regime <p>A written report of the review shall be submitted to the Environment Agency detailing the review's findings and recommendations. Remedial action shall be taken to ensure that the on-site containment meets the CIRIA C736 standards and BAT requirements and the operator must implement the maintenance and inspection regime.</p> <p>No site operations shall commence or waste accepted at the facility unless the Environment Agency has given prior written permission.</p>	<p>Progress report by 15/05/2021, with work completion by 31/06/2021, unless otherwise agreed by the Environment Agency</p>

Schedule 2 – Waste types, raw materials and fuels

Raw materials and fuel description	Specification
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Maximum quantity	Annual throughput shall not exceed 60,000 tonnes
Exclusions	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> separately collected loads of plastic unless the whole load is certified compostable to BS EN13432 co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432 food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025. wastes containing wood-preserving agents or other biocides and post-consumer wood wastes containing persistent organic pollutants wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014 manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.
Waste Code	Description
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 05	wastes from aerobic treatment of solid wastes
19 05 03	off-specification compost
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 01	paper and cardboard (where no non-biodegradable coating or preserving substance present)
20 01 38	wood other than that mentioned in 20 01 37 (where no non-biodegradable coating or preserving substance present)
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste (comprising wood and plant tissue)
20 03	other municipal wastes
20 03 02	Biodegradable waste from markets

Schedule 3 – Emissions and monitoring

Table S3.1 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Meteorological conditions	Wind speed, Air temperature, Wind direction	Continuous	As specified in the Environmental Management System	Weather station or anemometer and wind sock
Stock piles prior to composting including screened and shredded material	Temperature	Daily prior to processing	Temperature probe	<p>Monitoring equipment shall be available on site and used as required to maintain aerobic conditions and ensure compliance with this permit.</p> <p>Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.</p> <p>Uncontrolled self-heating and decomposition must be prevented in accordance with the Accident Management Plan and/or Fire Prevention Plan.</p> <p>Process shall be controlled in accordance with permit condition 3.3 and the Odour Management Plan.</p> <p>Sampling of waste shall be in accordance with EN14899.</p>
	Moisture	Daily prior to processing	Squeeze test, or drying oven in accordance with BS EN 13040	
	C:N Total Organic Carbon and Total Kjeldahl Nitrogen	As agreed in the Environmental Management System	Total Organic Carbon using recognised industry method Total Kjeldahl Nitrogen in accordance with BS EN 13654-1	
	Fly infestation or pupa formation	<p>Daily – for stock piles in storage prior to preparation and stock piles in sanitation stage</p> <p>Weekly – for stock piles in stabilisation stage</p>	Visual inspection	

Table S3.1 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
				Anaerobic conditions shall be prevented.
Representative internal core for each composting batch during sanitisation and stabilisation stage	Temperature	Daily	Temperature probe Temperature probe shall record core waste temperature and probe placement must be sufficient to record temperature uniformly.	Monitoring equipment shall be available on site and used as required to maintain aerobic conditions and ensure compliance with this permit. Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.
	Moisture	Daily	Moisture meter	
	C:N Total Organic Carbon and Total Kjeldahl Nitrogen	As agreed in the Environmental Management System	Total Organic Carbon using recognised industry method Total Kjeldahl Nitrogen in accordance with BS EN 13654-1	Process shall be controlled in accordance with permit condition 3.3 and the Odour Management Plan. Sampling of waste shall be in accordance with EN14899. Anaerobic conditions shall be prevented.
Internal core for oversize storage piles	Temperature	Once per week	Temperature probe As specified in the Environmental Management System	Uncontrolled self-heating and decomposition must be prevented in accordance permit condition 3.8, the Fire Prevention Plan and/or Accident Management Plan.
Leachate and dirty water storage capacity	Level	At least daily	Visual or capacity measurement	750 mm freeboard must be

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
				maintained for storage lagoons.
Waste reception and shredding area; storage lagoon	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary

Location or description of point of measurement	Parameter	Bioaerosols action levels (CFU m⁻³)	Monitoring frequency	Monitoring standard or method	Other specifications
Upwind of the operational area, as described in the Technical Guidance Note M9	Total bacteria	1000 ^{Note 1}	Twice a year, unless otherwise advised in writing by the Environment Agency ^{Note 2}	In accordance with Technical Guidance Note M9 – Environmental monitoring of bioaerosols at regulated facilities.	As described in the Technical Guidance Note M9, including all the additional data requirements specified therein.
Downwind of the operational area, as described in the Technical Guidance Note M9	Aspergillus Fumigatus	500 ^{Note 1}			
<p>Note 1 – The bioaerosols action levels are only applicable at downwind sampling locations equivalent to the distance of the nearest sensitive receptor. Where these action levels are elevated, the operator must take action to mitigate the impact on sensitive receptors. Assessment of compliance will be based on risk and in line with guidance.</p> <p>Note 2. Where the bioaerosols action levels are exceeded, then monitoring will remain quarterly until such time that it is demonstrated that the site has adequate mitigation for a 12 month period.</p>					

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
Process monitoring Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.1	Every 12 months	1 January
Bioaerosols monitoring Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.2	Twice a year unless otherwise advised in writing by the Environment Agency	1 January, 1 July

Table S4.2 Annual production/treatment	
Parameter	Units
Processed compost	tonnes
Non-waste outputs	tonnes

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

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Bioaerosols	As specified in the Technical Guidance Note M9 or other form as agreed in writing by the Environment Agency	--
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	10/03/2021
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	10/03/2021
Waste Returns	E-waste Returns Form or other form as agreed in writing by the Environment Agency	--

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 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.

“accident management plan” means a plan that identifies risks and failures which can have an impact on the environment or have environmental consequences. The plan forms part of the management system. The plan must minimise the potential causes and consequences and identify clearly the roles, responsibilities and action to be taken to minimise the consequences of accidents. This includes measures to prevent and control fires on site, DSEAR assessment and clearly marked zones.

“Animal By Products Regulations” means The Animal By Products (Enforcement)(England) Regulations 2013 (SI 2013 No. 2952)

“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.

“best available techniques” 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 the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole:

- a) ‘techniques’ includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;
- b) ‘available techniques’ means 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 the 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;
- c) ‘best’ means most effective in achieving high general level of protection of the environment as a whole.

“bioaerosols action levels” means the maximum acceptable bioaerosol concentrations at the nearest sensitive receptor, or at an equivalent distance downwind of the biowaste treatment operations, which are attributable to the biowaste treatment operations. The maximum acceptable concentrations are respectively 1000 and 500 CFU m⁻³ for total bacteria and *Aspergillus fumigatus*. Where these action levels are elevated, the operator must take action to mitigate the impact on sensitive receptors.

“biodegradable” means a material is capable of undergoing biological anaerobic or aerobic degradation leading to the production of CO₂, H₂O, methane, biomass and mineral salts depending on the environmental conditions of the process.

“capacity” means the potential capacity and not historical or actual production levels or throughput. This means that the designed capacity is the maximum rate at which the site can operate. Biological treatment of waste usually takes place over more than one day, so the physical daily capacity can be calculated by dividing the maximum quantity of waste that could be subject to biological treatment at any one time by the minimum residence time. For in-vessel composting, the residence time for sanitisation should be calculated separately and then aggregated to the complete composting time.

“competent persons and resources” means that a technically competent person accredited to a relevant scheme must attend site and record their attendance, and that all roles and responsibilities are clearly stated in the management systems along with records of operatives’ training.

“compost” means solid particulate material that is the result of composting, which has been sanitised and stabilised, and which confers beneficial effects when added to soil, used as a component of growing media or used in another way in conjunction with plants.

“compostable plastics” means plastics that are certified to meet the standards of EN 13432, EN 14995 or equivalent.

“composting” means the biological decomposition of organic materials, under conditions that are predominantly aerobic and that allow the development of thermophilic temperatures as a result of biologically produced heat and that result in compost.

“composting batch” means an identifiable quantity of material that progresses through the composting system and when fully processed has similar characteristics throughout. For composting systems that operate on a continuous or a plug-flow basis, batches will be taken to mean a series of “portions of production”.

“disposal” means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“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.

“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.

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

“hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations as amended.

“impermeable surface” means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions.

“maturation” means a stage when by agitating and turning the compost, it no longer results in reheating and the monitored temperature falls to ambient without the compost being too dry or anaerobic. Phtotoxin that are formed during the active composting phase are metabolised by microorganisms, which will result in the final material not being too harmful to plants. This usually coincides with a drop in pH toward neutral, and the conversion of ammonia into nitrates and recolonization of beneficial microorganisms. The maturation phase may need active management by turning to prevent the material becoming anaerobic.

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

“operational area” means any part of a facility used for the handling, storing and treatment of waste.

“operator” means in relation to a regulated facility:

- (a) the person who has control over the operation of the regulated facility,
- (b) if the regulated facility has not yet been put into operation, the person who will have control over the regulated facility when it is put into operation, or
- (c) if a regulated facility authorised by an environmental permit ceases to be in operation, the person who holds the environmental permit

“pests” means Birds, Vermin and Insects.

“pollution” means emissions as a result of human activity which may-

- (a) be harmful to human health or the quality of the environment,
- (b) cause offence to human sense.
- (c) result in damage to material property, or
- (d) impair or interfere with amenities and other legitimate uses of the environment.

“post-consumer wood” means manufactured treated wooden materials and products that have been discarded.

“recovery” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“representative internal” means representative monitoring at a point internally of the windrows that will give a representative assessment of temperature. Note: Larger windrows will require more bespoke temperature equipment to adequately assess temperature profiles accurately.

“sanitisation” means the actively managed and intensive stage of composting, lasting for at least five days, characterised by high oxygen demand and temperatures of over 55 °C, during which biological processes, together with conditions in the composting mass, eradicate human and animal pathogens or reduce them to acceptably low levels.

“sealed drainage system” in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

no liquids will run off the surface otherwise than via the system

all liquids entering the system are collected in a sealed sump, except where liquids may be lawfully discharged to foul sewer.

“secondary containment” – means a systems that is capable of containing loss from all above ground and underground storage tanks and that complies with CIRIA standard 736 or equivalent standard of design and construction.

“stable, stabilised” means the degree of processing and biodegradation at which the rate of biological activity has slowed to an acceptably low and consistent level and will not significantly increase under favourable, altered conditions.

“stabilisation stage” means the stage of composting following sanitisation, during which biological conditions in the composting mass, give rise to compost that is nominally stable. Soluble carbon is usually not fully used and material is still considered to be in treatment. This stage is a managed process to prevent odours, dust and bioaerosols. There is also a residual risk of reheating and leachate breakout.

“treated wood” means any wood that has been chemically treated (e.g. to enhance or alter the performance of the original wood). Treatments may include penetrating oils, tar oil preservatives, water-borne preservatives, organic-based preservatives, boron and organo-metallic based preservatives, boron and halogenated flame retardants and surface treatments (including paint and venner).

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

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

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.

“year” means calendar year ending 31 December.

Schedule 7 – site plan

