

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Renewi UK Services Limited
Hespin Wood Resource Park
Hespin Wood
Rockcliffe
Carlisle
Cumbria
CA6 4BJ

Variation application number

EPR/SP3133HW/V006

Permit number

EPR/SP3133HW

Hespin Wood Resource Park

Permit number EPR/SP3133HW

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.

Changes introduced by this variation notice/statutory review

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 scope of the permit review also covers the assessment of:

- the bioaerosols monitoring and compliance with M9 bioaerosols monitoring requirements;
- the design and construction of secondary containment and storage lagoons;
- the available storage facilities and measures to reduce ammonia emissions from storage; and
- information on existing medium combustion plant and/or specified generators on site.

This variation has been issued to update some of the conditions following a statutory review of the permits in the industry sector for biowaste treatment. The opportunity has also been taken to consolidate the original permit and subsequent variations.

Brief description of the process

Hespin Wood Resource Park is a Mechanical Biological Treatment facility for municipal solid waste (MSW). The facility is located approximately 5 miles north of Carlisle and 350 metres west of the village of Todhills. The site is surrounded on three sides by landfilling activities and the other by the West Coast Main Line railway. The process on site allows MSW to be treated, stabilised and materials including glass, stone and metals to be recovered. In addition the process also manufactures Solid Recovered Fuel (SRF). This activity is regulated as an installation under Section 5.4 A(1)(b)(i) of the Environmental Permitting Regulations 2016, with an annual throughput of 75,000 tonnes.

The process is undertaken in a single, enclosed building. The process starts at the reception pit where all incoming wastes are shredded and then transferred by crane to a biodrying hall. In this hall, the wastes are dried aerobically by drawing air from the building through the stockpiled wastes for around 12 to 15 days. This process reduces the waste mass by around 20 to 25% and stabilises the waste. The extracted air is then fed to an open bed biofilter to control odours and then released to atmosphere.

The dry waste is then removed by crane from the biodrying hall into a refinement area where it is segregated by size and type into different fractions. The key fraction is the SRF which may then go through a further shredding process. Each fraction is stored pending off-site recovery or disposal. Air is emitted to the atmosphere from the refinement area via a bag filter to control particulate levels.

Additionally, the operator is authorised to import waste classed as SRF to the facility. This SRF stream is produced by the operator at other sites and is only brought on site for baling. This is an additional waste operation to the existing installation activity. After baling, the SRF is placed into curtain-sided trailers before removal off-site. Annual throughput from the waste operation shall not exceed 40,000 tonnes.

Any leachate or polluted run-off from the biofilter and biodrying areas will drain to an effluent tank from where it will be removed from the site for disposal. Roof and yard water will drain via a settlement lagoon to a watercourse on the south of the site and then to the River Border Esk. Sewage from the offices is treated in a septic tank before being pumped to a drainage mound from where it enters the groundwater.

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 EPR/SP3133HW/A001	Duly made 24/01/2011	Application for Mechanical Biological Treatment facility.
Additional information received	22/02/2011	Corrected site boundary plan.
Additional information received	24/02/2011	Performance specification for biofilter.
Additional information received	01/03/2011	Information on biofilter inlet concentrations.
Additional information received	07/03/2011	Information on biofilter outlet concentration levels.
Additional information received	12/04/2011	Part 1 of response to notice for further information.
Additional information received	27/04/2011	Part 2 of response to notice for further information.
Additional information received	17/06/2011	Part 3 of response to notice for further information.
Additional information received	29/06/2011	Environmental Monitoring Plan.
Additional information received	30/06/2011	Odour Management Plan dated June 2011.
Permit EPR/SP3133HW determined	11/07/2011	Permit issued to Shanks Waste Management Limited.
Environment Agency-initiated variation EPR/SP3133HW/V002 - additional information received	02/11/2011	Updated Environmental Monitoring Plan V4.
Variation determined EPR/SP3133HW/V002	08/12/2011	Administrative variation amending bioaerosol monitoring requirements, operating techniques and improvement condition.
Variation Application EPR/SP3133HW/V003 received	Duly made 07/09/2012	Application for baling of SRF.
Additional information received following Schedule 5 Notice dated 01/10/2012	09/10/2012	-

Status log of the permit		
Description	Date	Comments
Additional information received	12/12/2012	Revised bale removal and door control arrangements.
Variation determined EPR/SP3133HW/V003	13/12/2012	-
Variation Application EPR/SP3133HW/V004 received	Duly made 12/02/2013	Application for import of waste for baling.
Variation determined EPR/SP3133HW/V004	10/05/2013	-
Variation application EPR/SP3133HW/V005	12/10/2017	Notified of change of Company Name to Renewi UK Services Limited.
Variation issued EPR/SP3133HW/V005	18/10/2017	Varied permit issued to Renewi UK Services Limited.
Regulation 61 Notice sent to Operator	19/07/2019	Regulation 61 Notice requiring information for statutory review of permit.
Regulation 61 Notice response	18/01/2020	Response received from the operator.
Application EPR/SP3133HW/V006 (variation and consolidation)	Environment Agency Initiated Variation	Statutory review of permit occasioned by Waste Treatment BAT Conclusions published on 17 August 2018.
Environment Agency Biowaste Treatment Sector Review Permit reviewed Variation determined EPR/SP3133HW (Billing Ref: PP3306BE)	12/11/2020	Varied and consolidated permit issued.

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 and consolidates

Permit number

EPR/SP3133HW

Issued to

Renewi UK Services Limited (“the operator”)

whose registered office is

**Dunedin House
Auckland Park
Milton Keynes
Buckinghamshire
MK1 1BU**

company registration number **02393309**

to operate a regulated facility at

**Hespin Wood Resource Park
Hespin Wood
Rockcliffe
Carlisle
Cumbria
CA6 4BJ**

to the extent set out in the schedules.

The notice shall take effect from 12/11/2020

Name	Date
Claire Roberts	12/11/2020

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/SP3133HW

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/SP3133HW/V006 authorising,

Renewi UK Services Limited (“the operator”),

whose registered office is

**Dunedin House
Auckland Park
Milton Keynes
Buckinghamshire
MK1 1BU**

company registration number **02393309**

to operate an installation/waste operations at

**Hespin Wood Resource Park
Hespin Wood
Rockcliffe
Carlisle
Cumbria
CA6 4BJ**

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

Name	Date
Claire Roberts	12/11/2020

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 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR6), 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 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR6), 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 For the following activities referenced in schedule 1 table S1.1 (AR1 to AR6), 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.
- 2.1.4 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR6), waste authorised by this permit shall be clearly distinguished from any other waste on the site.

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 tables S2.2 and S2.3; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
 - (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 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR6), 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 tables S3.1, S3.2 and S3.3.
- 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 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.

3.4 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, S3.2 and S3.3;
 - (b) process monitoring specified in table S3.4;
 - (c) bioaerosols and flies monitoring specified in table S3.5.
- 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, S3.2 and S3.3 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 should not exceed the emission action levels specified in table S3.5.
- 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.

3.8.2 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 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR6), 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.
- 4.2.7 The operator shall submit to the Environment Agency a bi-annual report of the efficiency of the biofilter in the first year of biological treatment operations. This shall include but not be limited to, the assessment of the efficiency to reduce odours, the summary of maintenance and any re-commissioning planned or conducted, assessment of back pressure, venting and cracking. Thereafter the operator shall submit the report within one month of the end of each year, unless otherwise agreed in writing by the Environment Agency.

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 involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents D8: Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12	From receipt of waste to despatch for other on-site operations (bio-drying) and recovery of by-products. Biological treatment of waste consisting of bio-drying for the purpose of recovery. Treatment of waste in closed buildings/vessels fitted with appropriate odour abatement. No more than 750 tonnes of waste to be stored within the waste reception at any one time. All waste activities shall be undertaken utilising the bio-drying process and within a building with an impermeable surface and 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 operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced) D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced)	From the receipt of permitted waste to pre-treatment and despatch to other on-site operations (bio-drying). Storage of residual wastes from pre-treatment to despatch off-site for recovery. Storage of waste pending despatch off-site for disposal.

			<p>Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with sealed drainage.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.2.</p>
AR3	Physical treatment for the purpose of recycling	<p>R3: Recycling/reclamation of organic substances which are not used as solvents</p> <p>R4: Recycling/reclamation of metals and metal compounds</p> <p>R5: Recycling/reclamation of other inorganic compounds</p>	<p>From the receipt of waste to despatch for biological treatment or despatch off site for recovery.</p> <p>Pre-treatment of waste in enclosed building and on impermeable surface with sealed drainage system including shredding, sorting, screening, compaction, baling, mixing and maceration.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.2.</p>
AR4	Raw material storage	Storage of raw materials including oil in a 1,200 litre storage tank	<p>From the receipt of raw materials to despatch for use within the facility.</p> <p>All oils to be stored in accordance with The Control of Pollution (Oil Storage) (England) Regulations 2001.</p>
AR5	Surface water collection and storage	Collection and storage of uncontaminated roof and site surface water in settlement lagoon before discharge to a watercourse on the south of the site.	From the collection of uncontaminated roof and site surface water from non-operational areas only to re-use within the facility or discharge off-site.
AR6	Air treatment	Collection and treatment of air from the buildings or plant using abatement system – a biofilter for point source A1 and a particulate filter for point source A2, prior to release to atmosphere.	From the collection of air from site processes to treatment and release of treated air to atmosphere.
Activity reference	Description of activities for waste operations	Limits of activities	

AR7	R3: Recycling/reclamation of organic substances which are not used as solvents 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)	Treatment operations shall be limited to: Physical treatment including screening, compaction, wrapping and baling prior to removal off site. Waste types as specified in Table 2.3. All activities shall be undertaken within a building with an impermeable surface and sealed drainage system.
Activity reference	Groundwater activity	Limits of activity
AR8	Discharge into land of sewage effluent from a septic tank	Discharge of sewage from site offices via an infiltration system centred on NGR NY 36468 62961. Discharge must not exceed 2 cubic metres per day. Prior to the discharge, the sewage must receive adequate treatment from a septic tank or sewage treatment plant designed and constructed according to the relevant British Standard design requirements in force at the time of installation, (currently BS EN 12566:2005) and sized in accordance with the method specified in the septic tank and sewage treatment plant manufacturer's and installer's industry Code of Practice "Flows and Loads 3." The sewage treatment system must be installed and operated in accordance with the manufacturer's specification issued at the time of installation or to the guidance given in the appropriate industry operating Code of Practice. The discharge must not cause pollution of surface water or groundwater.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	<p>The following sections of the report accompanying the application entitled 'Environmental Permit Application' version 2 dated November 2010;</p> <p>Section 1.6 detailing process operation Section 1.7 detailing emission control Section 1.8 detailing management of operations Section 1.9 detailing closure of the site Section 2.2 detailing energy management Section 2.3 detailing process risk management Section 2.5 detailing raw material usage Section 2.6 detailing water usage Section 4.5 detailing environmental training programme Section 4.6 detailing accident risk assessment and management Section 5.5 detailing surface water management Section 7.5 detailing control measures for bioaerosols</p>	24/01/2011
Application – additional information received	<p>Response to questions 3b in part B of the application form and section 1.8 of the application permit report detailing technical competence</p> <p>Response to questions 3a, 4a, 4b, 6a and 6b in part B3 of the application form.</p> <p>Response to questions 1, 2, 3, 4, 5 and 6 in appendix 5 of part B3 of the application form</p>	24/01/2011
Additional Information	Biofilter Filtrating Material specification, document reference S000-PR-10A-AS001-R00 dated 24/08/2010 – revision 00	24/02/2011
Part 1 of response to Schedule 5 Notice dated 23/03/2011	<p>Response to question 1 detailing EMS implementation</p> <p>Response to question 2 detailing oil storage</p> <p>Response to question 3 detailing waste acceptance of incompatibles</p> <p>Response to question 5 detailing fine and compost stabilisation</p> <p>Response to question 8 detailing baghouse alarms</p> <p>Response to question 9 detailing leachate pit alarms</p> <p>Response to question 10 regarding power loss</p> <p>Response to question 18 detailing groundwater discharge</p>	12/04/2011
Part 2 of response to Schedule 5 Notice dated 23/03/2011	Response to question 12 regarding fly control	27/04/2011
Part 3 of response to Schedule 5 Notice dated 23/03/2011	Fly Management Plan – Hespian Wood Intelligent Transfer Station	17/06/2011
Additional information	Odour Management Plan Version 4 dated June 2011	30/06/2011

Table S1.2 Operating techniques		
Description	Parts	Date Received
Agency-led variation EPR/SP3133HW/V 002 - additional information	Environmental Monitoring Plan V4 – all parts excluding time period for benzene monitoring (section 12.2.1.1) and section 12.2.1.3 hydrogen sulphide monitoring method.	02/11/2011
Variation Application EPR/SP3133HW/V 003	Response to parts C2 and C3 of the application form. Excluding: All reference to removal of bales via the doors and door opening arrangements.	07/09/2012
Response to Schedule 5 Notice dated 01/10/2012	Response to questions 1 – 11. Excluding: All reference to removal of bales via the doors and door opening arrangements.	09/10/2012
Additional information received	Revised proposals for removal of bales via conveyor, door management and control of fugitive emissions.	12/12/2012
Variation Application EPR/SP3133HW/V 004	Response to parts B2 and B3 of the application form.	12/02/2013
Response to Regulation 61 Notice – request for information dated 19/07/2019	<ul style="list-style-type: none"> • Annex 1 Returns Spreadsheet • Regulation 61 Notice – Hespian Wood – Appendix 2 • Compliance and operating techniques identified in response to the BAT Conclusions for Waste Treatment published on 17 August 2018. 	18/01/2020

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>The operator shall review the results of the bioaerosol monitoring undertaken both on and off site (as stipulated in tables S3.1 and S3.4). The review must include an assessment of the validity of the qualitative bioaerosol risk assessment provided with the application to actual results obtained during such monitoring.</p> <p>A written summary report of the findings of this review must be provided to the Environment Agency. The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the summary report.</p> <p>If the review demonstrates that the qualitative risk assessment does not remain valid, the operator shall submit proposals for a quantitative risk assessment (and proposed timetable for its implementation) to the Environment Agency for approval in writing.</p> <p>The operator must undertake the quantitative risk assessment as approved, and from the date stipulated by the Environment Agency.</p>	Completed
IC2	The operator shall provide a drawing showing the as built layout of the Baling Room and conveyor system.	Completed

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
Improvement condition for progress report to achieve BAT-AELs		
IC3	<p>The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) where BAT is currently not achieved, but will be achieved before 17 August 2022. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> 1) Current performance against the BAT-AELs. 2) Methodology for reaching the BAT-AELs. 3) Associated targets /timelines for reaching compliance by 17 August 2022. 4) Any alterations to the initial plan (in progress reports). <p>The report shall address the BAT Conclusions for Waste Treatment with respect to the following:</p> <ul style="list-style-type: none"> • BAT 20 Table 6.1 (compliance with BAT-AELs for direct discharges to a receiving water body) • BAT 34 Table 6.7 (compliance with BAT-AELs for channelled NH₃, odour, dust and TVOC emissions to air from the biological treatment of waste) <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	<p>Progress reports at six monthly intervals from date of permit issue:</p> <p>12/05/2021 12/11/2021 12/05/2022</p>
Improvement condition for progress report to achieve Narrative BAT		
IC4	<p>The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 17 August 2022. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> 1) Methodology for achieving BAT 2) Associated targets /timelines for reaching compliance by 17 August 2022 3) Any alterations to the initial plan (in progress reports). <p>The report shall address the BAT Conclusions for Waste Treatment with respect to BAT 1, 2, 3, 6, 7, 12, 14, 19, 23, 35 and 39.</p>	<p>Progress reports at six monthly intervals from date of permit issue:</p> <p>12/05/2021 12/11/2021 12/05/2022</p>
Improvement condition for primary containment		
IC5	<p>The operator shall submit a written 'primary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, and shall compare the design specification of primary containment systems where all polluting liquids and solids are being stored, treated, and/or handled against the design standards within CIRIA C535 guidance or equivalent.</p> <p>The review shall include:</p> <ul style="list-style-type: none"> • physical condition of all primary containment systems (storage and treatment vessels); • the suitability for providing primary containment when subjected to the dynamic and static loads caused by the vessels' contents; • any work required to ensure compliance with the standards set out in CIRIA C535 or equivalent; and • a preventative maintenance and inspection regime 	<p>12/11/2021 or other date as agreed in writing with the Environment Agency</p>

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<p>The plan must contain dates for the implementation of individual improvement measures necessary for the primary containment to adhere to the standards detailed/referenced within CIRIA C535 guidance, or equivalent.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>	
Improvement condition for secondary containment design		
IC6	<p>The operator shall submit a written 'secondary and tertiary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, in accordance with the methodology detailed within CIRIA C736 (2014), of the condition and extent of secondary and tertiary containment systems where all polluting liquids and solids are being stored, treated, and/or handled.</p> <p>The review should consider, but is not limited to, the storage vessels, bunds, loading and unloading areas, transfer pipework/pumps, temporary storage areas, and liners underlying the site. The plan must contain dates for the implementation of individual improvement measures necessary for the secondary and tertiary containment systems to adhere to the standards detailed/referenced within CIRIA C736 (2014), or equivalent.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>	12/11/2021 or other date as agreed in writing with the Environment Agency
Improvement condition for review of effectiveness of abatement plant		
IC7	<p>The operator shall carry out a review of the abatement plant on site, in order to determine whether the measures have been effective and adequate to prevent and where not possible minimise emissions released to air including but not limited to odour and ammonia.</p> <p>The operator shall submit a written report to the Environment Agency following this review for assessment and approval.</p> <p>The report shall include but not limited to the following aspects:</p> <ul style="list-style-type: none"> • Full investigation and characterisation of the waste gas streams. • Abatement stack monitoring results (not limited to odour and ammonia) • Abatement process monitoring results (not limited to odour and ammonia) • Details of air quality quantitative impact assessment including modelling and a proposal for site-specific "action levels" (not limited to odour concentration, hydrogen sulphide and ammonia). • Odour monitoring results at the site boundary • Records of odour complaints and odour related incidents • Recommendations for improvement including the replacement or upgrading the abatement plant • Timescales for implementation of improvements to the abatement plant 	12/11/2021 or other date as agreed in writing with the Environment Agency

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	The operator shall implement the improvements in line with the timescales as approved by the Environment Agency.	
Improvement condition for review of abatement plant design		
IC8	<p>The operator shall submit to the Environment Agency a written review report of the design details of the site ventilation system and abatement plant and obtain the Environment Agency's written approval to it.</p> <p>The report shall include but not limited to:</p> <ul style="list-style-type: none"> a) Ventilation design performance criteria for effective fugitive odorous emission control b) Design of the abatement systems that will ensure compliance with the odour condition 3.3. The report shall include a demonstration (whether by a detailed review of technical papers or by trial results) that all odorous chemical compounds and their loading rates expected in the relevant air streams have been considered in the design; and supporting evidence that the odorous compounds will be controlled and/or abated either by operating techniques or by the proposed abatement systems. c) Design alarms and triggers for each relevant scenario to alert the operator to the malfunction of both ventilation and abatement systems. The report should further list all relevant contingency mitigation actions to minimise risk of elevated odour pollution from the installation linked to each malfunction scenario and detail the actions to restore systems to normal operating conditions for effective odour control. <p>Ventilation and abatement systems should be designed by suitably qualified named engineers who can supervise and sign-off on construction quality assurance.</p>	12/11/2021 or other date as agreed in writing with the Environment Agency

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
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Table S2.2 Permitted waste types and quantities for mechanical biological treatment	
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes
Exclusions	Wastes having any of the following characteristics shall not be accepted: <ul style="list-style-type: none"> previously separated waste
Waste code	Description
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
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 02 02	soil and stones
20 03	other municipal wastes
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues

Table S2.3 Permitted waste types and quantities for importation for baling	
Maximum quantity	Annual throughput shall not exceed 40,000 tonnes
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 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 10	combustible waste (refuse derived fuel)

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in schedule 7]	Odour abatement stack or vent (open bed biofilter)	Hydrogen sulphide	No limit set	Average over sample period	Once every 6 months or as agreed in writing with the Environment Agency	CEN TS 13649 for sampling
		Odour concentration	No limit set	--		NIOSH 6013 for analysis
		Ammonia	20 mg/m ³	Average over sample period		BS EN 13725
		Total Volatile organic compounds (TVOCs)	40 mg/m ³	Average over sample period		EN ISO 21877
		Dust	5 mg/m ³	Determined in accordance with BS EN 13284-1		BS EN 12619
A2 [Point A2 on site plan in schedule 7]	Bag house stack from refinement area	Dust	5 mg/m ³	Determined in accordance with BS EN 13284-1		BS EN 13284-1
Vents from tank(s)	Oil/Fuel Storage tank(s)	No parameter set	No limit set	--	--	--

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
SW1 on site plan in schedule 7 emission to watercourse on the south of the site	Site surface water	Oil or grease	No visible oil or grease	--	Weekly	Visual assessment
		Total organic carbon (TOC) [Note 1 & 2]	60 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN 1484

Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
		Chemical oxygen demand (COD) [Note 1 & 2]	180 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN ISO 15705
		Total suspended solids [Note 2]	60 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN 872
		Total nitrogen [Note 2]	25 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN ISO 11905-1 or BS EN 12260
		Total phosphorus [Note 2]	2 mg/l	Spot sample or flow-proportional composite sample	Once every month	EN ISO 5681-1 and -2 or EN ISO 6878 or EN ISO 11885
		Arsenic [Note 2]	0.05 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN ISO 11885 or BS EN ISO 17294-2 or BS EN ISO 15586
		Cadmium [Note 2]	0.05 mg/l			
		Chromium [Note 2]	0.15 mg/l			
		Copper [Note 2]	0.5 mg/l			
		Nickel [Note 2]	0.5 mg/l			
		Lead [Note 2]	0.1 mg/l			
		Zinc [Note 2]	1 mg/l			
		Mercury [Note 2]	5 µg/l			
GW1 on site plan in schedule 7 emission to drainage mound	Foul water consisting of domestic sewage from offices	No parameter set	No limit set	--	--	--

Note 1 – Either TOC or COD can be monitored. TOC is the preferred option, because its monitoring does not rely on the use of very toxic compounds.

Note 2 – The monitoring only applies when the substance concerned is identified as relevant in the waste water inventory.

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
Leachate sump prior to transfer off site for disposal	Ammoniacal Nitrogen	Biodrying hall, MSW reception pit, shredded waste pit, refinement area and biofilter leachate.	None	None	Monthly, unless otherwise agreed by the Environment Agency.	UKAS accredited laboratory
	BOD					
	COD					
	Chloride					
	Electrical Conductivity					
	Iron					
	pH					
	Suspended Solids					
	Cadmium	Biodrying hall, MSW reception pit, shredded waste pit, refinement area and biofilter leachate.	None	None	Quarterly, unless otherwise agreed by the Environment Agency.	
	Calcium					
	Chromium					
	Copper					
	Lead					
	Magnesium					
	Manganese					
	Nickel					
	Nitrate					
	Nitrite					
	Potassium					
	Sodium					
Sulphate						
Total Alkalinity						
TOC						
TON						
Zinc						

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Waste reception building or area; and storage tank(s)	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary.
Meteorological conditions	Wind speed, air temperature, wind direction	Continuous	Method as specified in management system	Conditions to be recorded in operational diary and records. Equipment shall be calibrated on a 4 monthly basis, in accordance with manufacturer's recommendations or as agreed in writing by the Environment Agency.
Storage tanks	Volume	Daily	Visual or flow metre measurement	750 mm freeboard must be maintained for storage lagoons.
Open bed Biofilter 1 (A1)	Surface condition (signs of vegetation and channelling)	Daily	Visual assessment	Odour abatement plant shall be regularly checked and maintained to ensure appropriate temperature and moisture content.
	Gas temperature – inlet	Daily	Temperature probe / Traceable to national standards	
	Biofilter media moisture	Daily	Moisture meter or recognised industry method	Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan and manufacturer's recommendations.
	Thatching /compaction	Weekly	Back pressure	
	Gas flow rate – inlet	Continuous	Gas flow meter / EN 16911-1 and MID for EN 16911-1	
	pH (biofilter drainage effluent)	Daily	pH metre	Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.
	Efficiency assessment	Annual	Media health, air-flow distribution and emission	

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
			removal efficiency (BS EN 13725 for odour removal)	
	Ammonia – inlet	Once every 6 months or as agreed in writing with the Environment Agency	EN ISO 21877	Action levels to be agreed on completion of IC7 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Hydrogen sulphide – inlet and outlet gas stream	Once every 6 months or as agreed in writing by the Environment Agency.	CEN TS 13649 for sampling NIOSH 6013 for analysis	Action levels to be agreed on completion of IC7 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Odour concentration – inlet and outlet gas stream	Once every 6 months or as agreed in writing with the Environment Agency	BS EN 13725	Action levels to be agreed on completion of IC7 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.

Table S3.5 ambient air monitoring requirements					
Location or description of point of measurement	Parameter	Bioaerosols action levels (CFU m⁻³)	Monitoring frequency	Monitoring standard or method	Other specifications
Minimum of 6 locations corresponding with those used in the 2010 survey	Flies	Not applicable	Weekly	As detailed within the Environmental Monitoring Plan received 02/11/2011.	From first Monday in March until last Sunday in October only.
Upwind of the operational area, as described in the Technical Guidance Note M9	Total bacteria	1000 ^{Note 1}	Quarterly or as agreed 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 shall 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
Emissions to air from odour abatement plant Parameters as required by condition 3.5.1.	A1	Once every 6 months or as agreed in writing with the Environment Agency	1 January, 1 July
Emissions to air from Bag House stack Parameters as required by condition 3.5.1.	A2	Once every 6 months or as agreed in writing with the Environment Agency	1 January, 1 July
Emissions to water and land Parameters as required by condition 3.5.1	SW1	Annually	1 January
Process monitoring Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 12 months	1 January
Ambient air monitoring Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.5	Every 3 months or as agreed in writing by the Environment Agency	1 January, 1 April, 1 July, 1 October
Biofilter efficiency Parameters as required by condition 4.2.7	Biofilter	Annually or as agreed in writing with the Environment Agency	1 January

Table S4.2 Annual production/treatment	
Parameter	Units
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
Raw material usage	Annually	tonnes or m ³

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	12/11/2020
Bioaerosols	As specified in the Technical Guidance Note M9 or other form as agreed in writing by the Environment Agency	--
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Water	Form water 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Waste returns	E-waste Return 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.

“animal waste” means any waste consisting of animal matter that has not been processed into food for human consumption.

“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 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 a high general level of protection of the environment as a whole.

“bioaerosols action levels” mean the acceptable bioaerosols 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 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.

“building” means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

“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.

“channelled emissions” means the emissions of pollutants into the environment through any kind of duct, pipe, stack, etc. This also includes emissions from open top biofilters.

“diffuse emissions” mean non-channelled emissions (e.g. of dust, organic compounds, odour) which can result in ‘area’ sources (e.g. tanks) or ‘point’ sources (e.g. pipe flanges). This also includes emissions from open-air windrow composting.

“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.

“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.

“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

“Leak detection and repair (LDAR) programme” means a structured approach to reduce fugitive emissions of organic compounds by detection and subsequent repair or replacement of leaking components. Currently, sniffing (described by EN 15446) and optical gas imaging methods are available for the identification of leaks as set out in BAT 14 and section 6.6.2 of the Waste Treatment BAT Conclusions.

“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 a human sense,
- (c) result in damage to material property, or
- (d) impair or interfere with amenities and other legitimate uses of the environment.

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

“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.

“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.

“VOC” means Volatile organic compounds as defined in Article 3(45) of Directive 2010/75/EU – ‘volatile organic compound’ means any organic compound as well as the fraction of creosote, having at 293.15K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.

“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.

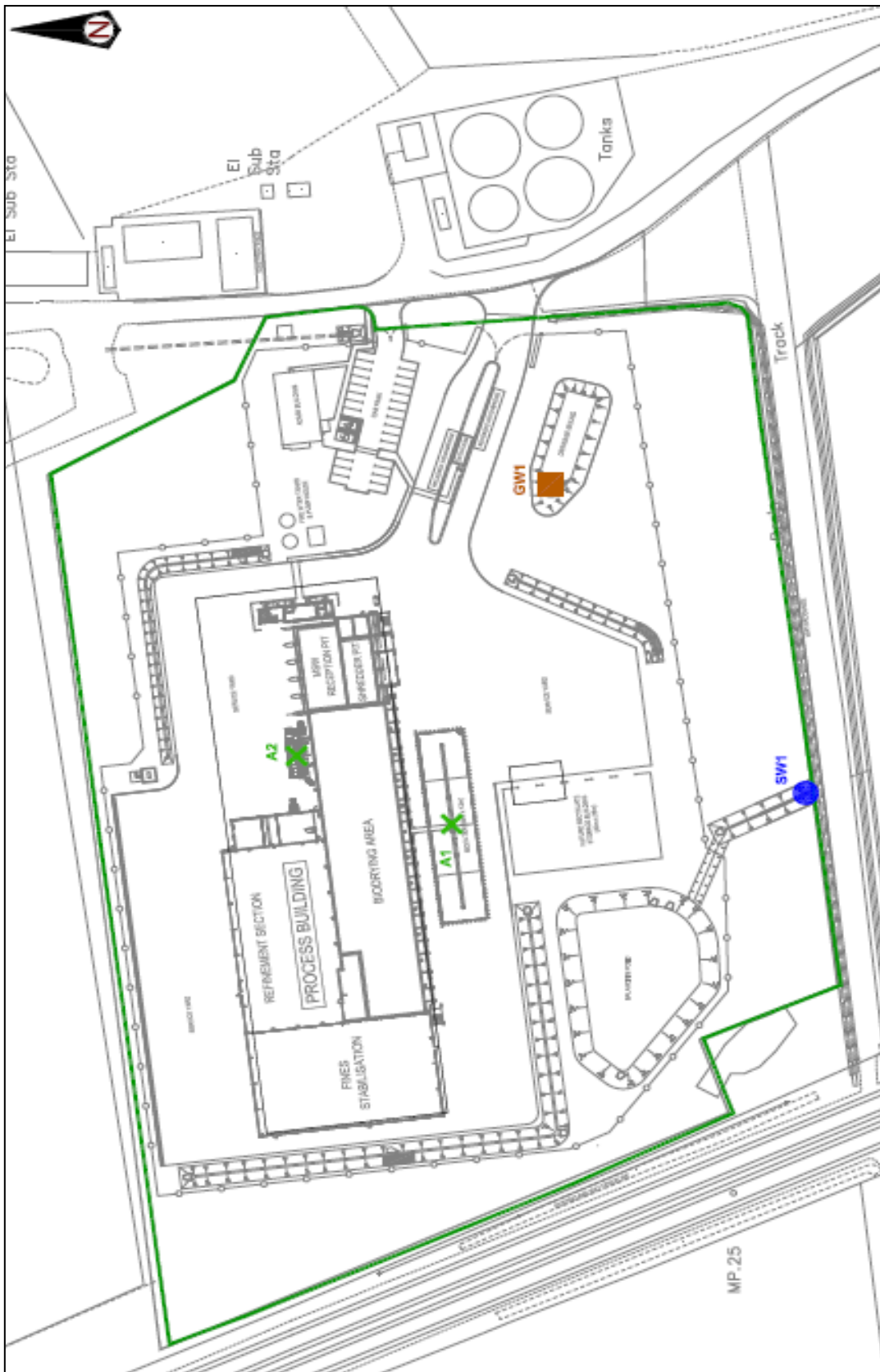
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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 fuels 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.

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT