

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Biowise Limited

Biowise Albion Lane Waste Treatment Facility

Albion Lane

Willerby

Hull

East Yorkshire

HU10 6TS

Variation application number

EPR/PP3096ZA/V010

Permit number

EPR/PP3096ZA

Biowise Albion Lane Waste Treatment Facility

Permit number EPR/PP3096ZA

Introductory note

This introductory note does not form a part of the permit

Under the Environmental Permitting (England & Wales) Regulations 2010 (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.

Biowise is currently permitted to treat a variety of materials at the Albion Lane Waste Treatment Facility located on the north western edge of Willerby, 7 km west of Hull and 8km south west of Beverley. The permitted activities at the site are:

- In-vessel Composting (IVC) of green and food wastes (<75,000 tonnes per annum);
- Open Windrow Composting (OWC) of green wastes (<75,000 tonnes per annum, no more than 30,000 tonnes at any one time);
- Soil manufacture (<50,000 tonnes per annum, no more than 20,000 tonnes at any one time); and
- Wood recycling (<75,000 tonnes per annum, no more than 10,000 tonnes at any one time).

This variation authorises the use of Aerated Static Pile (ASP) for composting of the wastes currently allowed to be treated under the OWC systems. This means that the facility is now authorised to utilise in-vessel composting, aerated static pile and open windrow for composting of organic wastes. These three Activities marked A1, A2 and A3 in Table S1.1 are considered as a listed activity and are regulated under Section 5.4 Part A(1)(b)(i) Schedule 1 of the EPR 2010.

There are no changes to the waste types that the site is currently allowed to accept as a result of this variation. There are little or no changes to the mode of operations of existing permitted Activities (IVC and OWC). The changes to the existing activities are detailed in the agreed Odour Management Plan (OMP).

Organic wastes received at the site are processed primarily by In-vessel Sanitisation (for food and commingled green and food wastes), ASP Sanitisation (for green waste only), ASP stabilisation (for sanitised wastes), OWC Sanitisation (for green waste only) and OWC stabilisation (for sanitised wastes). The ASP process will be used as a default treatment process for wastes designated for open composting; the OWC will be utilised as a backup treatment process for open system composting.

Incoming wastes received at the site are first shredded prior to the composting. They are batch shredded at the OWC reception area (within 5 days for green wastes only) or at the IVC reception hall (within 48hrs for food, commingled Animal By-product wastes). Once shredded the materials are moved continually from the shredding area to the active composting areas in the in-vessel tunnel, OWC and ASP pads.

The ASP and OWC pads and the IVC building are constructed on impermeable surfacing. The IVC building consists of 8 tunnels, each with a maximum capacity of 315t/485m³. Each vessel is 6m high, 5.2m wide and 35m long. All IVC activities will take place in the enclosed, negatively aerated, IVC building to prevent the release of odour, bioaerosols, noise or dust to the external atmosphere. Air from the reception hall and tunnels will be split and treated through one of two wet scrubbers and one of four biofilters. The permit requires process monitoring of the scrubbers and biofilters to confirm their effectiveness, as well as monitoring of temperature, moisture and oxygen levels. The IVC hall and tunnels are built impermeable surfacing with a sealed drainage system. Leachate from the sanitisation process will be collected and stored

in an integrally banded leachate storage tank located adjacent to the IVC building. If the leachate storage tank reaches 90% of its maximum volume, leachate will be transferred off site for disposal.

The IVC tunnels, OWC and ASP pads are used for sanitisation. The sanitisation phase is considered to take a minimum of 2 days (for the ASP and IVC systems), 7 days (for the OWC) but will typically last a period of 1-2 weeks from batch formation to completion. During this period monitoring equipment are used to monitor temperature and oxygen readings, and moisture levels (grip test) to ensure that the critical limits for composting are met. A minimum of one turn is made to fully incorporate the compost by loading shovel at the OWC pad during the sanitisation phase. No turning is required for wastes being composted within the IVC tunnels (other than turning during loading and unloading). Turning of waste is also not expected for wastes being treated in the ASP system, except if there is malfunctioning of the ASP plant during which time any waste within the bays are handled in line with the emergency procedures detailed in the OMP.

Following completion of the sanitisation phase in either IVC, ASP or OWC processes, the materials are further processed by stabilisation by default in the ASP pad or in the OWC pad (as a backup). During the stabilisation phase, all windrows in both the OWC or ASP pads are kept in discrete batches and are not mixed from formation to completion of the composing process. The stabilisation phase is typically 4 weeks in the ASP and 6 weeks in the OWC system.

The ASP comprises of five individual bays, segregated from each other by concrete walls. Each floor within the bay has a dedicated air handling and dispersion system consisting of 28 (20.5mm thick) PE pipes with drilled holes for delivery of air up into the compost media. The 28 pipes per floor (or bay) are divided into 4 groups of 7 pipes. Each group has a valve system which allows air into this specific group of pipes. Up to 50m³/h/m² of fresh ambient air can be delivered to each floor. The control of preferential airflow through the composting piles is achieved by good feedstock preparation, use of oversize material and design of the holes in the pipework. Each bay has sensors for temperature, back pressure and oxygen monitoring. The backpressure is used for volume measurement of the air delivery. The GICOM process computer (G-2000) controls the entire process – this system is the same as the one currently in use for the IVC process control.

The operator will have management plans in place to ensure that the environment and human health is protected from emissions to air, land and water. There will be only one point source emission, to a cellular soakaway, of uncontaminated roof and site surface water.

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
Permit determined EAWML 65512	16/10/06	Permit issued to Biowaste (Recycling) Limited. (EPR/PP3096ZA/A001)
Modification application received	08/03/07	Modification to add waste types. (EPR/PP3096ZA/V002)
Modification issued	21/03/07	
Variation determined EPR/PP3096ZA	08/12/09	Variation to change company name to Biowise Limited and to change registered office address. (EPR/PP3096ZA/V003)
Variation application EPR/PP3096ZA/V004 (variation and consolidation)	Duly made 24/08/11	Variation to extend the permitted area, increase annual tonnages, add soil manufacture as a permitted activity, increase storage capacity and change registered office address.
Variation and updating to modern conditions	18/01/12	Operator's agreement to Environment Agency varying the permit on its own initiative to update to modern conditions.
Amendment of variation application	13/02/12	Operator's confirmation of amendments to original variation application. The application was amended to

Status log of the permit		
Description	Date	Comments
		include a justification for the revised storage capacity, limiting waste types for soil manufacture to those listed in SR2010No12 standard rules permit, and agreement to pre-operational conditions relating to submission and approval of an odour management plan.
Submission of additional information	21/06/12	Submission of revised waste pre-acceptance criteria to be adopted for wastes requiring pre-acceptance tests.
Variation determined EPR/PP3096ZA	03/07/12	Consolidated permit issued in a modern format.
Application EPR/PP3096ZA/V005	16/08/13	Removal of pre-acceptance process and associated wastes (Environment Agency initiated variation).
Variation determined EPR/PP3096ZA	10/02/14	Variation notice issued (Environment Agency initiated variation).
Application EPR/PP3096ZA/V006 (variation)	Duly made 06/03/14	Application to add a wood sorting and segregation process to the permit.
Variation determined EPR/PP3096ZA/V006	14/03/14	Variation notice issued.
Application EPR/PP3096ZA/V007	Duly made 11/08/14	Application to remove exclusion of treated wood from Table S2.1.
Variation determined EPR/PP3096ZA	03/09/14	Variation notice issued.
Application EPR/PP3096ZA/V008 (variation and consolidation)	Duly made 04/02/15	Application for an in vessel (closed system) composting facility.
Additional information received	27/03/15	Accident Management Plan; Fugitive Emissions Management Plan; Noise Impact Assessment; Site Specific Bioaerosol Risk Assessment.
	02/04/15	Drainage Plans and Site Layout Plans.
	09/04/15	Drawing showing process water flows.
	14/04/15	Drawing showing odour release points.
	17/04/15	Drawings showing kerbing, paving and site surfacing.
	21/04/15	Management system; drawing showing drainage and open windrow layout; supporting information for Drainage Management Plan.
	01/05/15	Drainage Management Plan and Management System.
	07/05/15	Odour Management Plan.
Variation determined EPR/PP3096ZA	12/06/15	Varied and consolidated permit issued in modern condition format.
Application EPR/PP3096ZA/V009	21/01/16	Inclusion of Fire Protection Plan condition (Environment Agency initiated variation)
Variation determined EPR/PP3096ZA	18/03/16	Variation notice issued.
Application EPR/PP3096ZA/V010 (variation and consolidation)	Duly made 26/05/16	Application to include Aerated Static Pile as an authorised treatment system for open composting of waste at the site.

Status log of the permit		
Description	Date	Comments
Response to the Schedule 5 Notice dated 23/06/16	18/07/16	Email and documents received in response to items 1, 2, 3 and 5 of the Schedule 5 Notice, providing further information on the site operations, site engineering, pollution control measures, accident management including details of the site layout, drainage routes, and infrastructures amongst others.
Response to the Schedule 5 Notice dated 16/09/16	06/01/2017	Email and documents received in response to items 1 and 2 of the Schedule 5 Notice, providing further details on process design, controls, monitoring, maintenance and contingency measures for the ASP process; ASP technology assessment, site capacity assessment, material flow schematics, ASP rotation system amongst others.
Additional information	20/03/17	Email containing the Commissioning Plan and Odour Management Plan.
Additional information	22/03/17	Operator's response to the draft permit, requesting a change of the facility name from Biowise Albion Lane Composting Facility to Biowise Albion Lane Waste Treatment Facility.
Variation determined EPR/PP3096ZA/V010 (Billing ref. HP3333DX)	28/03/17	Varied and consolidated permit issued.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number

EPR/PP3096ZA

Issued to

Biowise Limited (“the operator”)

whose registered office is

**Albion Lane
Willerby
HU10 6TS**

company registration number **04305295**

to operate regulated facilities at

**Biowise Albion Lane Waste Treatment Facility
Albion Lane
Willerby
Hull
East Yorkshire
HU10 6TS**

to the extent set out in the schedules.

The notice shall take effect from 28/03/2017.

Name	Date
Mike Jenkins	28/03/2017

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 2010

Permit number

EPR/PP3096ZA

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/PP3096ZA/V010 authorising,

Biowise Limited (“the operator”),

whose registered office is

**Albion Lane
Willerby
HU10 6TS**

company registration number **04305295**

to operate an installation and waste operations at

**Biowise Albion Lane Waste Treatment Facility
Albion Lane
Willerby
Hull
East Yorkshire
HU10 6TS**

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

Name	Date
Mike Jenkins	28/03/2017

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 A1 to A9, 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 A1 to A9, 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 A1 to A9, 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 location 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, S2.3, S2.4, S2.5 or S2.6; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

- 2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 have been completed.

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 For the following activities referenced in schedule 1, table S1.1 A1 to A9, 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 Bioaerosols

- 3.5.1 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 threshold limits specified in table S3.5.
- 3.5.2 The operator shall where the emission threshold limits 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.

3.6 Monitoring

- 3.6.1 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 monitoring specified in table S3.5.
- 3.6.2 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.
- 3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.6.4 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, S3.3 and S3.5 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) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
 - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.8 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 A1 to A9, 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 submit to the Environment Agency a bi-annual report of the efficiency of the biofilter in the first year of compost 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 For the following activities referenced in schedule 1, table S1.1 A1 to A9, 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 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 For the following activities referenced in schedule 1, table S1.1 A10 to A12, the Environment Agency shall be notified without delay following the detection of:
- (a) 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;
 - (b) the breach of a limit specified in the permit; or
 - (c) any significant adverse environmental effects.
- 4.3.4 Any information provided under condition 4.3.3 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.5 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.

4.3.6 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:

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

In any other case:

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

4.3.7 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.

4.3.8 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 For the following activities referenced in schedule 1, table S1.1 A1 to A9, 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.

4.4.3 For the following activities referenced in schedule 1, table S1.1 A10 to A12, in this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", 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
A1	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	Composting of wastes (sanitisation only) under aerobic conditions in closed vessels fitted with appropriate odour abatement – In-vessel Composting (IVC). Treatment and handling of wastes must be on impermeable surface with sealed drainage system. Sanitisation of wastes under anaerobic conditions shall be prevented. Waste types are limited to those specified in Table S2.2.
A2			Composting of wastes (sanitisation of green wastes and stabilisation of sanitised wastes) under aerobic conditions in outdoor turned windrows – Open Windrow Composting (OWC). Treatment and handling of wastes must be on impermeable surface with sealed drainage system. Sanitisation and stabilisation of wastes under anaerobic conditions shall be prevented. Composting activities in the open (listed under Activities A2 and A3) and pre-treatment (Activity A5) of wastes specified in Table S2.3 are restricted to less than 30,000 tonnes at any one time. Treatment and handling of wastes shall not take place within 250 metres of any sensitive receptor. Waste types are limited to those specified in Table S2.3.
A3			Composting of wastes (sanitisation of green wastes and stabilisation sanitised wastes) under aerobic conditions - Aerated Static Pile (ASP). Treatment and handling of wastes must be on impermeable surface with sealed drainage system. Sanitisation and stabilisation of wastes under anaerobic conditions shall be prevented. Composting activities in the open (listed under Activities A2 and A3) and pre-treatment (Activity A5) of wastes specified in Table S2.3 are restricted to less than 30,000 tonnes at any one time. Treatment and handling of wastes shall not take place within 250 metres of any sensitive receptor. Waste types are limited to those specified in Table S2.3.

Table S1.1 Activities			
	Directly Associated Activity		
A4	Storage of wastes pending recovery activity	R13: Storage of waste pending the R3 operation (excluding temporary storage, pending collection, on the site where it is produced)	<p>From the receipt of waste to despatch for composting.</p> <p>Storage of waste specified in Table S2.2 in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with sealed drainage.</p> <p>Storage of waste specified in Table S2.3 on an impermeable surface with sealed drainage.</p> <p>Storage of wastes under anaerobic conditions shall be prevented.</p> <p>No waste specified in Table S2.3 shall be stored on site prior to composting for longer than 5 days.</p> <p>No waste specified in Table S2.2 shall be stored on site prior to composting for longer than 2 days.</p>
A5	Physical treatment for the purposes of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents	<p>From the receipt of waste to despatch for composting.</p> <p>Pre-treatment in an enclosed building and on an impermeable surface of waste specified in Table S2.2 including shredding and screening prior to composting.</p> <p>Pre-treatment on an impermeable surface of waste specified in Table S2.3 including shredding and screening prior to composting.</p> <p>Composting activities in the open (listed under Activities A2 and A3) and pre-treatment (Activity A5) of wastes specified in Table S2.3 are restricted to less than 30,000 tonnes at any one time.</p> <p>Treatment and handling of wastes shall not take place within 250 metres of any sensitive receptor.</p> <p>Post-treatment of processed compost on an impermeable surface including screening to remove contraries.</p> <p>Treatment of waste under anaerobic conditions shall be prevented.</p>
A6	Raw material storage	Storage of raw materials including lubrication oil and fuel.	From the receipt of raw materials to despatch for use within the facility.
A7	Compost storage	Storage of processed compost.	<p>From the receipt of processed compost produced at the facility to despatch for use off-site.</p> <p>Compost which does not meet the standard of BSI PAS 100 shall be stored on an impermeable surface with sealed drainage.</p>
A8	Process water collection and storage	Collection and storage of compost liquor/leachate in two storage tanks as shown on Drawing 'IVC Site Layout Plan' ('Double Bunded Leachate Tank') and Drawing 'Open Windrow Site Plan'	From the receipt of compost leachate produced at the facility to collection for use at the facility or despatch off-site for recovery or disposal.

Table S1.1 Activities			
		(‘OWC Leachate Tank (Boythorpe)’).	
A9	Surface water collection, storage and discharge	Collection and storage of uncontaminated roof and site surface water in ‘Rain Water Tank’ shown on Drawing ‘IVC Site Layout Plan’ followed by discharge from facility.	From the collection of uncontaminated roof and site surface water from non operational areas only to re-use within the facility or discharge to the ‘Cellular Soakaway’ as shown on Drawing ‘IVC Site Layout Plan’.
Activity reference	Description of activities for waste operations		Limits of activities
A10 - Soil manufacture	<p>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)</p> <p>R3: Recycling/reclamation of organic substances which are not used as solvents</p> <p>R5: Recycling/reclamation of other inorganic compounds</p>		<p>Treatment of wastes listed in schedule 2 table S2.4 consisting only of sorting, separation, screening, crushing and blending of waste for recovery as a soil, soil substitute or aggregate.</p> <p>Secure storage of wastes listed in Table S2.4 pending treatment.</p> <p>The total quantity of waste accepted at the site for Activities A10 and A11 shall be less than 50,000 tonnes a year.</p> <p>Storage of wastes listed in Table S2.4 and S2.5 shall not exceed 20,000 tonnes in total at any one time.</p>
A11 - Blending	R5: Recycling/reclamation of other inorganic materials		<p>Treatment of wastes listed in Table S2.5 consisting only of screening, crushing, shredding and mixing for the purpose of blending and recovery as a soil, soil substitute or aggregate.</p> <p>Waste for blending must be able to be used without risk to the end receiving soil.</p>
A12 - Sorting and segregation of wood	<p>R13: Storage of wastes pending the operation numbered R3 (excluding temporary storage pending collection on the site where it is produced).</p> <p>R3: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).</p>		<p>Treatment of wood wastes listed in Table S2.6 consisting only of sorting, separation, cutting, pulverising, shredding, and chipping for recovery.</p> <p>Secure storage of wastes listed in Table S2.6 at the place where it is to be treated.</p> <p>Quantities of waste stored shall not exceed 10,000 tonnes in total at any one time and shall be stored only in the area marked as ‘7’ on Drawing ‘Open Windrow Site Plan’. No other wastes shall be stored in area ‘7’.</p> <p>Treatment quantities shall be limited to 75 tonnes per day.</p> <p>No more than 75,000 tonnes of waste shall be accepted at the site in any one year.</p>

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Responses to section 3a – technical standards , Part C4 of the application form	24/08/11
Composting (Activity A2)	PAS 100:2005 and Quality Compost Protocol	24/08/11
Composting (Activity A2)	How to comply with your Environmental Permit and H4 Odour management guidance	24/08/11
Composting (Activity A2)	Sector guidance note IPPC S5.06 'Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste'	24/08/11
Application EPR/PP3096ZA/V006	'Doc 1 sop wood recovery' in response to section 3a – technical standards, Part C4 of the application form	31/01/14
Response to Schedule 5 Notice dated 18/03/15 EPR/PP3096ZA/V008	Accident Management Plan (Document name: 'BIO03 – Accident Management Plan (Issue 01).pdf')	27/03/15
	Fugitive Emissions Management Plan (Document name: 'BIO08 – Fugitive Emissions Management Plan (Issue 01).pdf')	
	Drainage plans (Document name: 'BIO09 – Appendix Drainage Plans.pdf')	02/04/15
	Site Layout Plans excluding Drawing 'Open Windrow Site Plan' (Document name: 'BIO12 – Site Layout Plans.pdf')	
Additional information requested 02/04/15	Drawing PFD3-02 'Process Flow Waterhandling'	09/04/15
	Drawing 'Odour Release Points Location Plan' (Document name 'BIO04 – Appendix 1 (ORP Plan).pdf')	14/04/15
Additional information requested 17/04/15	Drawing 207 'Kerbing and Paving' (Document name: '36602-207E Kerbing and Paving.pdf')	17/04/15
	Drawing 208 'Standard Carriageway Details' (Document name: '35602-208 Standard Roadway Details.pdf')	
	Risk Management measures provided in 'H1 Risk Assessment Annex A' (Document Reference: 'BIO07a H1 Risk Assessment Annex A.pdf')	
	Drawing 250 'External Works: Drainage GA (Sheet 1)' (Document Name: '35602-250G Drainage GA (Sheet 1).pdf')	21/04/15
	Drawing 'Open Windrow Drainage' (Document Name: 'Eppleworth011_5_Open Windrow Drainage.pdf')	
	Drawing 'Open Windrow Site Plan' (Document Name: 'Eppleworth011_6_Open Windrow Site Plan.pdf')	
	Supporting information for Drainage Management Plan ('Document Reference: 'Q&A Drainage Management Plan_2.docx')	
	Drainage Management Plan (Document name: 'BIO09 – Drainage Management Plan.pdf')	01/05/15
Additional information requested 01/05/15	Management System (Document name: 'BIO02 – Management System.pdf')	01/05/15
Additional information requested 06/05/15	Odour Management Plan (Document name: 'BIO04 – Odour Management Plan.pdf')	07/05/15
Application EPR/PP3096ZA/V010	Documents received in responses to section 3a – technical standards and Appendix 5, Part C3 of the application form including the amended version provided in response to the not duly made request for further information.	18/03/16 (duly made 26/05/16)

Table S1.2 Operating techniques		
Description	Parts	Date Received
Response to the Schedule 5 Notice dated 23/06/16	<ul style="list-style-type: none"> ▪ Letter provided in response to items 1, 2, 3 and 5 of the Schedule 5 Notice. ▪ Sections 3 and 4 of the document titled 'Non-Technical Summary (final), referenced BIO01', dated 29/06/2016. ▪ Sections 3, 4, 5, 6 and 7 of the document titled 'Management System (issue 03)', referenced BIO02, dated 13/07/2016, providing information on the site operations, site engineering, pollution control and accident management. ▪ Document referenced BIO12 – 'Site Plan (final)', providing details of the site layout and drainage routes and facilities. 	18/07/16
Response to the Schedule 5 Notice dated 16/09/16	<ul style="list-style-type: none"> ▪ Letter received in response to item 1 of the Schedule 5 Notice, providing further details on process design, controls, monitoring, maintenance and contingency measures for the ASP process. ▪ Document titled 'ASP Technology Assessment (final)', referenced BIO15, dated 23/12/2016. ▪ Document titled 'Site Capacity Assessment (final)', referenced BIO13, dated 24/03/2016. ▪ Material Flow Schematics titled 'Treatment of Organic Materials including controlled Food Wastes'. ▪ Drawing showing ASP rotation system. 	06/01/17
Additional information	<ul style="list-style-type: none"> ▪ Document titled 'ASP Composting System Commissioning Plan', dated 20/03/2017. ▪ Document titled 'Odour Management Plan (Issue 03)', reference BIO04, dated 20/03/2017. 	20/03/17

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>Submit a written report to the Environment Agency.</p> <p>The report shall contain evidence to demonstrate whether or not the noise impact assessment dated 17 July 2014 was undertaken in accordance with BS4142:1997.</p> <p>The report should include, but not be limited to:</p> <ul style="list-style-type: none"> - Confirmation that all parts of Section 10 of BS4142:1997 were followed; - Justification for the use of background sound levels measured in 2009; - Justification for not applying a correction of +5dB to the rating level (as noise from increased movement of on-site vehicles, deliveries and departures from the site are irregular enough to attract attention); - A site plan showing site topography and the location of background sound level measurements; - Clarification as to which version of BS5228 was used; and - Confirmation that, if the noise impact assessment dated 17 July 2014 was not undertaken in accordance with BS4142:1997, then a noise impact assessment in accordance with the most up to date version of BS4142 will be undertaken within a defined timeframe. 	12/07/15
IC2	<p>Submit a written plan to the Environment Agency for approval.</p> <p>The plan shall include an inspection and maintenance programme for all underground storage and drainage structures at the IVC facility and open windrow pads. This includes the cellular soakaway and sumps used for the collection of leachate from the open windrow pads.</p> <p>The plan should be prepared with reference to Section 2.2.5 of Sector guidance note IPPC S5.06 'Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste'.</p> <p>The plan shall confirm the tests that will be undertaken to confirm the integrity of underground structures, the frequency of periodic testing and include a commitment to undertake any necessary remedial measures within a defined timescale.</p> <p>The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>	12/07/15
IC3	<p>Submit a written report to the Environment Agency for approval.</p> <p>The report must contain the results and recommendations of a review of the design, method of construction and integrity of the proposed site secondary containment.</p> <p>The review must</p> <ul style="list-style-type: none"> - be carried out by a qualified structural engineer; - compare the constructed secondary containment against the standards set out in Section 2.2.5 of Sector guidance note IPPC S5.06 'Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste' and CIRIA C736 'Containment Systems for the Prevention of Pollution – secondary, tertiary and other measures for industrial and commercial premises' or other relevant industry standard. <p>The report must include:</p> <ul style="list-style-type: none"> - physical condition of the secondary containment; - the suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure; - any work required to ensure compliance with the standards set out in CIRIA C736 or other relevant industry standard; and 	12/12/15

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<p>- a preventative maintenance and inspection regime.</p> <p>Any works required, and the preventative maintenance and inspection regime, shall be implemented in accordance with the Environment Agency's written approval.</p>	
IC4	<p>Submit a written report to the Environment Agency for approval.</p> <p>The report must contain the results of a review of the method for measuring the level of leachate in the 'OWC Leachate Tank (Boythorpe)' as shown on Drawing 'Open Windrow Site Plan' and propose alternative methods to visual inspection.</p> <p>The report must contain dates for the implementation of individual measures.</p> <p>The individual measures shall be implemented in accordance with the Environment Agency's written approval.</p> <p>The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the report.</p>	12/12/15
IC5	<p>Submit a written report to the Environment Agency for approval.</p> <p>The report must contain a review of the effectiveness of the measures described in Section 9.1 of the Odour Management Plan to prevent odour pollution when wind is in the direction of sensitive receptors during:</p> <ol style="list-style-type: none"> the unloading of IVC tunnels; the transportation of waste from the IVC tunnels to the open windrow composting pad; or the turning of windrows. <p>The report must review one year of normal operation of the IVC facility.</p> <p>The report must include a discussion of any odour complaints received since the commencement of normal operation of the IVC facility and, where substantiated, a discussion of the relationship between the complaints and the above activities a) to c).</p> <p>Where odour complaints have been caused by one or more of the above activities a) to c) the report must contain proposals for measures to prevent further complaints.</p> <p>The report must contain dates for the implementation of individual measures and a timescale for updating the Odour Management Plan with reference to such individual measures.</p> <p>The individual measures shall be implemented in accordance with the Environment Agency's written approval.</p> <p>The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the report.</p>	12/12/16
IC6	<p>Submit a written plan to the Environment Agency for approval.</p> <p>The plan shall contain proposals for routine monitoring of the wet scrubbers and biofilters under normal operating conditions taking into account the results of the commissioning data collected under POM1.</p> <p>The plan shall conclude with a summary of changes to the Odour Management Plan in light of the commissioning monitoring results and a timescale for updating the Odour Management Plan.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>	1 month after completion of commissioning of Activity A1
IC7	<p>The operator shall submit a commissioning report of the Phase 1 operations to the Environment Agency for approval following the completion of activities allowed under Phase 1 of the Commissioning Plan dated 20/03/2017 (referenced in Table S1.2). The commissioning report shall include, but not be limited to, the following information:</p>	19/05/17

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<ul style="list-style-type: none"> ▪ a summary of activities carried out and details of other activities to note e.g. OWC materials on site, finished product storage on site; ▪ confirmation of compliance with commissioning plan and/or justification for any deviations or changes in the Operating Techniques relevant to odour management and/or process controls; ▪ details of the dimensions and tonnage of material processed during the Phase 1; ▪ records of monitoring data obtained from the Gicom process computer, including temperature, oxygen and backpressures; ▪ records of odour monitoring surveys conducted during the Phase 1; ▪ list of external odour complaints linked to installation and confirmation of how many of those that are linked to ASP process; ▪ details of any remedial actions taken during the Phase 1, e.g. biofilter layer added. 	
IC8	The operator shall submit an updated Odour Management Plan (OMP) with details of proposed changes/improvements to be implemented during the operations of activities authorised under Phase 2 of the agreed Commissioning Plan dated 20/03/2017 to the Environment Agency for approval.	19/05/17
IC9	<p>The operator shall submit a final commissioning report to the Environment Agency for approval following the completion of activities allowed under Phase 2 of the Commissioning Plan dated 20/03/2017 (referenced in Table S1.2). The commissioning report shall include, but not be limited to, the following information:</p> <ul style="list-style-type: none"> ▪ a summary of activities carried out and details of other activities to note; ▪ confirmation of compliance with commissioning plan and/or justification for any deviations or changes to the Operating Techniques relevant to odour management and/or process controls; ▪ details of the dimensions and tonnage of material processed during the Phase 2; ▪ records of monitoring data obtained from the Gicom process computer, including temperature, oxygen and backpressures; ▪ records of odour monitoring surveys conducted during the Phase 2; ▪ list of external odour complaints linked to installation and confirmation of how many of those that are linked to ASP process; ▪ details of any remedial actions taken during the Phase 2, e.g. biofilter layer added; ▪ a summary of lessons that were learnt during the commissioning phases (Phases 1 and 2) and a list of appropriate measures/improvements to be implemented. 	25/07/17
IC10	The operator shall submit an updated OMP with details of proposed changes/improvements to be implemented during the full operation of the ASP system (Activity A3 of Table S1.1) to the Environment Agency for approval.	25/07/17

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
POM 1	<p>At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of Activity A1 (composting in closed vessels followed by open windrows), the operator shall provide a written commissioning plan (including timescales for completion) for approval by the Environment Agency.</p> <p>The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the measures to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions.</p> <p>The plan shall include duct monitoring of the wet scrubbers (for ammonia) and biofilters (for odour) in order to provide evidence of effectiveness of odour controls performance to minimise risk of odour pollution beyond the installation boundary. The plan shall include a commitment to collect, as a minimum, data from three separate batch cycles.</p> <p>Commissioning shall be carried out in accordance with the commissioning plan as approved by the Environment Agency.</p> <p>No site operations shall commence or waste accepted at the installation unless the Environment Agency has given prior written permission under this condition.</p>
POM 2	<p>At least 4 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of Activity A1, the operator shall submit a bioaerosols background sampling report to the Environment Agency for written approval. The sampling shall be undertaken in accordance with the Industry Standard Protocol.</p> <p>No site operations shall commence or waste accepted at the facility unless the Environment Agency has given prior written permission under this condition.</p>
POM 3	<p>The operator shall notify the Environment Agency in writing prior to the commencement of the activities allowed under Phase 1 of Commissioning Plan dated 20/03/2017 (referenced in Table S1.2).</p> <p>The operator shall carry out the operations allowed under Phases 1 and 2 in line with the agreed Commissioning Plan dated 20/03/2017 (referenced in Table S1.2).</p>
POM 4	<p>The operator shall not commence the activities allowed under Phase 2 of the agreed Commissioning Plan dated 20/03/2017 (referenced in Table S1.2) until a written approval is received from the Environment Agency following the submission of the Phase 1 commissioning report and updated OMP required under Improvement Conditions IC7 and IC8.</p>
POM 5	<p>The operator shall not commence full operations of the ASP process (Activity A3 in Table S1.1) until a written approval is received from the Environment Agency following the submission of a final commissioning report and updated OMP required under Improvement Condition IC9 and IC10.</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 75,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: <ul style="list-style-type: none"> - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - hazardous wastes
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning (food preparation and processing waste, food washing waste only)
02 01 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 06	animal faeces, urine and manure (including spoiled straw) only
02 01 07	wastes from forestry (biodegradable only)
02 01 99	wastes not otherwise specified (spent mushroom compost and fully biodegradable bedding only)
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 01	sludges from washing and cleaning (biodegradable only)
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
02 02 99	Wastes not otherwise specified (animal manure, slurry or bedding of the following types: straw; shredded paper; paper pulp; sawdust; wood shavings; and chipped wood. Not allowed if treated, for example, contains veneers, other coatings or preserving substances)
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 04	materials unsuitable for consumption or processing (biodegradable only)
02 03 05	sludges from on-site effluent treatment (biodegradable only)
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
02 04 03	sludges from on-site effluent treatment (biodegradable only)

Table S2.2 Permitted waste types and quantities for composting in closed systems (Activity A1)	
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - hazardous wastes
Waste code	Description
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing (biodegradable only)
02 05 02	sludges from on-site effluent treatment (biodegradable only)
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing (biodegradable only)
02 06 03	sludges from on-site effluent treatment (biodegradable only)
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials (biodegradable only)
02 07 02	wastes from spirits distillation (biodegradable only)
02 07 04	materials unsuitable for consumption or processing (biodegradable only)
02 07 05	sludges from on-site effluent treatment (biodegradable only)
02 07 99	wastes not otherwise specified (malt husks, malt sprouts, yeast and yeast-like residues only)
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	wastes from wood processing and the production of panels and furniture
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood and particle board other than those mentioned in 03 01 04
03 03	wastes from pulp, paper and cardboard production and processing
03 03 01	waste bark and wood
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
04	Wastes from the leather, fur and textile industries
04 01	wastes from the leather and fur industry
04 01 01	fleshings and lime split wastes (fleshings may also be described as leather shavings. Allowed only if hides and skins, or parts of them, originating from animals that did not show clinical signs of any disease communicable through the product to humans or animals)
04 02	wastes from the textile industry
04 02 10	organic matter from natural products (un-dyed and untreated only)
04 02 21	Wastes from unprocessed textile fibres (biodegradable material only)
07	Wastes from organic chemical processes
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres

Table S2.2 Permitted waste types and quantities for composting in closed systems (Activity A1)	
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - hazardous wastes
Waste code	Description
07 02 13	waste plastic (compostable plastics only, unused and uncontaminated excess production only)
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging (excluding veneers, plastic coatings or laminates)
15 01 02	plastic packaging (compostable plastics only)
15 01 03	wooden packaging (not allowed if any non-biodegradable coating or preserving substance is present. Untreated wood only)
15 01 05	composite packaging (only biodegradable organic packaging)
15 01 09	textile packaging (made entirely from biodegradable fibres only)
16	Wastes not otherwise specified in the list
16 10	aqueous liquid wastes destined for off-site treatment
16 10 02	liquor/leachate from a composting process that accepts waste input types listed in this table only
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 02	wood, glass and plastic
17 02 01	wood (not allowed if treated, for example contains veneers, other coatings or preserving substances. Allowed only if biodegradable material with no chemical additives or preservative, and no persistent organics present. Untreated wood only)
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 06	dredging spoil other than those mentioned in 17 05 05 (from inland waters only)
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 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	premixed wastes composed only of non-hazardous wastes (waste types listed in this table only)
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05 (only if derived solely from physical treatment and/or pH adjustment of waste input types listed in this table)
19 05	wastes from aerobic treatment of solid wastes
19 05 01	non-composted fraction of municipal and similar wastes (from a composting process that accepts waste input types listed in this table)
19 05 02	non-composted fraction of animal and vegetable waste (from a composting process that accepts waste input types listed in this table)

Table S2.2 Permitted waste types and quantities for composting in closed systems (Activity A1)	
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - hazardous wastes
Waste code	Description
19 05 03	off-specification compost (from a composting process that accepts waste input types listed in this table)
19 06	wastes from anaerobic treatment of waste
19 06 03	liquor from anaerobic treatment of municipal waste (derived from source segregated municipal waste only)
19 06 04	digestate from anaerobic treatment of municipal waste (derived from source segregated municipal waste only)
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
19 08	wastes from waste water treatment plants not otherwise specified
19 08 05	sludges from treatment of urban waste water
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	paper and cardboard (excluding veneers or plastic coatings)
19 12 07	wood other than that mentioned in 19 12 06
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (and only including wastes types listed in this table)
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 (excluding veneers, plastic coatings or laminates)
20 01 08	biodegradable kitchen and canteen waste
20 01 25	edible oil and fat
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics (compostable plastics only)
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 03	other municipal wastes
20 03 01	Mixed municipal waste (allowed only if separately collected biodegradable wastes otherwise allowed by the Compost Quality Protocol)
20 03 02	waste from markets (biodegradable only)

Table S2.3 Permitted waste types and quantities for open windrow composting and aerated static pile (Activities A2 & A3)

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"> - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - hazardous wastes - catering waste and other wastes containing animal by products covered by the Animal By-Products Regulations (except waste code 02 01 06 and 02 02 99) - wastes producing significant odour or likely to produce significant odour
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning
02 01 03	plant-tissue waste
02 01 06	animal faeces, urine and manure (excluding non-biodegradable bedding)
02 01 07	wastes from forestry (biodegradable only)
02 01 99	Wastes not otherwise specified (spent mushroom compost only)
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 99	Horse manure, farmyard manure and bedding (excluding non-biodegradable bedding)
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation (Allowed only if no chemical additives or toxin residues present).
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 04	materials unsuitable for consumption or processing (biodegradable only)
02 03 05	sludges from on-site effluent treatment
02 04	wastes from sugar processing (Allowed only if no chemical additives or toxin residues present).
02 04 03	sludges from on-site effluent treatment (biodegradable waste only)
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing (ABPR waste excluded)
02 06	wastes from the baking and confectionary industry
02 06 01	materials unsuitable for consumption or processing (ABPR waste excluded)
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa) biodegradable material only. Any chemical additives or contaminants present must comply with EU Regulations, for example, Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs.
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials (spent grains or hops only)

Table S2.3 Permitted waste types and quantities for open windrow composting and aerated static pile (Activities A2 & A3)

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"> - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - hazardous wastes - catering waste and other wastes containing animal by products covered by the Animal By-Products Regulations (except waste code 02 01 06 and 02 02 99) - wastes producing significant odour or likely to produce significant odour
Waste code	Description
02 07 02	wastes from spirits distillation (whisky filter sheets or cloths)
02 07 04	materials unsuitable for consumption or processing (biodegradable only)
02 07 05	sludges from on-site effluent treatment
02 07 99	wastes not otherwise specified (malt husks, malt sprouts, yeast and yeast-like residues)
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	wastes from wood processing and the production of panels and furniture
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood and particle board only (excluding veneers or preservatives)
03 03	wastes from pulp, paper and cardboard production and processing
03 03 01	waste bark and wood
03 03 10	fibre rejects only (only allowed if not mixed with, or does not contain, de-inking sludge).
04	Wastes from the leather, fur and textile industries
04 02	wastes from the textile industry (non ABPR waste only)
04 02 10	organic matter from natural products (un-dyed and untreated only)
04 02 21	wastes from unprocessed textile fibres – allowed if biodegradable material only
15	Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging (excluding veneers or plastic coatings)
15 01 03	wooden packaging (non treated wood waste)
15 01 05	composite packaging (only biodegradable packaging)
15 01 09	textile packaging (made entirely from bio-degradable fibres only)
16	Wastes not otherwise specified in the list
16 10	aqueous liquid wastes destined for off-site treatment
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01 - Allowed only if digestate or liquor from an aerobic digestion process that accepts only the waste input types allowed by the Compost Quality Protocol.
17	Construction and demolition wastes (including excavated soil from contaminated sites)

Table S2.3 Permitted waste types and quantities for open windrow composting and aerated static pile (Activities A2 & A3)	
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"> - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - hazardous wastes - catering waste and other wastes containing animal by products covered by the Animal By-Products Regulations (except waste code 02 01 06 and 02 02 99) - wastes producing significant odour or likely to produce significant odour
Waste code	Description
17 02	wood, glass and plastic
17 02 01	Wood
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 06	dredging spoil and plant tissue waste other than those mentioned in 17 05 03 (only if dewatered and from inland waters)
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 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralization)
19 02 03	premixed wastes composed only of non-hazardous wastes - Acceptable only if derived solely from input types allowed by the Compost Quality Protocol and remains segregated from, and uncontaminated by, any other waste type.
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05 - Acceptable only if derived solely from physical treatment and/or pH adjustment of input types allowed by the Compost Quality Protocol and remains segregated from, and uncontaminated by, any other waste type.
19 05	wastes from aerobic treatment of solid wastes
19 05 03	off-specification compost (only from a process operated according to PAS 100 and quality protocol requirements, waste exemption T23 or another approved standard)
19 08	waste from waste water treatment plants
19 08 05	sludges from treatment of urban waste water
19 12	waste from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	paper and cardboard (excluding veneers or plastic coatings)
19 12 07	wood other than that mentioned in 19 12 06 (excluding wood containing dangerous substances)
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 (excluding veneers or plastic coatings)
20 01 38	wood other than wood containing dangerous substances from separately collected fractions of municipal wastes (household waste and similar commercial, industrial and institutional wastes)
20 02	garden and park waste (including cemetery waste)

Table S2.3 Permitted waste types and quantities for open windrow composting and aerated static pile (Activities A2 & A3)	
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"> - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - hazardous wastes - catering waste and other wastes containing animal by products covered by the Animal By-Products Regulations (except waste code 02 01 06 and 02 02 99) - wastes producing significant odour or likely to produce significant odour
Waste code	Description
20 02 01	biodegradable waste (plant matter only)
20 02 02	soil and stones
20 03	other municipal wastes
20 03 02	waste from markets (biodegradable only)

Table S2.4 Permitted waste types and quantities for treatment of waste to produce soil, soil substitutes and aggregate (Activity A10)	
Maximum quantity	Combined annual throughput for Activities A10 and A11 shall not exceed 50,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: <ul style="list-style-type: none"> - consisting solely or mainly of dusts, powders, or loose fibres - hazardous wastes - wastes in liquid form
Waste code	Description
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 02	shellfish shells from which the soft tissue or flesh has been removed only
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	wastes from wood processing and the production of panels and furniture
03 01 01	waste bark and cork
03 03	wastes from pulp, paper and cardboard production and processing
03 03 01	waste bark and wood

Table S2.4 Permitted waste types and quantities for treatment of waste to produce soil, soil substitutes and aggregate (Activity A10)	
Maximum quantity	Combined annual throughput for Activities A10 and A11 shall not exceed 50,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - consisting solely or mainly of dusts, powders, or loose fibres - hazardous wastes - wastes in liquid form
Waste code	Description
10	Wastes from thermal processes
10 01	wastes from power stations and other combustion plants (except 19)
10 01 01	bottom ash, slag only
10 01 02	pulverized fuel ash only
10 01 05	gypsum (solid) only
10 01 07	gypsum (sludge) only
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 11	wastes from manufacture of glass and glass products
10 11 12	clean glass other than those mentioned in 10 11 11
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 14	waste concrete only
15	Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 07	clean glass only
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 02	clean glass only
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	road base and road planings (other than those containing coal tar) only
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03

Table S2.4 Permitted waste types and quantities for treatment of waste to produce soil, soil substitutes and aggregate (Activity A10)	
Maximum quantity	Combined annual throughput for Activities A10 and A11 shall not exceed 50,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - consisting solely or mainly of dusts, powders, or loose fibres - hazardous wastes - wastes in liquid form
Waste code	Description
17 05 06	dredging spoil other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
17 08	gypsum-based construction material
17 08 02	gypsum only other than that mentioned in 17 08 01
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	compost from source segregated biodegradable waste only
19 08	wastes from waste water treatment plants not otherwise specified
19 08 02	washed sewage grit (waste from desanding) free from sewage contamination only
19 08 99	stone filter media if free from sewage contamination only
19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 09 02	sludges from water clarification
19 12	waste from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 05	clean glass only
19 12 09	minerals (for example sand, stones)
19 12 12	treated bottom ash including IBA and slag other than that containing dangerous substances only
19 13	wastes from soil and groundwater remediation
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
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 02	clean glass only
20 02	garden and park waste (including cemetery waste)
20 02 02	soil and stones

Table S2.5 Permitted waste types and quantities for blending (Activity A11)	
Maximum quantity	Combined annual throughput for Activities A10 and A11 shall not exceed 50,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - consisting solely or mainly of dusts, powders, or loose fibres - hazardous wastes
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
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 08	wastes from waste water treatment plants not otherwise specified
19 08 05	sludges from treatment of urban waste water
19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 09 02	sludges from water clarification
19 09 03	sludges from decarbonation

Table S2.6 Permitted waste types and quantities for sorting and segregation of wood (Activity A12)	
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - consisting solely or mainly of dusts, powders, or loose fibres - hazardous wastes - wastes in liquid form
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 03	plant-tissue waste (wood and bark only)
02 01 07	wastes from forestry (wood and bark only)
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and production
03 01	wastes from wood processing and the production of panels and furniture
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	wastes from pulp, paper and cardboard production and processing

Table S2.6 Permitted waste types and quantities for sorting and segregation of wood (Activity A12)	
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - consisting solely or mainly of dusts, powders, or loose fibres - hazardous wastes - wastes in liquid form
Waste code	Description
03 03 01	waste bark and wood
15	waste packaging: absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 03	wooden packaging
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 02	wood, glass and plastic
17 02 01	Wood
17 09	other construction and demolition wastes
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 (wood only)
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 07	wood other than that mentioned in 19 12 06
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 38	wood other than that mentioned in 20 01 37
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste (wood and bark only)

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Vent from fuel tank shown on Drawing 'IVC Site Layout Plan'.	Fuel storage tank	No parameter set	No limit set	--	--	--

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
'Cellular Soakaway' shown on Drawing 'IVC Site Layout Plan'.	Uncontaminated roof and site surface water from non-operational areas	No parameter set	No limit set	--	--	--

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	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
Leachate storage tanks shown on Drawing 'IVC Site Layout Plan' ('Double Bunded Leachate Tank') and Drawing 'Open Windrow Site Plan' ('OWC Leachate Tank (Boythorpe)') for transfer off-site.	Compost liquor/leachate	No parameter set	No limit set	--	--	--

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
Internal for each composting batch during sanitisation stage for the OWC, IVC and ASP	Temperature	Daily (for the OWC)	Temperature probe	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 an annual basis or as agreed in writing by the Environment Agency
		Continuously (for the IVC and ASP)		
	Moisture	Daily (for OWC and ASP)	Grip test	
		Continuously (for the IVC)	Gicom system moisture probe	
	Oxygen	Daily (for the OWC)	Oxygen probe	
		Continuously (for the IVC and ASP)		
Internal for each composting batch during stabilisation stage for the OWC and ASP	Temperature	Weekly (for the OWC)	Temperature probe	
		Continuously (for the ASP)		
	Moisture	Weekly; at least four reading per windrow/batch	Grip test	
	Oxygen	Weekly (for the OWC)	Oxygen probe	
		Continuously (for the ASP)		
	Oversize storage	Temperature	At least weekly	Hand held temperature probe
Biofilters	Temperature	Continuously	Temperature probe	Biofilter shall be regularly checked and maintained to ensure appropriate temperature and moisture content.
	Moisture	Weekly	None specified	
	Thatching/ compaction	As required	None specified	
Scrubber system	Key parameters to include pH, moisture, temperature and air flow	In accordance with manufacturer's recommendations	None specified	Scrubber system shall be regularly checked and maintained to ensure appropriate temperature and moisture content.
Waste reception building; Storage tanks; Maturation area	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary
Storage tanks	Integrity checks	Weekly	Visual assessment	--

Table S3.5 Bioaerosols monitoring requirements – ambient monitoring

Location or description of point of measurement	Parameter	Bioaerosols threshold limits (CFU m ⁻³)	Monitoring frequency	Monitoring standard or method	Other specifications
Ambient monitoring Upwind of the operational area, as described in the Technical Guidance Note M9 Downwind of the operational area, as described in the Technical Guidance Note M9	Total bacteria	1000	Quarterly for the first year of operation and twice a year thereafter, unless another frequency is agreed in writing by the Environment Agency	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.
	Aspergillus Fumigatus	500			

Schedule 4 – Reporting

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

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Bioaerosols monitoring Parameters as required by condition 3.6.1	As specified in schedule 3 table S3.5	Every 3 months or as agreed in writing by the Environment Agency	1 January, 1 May, 1 September
Biofilter efficiency Parameters as required by condition 4.2.6	Biofilters	Every 12 months	1 January

Parameter	Units
Processed compost	tonnes

Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes

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	12/06/15
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	12/06/15
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	12/06/15
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	12/06/15
Waste Returns	E-waste Returns Form	--

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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Measured value and uncertainty	
Date and time of monitoring	
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. This does include blood, feathers, uncooked butcher waste and any other animal waste that is not catering waste or former foodstuffs. This does not include faecal matter from animals (e.g. chicken litter or farmyard manure).

“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.

“bioaerosols threshold limits” 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*.

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

“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 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”.

“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.

“Compost Quality Protocol”) means ‘End of waste criteria for the production and use of quality compost from source-segregated biodegradable waste’, WRAP and Environment Agency, August 2012

“closed system” means a closed composting reactor or closed area (such as a building) in which waste is fully contained and efficient air management abatement systems are demonstrated. This may cover a wide range of technology and where necessary is in compliance with the Animal By-Products Regulations.

“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 2010 No.675 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.

“Industry Standard Protocol” means “A standardised protocol for the monitoring of bioaerosols at open composting facilities” published by the Association for Organics Recycling and developed in conjunction with the Environment Agency.

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

“pests” means Birds, Vermin and Insects.

“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.

“sanitisation stage” 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:

(a) no liquid will run off the surface otherwise than via the system;

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

“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.

“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.

“year” means calendar year ending 31 December.

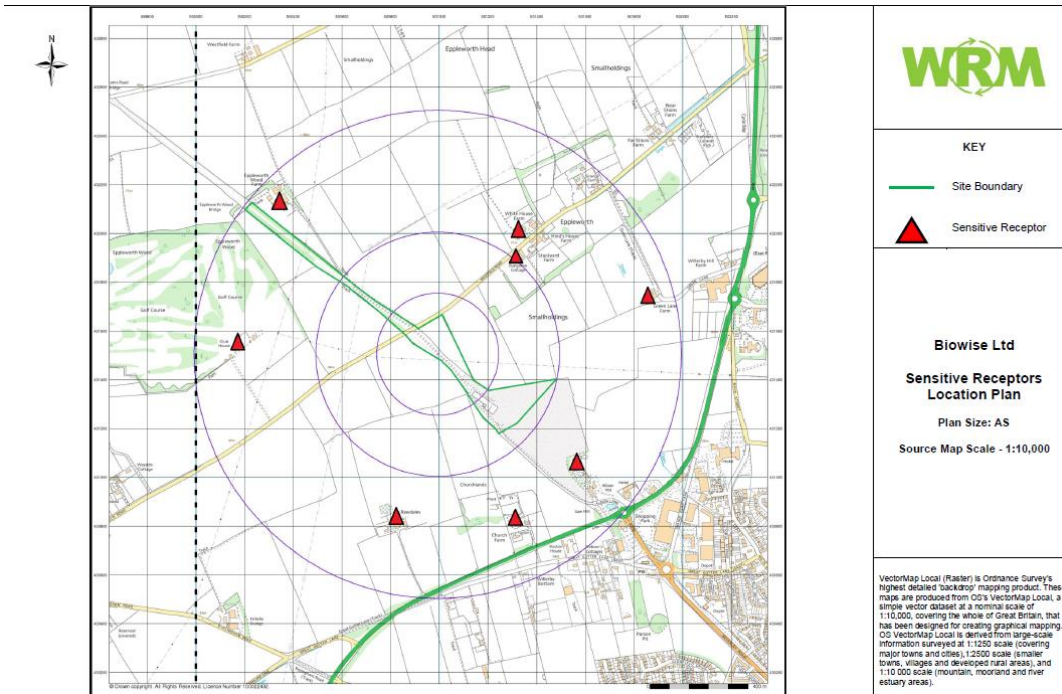
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

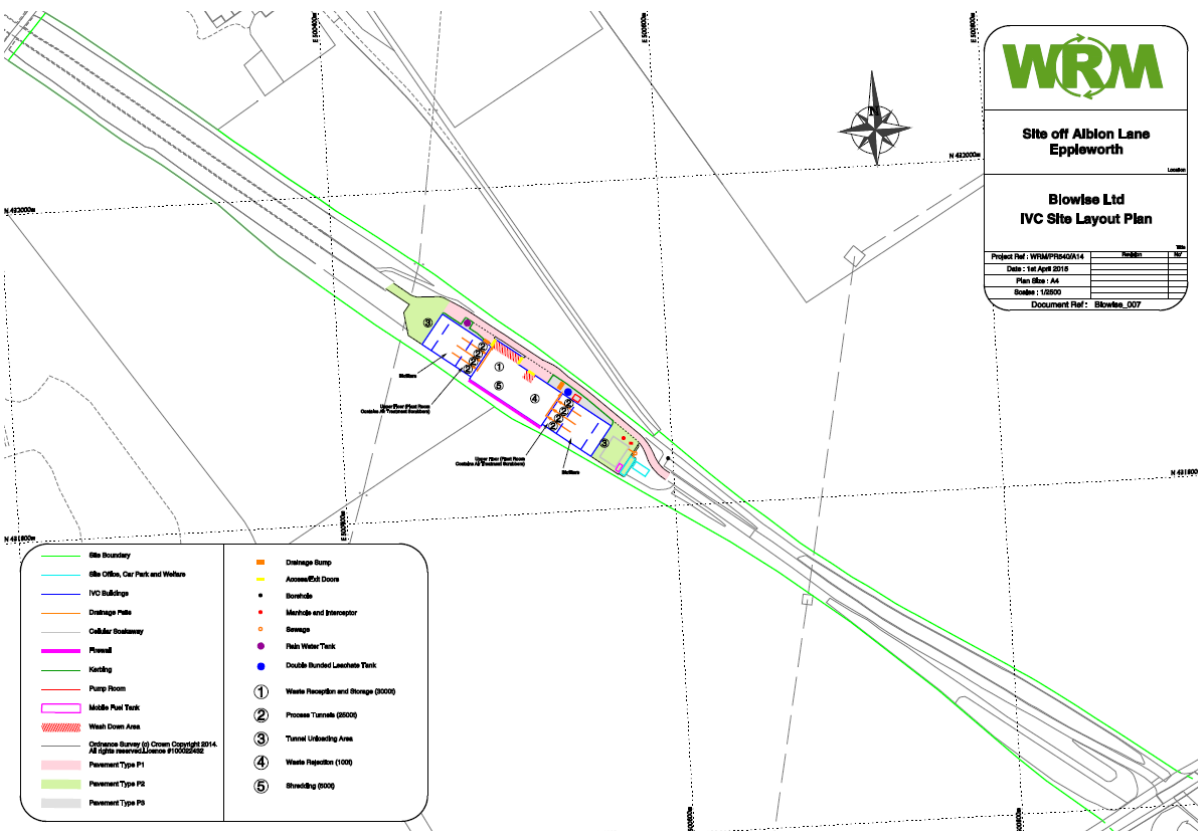
- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration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

Schedule 7 – Site plan

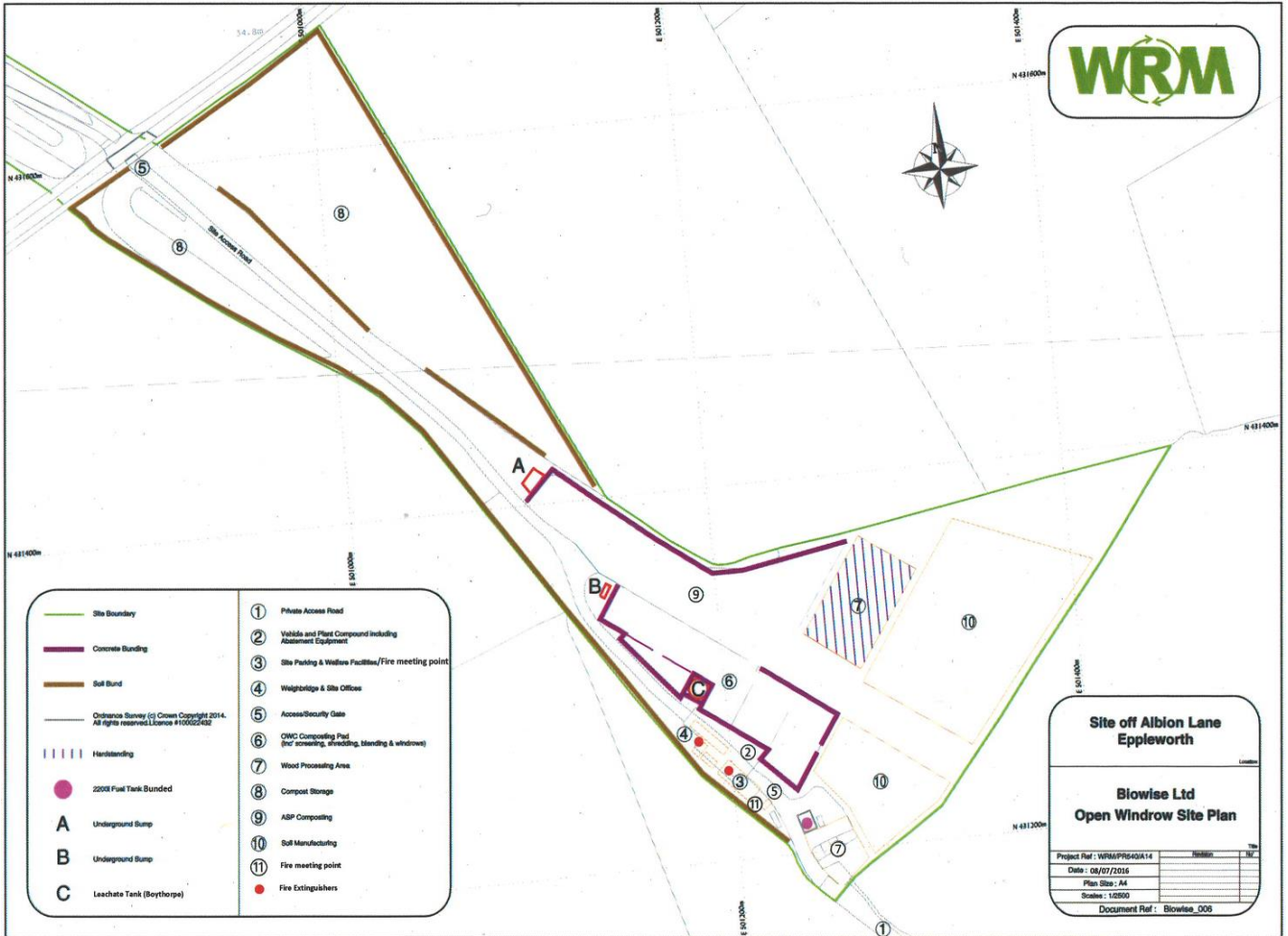
Site location plan



IVC Site Layout Plan



Open Windrow and Aerated Static Pile Site Plan



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END OF PERMIT

Permit Number: EPR/PP3096ZA

Operator:

Biowise Limited

**Facility: Biowise Albion Lane
Waste Treatment Facility**

Form Number:

WaterUsage1 / 12/06/15

Reporting of Water Usage for the year

Water Source	Usage (m3/year)	Specific Usage (m3/unit output)
Mains water		
Site borehole		
River abstraction		
TOTAL WATER USAGE		

Operator's comments:

Signed

Date.....

(authorised to sign as representative of Operator)

Permit Number: EPR/PP3096ZA

Operator:

Biowise Limited

Facility: Biowise Albion Lane Waste Treatment Facility

Form Number:

Energy1 / 12/06/15

Reporting of Energy Usage for the year

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh		
Natural Gas	MWh		
Gas Oil	tonnes		
Recovered Fuel Oil	tonnes		
TOTAL	-		

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

Signed

Date.....

(Authorised to sign as representative of Operator)

Permit Number: EPR/PP3096ZA

Operator:

Biowise Limited

Facility: Biowise Albion Lane Waste Treatment Facility

Form Number:

Performance1 / 12/06/15

Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY

Parameter	Units
Total raw material used	tonnes

Operator's comments:

Signed

Date.....

(Authorised to sign as representative of Operator)