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Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Riverside Bio Limited

Mitcham Waste Treatment Centre 43 Willow Lane Willow Lane Industrial Estate Mitcham Surrey CR4 4NA

Variation application number

EPR/JB3737WE/V003

Permit number

EPR/JB3737WE

Mitcham Waste Treatment Centre Permit number EPR/JB3737WE

Introductory note

This introductory note does not form a part of the notice.

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.

The Industrial Emissions Directive (IED) was transposed in England and Wales by the Environmental Permitting (England and Wales)(Amendment) Regulations 2013 on 27 February 2013. This variation implements the changes brought about by the IED for "existing facilities operating newly prescribed activities" and completes the transition of this facility from a waste operation to an IED Installation.

Riverside Bio operate an in-vessel accelerated biological treatment facility at Mitcham Waste Treatment Centre at Willow Lane, Mitcham. The facility operates an aerobic waste treatment operation in the liquid (wet) phase. It is permitted to accept up to 100,000 tonnes a year of non-hazardous waste. The operation consists of:

- Reception of raw incoming wastes;
- Pulping and pre-processing of raw wastes;
- Conversion of biodegradable wastes into a liquid slurry;
- Accelerated in-vessel biological treatment in an aerobic environment created by a combination of mechanical mixers and addition of compressed air; and
- Dewatering of treated materials followed by temporary storage of dewatered product prior to dispatch off-site; or
- Temporary storage of liquid slurry prior to dispatch off-site and/or to an on-site anaerobic digester operated under a separate permit by different operator.

The biological in-vessel treatment activity has been varied to an installation activity under the Environmental Permitting (England and Wales) (Amendment) Regulations 2013 Schedule 1 Part 2 Section 5.4 Part A(1) (b) (i) 'Recovery or mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment'.

In addition to the above, the facility also accepts digestate from the anaerobic digestion facility, operated by Riverside AD Limited on the same site, for storage and separation prior to dispatch off-site for use. This activity is included in this permit as a waste operation.

The schedules specify the changes made to the permit.

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

Status log of the permit			
Description	Date	Comments	
Application EPR/EP3792SX/A001 received (EAWML101177)	Duly made 08/09/09	Application for an accelerated in vessel biological treatment facility.	
Permit determined	08/01/10	Permit issued to Vertal Limited.	

Status log of the permit				
Description	Date	Comments		
Application EPR/JB3737WE/T001	Duly made 30/07/12	Application to transfer permit EPR/EP3792SX to Riverside Bio Limited.		
Transfer application EPR/JB3737WE determined	08/08/12	Permit transferred to Riverside Bio Limited.		
Environment Agency initiated variation EPR/JB3737WE/V002 determined	19/09/14	Agency initiated variation to update the permit to modern conditions.		
Application EPR/JB3737WE/V003 received	Duly made 17/03/15	Application to vary permit to include a waste operation and a newly prescribed activity under the Industrial Emissions Directive (IED).		
Variation determined EPR/JB3737WE/V003 Billing ref YP3939AD	07/07/16	Variation notice issued.		

Other Part A installation permits relating to this installation			
Operator Permit number Date of issue			
Riverside AD Limited	EPR/AB3307LK	30/03/16	

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/JB3737WE

Issued to

Riverside Bio Limited ("the operator")

whose registered office is

10 Osier Way Mitcham Surrey CR4 4NF

company registration number 08104799

to operate a regulated facility at

Mitcham Waste Treatment Centre 43 Willow Lane Willow Lane Industrial Estate Mitcham Surrey CR4 4NA

to the extent set out in the schedules.

The notice shall take effect from 07/07/2016

Name	Date
Rebecca Warren	07/07/2016

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/JB3737WE

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/JB3737WE/V003 authorising,

Riverside Bio Limited ("the operator"),

whose registered office is

10 Osier Way Mitcham Surrey CR4 4NF

company registration number 08104799

to operate an installation and waste operations at

Mitcham Waste Treatment Centre 43 Willow Lane Willow Lane Industrial Estate Mitcham Surrey CR4 4NA

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

Name	Date
Rebecca Warren	07/07/2016

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 A6), 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 A6), 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.

1.5 Multiple operator installations

1.5.1 Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

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 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit. The area edged in red on the site plan represents the extent of the installation covered by the permit of the other operator of the installation.

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
 - (a) it is of a type and quantity listed in schedule 2 tables S2.2 and S2.3; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
 - (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

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

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once 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.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
 - (a) point source emissions specified in tables S3.1 and S3.2;
 - (b) process monitoring specified in table S3.3.

- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 and S3.2 unless otherwise agreed in writing by the Environment Agency.

3.6 Pests

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

3.7 Fire prevention

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

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:
 - (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

- (i) off-site environmental effects; and
- (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 For the following activities referenced in schedule 1, table S1.1 (A1 to A6), a report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
 - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
 - (b) the annual production/treatment data set out in schedule 4 table S4.2; and
 - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
 - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
 - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

- 4.3.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A6), 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 (A7), 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 A6), 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 (A7), 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

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	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste through to biological treatment and recovery of by-products.
	tonnes per day involving biological treatment.		The digestion of waste shall be under aerobic conditions in closed controlled reactor vessels fitted with suitable abatement for the off-gas.
			The aerobic digestion of wastes including pasteurisation and chemical addition.
			The treatment building shall be provided with suitable negative air extraction that is directed to an abatement system.
			The biological treatment of wastes under anaerobic conditions shall be prevented, or where that is not practicable, minimised.
			Waste types suitable for acceptance are limited to those specified in Table S2.2.
	Directly Associated Activity	/	
A2	Storage of waste pending recovery or disposal	R13: Storage of waste pending the R3 operation (excluding temporary storage, pending collection, on the site where it is produced)	Undertaken in relation to Activity A1. From the receipt of waste to despatch for biological treatment or despatch off site for recovery and/or
			disposal. The storage of waste shall be in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with

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
			sealed drainage.
			Liquid waste received in sealed tankers shall be transferred directly via pipeline to an enclosed liquid storage tank prior to digestion. The transfer of waste shall be within an enclosed building on an impermeable surface with sealed drainage.
			The treatment building shall be provided with suitable negative air extraction that is directed to an abatement system.
			The storage of wastes under anaerobic conditions shall be prevented, or where that is not practicable, minimised.
			Waste types suitable for acceptance are limited to those specified in Table S2.2.
A3	Physical treatment for the purposes of recycling	R3: Recycling/reclamation of organic substances	Undertaken in relation to Activity A1.
		which are not used as solvents	From the receipt of waste to despatch for biological treatment or despatch off site for recovery.
			The pre-treatment of waste prior to biological treatment including sorting and screening to remove plastics, metals and nonfood wastes shall be in an enclosed building and on an impermeable surface with sealed drainage system.
			The post-treatment of liquid slurry (digestate) including centrifuge or pressing, addition of thickening agents (polymers) or drying shall be in an enclosed building and on an

Activity				
reference	1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	activity and waste types	
			impermeable surface with sealed drainage system	
			Emissions from the dewatering of liquid digestate shall be directed to a suitable abatement system.	
			The physical treatment of wastes under anaerobic conditions shall be prevented or, where that is not practicable, minimised.	
			Waste types suitable for acceptance are limited to those specified in Table S2.2.	
A4	Raw material storage	Storage of raw materials including chemicals for	Undertaken in relation to Activity A1.	
		waste treatment processes, chemicals for air abatement equipment, cleaning fluids, fuels and lubricants.	From the receipt of raw materials to despatch for use within the facility.	
A5	Treated liquid slurry (digestate) and dewatered, solid digestate storage	Storage of processed dewatered, solid digestate and liquid slurry (digestate) in an enclosed building	Undertaken in relation to Activity A1. From the receipt of processed liquid slurry (digestate) or dry, dewatered solid digestate produced at the facility to despatch for use off-site or to the on-site anaerobic digester operated by a different operator under a separate permit.	
			All treated liquid slurry (digestate) shall be stored in tanks in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with sealed drainage system.	
			All dry, dewatered, solid digestate shall be stored in an enclosed building fitted with an appropriate abatement system and on an impermeable surface with sealed drainage system.	

Table S1.1 Activities					
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of activity and V	VFD Annex I	Limits of specified activity and waste types	
A6	Surface water collection and discharge	Collection and discharge of uncontaminated site surface water and clean roof water to ditch system to River Wandle.		Undertaken in relation to Activity A1. From the collection of uncontaminated roof and site surface water from non operational areas only to discharge off-site via interceptor to River Wandle.	
Activity reference	Description of activities for operations	Description of activities for waste operations		Limits of activities	
A7	recovery R13: Storage of waste pendir operations numbered R1 to R temporary storage, pending of the site where it is produced) R3: Recycling/reclamation of	Management of digestate Physical treatment for the purpose of recovery R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on		sipt of digestate produced by anaerobic digestion facility to a despatch for use off-site. Ind treatment of digestate enclosed building and on an surface with sealed drainage ge of whole and liquid and the enclosed storage state to a suitable abatement digestate shall be limited to emove contraries, centrifuge and the de-watering of liquid and the directed to a suitable stem. In the despetch of the stem of the despective of the directed to a suitable stem.	

Table S1.2 Operating techniques			
Description	Parts	Date Received	
Application EPR/EP3792SX/A001	Section B Part 5, table 2 of the application document in response to section 5a – technical standards, Part B of the application form, or otherwise agreed in writing by the Environment Agency.	25/08/09	
Environment Agency initiated variation EPR/JB3737WE/V002	Response to request for additional information dated 13/02/14 – points 1 to 5; 11 and 12.	31/03/14	
Additional information	Clarification of point source emission to air and revised Drawing No 1220P-0101-LAY-1 Rev H.	16/06/14	
Additional information	Document reference - CRM 10306 004 PE R 002 B – Fugitive Emissions Management Plan Version B (September 2015), or as otherwise agreed in writing by the Environment Agency.	17/09/15	
	Document reference – CRM 1036 004 PE R 001 B – Odour Management Plan version B (September 2015), or as otherwise agreed in writing by the Environment Agency.	17/09/15	

Table S1.2 Operating techniques			
Description	Parts	Date Received	
	Document reference - Noise Management Plan Riverside Bio WC Draft 27Nov12, reviewed May 2013, or as otherwise agreed in writing by the Environment Agency.	17/09/15	
	Document reference – RSBIOSHEMS-WR/V001 - Operating Procedure – Risk Assessment OP-1 Waste reception, January 2015, or as otherwise agreed in writing by the Environment Agency.	17/09/15	
	Document reference – Operating Procedure – Risk Assessment OP-10 Pollution Prevention, January 2016, or as otherwise agreed in writing by the Environment Agency.	21/03/16	
	Document reference – Operating Procedure – Risk Assessment OP-17 Fibre separation and Liquor removal for PAS:110, January 2016, or as otherwise agreed in writing by the Environment Agency.	12/04/16	

Table S1.3 li	Table S1.3 Improvement programme requirements			
Reference	Requirement	Date		
IC1	The operator shall carry out a monitoring study to verify the assumptions made in the application in relation to the releases of pollutants to air. The study shall include the monitoring of point source releases to air from the combined carbon filter and wet scrubber emission point A1 during normal operation, having regard to the Environment Agency technical guidance M2 and to MCERTS standards.	Complete		
	The pollutants to be monitored shall include, but not limited to:			
	 total volatile organic compounds; 			
	 speciated VOCs including 1,1-dichloroethane, 1,2-dichloroetane, 1,1-dichloroethane, 1,3-dichloroethane, 1,3-butadiene, 1-butanethiol, 1-pentene, 1-propanethiol, 2-butoxy ethanol, benzene, butyric acid, carbon disulphide, carbonyl sulphide, chloroethane, chloroethene (vinyl chloride), dimethyl disulphide, dimethyl sulphide, ethanol (formaldehyde), methanethiol, methyl mercaptan, styrene, tetrachloromethane, toluene, trichloroethene 			
	carbon monoxide			
	hydrogen sulphide			
	carbon dioxide			
IC2	Following the completion of IC1, the operator shall undertake an environmental impact assessment of all point source releases to air, using the information obtained through the emissions monitoring. The environmental impact assessment report and all associated monitoring reports and assessments shall be submitted in writing to the Environment Agency for review.	Complete		
	The environmental impact assessment shall include:			
	 complete reports showing details of the monitoring undertaken and the results obtained 			
	results of the assessment of long and short term impacts from the emissions in accordance with Environment Agency Guidance			

Reference	eference Requirement					
	Note H1, Annex F – Air emissions					
	a complete H1 assessment software tool					
	details of any air dispersion modelling undertaken and the results obtained					
	If the H1 assessment shows potential long or short term impacts from the emissions, the operator shall propose an action plan to reduce the impacts of the substances identified.					
	Following the submission of the documentation, the Environment Agency shall assess whether setting of emission limits or routine monitoring is required.					
IC3	The operator shall submit to the Environment Agency for agreement, a proposal which shall include a process monitoring programme for all biological treatment vessels. The process monitoring programme shall propose monitoring parameters, methods and frequencies to be agreed with the Environment Agency. The proposed monitoring shall demonstrate the suitability for maintaining an aerobic environment and bacterial viability throughout the in-vessel biological treatment process. On agreement with the Environment Agency, the proposal shall form part of the site monitoring plan.	07/10/16				
IC4	The operator shall submit to the Environment Agency for agreement, a revised site monitoring plan to include a full description of the abatement system in use and an air flow diagram. The monitoring plan shall propose parameters, frequencies and methods for demonstrating an effective abatement system.	07/10/16				
IC5	The operator shall submit to the Environment Agency for agreement the procedures in place for operating the surface water shut-off system.	Complete				
IC6	The operator shall implement the physical infrastructure improvement works to the building ventilation system as detailed in Odour Management Plan CRM 1036 004 PE R 001 B as follows:					
	 (a) provide additional extraction points and fans to the building ventilation system to increase throughput; 	31/12/16				
	(b) reactivate carbon filters attached to the liquid waste input;	Complete				
	(c) carry out a condition survey at least annually, on the vessel ventilation pipework; and	Complete				
	(d) update the Odour Management Plan once all improvements have been completed.	30/04/17				
IC7	The operator shall undertake a commissioning study of the air extraction, ventilation and abatement system to assess its effectiveness. A report is to be provided to the Environment Agency which comprises the following (as a minimum):	30/04/17				
	The results of all air monitoring and air flow measurements undertaken as part of the commissioning study;					
	2. A quantitative assessment of the effectiveness of the air extraction, ventilation and abatement system in comparison with Best Available Techniques (BAT) as described in SGN5.06 Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste, sections 2.2.1, 2.2.4 & 2.2.6 as well as any other relevant available standards.					
	The assessment shall consider:					

Table S1.3 Improvement programme requirements					
Reference	Requirement	Date			
	 (a) the effective removal of the air volumes associated with the reception hall and processing hall, which are affected by the need to have vehicular access for loading and unloading; 				
	(b) the effective management of the flow of air during normal operations and peak loading.				
	3. In the case that the above assessment determines that the air extraction, ventilation and abatement system does not achieve the required effectiveness, the report must include proposals for improvement measures that may need to be implemented with dates for their implementation.				

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels				
Raw materials and fuel description	Specification			
Fuel oil	Sulphur content not exceeding 0.1% by mass.			

Maximum quantity	Annual throughput shall not exceed 100,000 tonnes.
· · · · · ·	
Exclusions	Wastes having any of the following characteristics shall not be accepted: - 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 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
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 04	sludges from on-site effluent treatment (biodegradable only)
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 03	sludges from on-site effluent treatment (biodegradable only)
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
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)

Table S2.2 Permitte	d waste types and quantities for composting in closed systems
Maximum quantity	Annual throughput shall not exceed 100,000 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - hazardous wastes
Waste code	Description
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)
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 03	wastes from pulp, paper and cardboard production and processing
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation (biodegradable 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 – not allowed if any non biodegradable coating or preserving substance is present
15 01 02	biodegradable plastic packaging – must be independently certified to BS EN 13432
15 01 03	untreated wooden packaging – not allowed if any non biodegradable coating or preserving substance is present
15 01 05	composite packaging – must conform to BS EN 13432 and not allowed if any non biodegradable coating or preserving substance is present
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 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost from source segregated biodegradable waste
19 06	wastes from anaerobic treatment of waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
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 – not allowed if any non biodegradable coating or preserving substance is present
20 01 08	biodegradable kitchen and canteen waste
20 02	garden and park wastes (including cemetery waste)

Table S2.2 Permitted waste types and quantities for composting in closed systems					
Maximum quantity	tity Annual throughput shall not exceed 100,000 tonnes.				
Exclusions	Wastes having any of the following characteristics shall not be accepted: - hazardous wastes				
Waste code	Description				
20 02 01	biodegradable waste				
20 03	other municipal wastes				
20 03 02	waste from markets – allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables				

Table S2.3 Permitted waste types and quantities for waste operations					
Maximum quantity	Annual throughput shall not exceed 77,500 tonnes.				
Exclusions	Only digestate from the digesters at the adjacent AD facility (operated by Riverside AD Limited) shall be accepted for processing at this facility. No other waste shall be received for processing at this facility.				
	Wastes having any of the following characteristics shall not be accepted at the facility:				
	 consisting solely or mainly of dusts, powders or loose fibres 				
	hazardous waste				
Waste code	Description				
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use				
19 06	wastes from anaerobic treatment of waste				
19 06 03	liquor from anaerobic treatment of municipal waste				
19 06 04	digestate from anaerobic treatment of municipal waste				
19 06 05	liquor from anaerobic treatment of animal and vegetable waste				
19 06 06	digestate from anaerobic treatment of animal and vegetable waste				

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	
RBL EP1 on site plan in schedule 7	Combined carbon filter & wet scrubber	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
SW1 and SW2 on site plan in schedule 7 emission to River Wandle via ditch system	Uncontaminated site surface water from non-process areas and roof run-off only.	Oil or grease	Visible – no significant trace present	Instantaneous (spot sample)	Daily	

Table S3.3 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 enclosed biological	Temperature	Continuous	Thermocouple probe		
treatment vessel (digester tanks)	Oxygen distribution			As agreed with the Environment Agency	
Odour abatement system	Integrity and performance checks			As agreed with the Environment Agency	
Combined carbon filter & wet scrubber	Key process parameters to include pH, temperature and air flow	In accordance with manufacturer's recommendations.	None specified	Scrubber system / Carbon filter shall be regularly checked and maintained to ensure appropriate temperature and moisture content. Carbon filters to be replaced when saturated in accordance with manufacturer's	

Table S3.3 Process monitoring requirements						
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications		
				recommendations.		
Biological treatment tanks, pre-treatment	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary		
processing area, waste reception, waste storage area and storage tanks	Integrity checks (all tanks, pipe- work and silos)	Weekly	Visual assessment			

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data						
Parameter	Emission or monitoring point/reference	Reporting period	Period begins			
Emissions to water Parameters as required by condition 3.5.1.	SW1, SW2	Every 3 months	1 January			
Process monitoring Parameters as required by condition 3.5.1.	Biological treatment vessels, pre-treatment processing area, waste reception, waste storage area and storage tanks	Every 12 months	1 January			

Table S4.2 Annual production/treatment			
Parameter	Units		
Processed liquid slurry digestate	tonnes		
Processed dewatered product	tonnes		

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

Table S4.4 Reporting forms				
Media/parameter	Reporting format	Date of form		
Water	Form water 1 or other form as agreed in writing by the Environment Agency	07/07/16		
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	07/07/16		
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	07/07/16		
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	07/07/16		
Waste Returns	E-waste Returns Form			

Schedule 5 - Notification

These pages outline the information that the operator must provide.

(b) Notification requirements for the breach of a limit

Emission point reference/ source

Measured value and uncertainty

Measures taken, or intended to be

Date and time of monitoring

To be notified within 24 hours of detection unless otherwise specified below

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	
	any malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is 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.	

Parameter(s)

Limit

(b) Notification requirements for the breach	of a limit
To be notified within 24 hours of detection u	nless otherwise specified below
taken, to stop the emission	
Time periods for notification following detec	tion of a breach of a limit
Parameter	Notification period
(c) Notification requirements for the detection	n 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 s Any more accurate information on the matters for notification under Part A.	•
Measures taken, or intended to be taken, to pre a recurrence of the incident	vent
Measures taken, or intended to be taken, to reclimit or prevent any pollution of the environment which has been or may be caused by the emiss	
The dates of any unauthorised emissions from t facility in the preceding 24 months.	he
Name*	
Post	
Signature	
Date	

^{*} authorised to sign on behalf of the operator

Schedule 6 - Interpretation

"accident" means an accident that may result in pollution.

"anaerobic digestion" means a process of controlled decomposition of biodegradable materials under managed conditions where free oxygen is absent, at temperatures suitable for naturally occurring mesophilic or thermophilic anaerobes and facultative anaerobe bacteria species, which convert the inputs to a methanerich biogas and whole digestate.

"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.

"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" 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.

"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.

"digestate" means material resulting from an anaerobic digestion process.

"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.

"List of Wastes" means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"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.

"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.

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

"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes 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



END OF PERMIT

Permit	Number: 、	JB3737WE		Operator:	Riverside B	io Limited	
Facility: Mitcham Waste Treatment Form Number: Water1/07/07/16 Centre			07/16				
Reportir DD/MM/	•	ons to water (ot	her than to sewe	r) and land for t	he period from I	DD/MM/YYYY to)
Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
SW1	Oil or Grease	No limit set	Instantaneous (spot sample)		Visible – no significant trace present		
SW2	Oil or Grease	No limit set	Instantaneous (spot sample)		Visible – no significant trace present		
expressed ir measured va	the same terms alues.	as the emission limit va	nimum value in the case of lue. Where the emission I method is used the refere	imit value is expressed	as a range, the result is	given as the 'minimum	n – maximum'
	-	_	entifier is given. In other c	_			_
		rements the date and tied by the result is given.	ime of the sample that pro	oduced the result is give	en. For continuous meas	surements the percenta	ge of the
[4] The unce	ertainty associated	d with the quoted result	at the 95% confidence int	erval, unless otherwise	stated.		
Signed			Date				
(Authorised	to sign as represe	entative of Operator)					

· Crime Hamber.	OBOTOTILE		operator.	IXIVOIC	nac Bio Eminica
Facility:	Mitcham Wa Treatment C		Form Number:	Waterl	Jsage1 / 07/07/16
Reporting of Water Usag	ge for the year				
Water Source	Usag	e (m³/year)		Specific Usage (m	³ /unit output)
Mains water					
TOTAL WATER USAGE					
Operator's comments:					
Signed		Date.			
(authorised to sign as representative	of Operator)				

Operator:

Permit Number

.IR3737WF

Riverside Rio Limited

Permit Number:	JB3737WE	Operator:	Ri	verside Bio Limited
Facility:	Mitcham Waste Treatment Centre	Form Number:	En	ergyUsage1 / 07/07/16
Reporting of Energy Us	age for the year			
Energy Source	Energy Usage			Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)		
Electricity *	MWh			
Natural Gas	MWh			
TOTAL	-			
* Conversion factor for delivered ele	ectricity to primary energy = 2.4			
Operator's comments:				
Signed	Dai	e		
(Authorised to sign as representativ				

Permit Number:	Number: JB3737WE Operator:			Riverside Bio Limited
Facility:	Mitcham Waste Treatment Centre	Form Numbe	er:	Performance1 / 07/07/16
Reporting of other perfo	ormance indicators for the p	period DD/MM/YYY	Y to DD	/MM/YYYY
Parameter			Units	
Total raw material used			tonnes	
Operator's comments:				
Signed		te		
(Authorised to sign as representative	e of Operator)			