



Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Tricoya Ventures UK Limited

Tricoya Ventures UK Limited

Saltend Chemicals Park

Saltend Lane

Hull

HU12 8DS

Permit number

EPR/FP3432JH

Tricoya Ventures UK Limited

Permit number EPR/FP3432JH

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The installation acetylates wood chips for use in a proprietary medium density fibreboard, which is made at other locations.

The site covers approximately 2 Ha and is surrounded on all sides by chemical plant which is operated by other companies.

There will be eight point source emissions to air, 3 unabated, 3 with bag filters for dust abatement and 2 with liquid scrubbers for abatement of acetic anhydride and acetic acid vapours. There will be no planned process emissions directly to land or groundwater.

Rainwater on open land will be absorbed and can travel via the culvert under the site to Hedon Haven and ultimately the Humber Estuary. Process waste water from abatement scrubbers and excess cooling water, together with rain water from impermeably surfaced areas of the site will be collected and sent to a third party effluent treatment facility (elsewhere on the larger Saltend site) before discharge to Yorkshire Water's Saltend Waste Water Treatment Works, which ultimately discharges to the Humber Estuary.

The nearest residential receptor is over 600m to the North. The Humber Estuary, approximately 500m south but linked to the site by a culvert and Hedon Haven, is a Special Area of Conservation, Special Protected Area, Ramsar Site and Site of Special Scientific Interest.

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

Status log of the permit		
Description	Date	Comments
Application EPR/FP3432JH/A001	Duly made 28/03/18	Application for acetylation of wood plant as an A2 process
Schedule 5 notice for additional information	Dated 24/05/18	Response received 31/05/18 to Questions 6,8 and 9 04/06/18 to Question 2 11/06/18 to Questions 1, 3, 4, 7 13/06/18 to Questions 5, 10, 11
Permit determined EPR/FP3432JH (PAS Billing ref. FP3432JH)	14/09/18	Permit issued to Tricoya Ventures UK Limited.

Other Part A installation permits relating to this installation		
Operator	Permit number	Date of issue
BP Chemicals Limited	EPR/BJ8162IR	11/04/01
Nippon Gohsei	EPR/BR6643IR	09/07/03
Vivergo Fuels Limited	EPR/WP3633KH	30/06/10
Ineos (Manufacturing) Hull Limited	EPR/HP3235CG	23/02/12
Saltend Chemicals Park Limited	EPR/VP3834YU	15/03/18

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/FP3432JH

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Tricoya Ventures UK Limited (“the operator”),

whose registered office is

**Brettenham House
19 Lancaster Place
London
WC2E 7EN**

company registration number 10087465

to operate part of an installation at

**Tricoya Ventures UK Limited
Saltend Chemicals Park
Saltend Lane
Hull
HU12 8DS**

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

Name	Date
Philip Lamb	14/09/2018

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.

1.2 Energy efficiency

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

1.3 Efficient use of raw materials

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

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

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

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

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”).

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 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.
- 2.3.5 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 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Total annual emissions from the emission point(s) set out in schedule 3 tables S3.1 and S3.2 of a substance listed in schedule 3 table S3.3 shall not exceed the relevant limit in table S3.3.
- 3.1.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

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

3.3 Odour

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

- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

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

4 Information

4.1 Records

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

(ii) matters which affect the condition of the land and groundwater.

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

4.2 Reporting

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

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

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

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

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

4.3 Notifications

4.3.1 In the event:

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

- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (a) any change in the operator's name or address; and
 - (b) any steps taken with a view to the dissolution of the operator.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
 - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
 - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately" or "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	Limits of specified activity
AR1	S6.6 A(2)	Preservation of wood and wood products with chemicals with a production capacity exceeding 75m ³ per day other than exclusively treating against sapstain.	From receipt of wood and other raw materials to discharge of product.
Directly Associated Activity			
AR2	Directly Associated Activity	Storage of Acetic Acid by-product	Including loading to road tankers
AR3	Directly Associated Activity	Storage of waste water in waste collection pits	Collection prior to pumping to 'Aquarius' treatment facility

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Response to Not Duly Made Request for Information received 28/03/18 TVUK-ENV-0008 C2-a BAT Document Rev 1 TVUK-ENV-0009 C2-b Emissions Management Strategy Rev 1 TVUK-ENV-0011 C4-a Raw Materials Strategy Rev 1 TVUK-ENV-0013 C5 Waste Management Plan Rev1 TVUK-ENV-0017 C10-a Environmental Management System Strategy Rev1 TVUK-ENV-0004 Application for an Environmental Permit to operate a 'Part A2' Installation TVUK-ENV-0002 C1-a Technical Description of Process Rev 1 TVUK-ENV-0025 D1 Non-Technical Summary Rev 1	Duly Made 28/03/18
Response to Schedule 5 Notice dated 24/05/18	Response to Questions: 1. Containment of materials storage. 3. Pumping out acetic acid tank bund over rather than through wall. 7. Leak mitigation measures for pipelines above unsealed ground	11/06/18

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC 1	The operator shall submit a written report to the Environment agency assessing the baseline condition of the installation soil and groundwater at the start of commissioning. The report may use the information submitted in report TVUK-ENV-0010 Application Site Report Baseline Condition (before build finished) 28/03/18 but should include: a) Single baseline values for materials rather than ranges of test results. b) Values for all potential pollutants associated with the permitted process. c) Any intrusive monitoring results subsequent to the March 2018 report.	31/03/19

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC 2	<p>The operator shall submit a written Noise Management Plan to the Environmental Agency for approval. This plan should address, but not be limited to:</p> <ul style="list-style-type: none"> • the responses to BAT4 in TVUK-ENV-0008 BAT Document Rev1. • TVUK-ENV-0015 C7 Noise and Vibration strategy rev 1 • the acoustic consultant report referenced in Noise and Vibration strategy rev 1 TVUK-ENV-0015 • Items where the design target of <80dBA at 1 m was not achieved. • Frequency and extent of noise surveys on site. • Environment Agency guidance H3 Part 2 Appendix 4 <p>It should include references to relevant procedures and timescales for implementation of any improvement measures. The plan must be implemented as approved.</p>	6 months from the introduction of raw material wood to the site or otherwise as agreed in writing with the Environment Agency
IC 3	<p>The operator shall submit a written report to the Environment Agency for approval considering the need to suppress dust emissions by water sprinkling in routine operational conditions. If relevant, the report should include timescales for implementation of any improvement measures. The plan must be implemented as approved.</p>	6 months from the introduction of raw material wood to the site or otherwise as agreed in writing with the Environment Agency
IC4	<p>The operator shall submit a written report to the Environment Agency for approval reviewing emissions of volatile organic compounds to air from the process. This should include, but not be limited to, comparison of measured emissions with emission limits as well as consideration of odour impact. If relevant, the report should include a plan with options and timescales for implementation of improvement measures to meet the emission limits.</p> <p>The plan must be implemented as approved.</p>	6 months from the introduction of raw material wood to the site or otherwise as agreed in writing with the Environment Agency
IC 5	<p>The operator shall submit a post-commissioning report to the Environment Agency which shall include, but not be limited to:</p> <ul style="list-style-type: none"> • a review of performance of the facility against the conditions of this permit and the pre-commissioning report proposals • details of optimisation of emission abatement systems including reagent dosing rates. • details of procedures developed during commissioning for achieving and demonstrating satisfactory process control <p>energy use baseline of the optimised process</p>	6 months from the start of commissioning or otherwise as agreed in writing with the Environment Agency

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
PO 1	<p>At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, 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. Commissioning shall be carried out in accordance with the commissioning plan as approved by the Environment Agency.</p> <p>No site operations shall commence at the installation unless the Environment Agency has given prior written permission under this condition.</p>

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
-	-

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) ¹	Reference period	Monitoring frequency	Monitoring standard or method ²
A1 [Point A1 on TVUK-ENV-0006 - Site Layout Plan Rev. 1.0]	Product Loading Extract Vent	Acetic Acid	187.5 mg/Nm ³	1 hour	6 monthly	BS EN 13649
		Dust	5 mg/Nm ³	1 hour	6 monthly	BS EN 13284-1
A2 [Point A2 on TVUK-ENV-0006 - Site Layout Plan Rev. 1.0]	Feed Dryer Vent	Formaldehyde	10 mg/Nm ³	1 hour	6 monthly	Based on US EPA Method 316
		Total Volatile Organic Compounds	200 mg/Nm ³	1 hour	6 monthly	BS EN 2619
		Dust	5 mg/Nm ³	1 hour	6 monthly	BS EN 13284-1
A3 [Point A3 on TVUK-ENV-0006 - Site Layout Plan Rev. 1.0]	Vacuum Pump Vent	Total Volatile Organic Compounds	200 mg/Nm ³	1 hour	6 monthly	BS EN 2619
		Formaldehyde	10 mg/Nm ³	1 hour	6 monthly	Based on US EPA Method 316
		Dust	5 mg/Nm ³	1 hour	6 monthly	BS EN 13284-1
A4 [Point A4 on TVUK-ENV-0006 - Site Layout Plan Rev. 1.0]	Vent Scrubber Vent	Acetic Acid	187.5 mg/Nm ³	1 hour	6 monthly	BS EN 13649
		Acetic Anhydride	159 mg/Nm ³	1 hour	6 monthly	BS EN 13649
A5 [Point A5 on TVUK-ENV-0006 - Site Layout Plan Rev. 1.0]	Acetic Acid Tank Vent	Acetic Acid	187.5 mg/Nm ³	1 hour	6 monthly	BS EN 13649
A6 [Point A6 on TVUK-ENV-0006 - Site Layout Plan Rev. 1.0]	Feed Extract Vent	Dust	5 mg/Nm ³	1 hour	6 monthly	BS EN 13284-1

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit) ¹	Reference period	Monitoring frequency	Monitoring standard or method²
A7 [Point A7 on TVUK-ENV-0006 - Site Layout Plan Rev. 1.0]	Raw woodchip silo	No parameters set	-	--	--	-
A8 [Point A8 on TVUK-ENV-0006 - Site Layout Plan Rev. 1.0]	Acetylated woodchip silo	No parameters set	-	--	--	-

Note 1: Reference conditions – dry, temperature of 273K and at a pressure of 101.3 kPa.

Note 2: Or otherwise as agreed in writing with the Environment Agency.

Table S3.2 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 method²
S1 on site plan in schedule 7 emission to Aquarius effluent treatment plant	Process waste water (from Vent scrubber)	Flow	No limit set	-	Continuous	MCerts complaint (M18 guidance)
		pH	Greater than pH3.5	-	Continuous	BS ISO 10523
		Total Organic Carbon	No limit set	-	Continuous	BS EN 1484
		Temperature	No limit set	-	Continuous	-
		Total Suspended Solids	No limit set	24 hour flow proportional sample	6 monthly	BS EN 872
S2 on site plan in schedule 7 emission to Aquarius effluent treatment plant	Potentially contaminated surface water collection pits 1 and 2	Flow ¹	No limit set	-	Continuous	MCerts complaint (M18 guidance)
		pH ¹	No limit set	-	Continuous	BS ISO 10523
		Total Organic Carbon ¹	No limit set	-	Continuous	BS EN 1484
S2 on site plan	Potentially	Temperature ¹	No limit	-	Continuous	-

Table S3.2 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 method²
in schedule 7 emission to Aquarius effluent treatment plant	contaminated surface water collection pits 1 and 2		set			
		Total Suspended Solids	No limit set	24 hour flow proportional sample	6 monthly	BS EN 872

Note 1: Continuous monitoring while being sent to Aquarius treatment facility.

Note 2: Or otherwise as agreed in writing with the Environment Agency.

Table S3.3 Annual limits		
Substance	Medium	Limit (including unit)
-	-	-

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	A1, A2, A3, A4, A5, A6	Every 6 months	1 January, 1 July
Emissions to Aquarius effluent treatment plant Parameters as required by condition 3.5.1	S1, S2	Every 12 months	1 January

Table S4.2: Annual production/treatment	
Parameter	Units
Total Acetylated Wood Product(s)	tonnes

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total Raw Material Wood used	Annually	tonnes
Total Raw Material Wood used (dry weight basis)	Annually	tonnes

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form Air 1 or other form as agreed in writing by the Environment Agency	14/09/18
Effluent	Form Effluent 1 or other form as agreed in writing by the Environment Agency	14/09/18
Water usage	Form Water usage 1 or other form as agreed in writing by the Environment Agency	14/09/18
Energy usage	Form Energy 1 or other form as agreed in writing by the Environment Agency	14/09/18
Other performance indicators	Form Performance 1 or other form as agreed in writing by the Environment Agency	14/09/18

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

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

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
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.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

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

“Hazardous property” has the meaning in Annex III of the Waste Framework Directive.

“Hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

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

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

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

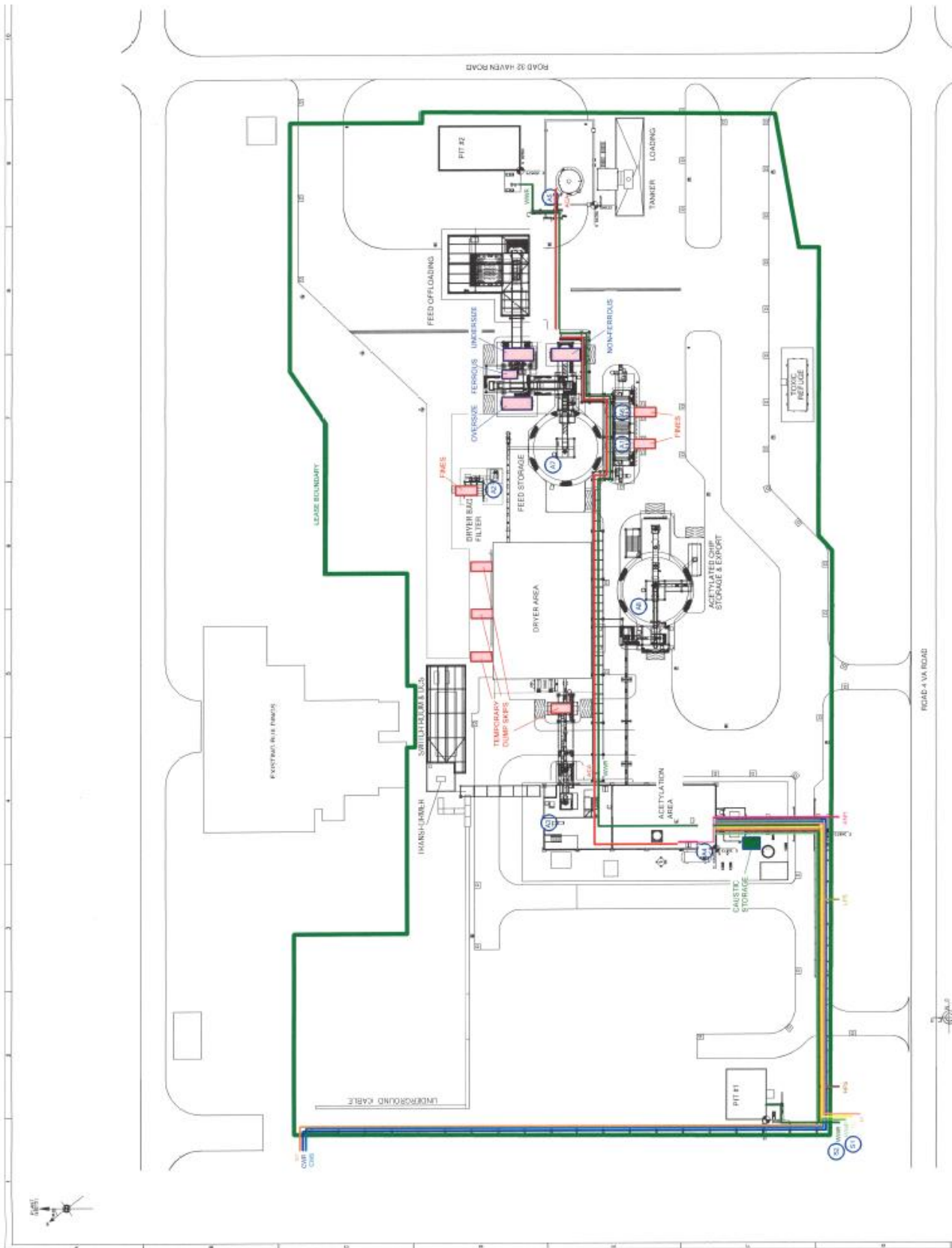
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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.

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT

Permit number
EPR/FP3432JH

Permit Number: FP3432JH

Operator: Tricoya Ventures UK Limited

Facility: Tricoya Ventures UK Limited Form Number: Air 1 14/09/18

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value ^[5]	Reference Period	Result ^[1]	Test Method ^{[2][6]}	Sample Date and Times ^[3]	Uncertainty ^[4]
A1	Acetic Acid	187.5 mg/Nm ³	1 hour		BS EN 13649		
	Dust	5 mg/Nm ³	1 hour		BS EN 13284-1		
A2	Formaldehyde	10 mg/Nm ³	1 hour		Based on US EPA Method 316		
	Total Volatile Organic Compounds	200 mg/Nm ³	1 hour		BS EN 2619		
	Dust	5 mg/Nm ³	1 hour		BS EN 13284-1		
A3	Total Volatile Organic Compounds	200 mg/Nm ³	1 hour		BS EN 2619		
	Formaldehyde	10 mg/Nm ³	1 hour		Based on US EPA Method 316		
	Dust	5 mg/Nm ³	1 hour		BS EN 13284-1		
A4	Acetic Acid	187.5 mg/Nm ³	1 hour		BS EN 13649		
	Acetic Anhydride	159 mg/Nm ³	1 hour		BS EN 13649		
A5	Acetic Acid	187.5 mg/Nm ³	1 hour		BS EN 13649		

Emission Point	Substance / Parameter	Emission Limit Value^[5]	Reference Period	Result ^[1]	Test Method ^{[2][6]}	Sample Date and Times ^[3]	Uncertainty ^[4]
A6	Dust	5 mg/Nm ³	1 hour		BS EN 13284-1		

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.
5. Reference conditions – dry, temperature of 273K and at a pressure of 101.3 kPa
6. Or otherwise as agreed in writing with the Environment Agency.

Signed

Date.....

(Authorised to sign as representative of Operator)

Permit Number: FP3432JH

Operator: Tricoya Ventures UK Limited

Facility: Tricoya Ventures UK Limited Form Number: Effluent 1 14/09/18

Reporting of emissions to off-site effluent treatment plant for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^{[2][5]}	Sample Date and Times ^[3]	Uncertainty ^[4]
S1	Flow	No limit set			MCerts complaint (M18 guidance)		
	pH	Greater than pH3.5			BS ISO 10523		
	Total Organic Carbon	No limit set			BS EN 1484		
	Temperature	No limit set			-		
	Total Suspended Solids	No limit set	24 hour flow proportional sample		BS EN 872		
S2	Flow ⁴	No limit set			MCerts complaint (M18 guidance)		
	pH ⁴	No limit set			BS ISO 10523		
	Total Organic Carbon ⁴	No limit set			BS EN 1484		
	Temperature ⁴	No limit set			-		
	Total Suspended Solids	No limit set	24 hour flow proportional sample		BS EN 872		

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.
5. Continuous monitoring while being sent to Aquarius treatment facility.
6. Or otherwise as agreed in writing with the Environment Agency.

Signed

Date.....

(Authorised to sign as representative of Operator)

Permit Number: FP3432JH

Operator: Tricoya Ventures UK Limited

Facility: Tricoya Ventures UK Limited Form Number: Water usage 1 14/09/18

Reporting of Water Usage for the year YYYY

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: FP3432JH

Operator: Tricoya Ventures UK Limited

Facility: Tricoya Ventures UK Limited Form Number: Energy 1 14/09/18

Reporting of Energy Usage for the year YYYY

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: FP3432JH

Operator: Tricoya Ventures UK Limited

Facility: Tricoya Ventures UK Limited Form Number: Performance 1 14/09/18

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

Parameter	Units
Total Raw Material Wood used	tonnes
Total Raw Material Wood used (dry weight basis)	tonnes
Total Acetylated Wood Product	tonnes

Operator's comments:

Signed

Date.....

(Authorised to sign as representative of Operator)