Environmental Permit

Pollution Prevention and Control Act 1999
Environmental Permitting (England and Wales) Regulations 2016

Ransom Naturals Limited
53 Mead Industrial Estate
Burymead Road
Hitchin
Hertfordshire
SG5 1RT

Regulated activities:
Manufacture of botanical extracts

Permit Number:
EPA/00655/03/P4

Permit Issued by:

North Hertfordshire District Council
Council Offices
Gernon Road
Letchworth Garden City
Hertfordshire
SG6 3JF

Tel: 01462 474 000
Fax: 01462 474 546
Web: www.north-herts.gov.uk
Email: david.carr@north-herts.gov.uk

The address for all correspondence in relation to this permit

Contents

Permit reference	Date	Comment
Permit EPA/00655/03/P4	*25th July 2019*	*Issued*
Draft Permit EPA/00655/03/P4	*14th November 2018*	*Changes to storage areas affecting plans and conditions*
Permit EPA/00655/03/P3	*31st October 2017*	*Permit EPA/00655/03/P3*
Draft permit EPA/00655/03/P3	*13th July 2016*	*Draft permit EPA/00655/03/P3*
EPA/00655/03/P2	*11th May 2011*	*Ransom Naturals Limited*
EPA/00655/03/P1	*March 2009*	*William Ransom & Son plc*
EPA/00655/03	*July 2007*	*William Ransom & Son plc*

Introductory Note

These introductory notes are not Environmental Permit conditions; however they do provide useful information about the Environmental Permitting Regulations:

The following Permit is granted under Regulation 13 and 35 of the Environmental Permitting (England and Wales) Regulations 2016 (S.I 2016 No.1154) as amended, ("the EPR") to operate an SED activity in Schedule 14 of the EPR, to the extent authorised by the Permit.

Conditions within this Permit detail Best Available Techniques (BAT), for the management and operation of the installation, to prevent, or where that is not practicable, to reduce emissions.

In determining BAT, the Operator should pay particular attention to relevant sections of the LAPPC Process Guidance note (PG6/43(11) – June 2014 revision), and any other relevant guidance. Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Note that the Permit requires the submission of certain information to the Regulator, and in addition, the Regulator has the power to seek further information at any time under Regulation 60 of the EPR Regulations provided that the request is reasonable.

Public Registers

Information relating to Permits, including the application, is available on public registers in accordance with the EPR. Certain information may be withheld from the public registers where it is commercially confidential, or if it is in the interest of national security to do so.

Variations to the Permit

The Regulator may vary the Permit in the future, by serving a variation notice on the Operator. Should the Operator want any of the conditions of the Permit to be changed, a formal application must be submitted to the Regulator (the relevant forms are available from the Regulator). The Status Log includes a summary of the Permits and variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another Operator, an application to transfer the Permit has to be made jointly by the existing and proposed Operators. A transfer will not be approved if the Regulator is not satisfied that the proposed Permit holder will be the person having control over the operation of the installation, or will not comply with the conditions of the transferred Permit. In addition, if the Permit authorises the Operator to carry out a specified waste management activity, the transfer will not be approved if the Regulator does not consider the proposed Permit holder to be a 'fit and proper person' as required by the EPR.

Talking to us

Please quote the permit number if you contact the Regulator about this permit. To give a notification under conditions in this permit, the Operator should use the contact details on the cover of this permit.

Description of the installation and regulated activity

This description of the installation and the regulated activity are not environmental permit conditions, however they do provide useful information about the installation and the activities undertaken. It also provides a reference point in relation to any substantial or non-substantial changes.

Ransom Naturals Limited manufactures natural products and extracts to the pharmaceutical, healthcare, cosmetic and food & drinks industries via solvent extraction.

Description of process – don't include anything commercially confidential!

The bulk storage of solvents is undertaken in 3 No. 25,000 litre stainless steel storage tanks, referred to as T201, T202 and T203, which are all located in a fully bunded concrete tank farm. Each bulk storage tank is equipped with a pressure vacuum valve and a high-level warning alarm.

The installation also undertakes the on-site distillation of solvent for internal re-use.

Authorisation

Permit Reference Number:
EPA/00655/03/P3

North Hertfordshire District Council ("the Regulator") in exercise of its powers under Regulation 13 and 35 of the Environmental Permitting (England and Wales) Regulations 2016 (S.I 2016 No.1154), hereby authorises ***Ransom Naturals Limited*** ("the Operator").

Whose registered office is:

Ayrton Saunders House
Parliament Business Park
Commerce Way
Liverpool
Merseyside
L8 7BA

Whose limited company registration number is: ***07503850***

To operate an installation at:

Ransom Naturals Limited
53 Mead Industrial Estate
Burymead Road
Hitchin
Hertfordshire
SG5 1RT

The Operator is authorised to carry out the following activities* to the extent authorised by and subject to the conditions of this Permit.

- The formulation and finishing of pharmaceutical products (Chapter 14 'Solvent Emission Activities') of the Environmental Permitting (England and Wales) Regulations 2016, ('the EPR') and as described, and in accordance with the conditions contained in this permit.

This Permit shall be subject to replacement, variation or amendment as may be considered appropriate by North Hertfordshire District Council, at any time, according to the provisions of Regulation 20 of the EPR.

* Nothing in this Permit grants or implies any consent under the Town and Country Planning Act.

Signed

Dated this day

25th July 2019

David Carr
Environmental Protection Officer
The Officer Authorised for this Purpose

Conditions

The following are Environmental Permit conditions and are legal requirements.

Installation

1. The activities operated under this permit shall not extend beyond the installation boundary, that being the area outlined in red as shown in the location plan forming Schedule 1 of this permit. Other land owned by the Operator is outlined in blue in that Schedule.

Substantial change

2. 'Existing installation' means an installation in operation on 29 March 1999 or which was granted a permit before 1 April 2001 or the operator of which submitted a complete application for a permit before 1 April 2001, provided that that installation was put in operation no later than April 2002.

3. 'Substantial change' means a change in the nature or functioning, or an extension, of an installation which may have significant negative effects on human health or the environment. Following a substantial change, compliance with the emission limits requirements of this permit must be re-verified.

4. 'Substantial change' also means a change of the maximum mass input of organic solvents by an existing installation averaged over 1 day, where the installation is operated at its design output under conditions other than start up and shut down operations and maintenance of equipment, shall be considered as substantial if it leads to an increase of emissions of volatile organic compounds of more than 10% for pharmaceutical manufacturing solvent emission installations.

5. Where an existing installation undergoes a substantial change, or falls within the scope of the Solvent Emissions Directive for the first time following a substantial change, that part of the installation which undergoes the substantial change shall be treated either as a new installation or as an existing installation, provided that the total emissions of the whole installation do not exceed those that would have resulted had the substantially changed part been treated as a new installation.

Best available techniques

6. The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this permit.

7. If the operator proposes to make a change in operation of the installation, he must, at least 14 days before making the change, notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition ‘change in operation’ means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

VOC Emission limits, monitoring and other provisions

VOC emission limits

8. The Operator shall report on consumption and compliance with the solvent emission limits of this permit annually. Data shall be reported as follows:

   a) for the period 1st January to 31st December inclusive, and;
   b) by 28th February each year, and;
   c) In accordance with schedule 3 of this permit.

9. If the emission limits of this permit are breached, compliance must be restored within the shortest possible time. For accidents and incidents significantly affecting the environment the Regulator must be notified in accordance with conditions 11, 12, 13, 15 and 20, 21, and 22. In addition, further possible incidents or accidents must be prevented.

10. The Operator shall demonstrate compliance with the total emission limits requirements for Solvent Emission activities under the Industrial Emissions Directive, and the following emission limits and monitoring provisions shall apply:

Row	VOC in waste gases Emission	Total emission limit values/requirements	Monitoring	
			Unabated releases	Abated releases
1	**Existing processes**	15% of organic solvent input	Annual solvent management plan	Continuous monitoring and recording **PLUS** Annual solvent management plan
2	**New and substantially changed processes**	5% of organic solvent input		
Note 1 - the fugitive emission limit value does not include solvent sold as part of a coatings mixture in a sealed container.				

11. Compliance is achieved if the total emission from the activity expressed as a percentage of the organic solvent input to the activity is equal to or less than the total emission limit value:

    Where total emission is equal to the mass of organic solvent released in the waste gases plus the fugitive releases.

    Total emission = O1 + Fugitive

    And organic solvent input is equal to the quantity of organic solvents purchased and used in the process plus the quantity of organic solvents recovered and reused as organic solvent input into the process as determined as part of the solvent management plan.

    Organic solvent input (I) = I1 + I2

    Compliance with the total emission limit value is achieved if:

    $$\frac{\text{Total emission}}{\text{Organic solvent input}} \times 100 \text{ is equal to or less than the total emission limit value}$$

Emission monitoring & reporting

12. The Operator shall notify the regulator at least 7 days before any periodic monitoring exercise to determine compliance with emission limit values. The Operator shall state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.

13. For extractive testing for batch processes, where the production operation is complete within, say, 2 hours, then the extractive sampling shall take place over a complete cycle of the activity.

14. Where the activity is either continuous, or has a batch cycle that is not compatible with the time available for sampling, then the data required shall be obtained over a minimum period of 2 hours in total.

15. Adverse results from any monitoring activity (both continuous and non-continuous) shall be investigated by the Operator as soon as the monitoring data has been obtained. The operator shall:

    a) identify the cause and take corrective action;
    b) clearly record as much detail as possible regarding the cause and extent of the problem, and the remedial action taken;
    c) re-test to demonstrate compliance as soon as possible; and inform the Regulator of the steps taken and the re-test results.

16. The Operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. Records shall be:

    a) kept on site;
    b) kept by the operator for at least two years; and
    c) made available for the regulator to examine.

17. If any records are kept off-site they shall be made available for inspection within one working week of any request by the Regulator.

Representative sampling

18. Sampling points on new plant shall be designed to comply with the British or equivalent standards.

19. The operator shall ensure that relevant stacks or ducts are fitted with facilities for sampling which allow compliance with the sampling standards.

Abnormal events

20. In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator shall:

    a) investigate and undertake remedial action immediately;
    b) adjust the process or activity to minimise those emissions; and
    c) promptly record the events and actions taken.

21. The Regulator shall be informed without delay, whether or not there is related monitoring showing an adverse result:

a) if there is an emission that is likely to have an effect on the local community; or
b) in the event of the failure of key arrestment plant, for example, bag filtration plant or scrubber units.

22. In cases of non-compliance causing immediate danger to human health, or threatening to cause an immediate significant adverse effect upon the environment, operation of the activity must be suspended. All of following criteria should be taken into account:

a) the toxicity of the substances being released;
b) the amount released;
c) the location of the installation; and
d) the sensitivity of the receptors.

Control techniques

VOC materials designation

23. Designated materials used in industrial emissions Directive installations must be either replaced, or controlled contained and limited, as set out in the table below:

All Directive installations	
1. Materials designated because of their VOC content: ➢ **hazard statement H340, H350, H350I, H360D, or H360F**	
Requirements: **Replace** as far as possible (Taking into account guidance under Article 64 of the industrial emissions Directive. See note 3 and Appendix 1) by less harmful substances or mixtures.	Timescale: Installations must comply within the shortest possible time
Control under **contained** conditions as far as technically and economically feasible to safeguard public health and the environment, normally, in accordance with the guidance provided within Section 5 of the note.	Timescale: Immediately (and see note 1 below)
Limit - where the sum of the mass flows of all the discharges of all the compounds causing the designated labelling is greater or equal to 10g/h, a limit value of 2mg/Nm^3 for the mass sum of the individual compounds must apply.	Monitoring: Manual extractive testing
2. Materials designated because of their halogenated VOC content: ➢ **hazard statements H341 or H351**	
Requirements: **Control** under **contained** conditions as far as technically and economically feasible to safeguard public health and the environment, normally, in accordance with the guidance provided within Section 5 of the note.	Timescale: Immediately (and see note 1 below)
Limit - where the sum of the mass flows of all the discharges of all the compounds causing the designated labelling is greater or equal to 100 g/h, a limit value of 20mg/Nm^3 for the mass sum of the individual compounds must apply.	Monitoring: Manual extractive testing
Note 1 - substances or mixtures which are classified after the date of publication of this note as designated materials because of their VOC content, must apply the replace, control and limit requirements above within the shortest possible time from the date at which substances or mixtures became/become designated materials. In determining the "shortest possible time", the operator will need to justify their timetables taking account of the guidance in the relevant chapter of the appropriate Guidance Manual. **Note 2** - the European Commission have published information on substituting and containing designated solvents.	

Start up and shutdown

24. The number of start-ups and shut downs shall be kept to the minimum that is reasonably practicable.

25. All appropriate precautions shall be taken to minimise emissions during start up and shut down.

VOC storage & use

26. Displaced air vents for bulk storage tanks for organic solvents and organic solvent-containing liquids shall be sited in such a way as to prevent the arising of offensive odour beyond the site boundary. All new tanks shall be back vented to the delivery tank during filling.

27. All potentially odorous waste materials shall be stored in suitable closed containers or bulk storage vessels, and where appropriate vented to suitable abatement plant.

28. The exterior of outdoor bulk storage tanks for organic solvent storage shall be light coloured.

29. Where necessary to meet emission limits, emissions from fixed organic solvent storage tanks shall be vented to suitable arrestment equipment.

30. All static bulk organic solvent storage tanks containing organic solvent with a composite vapour pressure that is likely to exceed 0.4kPa at 20^{o}C (293K) shall be fitted with pressure vacuum relief valves. Pressure vacuum relief valves shall be examined at regular intervals for signs of contamination, incorrect seating and be cleaned and/or corrected as required. The normal minimum examination frequency should be once every six months, but less frequent examination may be justified having regard for the tank contents and the potential emissions as a result of valve failure.

31. Delivery connections to bulk storage tanks shall be located within a bunded area and uniquely identifiable with a suitable and durable sign or label securely attached to the connection point.

32. All connections to bulk storage tanks should be fixed, capped and locked when not in use.

33. All fixed storage tanks shall be fitted with high-level alarms or volume indicators to warn of overfilling.

34. Bulk storage bunds and containment devices shall:

    a) completely surround the bulk liquid storage tanks;
    b) be maintained in sound condition and impervious and resistant to the liquids in storage; and
    c) capable of holding 110% of the capacity of the largest storage tank.

35. Pipeline delivery systems shall be used to transport all VOC containing liquids to and from bulk storage to production areas and from production areas to bulk waste storage.

36. Extractions containing VOC’s (including solvent washes and cleaning solvents) shall be stored in closed storage containers.

37. All 25lt and 205lt drums containing solvent (including finished goods with an ethanol content of greater than 20%) shall be stored within the bunded racking.

38. Storage bunds and containment devices shall for IBCs, 205 litre drums and small containers of liquids shall:

    a) completely surround the container;
    b) be maintained in sound condition and impervious and resistant to the liquids in storage; and
    c) capable of holding 110% of the capacity of the largest storage container.

39. Drums shall be sealed unless opened for dispensing solvent or receiving waste solvent.

40. Extracted plant material shall be drained prior to removal to skip. The waste skip holding extracted plant material prior to disposal shall be maintained free of leaks and in

41. Dirty solvent and extractions shall be recycled on or off site and copies of any receipts shall be kept for 3 years.

42. Suitable and sufficient equipment to deal with spillages of VOC containing liquids shall be held on site, including at tanker connection points.

43. A site specific VOC delivery and VOC waste removal procedure shall be implemented, and updated as often as necessary.

44. A site specific VOC spillage procedure shall be implemented, and updated as often as necessary.

Management

Training

45. All staff whose functions could impact on air emissions from the activity must receive appropriate training on those functions. This shall include:

    a) awareness of their responsibilities under the permit;
    b) steps that are necessary to minimise emissions during start-up and shutdown;
    c) actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled, result in emissions.

46. The Operator shall maintain a statement of training requirements for each post with the above mentioned functions and keep a record of the training received by each person. These documents shall be made available to the Regulator on request.

Maintenance

47. The Operator shall have the following available for inspection by the Regulator:

    a) a written maintenance programme for all pollution control equipment, including storage and containment devices; and
    b) a record of maintenance that has been undertaken.

Interpretations and Explanatory Notes

These interpretations and explanatory notes does not form part of your Environmental Permit conditions, however they do provide useful information about the Environmental Permitting Regulations:

In relation to this Permit, the following expressions shall have the following meanings:

"Activity"	An activity listed in Part 2 of Schedule 1 to the EP Regulations which will form part of an EP installation or be a mobile plant
"The EPR / EP Regulation*"*	Means the Environmental Permitting (England and Wales) Regulations 2016 S.I. 2016 No.1154 (as amended) and words and expressions defined in the EPR shall have the same meanings when used in this Permit save to the extent they are explicitly defined in this Permit.
"Change in Operation"	In relation to an installation or mobile plant, a change in its nature or functioning or an extension which may have consequences for the environment.
"Enforcement notice"	A notice served by a local authority to enforce compliance with the permit conditions or require remediation of any harm following a breach of any condition.
"Installation"	A stationary technical unit where one or more activities listed in Part 2 of Schedule 1 to the EP Regulations are carried out and any other location on the same site where any other directly-associated activities are carried out. and any activities that are technically linked. The terms 'regulated facility' and 'installation' are, in effect, interchangeable for A(2) and B activities.
"Operator"	The person who has control over the operation of the installation/regulated facility (EP Regulation 7).
"Permit"	A permit granted under EP Regulation 13 by a local authority allowing the operation of an installation subject to certain conditions.
"Pollution"	Any emission as a result of human activity which may be harmful to human health or the quality of the environment, cause offence to any human senses, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment (EP Regulation 2(1)).
"Revocation notice"	A notice served by the Regulator under EP regulation 22 revoking all or part of a permit.
"Permitted Installation"	Means the activities and the limits to those activities described in this Permit.
"Monitoring"	Includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.
"MCERTS"	Means the Environment Agency's Monitoring Certification Scheme.
"Fugitive Emission"	Means an emission to air or water (including sewer) from the Permitted installation that is not controlled by an emission limit imposed by a condition of this Permit.
"Regulator"	Means any officer of North Hertfordshire District Council who is authorised 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(1) of that Act.
"Best Available Techniques (BAT)"	Best available techniques means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent, and where that is not practical, generally to reduce emissions and the impact on the environment as a whole. For those purposes: "Available techniques" means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the Operator; "Best" means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole; "Techniques" includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned. Schedule 2 of the Regulations shall have effect in relation to the determination of best available techniques.

Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the document with the most recent publication date shall be taken to be the most appropriate document to be used.

Any person who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for Environment, Food & Rural Affairs. Appeals must be received by the Secretary of State no later than 6 months from the date of the decision (the date of the Permit).

Appeals relating to installations in England should be received by the Secretary of State for Environment, Food & Rural Affairs. The address is as follows;

The Planning Inspectorate
Environment Team, Major and Specialist Casework
Room 4/04 – Kite Wing
Temple Quay House
2 The Square
Temple Quay
Bristol, BS1 PN

The appeal must be in the form of a written notice or letter stating that the person wishes to appeal and listing the condition(s) which is/are being appealed against. The following five items must be included;

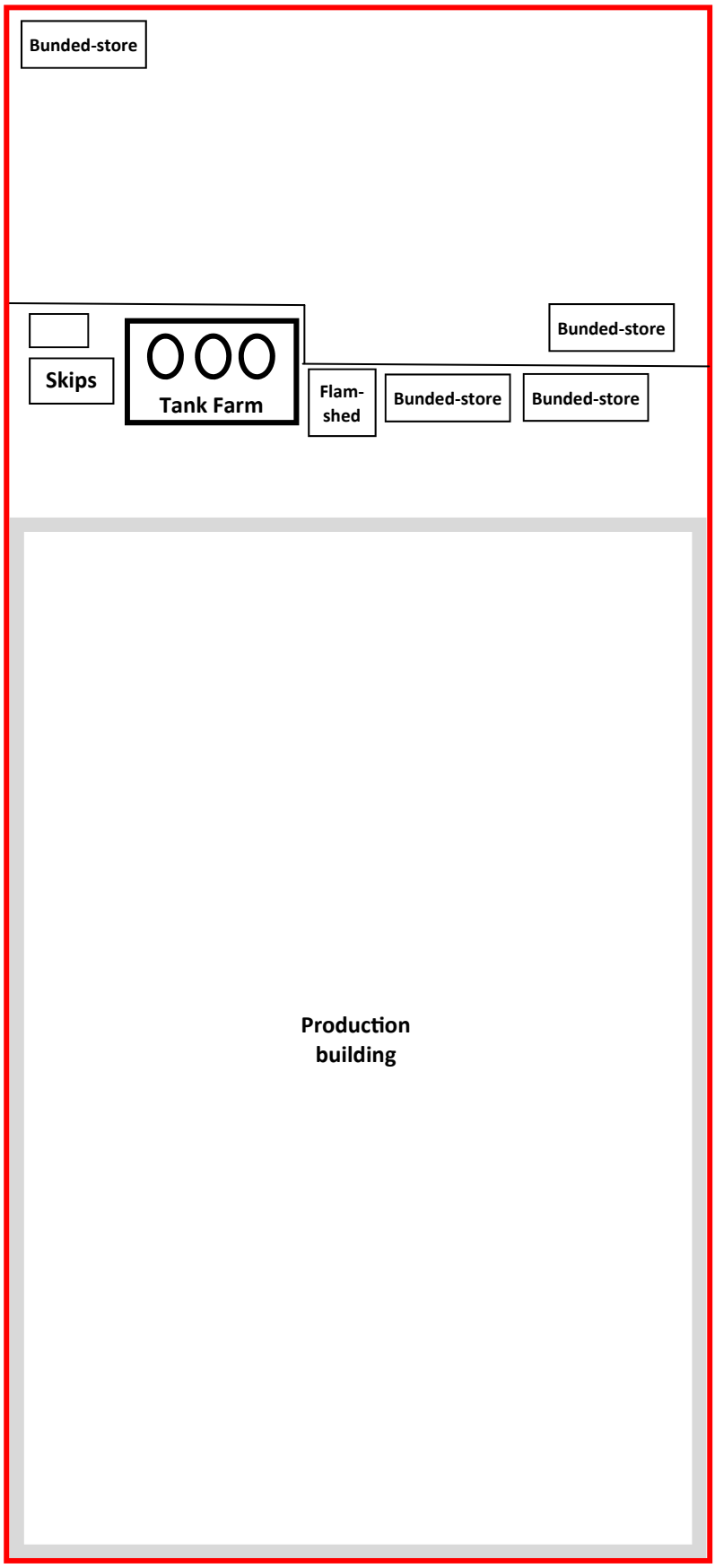
(a) A statement of the ground of appeal;
(b) A copy of any relevant application;
(c) A copy of any relevant Permit;
(d) A copy of any relevant correspondence between the person making the appeal ("the appellant") and the Council;
(e) A statement indicating whether the appellant wishes the appeal to be dealt with.

- By a hearing attended by both parties and conducted by an inspector appointed by the Secretary of State; or
- By both parties sending the Secretary of State written statements of their case (and having the opportunity to comment upon one another's statements).

At the same time, the notice of appeal and documents (a) and (e) must be sent to the Council, and the person making the appeal should inform the appropriate Secretary of State that this has been done.

- An appeal will not suspend the effect of the conditions appealed against; the conditions must still be complied with.
- In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal and to direct the local authority to either vary any of these conditions or to add new conditions.

Site	**Ransom Naturals Limited**		
Project	**Location Plan**		
Drawing	**Schedule 1**	No.	**EPA/00655/03/P4**
Date	**14th November 2018**	Scale	**Not to scale**



Site	**Ransom Naturals Limited**		
Project	**Site Plan**		
Drawing	**Schedule 2**	No.	**EPA/00655/03/P4**
Date	**14th November 2018**	Scale	**Not to scale**

Schedule 3

Determination of solvent consumption

the organic solvent consumption is the total mass of organic solvent Inputs minus any solvents sent for reuse/recovery off-site. This is in the form of a mass balance in order to determine the annual actual consumption of organic solvent (C):

Where: C = I1- O8

Solvent management plan

Inputs of organic solvent in the time frame over which the mass balance is being calculated **(I).**

I1 The quantity of organic solvents or their quantity in mixtures purchased which are used as input into the process/activity (including organic solvents used in the cleaning of equipment, but not those used for the cleaning of the products).

I2 The quantity of organic solvents or their quantity in mixtures recovered and reused as solvent input into the process/activity. (The recycled solvent is counted every time it is used to carry out the activity.)

Outputs of organic solvents in the time frame over which the mass balance is being calculated **(O)**

O1 Emissions in waste gases.

O2 Organic solvents lost in water, if appropriate taking into account waste water treatment when calculating O5.

O3 The quantity of organic solvents which remains as contamination or residue in products output from the process/activity.

O4 Uncaptured emissions of organic solvents to air. This includes the general ventilation of rooms, where air is released to the outside environment via windows, doors, vents and similar openings.

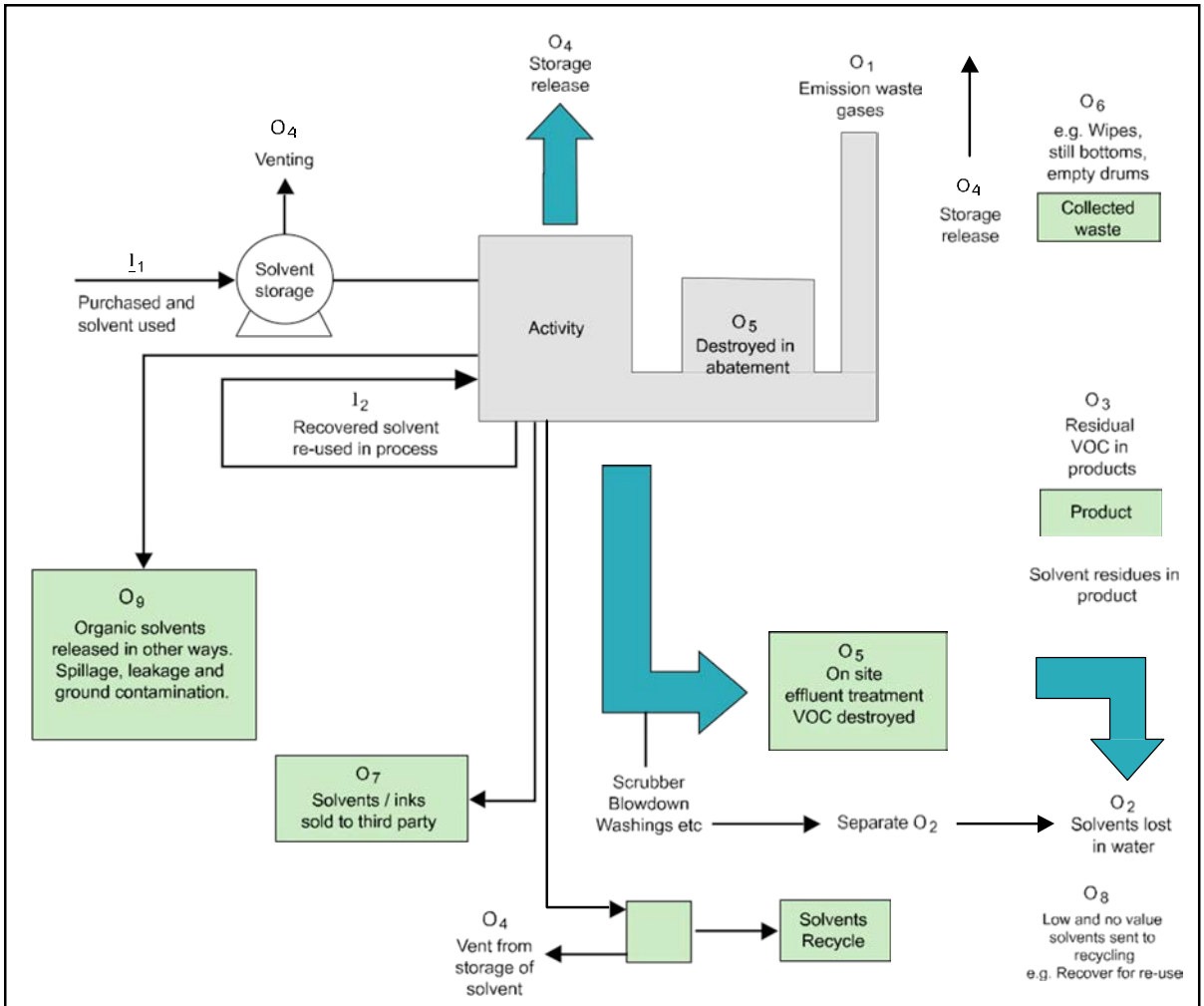
O5 Organic solvents and/or organic compounds lost due to chemical or physical reactions (including for example those which are destroyed, e.g. by thermal oxidation or other waste gas or waste water treatments, or captured, e.g. by adsorption, as long as they are not counted under O6, O7 or O8).

O6 Organic solvents contained in collected waste.

O7 Organic solvents, or organic solvents contained in mixtures, which are sold or are intended to be sold as a commercially valuable product.

O8 Organic solvents contained in mixtures recovered for reuse but not as input into the process/activity, as long as not counted under O7.

O9 Organic solvents released in other ways.



Solvent Management Plan

Consumption = $I_1 - O_8$

Actual solvent emission = $I_1 - O_1 - O_5 - O_6 - O_7 - O_8$

Fugitive emission (F) = $I_1 - O_1 - O_5 - O_6 - O_7 - O_8$

OR

Fugitive emission (F) = $O_2 + O_3 + O_4 + O_9$

industrial emissions Directive - solvent emissions activities

Fugitive emission value = $\frac{F}{I_1 + I_2} \times 100\%$

Total emission = O_1 + Fugitive emission (F)