

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

**Sensient Flavors Limited & Volac
International Limited**

**Felinfach Effluent Treatment Plant
Felinfach Industrial Estate
Lampeter
Ceredigion
SA48 8AG**

Permit number
EPR/BP3135EB

Felinfach Effluent Treatment Plant

Permit number EPR/BP3135EB

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The Felinfach Effluent Treatment Plant processes and treats the effluent from two nearby manufacturing sites (Sensient Flavors Ltd and Volac International Ltd). The installation is operated jointly by a Consortium of both companies. Volac International Ltd operates the largest of the two factories, producing milk based products for the animal feed and human food markets, as well as whey protein isolates and concentrates for the nutritional/functional food market. Sensient Flavors Ltd produces food flavourings from the hydrolysis of vegetable protein.

The installation is comprised of:

- Primary treatment with balance tank;
- Dissolved air flotation (DAF) plant;
- Anoxic pre-mixing (Selector Tank);
- Conventional activated sludge with gravity sludge settlement tank;
- Membrane bioreactor (MBR) activated sludge
- Reverse osmosis (RO) plant for full-scale water reuse

The treated effluent is discharged into the coastal waters of Cardigan Bay.

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/BP3135EB/A001	Duly made 18/12/14	Application for a biological effluent treatment plant
Additional information requested	12/03/14	
Additional information received	04/04/14	Confirmation of surface water drainage arrangements, clarification on EWC codes for acceptance and site plan amendment.
NRW request to extend determination date to 04/07/14	Sent 15/05/14	
Extension Request agreed	Received 16/05/14	
Permit determined	04/07/14	Permit issued to Sensient Flavors Ltd and Volac International Ltd

Status log of the permit		
Description	Date	Comments
Regulation 61 Notice sent to the Operator	05/04/19	Issue of a Notice under Regulation 61(1) of the EPR. Natural Resources Wales initiated review and variation to vary the permit following the publication of the revised Best Available Techniques (BAT) Reference Document (BRef) for Waste Treatment.
Regulation 61 Notice response	12/09/19	Response received from the operator.
Additional information received	08/09/20	Additional information received from request for information (RFI).
Variation determined EPR/BP3135EB/V002	09/09/21	Varied and consolidated permit issued to Sensient Flavors Limited and Volac International Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number
EPR/BP3135EB

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BP3135EB/V002 authorising,

Sensient Flavors Limited and Volac International Limited (“the operator”),
whose registered offices are

Sensient Flavors Limited
Bilton Road
Bletchley
Milton Keynes
Buckinghamshire
MK1 1HP

Volac International Limited
50 Fishers Lane
Orwell
Royston
Hertfordshire
SG8 5QX

company registration numbers

Sensient Flavors Limited	01514781
Volac International Limited	02576295

to operate an installation at

Felinfach Effluent Treatment Plant
Felinfach Industrial Estate
Lampeter
Ceredigion
SA48 8AG

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

Name	Date
Holly Noble	08/09/2021

Authorised on behalf of Natural Resources Wales

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 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.

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 yellow on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1
 - (a) 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 Natural Resources Wales
 - (b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales 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 Natural Resources Wales.
- 2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.3 Waste shall only be accepted if:
 - (a) it is of a type and quantity listed in schedule 2 table(s) S2.2; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 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

- 2.5.1 The operator shall complete the improvements specified in schedule 1 table S1.4 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.
- 2.5.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales 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 table S3.1
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales 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 Natural Resources Wales.
- 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 Natural Resources Wales, 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 Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales 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 Natural Resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales 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 Natural Resources Wales.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in table S3.1
- 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 Natural Resources Wales.
- 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 table S3.1 unless otherwise agreed in writing by Natural Resources Wales.

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 pest's 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 Natural Resources Wales, submit to Natural Resources Wales for approval within the period specified, a pests management plan which identifies and minimises risks of pollution, hazard or annoyance from pests;
 - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by Natural resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales.

4.2 Reporting

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

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) 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 Natural Resources Wales, 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 Natural Resources Wales, 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 Natural Resources Wales 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 (a) In the event 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 Natural Resources Wales,

- (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) in the event of a breach of any permit condition the operator must immediately—
 - (i) inform Natural Resources Wales, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (c) in the event 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 Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

 - (a) any change in the operator's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

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

In any other case:

 - (a) the death of any of the named operators (where the operator consists of more than one named individual);
 - (b) any change in the operator's name(s) or address(es); and
 - (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 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) Natural Resources Wales 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 Natural Resources Wales shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
A1	S5.4 A1 (a)(i)	<p>Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC – (i) biological treatment.</p> <p>D7 - Release into seas/oceans including sea-bed insertion.</p> <p>D8 - Biological treatment which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12.</p> <p>D13 – blending or mixing prior to submission to any of the operations numbered D1 to D12.</p> <p>R3 - Recycling/reclamation or organic substances which are not used as solvents (including composting and other biological transformation processes).</p> <p>R13 - Storage of wastes pending any of the operations R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).</p>	<p>Operation of a biological effluent treatment plant with a treatment capacity of 2750 m³/day.</p> <p>From receipt of untreated effluent to discharge of treated effluent into Cardigan Bay. Also recovery and storage of sludge from the effluent treatment plant pending off site recovery.</p> <p>The effluent treatment plant shall only treat process effluent originating from the adjacent Sensient Flavors Ltd and Volac International Ltd installations.</p> <p>Waste types as specified in Table S2.2</p>
Directly Associated Activity			
A2	Chemical Dosing	Use of Sodium Hydroxide for pH adjustment. Use of Ferric Chloride, DAF Polymer, Polymer Thickener and Borax as additives to promote the efficiency of the treatment process.	Includes receipt and storage of chemicals and chemical dosing system.

Table S1.2 Operating techniques

Description	Parts	Date Received
Application EPR/BP3135EB/A001	Part B2, response to Q3d – Annex 1 “Consortium Chair / Vice Chair details” and Annex 1 “Management System Summary” Part B2, response to Q7 – “Part 5 Risk Assessments” Part B3, response to Q3c – Annex 2 “Raw Materials” Part B3, response to Appendix 5 Qs 1 – 3 – Annex 8 “How to Comply”	21/10/13
Response to request for additional information dated 12/03/14	Response to Q1 clarifying arrangements for surface water run-off and drainage	04/04/14
Response to regulation 61(1) Notice – request for information dated 05/04/2019 detailing how the Operator will comply with the BAT conclusions for Waste Treatment, under Directive 2010/75/EU of the European Parliament and of the Council	All relevant sections	12/09/2019
Additional information for regulation 61(1) Notice	All relevant sections	08/09/2020
Additional information received	All additional information received from Opeator via e-mails	03/08/2021 and 12/08/2021

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC1	The operator shall install and commission a flow weighted autosampler to collect samples of the treated effluent discharged from emission point W1 in order to meet the terms of conditions 3.5.1 and 3.5.3 of this permit.	Completed
IC2	The operator shall monitor the discharge from emission point W1 for the following parameters: Metals - Copper (Cu), Lead (Pb), Cadmium (Cd) and Mercury (Hg) Nutrients - Phosphate, Ammonia and Total Nitrogen. Each of these parameters shall be sampled and measured once per month for a period of 12 months. The monitoring shall be conducted in line with the test methods stipulated in the Environment Agency Monitoring Technical Guidance Note M18: “Monitoring of Discharges to Water and Sewer”. The monitoring results and details of the analytical methods used shall be submitted in writing to Natural Resources Wales. Emission limit values may subsequently be set in table S3.1 for these parameters following Natural Resources Wales review of the monitoring results. The monitoring results may also be used to inform the Best Available Techniques Reference Document (BREF) permit review process.	Completed

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC3	<p>The Operator shall complete and submit for approval in writing by Natural Resources Wales:</p> <ul style="list-style-type: none"> • A baseline report containing information necessary to determine the current state of soil and groundwater contamination; or • Provide a summary report referring to information previously submitted where you are satisfied that such information represents the current state of soil and groundwater contamination; <p>so as to enable a quantified comparison to be made with the state of soil and groundwater contamination upon definitive cessation of activity.</p>	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC4	<p>The operator shall submit for approval in writing by Natural Resources Wales information to evidence compliance with the following BAT requirements in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018) in relation to:</p> <ul style="list-style-type: none"> • BAT 4 - In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques described within BAT 4 Table. 	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC5	<p>The operator shall submit for approval in writing by Natural Resources Wales information to evidence compliance with the following BAT requirements in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018) in relation to:</p> <ul style="list-style-type: none"> • BAT 14 - In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques described within BAT 14 Table. 	17 February 2022 or otherwise agreed in writing with Natural Resources Wales
IC6	<p>The operator shall submit for approval in writing by Natural Resources Wales information to evidence compliance with the following BAT requirements in accordance with requirements specified within BAT Conclusions of the Waste Treatment BREF Document (EU 2018) in relation to:</p> <ul style="list-style-type: none"> • BAT 19 - In order to optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques described within BAT 19 Table. 	17 February 2022 or otherwise agreed in writing with Natural Resources Wales

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels

Raw materials and fuel description	Specification
Sodium Hydroxide	Mercury Free

Table S2.2 Permitted waste types and quantities for Felinfach Effluent Treatment Plant

Maximum quantity	The total throughput of waste accepted at the site shall not exceed 1,003,750m ³ per year.
Waste code	Description
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing
06	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 01	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06 01 99	wastes not otherwise specified

Schedule 3(a) – Emissions and monitoring effective until 16 August 2022

Table S3.1 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
W1 – Release of treated effluent at NGR SN 4567 6368	Felinfach Effluent Treatment Plant	Total volume of treated effluent	2,750 m ³ /day	24 hours	Continuous	MCERTS self-monitoring of effluent flow scheme
		Maximum flow rate	37 l/s	Instantaneous		
		pH range	6-9	Instantaneous		
		Chemical Oxygen Demand (COD)	No Limit Set	24 hour flow proportional composite	Daily	As per Technical Guidance M18 – Monitoring of Discharges to Water and Sewer
		Biochemical Oxygen Demand (BOD)	100 mg/l	24 hour flow proportional composite	Monthly	
		Total Suspended Solids	150 mg/l	24 hour flow proportional composite	Daily	
		Colour (Platinum – Cobalt scale)	No Limit Set (Hazen Units)	24 hour flow proportional composite	Monthly	Colorimetric analysis at 400 nm
		Total Phosphate	No Limit Set	Spot Sample	Monthly	As per Technical Guidance M18 – Monitoring of Discharges to Water and Sewer
		Total Ammonia				
		Total Nitrogen				

Schedule 3(b) – Emissions and monitoring effective from 17 August 2022

Table S3.1 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
W1 – Release of treated effluent at NGR SN 4567 6368	Felinfach Effluent Treatment Plant	Total volume of treated effluent	2,750 m ³ /day	24 hours	Continuous	MCERTS self-monitoring of effluent flow scheme
		Maximum flow rate	37 l/s	Instantaneous		
		pH range	6-9	Instantaneous		
		Chemical oxygen demand (COD)	180 mg/l	24 hour flow proportional composite	Daily	As per Technical Guidance M18 – Monitoring of Discharges to Water and Sewer
		Biochemical oxygen demand (BOD)	100 mg/l	24 hour flow proportional composite	Monthly	
		Total suspended solids	60 mg/l	24 hour flow proportional composite	Daily	EN 872
		Colour (Platinum – Cobalt scale)	No limit set (Hazen units)	24 hour flow proportional composite	Monthly	Colorimetric analysis at 400 nm
		Total ammonia	No limit set	Spot sample	Monthly	As per Technical Guidance M18 – Monitoring of Discharges to Water and Sewer
		Total nitrogen (Total N)	25 mg/l	24 hour flow proportional composite	Monthly	EN 12260, EN ISO 11905-1

Table S3.1 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
		Total phosphorus (Total P)	2 mg/l	24 hour flow proportional composite	Monthly	Various EN standards available (i.e. EN ISO 15681-1 and - 2, EN ISO 6878, EN ISO 11885

Schedule 4(a) – Reporting effective until 16 August 2022

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	W1	Annually	1 January

Table S4.2: Annual production/treatment

Parameter	Units
Treated liquid effluent discharged at W1	m ³
Sludge collected for off-site recovery	m ³

Table S4.3 Performance parameters

Parameter	Frequency of assessment	Units
Sodium Hydroxide usage	Annually	m ³

Table S4.4 Reporting forms

Media/parameter	Reporting format	Date of form
Water and Land	Form water 1 or other form as agreed in writing by Natural Resources Wales	09/09/21
Other performance indicators	Form performance 1 or other form as agreed in writing by Natural Resources Wales	04/07/14
Waste Subject to Conditions 4.2.5	Waste tonnage return form from the Natural Resources Wales website or other form as agreed in writing by Natural Resources Wales	N/A

Schedule 4(b) – Reporting effective from 17 August 2022

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	W1	Annually	1 January

Table S4.2: Annual production/treatment

Parameter	Units
Treated liquid effluent discharged at W1	m ³
Sludge collected for off-site recovery	m ³

Table S4.3 Performance parameters

Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Generation of residues	Annually	tonnes
Generation of waste water	Annually	m ³
Sodium hydroxide usage	Annually	m ³

Table S4.4 Reporting forms

Media/parameter	Reporting format	Date of form
Water and Land	Form water 1 or other form as agreed in writing by Natural Resources Wales	17/08/2022
Water usage	Form water usage 1 or other form as agreed in writing by Natural Resources Wales	17/08/2022
Energy usage	Form energy 1 or other form as agreed in writing by Natural Resources Wales	17/08/2022
Other performance indicators	Form performance 1 or other form as agreed in writing by Natural Resources Wales	17/08/2022
Waste Subject to Conditions 4.2.5	Waste tonnage return form from the Natural Resources Wales website or other form as agreed in writing by Natural Resources Wales	N/A

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 activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment	
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 permit condition	
To be notified within 24 hours of detection	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) In the event 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:	
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 Sensient Flavors Limited and Volac International Limited

Schedule 6 - Interpretation

“accident” means an accident that may result in pollution.

“Annex I” means Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“Annex II” means Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“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 Natural Resources Wales 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.

“background concentration” means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.
- *“best available treatment, recovery and recycling techniques”* shall have the meaning given to it in the document published jointly by the Department for Environment, Food and Rural Affairs, the Welsh Assembly Government and the Scottish Executive on 27th November 2006, entitled “Guidance on Best Available Treatment, Recovery and Recycling Techniques (BATRR) and Treatment of Waste Electrical and Electronic Equipment (WEEE).
- *“bioaerosol threshold limits”* means the maximum acceptable bioaerosol concentrations at the nearest sensitive receptor, or at an equivalent distance downwind of the composting operations, which are attributable to the composting operations. The maximum acceptable concentrations are respectively 1000 and 500 CFU m⁻³ for total bacteria and *Aspergillus fumigatus*.

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

“disposal” or *“D”* 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 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 or background concentration 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 substance” means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008

“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.

“Pests” means Birds, Vermin and Insects.

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

“*recovery*” or “*R*” 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.

“*residue*” means the solid waste generated by the waste treatment activity and is not directly related to the type of waste treated in the plant

“*Solvent Emissions Directive*” means Directive 1999/13/EC (as amended by Directive 2004/42/EC) on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations.

“*Waste code*” means the six digit code referable to a type of waste in accordance with the list of wastes established by Commission Decision 2000/532/EC as amended from time to time (the ‘List of Wastes Decision’) 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.

“*Waste Treatment BAT Conclusions*” means the BAT Conclusions for the Waste Treatment sector published as a Commission Implementing Decision EU 2018/1447 in the Official Journal of the EU on 17 August 2018

“*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:

- (a) 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
- (b) 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



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