

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Greenyard Frozen UK Limited

Greenyard Way
Hardwick Industrial Estate
King's Lynn
Norfolk
PE30 4WS

Variation application number

EPR/BN9241IS/V009

Permit number

EPR/BN9241IS

Greenyard Way

Permit number EPR/BN9241IS

Introductory note

This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

This consolidated permit has been issued following a full review against the best available techniques (BAT) conclusions for the Food, Drink and Milk Industries published on 4th December 2019 in the official journal of the European Union.

We have implemented the requirements of the Medium Combustion Plant directive, and incorporated post-dated requirements for 2030.

The schedules specify the changes made to the permit.

The main features of the permit are as follows:

Greenyard Frozen UK Limited produce frozen vegetable products for human consumption. The installation is located on the southern outskirts of King's Lynn at grid reference TF 63433 18700. There are industrial, commercial and residential receptors nearby, the nearest residential receptors are 200m. The operation of the site has the following listed activities:

Section 6.8 Part A(1) (d)(ii) – 'Treating and processing materials intended for the production of food products from vegetable raw materials at plant with a finished product production capacity of more than 300 tonnes per day (average value on a quarterly basis)';

Section 5.4 Part A(1) (a)(i) – 'Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving biological treatment'.

The facility comprises one processing factory, two modern packing halls and a series of cold stores. All crops are processed in a similar way by washing and de-stoning, peeling, cutting, blanching and freezing prior to packing and storage in cold halls.

Operations run on a 24/7 basis with different crops being processed according to the seasons. The processing capacity is 237,250 tonnes per year, although the total stock processed at this facility is during normal production 60,000 tonnes per year. Stock from other facilities is also stored in the cold halls, adding another 60,000 tonnes per year, totalling 120,000 tonnes per year storage capacity. Onsite storage can hold up to 50,000 tonnes at any one time.

A central, natural gas fired boiler (3.6 MWth) is used to generate steam and hot water. There is also a back-up boiler (2.93 MWth). The total site thermal input is 7.93 MW. Water is used for washing, cleaning and product transport and can be recycled for re-use in the process where food hygiene and product quality is not critical.

Process effluent and potentially contaminated surface run-off is channelled to an effluent treatment plant (ETP). The ETP comprises an effluent reception pit, screens, balance tank, dissolved air floatation (DAF) plant, nitrification/denitrification tank, clarifier, sand filters and ultra-filtration. Sludge is directed to a centrifuge for dewatering and liquid effluent is either re-used within the facility or is discharged to sewer. The facility has a trade discharge consent from Anglian Water.

In 2018, an additional process for effluent treatment was installed (Variation EPR/BN9241IS/V006). A conditioning tank, upflow anaerobic sludge blanket reactor (UASB), biogas desulphurisation unit, biogas combined heat and power engine and auxiliary flare was also added. A biogas storage facility is in place in order to provide a steady constant feed of biogas to the CHP engine. This equipment is integrated into the existing ETP, post DAF plant and is primarily intended to reduce the chemical oxygen demand (COD) in the process effluent from the factory prior to discharge to sewer.

Once the effluent has been treated in the DAF plant, it is fed into a conditioning tank before passing to the UASB reactor, where it undergoes anaerobic treatment, reducing the COD and producing biogas. The liquid is returned to the nitrification/denitrification tanks and continues its treatment prior to discharge. The biogas is fed into an activated sludge desulphurisation unit turning hydrogen sulphide (H₂S) gas into elemental sulphur. The sludge is recirculated to the existing treatment plant. The desulphurised gas is combusted in the combined heat and power (CHP) engine, which has a rated thermal input of 1.4 MW. There is an auxiliary flare in the event the supply of gas exceeds the capacity of the engine or should the engine malfunction or be taken out of service for maintenance or repair. The heat and power produced is utilised within the facility.

There are three Special Conservation Areas (Roydon Common & Dersingham Bog, The Wash & North Norfolk Coast and Norfolk Valley Fens), one Special Protection Area (the Wash), and three Ramsar sites (Roydon Common, Dersingham Bog & The Wash) within 10km of the facility. There is also one site of Special Scientific Interest (River Nar) and seven local wildlife sites within 2km.

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

Status log of the permit		
Description	Date	Comments
Application BN9241IS EPR/BN9241IS/A001	Received 31/03/2005	Application received for the treatment and processing of frozen vegetables.
Additional information received	05/09/2005	Response to request for information relating to Installation boundary and odour assessment.
Request to extend determination	06/10/2005	--
Permit determined EPR/BN9241IS	09/11/2005	Permit issued to Greenyard Frozen UK Limited.
Part surrender application EPR/BN9241IS/S002	Duly Made 15/01/2013	Part surrender to exclude portion of the permitted site.
Additional information received	21/02/2013	Response to Schedule 5 Notice on the Site Condition Report.
Additional information received	14/03/2013	--
Part surrender issued EPR/BN9241IS	02/05/2013	--
Variation application EPR/BN9241IS/V003	Duly made 19/06/2013	Extension of the site boundary.
Variation determined EPR/BN9241IS	10/09/2013	Varied permit issued.
Variation application EPR/BN9241IS/V004	Duly made 01/12/2014	Application to vary the current permit to include an additional cold store, removal of an emission point to surface water, clarify ETP volumes in Table 1.1.1 and extend the eastern side of the permitted boundary.
Additional information received	19/05/2015	Confirmation from Anglian Water regarding

Status log of the permit		
Description	Date	Comments
		effluent volume discharge limits.
Variation determined EPR/BN9241IS	17/06/2015	Varied permit issued.
Notified change to company name EPR/BN9241IS/V005	Duly made 05/03/2017	Name changed to Greenyard Frozen UK Limited.
Variation issued EPR/BN9241IS	24/03/2017	Varied permit issued.
Additional information received	23/03/2018	Response to Schedule 5 notice dated 16/02/2018. Includes odour management plan and BAT assessment.
Additional information received	16/05/2018	Additional information on odour management plan.
Additional information received	29/05/2018	Accident management plan.
Variation determined EPR/BN9241IS	21/06/2018	Varied permit (consolidated and modernised) issued.
Variation application EPR/BN9241IS/V008	Duly made 12/07/2019	Application to add biogas storage facility and remove Activity Ref. AR10 Biomass boilers from the permit.
Schedule 5 response	10/10/2019	Response to Schedule 5 Notice dated.
Variation determined EPR/BN9241IS	02/04/2020	Varied permit issued.
Application EPR/BN9241IS/V008 (variation and consolidation)	Duly made 23/11/2020	Application to change air emission limit values for the biogas engine.
Additional information received	08/12/2020	Revised air dispersion modelling report and model files.
Variation determined and consolidation issued EPR/BN9241IS	19/01/2021	Varied and consolidated permit issued.
Application EPR/BN9241IS/V009 (variation and consolidation)	Regulation 61 Notice response received 10/10/2022	Environment Agency initiated variation and consolidation following the Food, Drink & Milk Industries sector permit review.
Variation determined and consolidation issued EPR/BN9241IS (Billing ref. KP3347QG).	02/02/2024	Varied and consolidated permit issued in modern format.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/BN9241IS

Issued to

Greenyard Frozen UK Limited (“the operator”)

whose registered office is

**Greenyard Way
Hardwick Industrial Estate
King's Lynn
Norfolk
PE30 4WS**

company registration number 04423715

to operate a regulated facility at

**Greenyard Way
Hardwick Industrial Estate
King's Lynn
Norfolk
PE30 4WS**

to the extent set out in the schedules.

The notice shall take effect from 02/02/2024.

Name	Date
Beccy Brough	02/02/2024

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/BN9241IS

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BN9241IS/V009 authorising,

Greenyard Frozen UK Limited (“the operator”),

whose registered office is

**Greenyard Way
Hardwick Industrial Estate
King's Lynn
Norfolk
PE30 4WS**

company registration number 04423715

to operate an installation at

**Greenyard Way
Hardwick Industrial Estate
King's Lynn
Norfolk
PE30 4WS**

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

Name	Date
Beccy Brough	02/02/2024

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.

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 The activities shall be undertaken in accordance with best available techniques.
- 2.1.3 All process plant and equipment shall be commissioned, operated and maintained and shall be fully documented and recorded in accordance with the manufacturer’s recommendations.

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.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 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.
- 3.1.4 For the following activities referenced in schedule 1, table S1.1 (AR4) the first monitoring measurements shall be carried out within four months of 01/01/2030 or of the date when the MCP is first put into operation, whichever is later.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour, but including ammonia) 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.
- 3.2.4 The operator shall implement a leak detection and repair (LDAR) programme to detect and mitigate the release of volatile organic compounds, including methane from diffuse sources.

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, S3.2 and S3.3;
- (b) process monitoring specified in table S3.4;

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 unless otherwise agreed in writing by the Environment Agency.

3.6 Pests

3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

3.6.2 The operator shall:

- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
- (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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 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 Following the detection of an issue listed in condition 4.3.1, the operator shall review and revise the management system and implement any changes as necessary to minimise the risk of re-occurrence of the issue.
- 4.3.4 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.
- 4.3.5 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.
 - 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.
- 4.3.6 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.
- 4.3.7 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.
- 4.3.8 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”, 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
AR1	Section 6.8 A1 (d)(ii)	Treating and processing of vegetable raw materials only for the production of food products at a plant with a finished product production capacity of more than 300 tonnes per day (average value on a quarterly basis)	From receipt of vegetable raw materials delivered to the site to the despatch of frozen vegetables. Production capacity is limited to 650 tonnes per day.
AR2	Section 5.4 Part A1 (a) (i)	Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving biological treatment	From generation of waste water to discharge to sewer. Aerobic, anaerobic and physical treatment of process effluent generated at the facility. The treatment process includes the generation and combustion of biogas produced by the effluent treatment process.
Directly Associated Activity			
AR3	Raw material storage and handling	Storage and handling of raw materials at the installation	From receipt of raw materials to despatch of final product.
AR4	Steam and hot water supply	Medium Combustion plants: Combustion of natural gas in a natural gas fired boiler with a thermal input of 3.6 MW (Boiler 4). Combustion of natural gas in an auxiliary back-up boiler with a thermal input of 2.93 MW (Boiler 3).	From receipt of fuel to release of products of combustion to air.
AR5	Waste and by-product storage and handling	Storage and handling of waste materials	From generation of waste to storage pending removal for disposal or recovery.
AR6	Chiller units	Cold storage for 120,000 tonnes per annum of processed vegetables.	All processes within the cold store

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
AR7	Use of refrigerants	Use of refrigerants in cooling, chilling and/or freezing systems at the installation.	From receipt of raw materials to despatch of final product.
AR8	Packaging	Packing Hall.	All processes withing packing hall.
AR9	Emergency flare operation	D10: Incineration on land	Undertaken in relation to Activity AR2. From the receipt of biogas produced at the on-site anaerobic digestion process to incineration with the release of combustion gases. Use of biogas auxiliary flare required only during periods of breakdown or maintenance of the CHP engine, biogas upgrading plant and/or auxiliary boiler and/or biogas storage facility.
AR10	Steam and electrical power supply	R1: Use principally as a fuel to generate energy. Combustion of biogas in a combined heat and power engine with an aggregated thermal input of 1.4 MW.	From the receipt of biogas produced at the on-site effluent treatment process to combustion with the release of combustion gases.
AR11	Surface water drainage	Collection of uncontaminated site surface waters	Handling and storage of site drainage until discharge to the site surface water system.
AR12	Storage and use of chemicals and oils	Storage and use of chemicals and oils at the installation.	From receipt of chemicals and oils to disposal of wastes arising.
AR13	Biogas storage	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) Storage of biogas to attenuate flow to combined heat and power (CHP) engine (A10).	Undertaken in relation to Activity AR2 From the storage of biogas in a 1,800m ³ buffer tank to the release as and when required via the desulphurisation unit and gas dehumidifier before combustion in the CHP engine.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to questions 2.1 and 2.2 given in section B2.1 and B2.2 of the PPC permit application. The response to request for information relating to Installation boundary and odour assessment dated 05/09/2005.	31/03/2005
Application	Information in Parts E2 of the application and the Site Investigation Report (Ref. EN 16230 SI).	05/12/2012
Application EPR/BN9241IS/V003	All parts and supporting documents.	02/05/2013
Additional information EPR/BN9241IS/V003	Confirmation of boiler sizes and non-technical summary.	20/05/2013 & 19/06/2013
Additional information EPR/BN9241IS/V003	Cold store technical information (refrigerants and systems). Packaging regulation data.	19/06/2013
Application for Variation EPR/BN9241IS/V004	The response to questions in section 3, form EPC – Part C3 and sections 2 and 3 of the supporting information document to the variation application.	08/11/2014
E-Mail from Anglian Water	Confirming agreed effluent flow limits of 170 m ³ /hr with a maximum daily throughput of 3000 m ³ /day.	19/05/2015
Application EPR/BN9241IS/V006	Application for Part C, Section 3 – Operating Standards.	02/08/2017
Application EPR/BN9241IS/V006	Request for duly making information response.	23/11/2017
Schedule 5 response	Response to Schedule 5 dated 16/02/2018, which includes: <ul style="list-style-type: none"> • Technical information • Process monitoring and control systems • Pollution prevention • Management controls • BAT assessment • Operating manual • Odour Management Plan for Effluent Treatment Process (additional supplementary information submitted 16/05/2018) 	23/03/2018
Additional information	Environmental Accident Management Plan.	29/05/2018
Application EPR/BN9241IS/V007	Section 5 – Proposed changes Application for Part C3 – Table 3 – Technical Standards	03/04/2019
Schedule 5 response	Response to Schedule 5 dated 17/09/2019, which includes: <ul style="list-style-type: none"> • Design and construction methods of biogas storage facility and monitoring of parameters • Contingence plan • Biogas storage holder protection methods • Material thickness of biogas dome • Biogas pressure system • Control panel operating methods • Pre-treatment of biogas 	10/10/2019

Table S1.2 Operating techniques		
Description	Parts	Date Received
	<ul style="list-style-type: none"> Unwanted gas components method Operational Manual, Lightning Protection System (LPS), BSEN 62305:2012 'Protection against Lightning' 13/06/2019. DCN, 19-2-8-A-MAN-002-Biogas operational manual REV-A10, 30/09/2019. DCN 19-02-0000-A-MAN-001-Crisis Management-REV-B10, 01/10/2019. 	
Regulation 61 (1) Notice – Responses to questions dated 09/06/2022	All parts	Received 10/10/2022
Regulation 61(1) Notice – request for further information dated 29/11/2023	Technical standards in relation to Best available techniques as described in BAT conclusions under Directive 2010/75/EU of the European Parliament and of the Council on establishing best available techniques (BAT) conclusions for the food, drink and milk industries, BAT Conclusions Numbers 1-12, AD Waste Treatment BAT 15, 16, 21 and 38, Hazardous Substances (monitoring) and Climate Change Adaption Plan.	Received 06/12/2023
Additional information	EMS submitted for BAT 1 and BAT 2, BAT 9 (Refrigerants) and Climate Change Adaption Plan.	Received 14/12/2023

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC11	The operator shall confirm in writing to the Environment Agency that the Narrative BAT requirements for the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 6 and 9 were in place on or before 4 December 2023. Refer to BAT Conclusions for a full description of the BAT requirement.	1 month from date of permit issue: 04/03/2024
IC12	<p>The operator shall use refrigerants without ozone depletion potential and with a low global warming potential (GWP) in accordance with BAT 9 from the Food, Drink and Milk Industries BATCs.</p> <p>To demonstrate compliance against BAT 9, the operator shall develop a replacement plan for the refrigerant system(s) at the installation. This shall be incorporated within the existing environmental management system by the specified date.</p> <p>The plan should include, but not be limited to, the following:</p> <ul style="list-style-type: none"> Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible. An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP. Replacement of systems containing HCFCs as soon as possible. Only to be included where operator has confirmed use of R22 in “legacy system” in their Reg 61 response. 	1 month from date of permit issue: 04/03/2024

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC13	The operator shall produce a Site Condition Report (SCR) in line with our H5 Guidance. The report shall contain the information necessary to determine the state of soil and groundwater, and ensure this is maintained throughout the life of the permit by using the results to better inform the SPMP. The report shall be submitted to the Environment Agency for review.	12 months from date of permit issue: 01/02/2025 or other date as agreed in writing with the Environment Agency
IC14	The operator shall produce a monitoring plan detailing how the management of relevant hazardous substances which did not screen out as low risk, based on the RHS baseline assessment, will be maintained and monitored to mitigate the risks of pollution. The plan shall be submitted for approval. The plan shall be implemented in accordance with the Environment Agency's written approval, including timescales to undertake any infrastructure improvements.	12 months from date of permit issue: 01/02/2025 or other date as agreed in writing with the Environment Agency
Improvement condition to address methane slip emissions from gas engines burning biogas		
IC15	The operator shall establish the methane emissions in the exhaust gas from engines burning biogas and compare these to the manufacturer's specification and benchmark levels agreed in writing with the Environment Agency. The operator shall, as part of the methane leak detection and repair (LDAR) programme, develop proposals to assess the potential for methane slip and take corrective actions where emissions above the manufacturer's specification or appropriate benchmark levels are identified.	12 months from permit issue. 01/02/2025 or other date as agreed in writing with the Environment Agency.

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Gas oil	Less than 0.1% sulphur content

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in Schedule 7]	Boiler 4	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	250 mg/m ³ [Note 1]	Periodic	Every three years [Note 1]	BS EN 14792
		Carbon monoxide	No Limit			MCERTS BS EN15058
	Boiler 4 [Note 2]	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	200 mg/m ³ [Note 1]	Periodic	Every three years [Note 1]	BS EN 14792
		Carbon monoxide	No limit			MCERTS BS EN15058
A2 [Point A2 on site plan in Schedule 7]	Auxiliary boiler (Boiler 3)	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	250 mg/m ³ [Note 1]	Periodic	Every three years [Note 1]	BS EN 14792
		Carbon monoxide	No Limit			MCERTS BS EN15058
A3 [Point A3 on site plan in Schedule 7]	Biogas CHP engine [Note 3]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	190 mg/m ³	Periodic	Every three years	BS EN 14792
		Sulphur dioxide	40 mg/m ³			BS EN 14791
		Carbon Monoxide	520 mg/m ³			BS EN 15058
		Total VOCs	No limit			BS EN 12619:2013
A4 [Point A4 on site plan in Schedule 7]	Auxiliary Flare [Note 5]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	150 mg/m ³	Hourly average	Annual calculation [Note 6]	Mass Balance [Note 7]
		Carbon Monoxide	50 mg/m ³			BS EN 15058

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
		Total VOCs	10 mg/m ³			BS EN 12619:2013
Pressure relief valves	Effluent treatment tanks and biogas storage facility	No parameters set	No limit set	--	--	--
Vents from tank(s)	Oil/Fuel Storage tank(s)	No parameters set	No limit set	--	--	--

Note 1: The emission monitoring/limits requirements apply from 1 January 2030, unless otherwise advised by the Environment Agency or if a/the Boiler(s) is/are replaced.

Note 2: Emission limit and monitoring requirements apply when 500 hours per year of burning gas oil of have elapsed.

Note 3: These limits are based on normal operating conditions and load - temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 15 per cent (dry gas). The measurement uncertainty specified in LFTGN08 v2 2010 shall apply.

Note 5: These limits are based on normal operating conditions and load – temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 3 per cent (dry gas).

Note 6: Monitoring to be undertaken in the event the emergency flare has been operational for more than 10 per cent of a year (876 hours). Record of operating hours to be submitted annually to the Environment Agency.

Note 7: Method of calculation of Annual Mass Emission Limit shall be agreed in writing with the Agency.

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 [Point W1 on site plan in schedule 7] emission to Pierpont Drain	Uncontaminated surface runoff	No visible oil or grease	Non-visible	--	Weekly	Visual assessment
W2 [Point W2 on site plan in schedule 7] emission to Pierpont Drain	Uncontaminated surface runoff	No visible oil or grease	Non-visible	--	Weekly	Visual assessment
W3 [Point W3 on site plan in schedule 7] emission to Pierpont Drain	Uncontaminated surface runoff	No visible oil or grease	Non-visible	--	Weekly	Visual assessment

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
2x Discharge to land via soakaway adjacent to the engine room as marked on the site plan	Uncontaminated surface runoff	No parameter set	No limit set	--	--	--

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 [Point S1 on site plan in schedule 7] emission to Anglian Water Sewer	Treated process effluent from onsite effluent treatment plant	No parameters Set	No limit set	--	--	--

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
UASB	Key process parameters in accordance with manufacturer's recommendations	In accordance with manufacturer's recommendations	None specified	--
Effluent Treatment Plant	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary
Desulphurisation unit	Key process parameters in accordance with manufacturer's recommendations	In accordance with manufacturer's recommendations	None specified	--
Biogas in digester	Flow	Continuous	In accordance with EU weights and measures Regulations	Process monitoring to be recorded using a SCADA system where relevant. Gas monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations
	Methane	Continuous	None specified	
	CO ₂	Continuous	None specified	
	O ₂	Continuous	None specified	
	Hydrogen sulphide	Daily	None specified	
	Pressure	Continuous	None specified	
Digester(s) and storage tank(s)	Integrity checks	Weekly	Visual assessment	In accordance with design specification and tank integrity checks.

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Diffuse emissions from all sources identified in the Leak Detection and Repair (LDAR) programme	VOCs including methane	Every 6 months or otherwise agreed in accordance with the LDAR programme	BS EN 15446 In accordance with the LDAR programme	Monitoring points as specified in a DSEAR risk assessment and LDAR programme. Limit as agreed with the Environment Agency as a percentage of the overall gas production.
Emergency flare	Operating hours	Continuous	Recorded duration and frequency. Recording using a SCADA system or similar system	Date, time and duration of use of auxiliary flare shall be recorded.
	Quantity of gas sent to emergency flare			Quantity can be estimated from gas flow composition, heat content, ratio of assistance, velocity, purge gas flow rate, pollutant emissions.
Pressure relief valves and vacuum systems	Gas pressure	Continuous	Recording using a SCADA system	Continuous gas pressure shall be monitored.
	Re-seating	Weekly inspection	Visual	Operator must ensure that valves are re-seated after release in accordance with the manufacturer's design.
	Inspection, maintenance, calibration, repair and validation	Following foaming or overtopping or at 3 yearly intervals whichever is sooner	Written scheme of examination in accordance with condition 1.1.1	After a foaming event or sticking, build-up of debris, obstructions or damage, operator must ensure that pressure relief valve function remains within designed gas pressure in accordance with the manufacturer's design by suitably trained and qualified personnel.

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
	Inspection, calibration and validation report	In accordance with design and construction specifications or after over topping or foaming event	Written scheme of examination in accordance with condition 1.1.1	<p>Operator must ensure that valves are re-seated after release, after a foaming event or sticking, build-up of debris, obstructions or damage.</p> <p>Operator must ensure that PRV function remains within designed operation gas pressure in accordance with the manufacturer's design by suitably trained/qualified personnel.</p> <p>Inspection, calibration and validation report. In accordance with industry Approved Code of Practice</p>
Effluent storage tank(s)	Volume & integrity checks	Daily	Visual or flow metre measurement	Records of volume must be maintained.

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
Point source emissions to air Parameters as required by condition 3.5.1	A1 & A2	First monitoring undertaken in accordance with Condition 3.1.4 to be reported within 3 months, and then every 3 years thereafter.	From first monitoring requirements in accordance with Condition 3.1.4
	A3	Every 3 years there after	1 January
	A4	Annually	1 January
Process monitoring – digester tank integrity Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 5 years from the date of commissioning or as per the manufacturer's recommendation, whichever is sooner	1 January
Process monitoring – under and over pressure relief systems Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 12 months Yearly summary report of over-pressure and under-pressure events detailing mass balance release	1 January
Process monitoring – leak detection and repair (inspection, calibration and maintenance) Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 3 years	1 January
Process monitoring – use of emergency flare Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 12 months	1 January

Table S4.2: Annual production/treatment	
Parameter	Units
Quantity of raw vegetables processed	tonnes
Total site production (Finished products)	tonnes
Electricity generated	MWh

Table S4.2: Annual production/treatment	
Parameter	Units
Whole digestate	tonnes
Liquid digestate	m ³
Solid digestate	tonnes

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Ammonia released	Annually	kg
Refrigerant R404A	Annually	kg
Refrigerant R422A	Annually	kg
Refrigerant R448a	Annually	kg
Water usage	Annually	m ³
Energy usage	Annually	MWh
Waste	Annually	tonnes
COD efficiency	Annually*	COD te/te product
Food waste	Annually	Tonnes
Emergency flare operation	Annually	hours
Raw material usage	Annually	tonnes
Auxiliary boiler usage (Boiler 3)	Annually	hours
CHP biogas engine usage	Annually	hours
CHP biogas engine efficiency	Annually	%
Pressure relief valve operation	Annually	hours
*COD efficiency to be calculated on a weekly frequency, reported annually		

Table S4.4 Reporting forms		
Parameter	Reporting form	Form version number and date
Point source emissions to air	Emissions to Air Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Water usage	Water Usage Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Energy usage	Energy Usage Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Food Waste	Food waste Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1 06/02/2023
Other performance parameters	Other Performance Parameters Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021

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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Measures taken, or intended to be taken, to stop the emission	

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

(c) Notification requirements for the breach of permit conditions not related to limits	
To be notified within 24 hours of detection	
Condition breached	
Date, time and duration of breach	
Details of the permit breach i.e. what happened including impacts observed.	
Measures taken, or intended to be taken, to restore permit compliance.	

(d) 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.

“disposal” means any of the operations provided for in Annex I to the Waste Framework Directive.

“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.

“Food waste” reporting: Reporting of food waste to use a methodology such as the global Food Loss and Waste Accounting and Reporting Standard (FLW standard), WRAP’s Target Measure Act initiative or similar.

“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.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“Leak detection and repair (LDAR) programme” means a structured approach to reduce fugitive emissions of organic compounds by detection and subsequent repair or replacement of leaking components. Currently, sniffing (described by EN 15446) and optical gas imaging methods are available for the identification of leaks as set out in BAT 14 and section 6.6.2 of the Waste Treatment BAT Conclusions.

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

“Medium Combustion Plant” or “MCP” means a combustion plant with a rated thermal input equal to or greater than 1 MW but less than 50 MW. An “existing medium combustion plant” is combustion plant operating before 20 December 2018.

“Medium Combustion Plant Directive” or “MCPD” means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016..

Pests” means Birds, Vermin and Insects.

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.

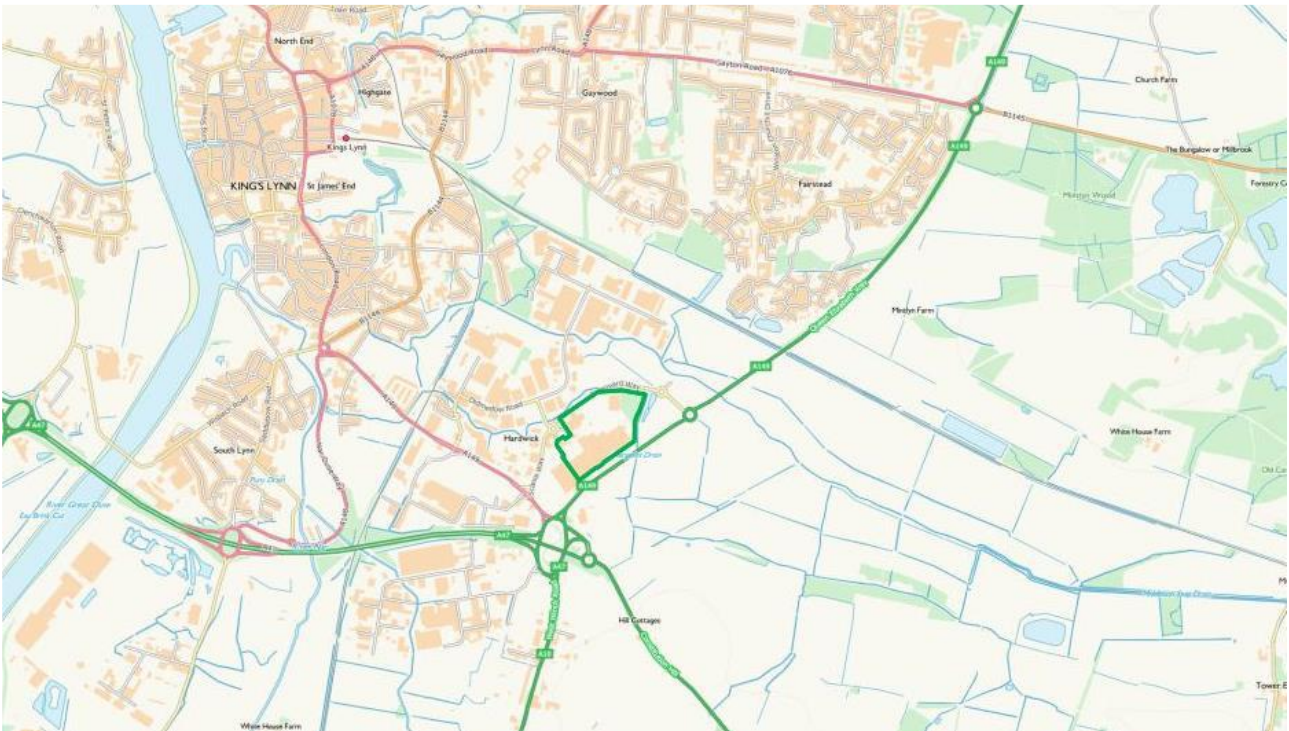
Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- 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 other than gas engines or gas turbines, 6% dry for solid fuels; and/or
- in relation to emissions from gas engines or gas turbines, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 15% dry for liquid and gaseous fuels ; and/or

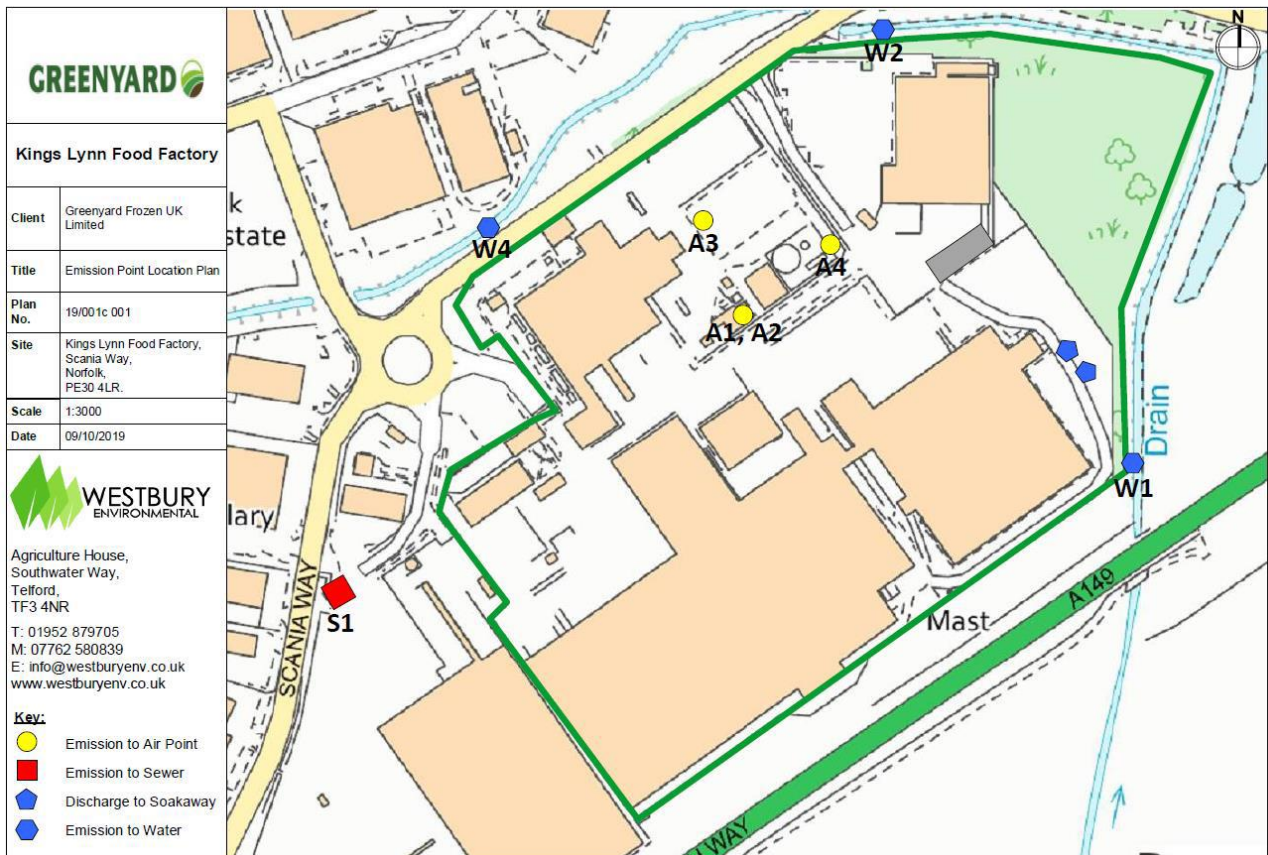
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



©Crown Copyright. All rights reserved. Environment Agency, 100024198, 2023



END OF PERMIT