

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Hall & Woodhouse Limited

Water Purification Plant

The Brewery

Bournemouth Road

Blandford St Mary

Dorset

DT11 9LS

Variation application number

EPR/LP3539DS/V003

Permit number

EPR/LP3539DS

Water Purification Plant, The Brewery

Permit number EPR/LP3539DS

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.

Changes introduced by this variation made by the operator

The consolidated variation authorises the following changes:

- the addition of a new secondary containment system, and;
- an extension to the site boundary to provide adequate land for siting the new secondary containment system.

Changes introduced by this variation notice/statutory review

The Industrial Emissions Directive (IED) came into force on 7 January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision. Article 21(3) of the IED requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions. The BAT Conclusions for Waste Treatment (the BREF) was published on 17 August 2018 following a European Union wide review of BAT, implementing decision (EU) 2018/1147 of 10 August 2018.

The scope of the permit review also covers the assessment of:

- the bioaerosols monitoring and compliance with M9 bioaerosols monitoring requirements;
- the design and construction of secondary containment and storage lagoons;
- the available storage facilities and measures to reduce ammonia emissions from storage; and
- information on existing medium combustion plant and/or specified generators on site.

This variation has been issued to update some of the conditions following a statutory review of the permits in the industry sector for biowaste treatment. The opportunity has also been taken to consolidate the original permit and subsequent variations.

Brief description of the process

The Water Purification Plant (WPP) is designed to treat the process water from the brewing and packaging activities at the Hall & Woodhouse Brewery. The brewery process water will receive anaerobic treatment within a Downflow Anaerobic Carrier System (DACs). This contains floating carriers containing anaerobic biomass capable of converting the majority of the Chemical Oxygen Demand (COD) of the process water into biogas.

This activity falls under the Environmental Permitting Regulations;

Section 5.4 Part A(1) (a) (i) 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 biological treatment.

The biogas produced from the process is directed to a small combined heat and power (CHP) unit, where it undergoes combustion to create electricity and heat used on site. Under certain circumstances (i.e. CHP shutdown/maintenance), excess biogas can be consumed in the gas burner.

The system includes an odour control unit (OCU), with the treated gas being emitted to atmosphere.

Following treatment in the WPP, the treated waste water effluent is discharged to sewer.

The site is located to the east of Blandford St Mary. It is surrounded by commercial and industrial users, with residential properties, recreational/agricultural grassland and the River Stour beyond these immediate surroundings. Bryanston Site of Special Scientific Interest (SSSI) is located 1.8 km to the northwest.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	Date	Comments
Application EPR/LP3539DS/A001	Duly made 05/08/2016	Application for an anaerobic treatment plant with combustion of biogas.
Additional information received	13/10/2016	Information relating to a detailed technical description and noise matters.
Additional information received	06/12/2016	Information on commissioning, the site condition, report, monitoring and containment.
Additional information received	13/12/2016	Information on the gas burner and an update to the Monitoring document.
Additional information received	16/12/2016	Updated Environmental Management Plan.
Application EPR/LP3539DS/V002 (variation and consolidation)	Duly made 07/02/2018	Application to vary and update the permit to modern conditions.
Schedule 5 response	19/03/2018	Odour abatement system design and management criteria.
Schedule 5 response	07/05/2018	Containment assessment justification.
Schedule 5 response	02/07/2018	Additional odour abatement design and revised buffer tank containment detail.
Schedule 5 Response	30/07/2018	Odour abatement system operating techniques.
Variation determined EPR/LP3539DS (Billing ref. TP3038JM).	19/09/2018	Varied permit issued.
Regulation 61 Notice sent to Operator	21/10/2019	Regulation 61 Notice requiring information for statutory review of permit.
Application EPR/LP3539DS/V003 (variation and consolidation)	Duly made 31/01/2020	Application to add secondary containment and increase permitted area.
Regulation 61 Notice response	08/06/2020	Response received from the operator.
Application EPR/LP3539DS/V003 (variation and consolidation)	Environment Agency Initiated Variation	Statutory review of permit occasioned by Waste Treatment BAT Conclusions published on 17 August 2018.
Environment Agency Biowaste Treatment Sector Review Permit reviewed Variation determined EPR/LP3539DS (Billing Ref: GP3032QH)	22/10/2020	Varied and consolidated permit issued.

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 and consolidates

Permit number

EPR/LP3539DS

Issued to

Hall & Woodhouse Limited (“the operator”)

whose registered office is

**The Brewery
Blandford St Mary
Dorset
DT11 9LS**

company registration number 00057696

to operate a regulated facility at

**Water Purification Plant
The Brewery
Bournemouth Road
Blandford St Mary
Dorset
DT11 9LS**

to the extent set out in the schedules.

The notice shall take effect from 22/10/2020.

Name	Date
Louise Hann	22/10/2020

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator and 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/LP3539DS

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/LP3539DS/V003 authorising,

Hall & Woodhouse Limited (“the operator”),

whose registered office is

**The Brewery
Blandford St Mary
Dorset
DT11 9LD**

company registration number 00057696

to operate an installation at

**Water Purification Plant
The Brewery
Bournemouth Road
Blandford St Mary
Dorset
DT11 9LS**

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

Name	Date
Louise Hann	22/10/2020

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Energy efficiency

- 1.2.1 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.
- 2.1.4 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

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

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 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 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.

3.4 Noise and vibration

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

specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

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

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1 and S3.2;
- (b) process monitoring specified in table S3.3;

3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 and S3.2, unless otherwise agreed in writing by the Environment Agency.

3.6 Pests

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

3.6.2 The operator shall:

- (a) only use approved products for pest control;
- (b) treat pest infestations promptly;
- (c) 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;
- (d) 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 (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 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 reoccurrence 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.

4.4 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 and waste types
AR1	Section 5.4 Part A(1) (a) (i) 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 biological treatment.	Effluent treatment including screening, balancing, conditioning, anaerobic treatment and aeration plus the production and handling of biogas.	<p>Treatment of effluent produced from the adjacent Hall & Woodhouse brewery only and surface water from the drain adjacent to the skip room.</p> <p>From receipt of brewery process effluent and raw materials, through treatment of effluent and production of biogas, to discharge of effluent to sewer and transfer of biogas to the combined heat and power (CHP) plant, with treatment via the odour control unit (OCU) of odorous compounds prior to release to air and storage of residual wastes from screening prior to disposal off-site.</p> <p>Effluent treatment is in an enclosed building and on an impermeable surface with a sealed drainage system.</p>
Directly Associated Activity			
AR2	Storage of waste pending recovery or disposal	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)	<p>From the receipt of permitted waste to pre-treatment and despatch for anaerobic digestion on site.</p> <p>Storage of residual wastes from pre-treatment to despatch off-site for recovery.</p> <p>Storage of waste in an enclosed building fitted with appropriate odour abatement in appropriately designed containment.</p> <p>Waste types suitable for acceptance are limited to brewery effluent from the</p>

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
			adjoining Hall & Woodhouse Limited factory.
AR3	Heat and electrical power supply	Combustion of biogas in a CHP engine with a maximum thermal input of 0.3 MWth R1:Use principally as a fuel to generate energy	From the receipt of biogas produced at the on-site anaerobic digestion process to combustion with the release of combustion gases and export of heat and electricity to the adjacent Hall & Woodhouse Limited brewery. Combustion of biogas in one combined heat and power (CHP) engine with a maximum thermal input of 0.3 MWth.
AR4	Emergency flare operation	Use of the enclosed flame auxiliary flare for the safe consumption of any biogas not utilised in the CHP engine. D10: Incineration on land	From the receipt of biogas produced at the on-site anaerobic digestion process to incineration with the release of combustion gases. Use of one auxiliary flare required only during periods of breakdown or maintenance of the CHP engine.
AR5	Raw material storage	Storage of raw materials	From the receipt of raw materials to despatch for use within the facility.
AR6	Gas 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 produced from on-site anaerobic digestion of permitted waste in roof space of DACs reactor. From the receipt of biogas produced at the on-site anaerobic digestion process to despatch for use within the facility.
AR7	Air treatment (odour abatement system).	Collection and treatment of air from the process via an odour control unit (OCU) prior to release to atmosphere.	From the collection of air from the tanks into the odour abatement system and final release of treated emissions to atmosphere.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Resources (ref: B36abcd) in response to question 6 (resource efficiency and climate change) of application form Part B3.	05/08/2016
Application	Odour Management Plan (ref: B23d(i)), including the commitment to update the plan annually and review the OMP in response to any complaints.	05/08/2016
Response to Schedule 5 Notice dated 24/08/16	Technical Report (Envirogen ref: 6366 EP Supplement) dated 22 September 2016, including guidance and appendices referenced within.	05/10/2016
Additional information	Response to: - Question 1 detailing the stages of and completion criteria for commissioning. Question 2c confirming that monthly samples from the Millennium borehole (ST 88755 05725) will be monitored for ammonia, phosphate, sulphate, and suspended solids.	06/12/2016
Additional information	Monitoring (ref: B34a – EM).	13/12/2016
Additional information	Environmental Management Plan, issue 3.0 dated 12 December 2016 (ref: B23d).	16/12/2016
Application	Balance tank document Permit-V002b C22b Monitoring Document V010 C34a Environment Management Plan V004 C23d	Duly Made 07/02/2018
Response to Schedule 5 Notice dated 14/02/18	Odour abatement system design and operation.	19/03/2018
Response to Schedule 5 Notice dated 28/03/18	Response to all question relating to: Odour abatement system design and operation. Buffer tank containment design.	02/07/2018
Response to Schedule 5 Notice dated 10/07/18	All responses regarding odour abatement system operating techniques.	30/07/2018
Application (variation)	Responses to Section 3a, Part C3 – technical standards, Part B of the application form.	Duly made 31/01/2020
Response to Regulation 61 Notice dated 21/10/2019	<ul style="list-style-type: none"> Annex 1 Returns Spreadsheet Compliance and operating techniques identified in response to BAT Conclusions 1 to 8, 10 to 24 and 33 to 38 in the Waste Treatment BREF published on 17 August 2018. 	Received 31/01/2020

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>Following completion of commissioning the operator shall submit a copy of the Operations & Maintenance (O & M) Manual to the Environment Agency for inspection.</p> <p>The operator shall also make any updates to the Environmental Management System (EMS) and associated documents (emergency plans, accident plans, planned preventative maintenance), which shall be made available to the Environment Agency for inspection.</p> <p>The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.</p>	Completed
IC2	<p>The operator shall submit a report on the baseline conditions of soil and groundwater at the installation. The report shall contain information, supplementary to that already provided in the application Site Condition Report (August 2016), needed to meet the information requirements of Article 22(2) of the Industrial Emissions Directive. The notification requirements of condition 2.4.2 shall be deemed to have been complied with on submission of the report.</p>	Completed
IC3	<p>The operator shall carry out a review assessing surfacing, containment measures and subsurface structures and their potential to cause fugitive emissions to surface water and groundwater.</p> <p>The operator shall submit a written report to the Environment Agency following this review. The report shall take into account the requirements in the sections on 'emissions to water' and 'leaks from containers' in https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit</p> <p>Where improvements can be made, the report shall include timescales for agreement with the Environment Agency. The report shall also include a drainage and surfacing plan, with any updates as necessary. The notification requirements of condition 2.4.2 shall be deemed to have been complied with on submission of the report.</p>	Completed
IC4	<p>The operator shall carry out a review of the AR4 odour abatement system listed in table S1.1 in order to determine whether the system has been effective in minimising odorous emissions</p> <p>The operator shall submit a written report to the Environment Agency following this review for written approval.</p> <p>This report shall outlining the following.</p> <ul style="list-style-type: none"> • Odour monitoring results at the site boundary • At least three inlet and outlet monitoring results for all odorous compounds taken during full operation • Process operation monitoring results • Recommendations for improvement <p>Where odour is detected at the boundary of the site or other improvements can be made, the report shall include timescales for implementation of improvements to the abatement system for agreement with the Environment Agency. The operator shall implement the improvements in line with the timescales agreed with the Environment Agency.</p>	Superseded by IC 7
IC5	<p>The operator shall submit a report to the Environment Agency for written approval outlining the proposed design specification for construction of a secondary bund around the balance tank, along with time scales for construction.</p>	Construction of the secondary containment to

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	The operator shall construct the secondary bund as approved and in line with the timescales agreed by the Environment Agency	be completed by 22/10/2021
Improvement condition for progress report to achieve BAT-AELs		
IC6	<p>The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) where BAT is currently not achieved, but will be achieved before 17 August 2022. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> 1) Current performance against the BAT-AELs. 2) Methodology for reaching the BAT-AELs. 3) Associated targets /timelines for reaching compliance by 17 August 2022. 4) Any alterations to the initial plan (in progress reports). <p>The report shall address the BAT Conclusions for Waste Treatment with respect to the following:</p> <ul style="list-style-type: none"> • BAT 34 Table 6.7 (compliance with BAT-AELs for channelled NH₃ emissions to air from the biological treatment of waste) <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	<p>Progress reports at six monthly intervals from date of permit issue:</p> <p>22/04/2021</p> <p>22/10/2021</p> <p>22/04/2022</p>
Improvement condition for review of effectiveness of abatement plant		
IC7	<p>Following review of the effectiveness of the abatement plant as required in IC4, the operator shall submit a written report to the Environment Agency, which shall include:</p> <ul style="list-style-type: none"> • Records of odour complaints and odour related incidents • Details of air quality quantitative impact assessment including modelling and a proposal for site-specific “action levels” (not limited to odour concentration, hydrogen sulphide and ammonia). • Recommendations for improvement, including the replacement or upgrading the abatement plant. • Timescales for implementation of improvements identified. <p>The operator shall implement the improvements in line with the timescales as approved by the Environment Agency.</p>	<p>22/10/2021 or other date as agreed in writing with the Environment Agency</p>

Schedule 2 – Waste types, raw materials and fuels

Raw materials and fuel description	Specification
-	-

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
CHP as shown on site plan in Schedule 7	CHP engine stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	No limit set	-	Note 1	-
		Carbon monoxide	No limit set	-	-	-
Gas flare shown on site plan in Schedule 7	Emergency flare stack ^{Note 2}	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	150 mg/m ³	Average over sample period	Note 3	BS EN 14792
		Carbon monoxide	50 mg/m ³			BS EN 15058
		Total VOCs	10 mg/m ³			BS EN 12619
Odour control unit (OCU) as shown on site plan in Schedule 7	Channelled emissions from vent/stack	Hydrogen sulphide	No limit set	Average over sample period	Once every 6 months	CEN TS 13649 for sampling NIOSH 6013 for analysis
		Ammonia	20 mg/m ³ ^{Note 4}	Average over sample period		EN ISO 21877
		Odour concentration	No limit set	--		BS EN 13725
Aeration tank vent as shown on site plan in Schedule 7	Vent from aeration tank	No parameter set	No limit set	--	--	--

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
<p>Note 1: Following commissioning, the exhaust emissions as recorded on the commissioning certificate shall be submitted to the Environment Agency. The exhaust emissions as monitored and recorded on each service shall be submitted to the Environment Agency.</p> <p>Note 2 - These emission limits are based on normal operating conditions and load - temperature 0°C (273K); pressure 101.3 kPa and oxygen 3%.</p> <p>Note 3 - Following commissioning, 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.</p> <p>Note 4 – Applicable from 17 August 2022</p>						

Table S3.2 Point source emissions to sewer						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
D1 on site plan in Schedule 7 emission to Wessex Water sewer	Water purification plant	Total daily volume of discharge	530 m ³ /day	24-hour total	Continuous	Inline flow monitoring, calibrated annually
As shown on Drainage plan 0004 B25b dated 29 Jul 2016	Uncontaminated site surface water	No parameter set	No limit set	--	--	--

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Biogas from DACS reactor	Flow	Continuous	In accordance with EU weights and measures Regulations	Process monitoring to be recorded using a SCADA system where relevant.
	Methane	Continuous	None specified	Gas monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations.
Treatment tanks and pipework	Integrity checks	Weekly	Visual assessment	--
The building and the vent from the aeration tank	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary.

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Aeration tank blowers, flare stack and the CHP engine	Noise	Daily	None specified	Noise detection at the site boundary.
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	In accordance with the LDAR programme	Leak detection and repair (LDAR) programme in accordance with permit condition 3.2.4.
Meteorological conditions	Wind speed, air temperature, wind direction	Continuous	Method as specified in management system	Conditions to be recorded in operational diary and records. Equipment shall be calibrated on a 4 monthly basis, in accordance with manufacturer's recommendations or as agreed in writing by the Environment Agency.
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.
Pressure relief valves	Biogas release and operational events	Weekly.	Recorded duration and frequency.	Operational record including date, time duration of pressure relief events and calculated annual mass release. Pressure relief valves to be re-seated after release.
Water purification plant emission to Wessex Water sewer	Suspended solids	Daily	SOP OP-WPP-002	-
	COD	Continuous	Online sampler	-
	Temperature			

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
	pH			
Odour control unit	Gas temperature – inlet and outlet	Daily	Temperature probe / Traceable to national standards	Odour abatement plant shall be regularly checked and maintained to ensure appropriate temperature and moisture content.
	Biofilter media moisture	Daily	Moisture meter or as agreed with the Environment Agency	
	Thatching /compaction	Weekly	As agreed with the Environment Agency	Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan and manufacturer's recommendations.
	Gas flow rate – inlet and outlet	Continuous	Gas flow meter / EN 16911-1 and MID for EN 16911-1	
	pH (biofilter drainage effluent)	Daily	pH metre	
	Efficiency assessment	Annual	Media health, air-flow distribution and emission removal efficiency (BS EN 13725 for odour removal)	Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.
	Hydrogen sulphide – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	CEN TS 13649 for sampling NIOSH 6013 for analysis	Action levels to be agreed on completion of IC7 as approved in writing by the Environment Agency.
Ammonia – inlet	Every 6 months or as agreed in writing by the	EN ISO 21877	Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.	
				Action levels to be agreed on completion of IC7

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
		Environment Agency.		as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Odour concentration – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	BS EN 13725	Action levels to be agreed on completion of IC7 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	Odour control unit	Every 6 months Note 1	1 January
	CHP	Annually Note 2	1 January
	Gas flare	Annually Note 3	1 January
Process monitoring Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3	Every 12 months	1 January
Emissions to sewer Parameters required by condition 3.5.1	D1	Every 6 months	1 January, 1 July
Total annual VOCs emissions from gas engines (calculated)	As specified in schedule 3 table S3.3	Every 12 months	1 January
<p>Note 1 – applicable from 17th August 2022</p> <p>Note 2: Following commissioning, the exhaust emissions as recorded on the commissioning certificate shall be submitted to the Environment Agency. The exhaust emissions as monitored and recorded on each service shall be submitted to the Environment Agency.</p> <p>Note 3 - Following commissioning, 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.</p>			

Table S4.2 Annual production/treatment	
Parameter	Units
Biogas production	m ³

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes or m ³
Energy usage	Annually	MWh
Raw material usage	Annually	tonnes or m ³
Emergency flare operation	Annually	hours
Electricity exported	Annually	MWh
CHP engine usage	Annually	hours

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	22/10/2020
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	22/10/2020
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	21/12/2016
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	21/12/2016
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	21/12/2016
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	21/12/2016

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 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.

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

“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.

“Best available techniques” means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole:

(a) ‘techniques’ includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;

(b) ‘available techniques’ means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;

(c) ‘best’ means most effective in achieving a high general level of protection of the environment as a whole.

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

“Capacity” means the potential capacity and not historical or actual production levels or throughput. This means that the designed capacity is the maximum rate at which the site can operate. Biological treatment of waste usually takes place over more than one day, so the physical daily capacity can be calculated by dividing the maximum quantity of waste that could be subject to biological treatment at any one time by the minimum residence time. For in-vessel composting, the residence time for sanitisation should be calculated separately and then aggregated to the complete composting time.

“channelled emissions” means the emissions of pollutants into the environment through any kind of duct, pipe, stack, etc. This also includes emissions from open top biofilters.

“combined heat and power” (CHP) or Cogeneration means the simultaneous generation in one process of thermal energy and electrical or mechanical energy.

“diffuse emissions” mean non-channelled emissions (e.g. of dust, organic compounds, odour) which can result in ‘area’ sources (e.g. tanks) or ‘point’ sources (e.g. pipe flanges). This also includes emissions from open-air windrow composting.

“disposal” means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

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

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 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.

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

“impermeable surface” means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface.

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

“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.

“operational area” means any part of a facility used for the handling, storing and treatment of waste.

“operator” means in relation to a regulated facility:

- (a) the person who has control over the operation of the regulated facility,
- (b) if the regulated facility has not yet been put into operation, the person who will have control over the regulated facility when it is put into operation, or
- (c) if a regulated facility authorised by an environmental permit ceases to be in operation, the person who holds the environmental permit

“pests” means Birds, Vermin and Insects.

“pollution” means emissions as a result of human activity which may—

- (a) be harmful to human health or the quality of the environment,
- (b) cause offence to a human sense,
- (c) result in damage to material property, or
- (d) impair or interfere with amenities and other legitimate uses of the environment.

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

“recovery” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“sealed drainage system” in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

- no liquids will run off the surface otherwise than via the system
- all liquids entering the system are collected in a sealed sump, except where liquids may be lawfully discharged to foul sewer.

“VOC” means Volatile organic compounds as defined in Article 3(45) of Directive 2010/75/EU – ‘volatile organic compound’ means any organic compound as well as the fraction of creosote, having at 293.15K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

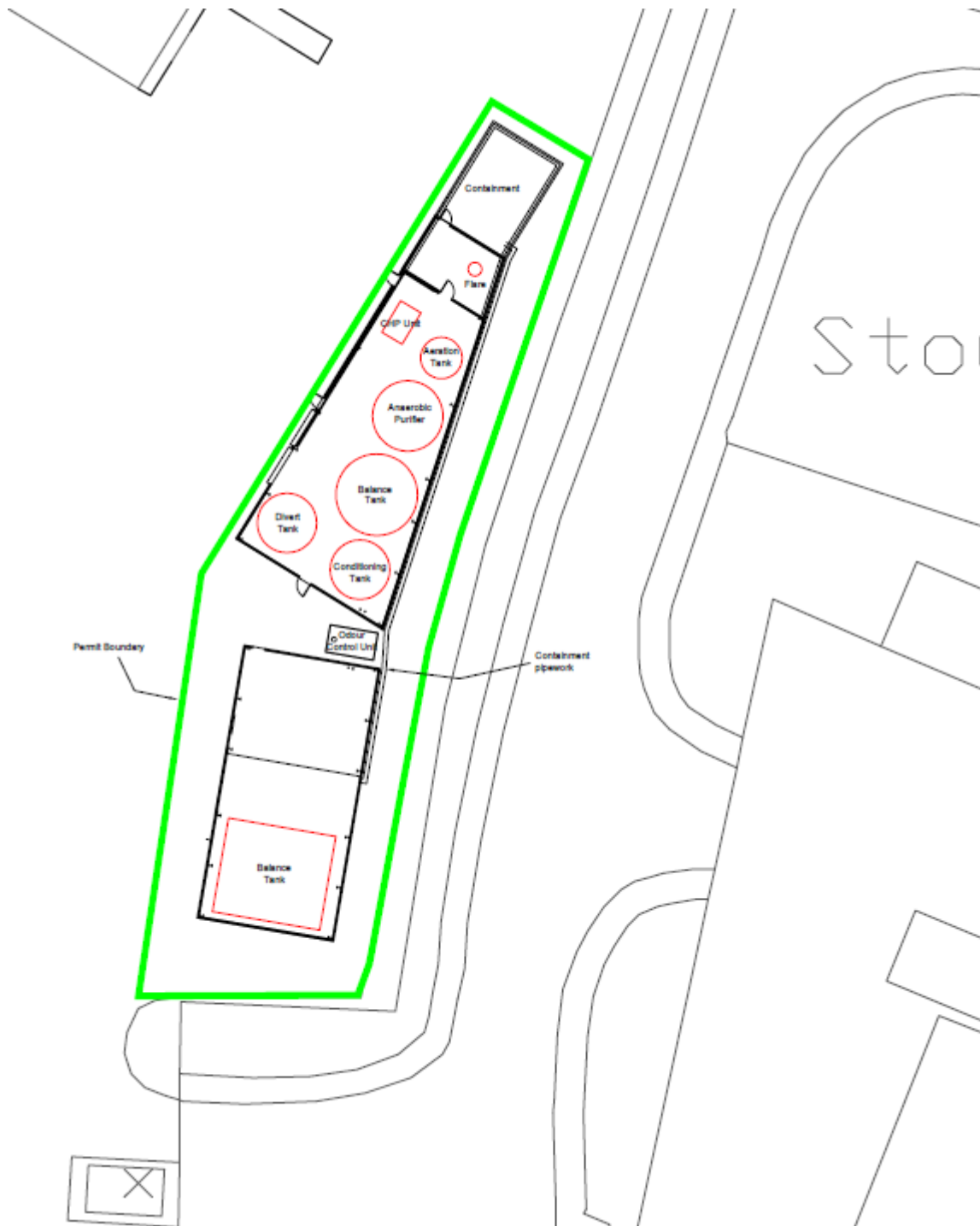
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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 fuels and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT