

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Hovis Limited

Forest Gate Bakery
16 Chaucer Road
Forest gate
London
E7 9NA

Variation application number

EPR/VP3732VD/V002

Permit number

EPR/VP3732VD

Forest Gate Bakery

Permit number EPR/VP3732VD

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.

The schedules specify the changes made to the permit.

The Hovis site at Chaucer Road, Forest Gate, London, E7 produces primarily Hovis branded 800g bread loaves on two production lines (referred to as 30 sack and 50 sack). Both production lines operate for 152 hours per week and produce in total approximately 2 million loaves per week.

Raw materials include flour, yeast, vinegar and food grade vegetable oils, which are delivered and stored on site in bulk. Other raw materials used on site include product ingredients such as flour improvers, seeds, (mains) water and other additives, as well as packaging, cleaning materials, maintenance and auxiliary materials.

Bread manufacturing is undertaken on site 24 hours per day, 7 days per week. Ingredients including flour, vinegar, yeast, salt and other additives are sieved and weighed according to the recipe specifications and then mixed with water to form a dough. A mechanical stirrer mixes the ingredients before transferring to a hopper along with divider oil, which prevents the dough sticking. The dough is cut and weighed into identical balls, rested and moulded before being deposited into an oiled bread tin.

The dough is transferred to a prover where yeast action causes the dough to rise and then the conveyor passes the bread on to the ovens where the bread is baked. Within the provers and ovens, direct natural gas-fired burners are used to maintain the required temperature. The 50s prover is heated via hot water coil fed from the boilers. Where required, steam from natural gas-fired steam raising boilers is added to maintain the required humidity.

After baking, loaves are depanned from their tins using a compressed air knife which loosens the bread and suction cups which lift the loaves out of the tins. The hot loaves are transferred to coolers to be cooled before slicing and packing in plastic bags and then reusable plastic bread baskets. The process is fully automated with a conveyor system that continually moves the dough / loaves through each stage in the production line.

All waste water from the site, including process effluent, domestic effluent and surface water run-off is discharged to Thames Water combined sewer via emission points S1-S7.

Emissions to air arise from 3 x 0.746 MWth natural gas boilers (A1 – A3). Along with stacks arising from provers and ovens serving the 30 sack line (A5 – A12) basket wash heater (A13), prover and oven exhausts for the 50 sack line (A19 – A25)

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 BR4888IF	Received 10/04/2002	Application for a bakery/breadmaking site
Response to request for information	Request date 28/06/2002	Response dated 07/10/2002
Permit determined BR4888IF	20/12/2002	
Variation application ZP3430BA	Received 31/08/2004	
Variation notice ZP3430BA	Effective from 20/10/2006	
Agency initiated variation EA/EPR/BR4888IF/V003	Effective from 15/10/2008	
Application EPR/VP3732VD /T001 (full transfer of permit EPR/BR4888IF	Duly made 23/06/2014	Application to transfer the permit in full to Hovis Limited
Transfer determined EPR/VP3732VD/T001	31/07/2014	Full transfer of permit complete
Application EPR/VP3732VD/V002 (variation and consolidation)	Regulation 61 Notice response received 31/10/2024	Environment Agency initiated variation and consolidation following the Food, Drink & Milk Industries sector permit review.
Additional information received	22/11/2024	Copy of original site condition report
Variation determined and consolidation issued EPR/VP3732VD	23/12/2024	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/VP3732VD

Issued to

Hovis Limited (“the Operator”)

whose registered office is

**The Lord Rank Centre
Lincoln Road
High Wycombe
Buckinghamshire
HP12 3QS**

company registration number 08846838

to operate a regulated facility at

**Forest Gate Bakery
16 Chaucer Road
Forest gate
London
E7 9NA**

to the extent set out in the schedules.

The notice shall take effect from 23/12/2024

Name	Date
Denise Horton	23/12/2024

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/VP3732VD

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/VP3732VD/V002 authorising,

Hovis Limited (“the Operator”),

whose registered office is

The Lord Rank Centre

Lincoln Road

High Wycombe

Buckinghamshire

HP12 3QS

company registration number 08846838

to operate an installation at

Forest Gate Bakery

16 Chaucer Road

Forest gate

London

E7 9NA

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

Name	Date
Denise Horton	23/12/2024

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”).

2.2 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.

3.2 Emissions of substances not controlled by emission limits

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

3.3 Odour

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

3.4 Noise and vibration

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

3.5 Monitoring

- 3.5.1 The Operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1, S3.2 and 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, S3.2 and S3.3 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 Where the Environment Agency has requested in writing that it shall be notified when the Operator is to undertake monitoring and/or spot sampling, the Operator shall inform the Environment Agency

when the relevant monitoring and/or spot sampling is to take place. The Operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the Operator is a registered company:

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

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

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

In any other case:

- (a) the death of any of the named Operators (where the Operator consists of more than one named individual);
- (b) any change in the Operator's name(s) or address(es); and
- (c) any steps taken with a view to the Operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the Operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.3.6 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.

4.4 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	Limits of specified activity
AR1	Section 6.8 Part A1 (d) (ii)	Treating and processing materials intended for the production of food products from vegetable raw materials at a plant with a finished product production capacity of more than 300 tonnes per day – manufacture of bread	From receipt of raw materials to production of finished product including storage and dispatch offsite. Production capacity is limited to 319 tonnes per day.
Directly Associated Activity			
AR2	Steam and heat supply	Combustion plant: 3 x 0.746MWth natural gas fired boilers 0.2MWth natural gas prover burner 1.2MWth natural has oven burner 3 x 0.6MWth natural gas oven burners 0.293MWth natural gas basket wash heater 4 x 1.2MWth natural gas oven burners	From receipt of fuel to release of products of combustion to air.
AR3	Raw material storage and handling	Storage and handling of raw materials at the installation	From receipt of raw materials to dispatch of final product.
AR4	Use of refrigerants	Use of refrigerants in cooling, chilling and/or freezing systems at the installation.	From receipt of raw materials to dispatch of final product.
AR5	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.
AR6	Waste storage and handling	Storage and handling of waste materials	From generation of waste to storage pending removal for disposal or recovery.
AR7	Surface water and effluent discharge to foul sewer	Collection of process effluent and site surface waters	Handling and storage of process water and surface waters to the foul drainage system.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to question 2.1 given in section 2.1 (pages 10-14) of the application (Excluding reference to the pancake line)	10/04/2002
Application	The response to question 2.3 given in section 2.3 (pages 27-51) of the application (excluding reference to the pancake line)	10/04/2002
Regulation 61 (1) Notice – Responses to questions dated 04/10/2022	All parts	Received 31/10/2024
Regulation 61 (1) Notice – Noise Management Plan	Noise Management Plan – Forest Gate dated 30/10/2024	Received 31/10/2024

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC7	<p>The operator shall submit, for approval by the Environment Agency, a report demonstrating achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT is currently not demonstrated or achieved. The report shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • Methodology applied for achieving BAT • Demonstrating that BAT has been achieved. <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 6a Energy Efficiency Plan</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	31/03/2025 or as agreed in writing by the Environment Agency
IC8	<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 produce a plan for the onsite refrigerant system(s) at the installation. The plan is to be assessed by the Environment Agency and shall be incorporated within the existing environmental management system.</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. 	31/03/2025 or as agreed in writing by the Environment Agency

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC9	<p>The operator shall confirm, achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT is currently not demonstrated or achieved with respect to BATc 11</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p> <p>The Operator shall undertake a survey of the waste water buffer storage at the site and review measures against relevant standard including:</p> <p>The operator shall submit a written report that meets the Narrative BAT requirements for the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 11, to the Environment Agency for approval, outlining the results of the survey and the review of feasibility of options and provide details of:</p> <ul style="list-style-type: none"> • current containment measures • improvements proposed • time scale for implementation of improvements. <p>The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency.</p>	31/03/2025 or as agreed in writing by the Environment Agency
IC10	<p>The Operator shall submit a written report to the Environment Agency for technical assessment and approval on the feasibility of installing effluent treatment and include a review of treatment options available along with their associated benefits. Justification is required where no on-site treatment is provided, taking into account the nature of the wastewater and any subsequent off-site treatment. In addition, the report needs to consider the appropriate on-site monitoring of the effluent stream prior to disposal. With regard to (BAT 3 and 12 of the Best Available Techniques Reference Document and BAT Conclusions document for the food, drink and milk industry dated December 2019).</p>	12 months from date of issue or as agreed in writing by the Environment Agency

Schedule 2 – Waste types, raw materials and fuels

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

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in Schedule 7]	0.746 MWth boiler fired on natural gas	No parameters set	No limit set	--	--	--
A2 [Point A2 on site plan in Schedule 7]	0.746 MWth boiler fired on natural gas	No parameters set	No limit set	--	--	--
A3 [Point A3 on site plan in Schedule 7]	0.746 MWth boiler fired on natural gas	No parameters set	No limit set	--	--	--
A5 [Point A5 on site plan in Schedule 7]	30 sack 0.2MWth natural gas prover burner	No parameters set	No limit set	--	--	--
30 Sac Oven release point A8 on site plan in Schedule 7	30 sack 1.2 MWth natural gas oven burner 1	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	0.8kg/hr note 1	Averaged over a minimum period of 1 hour	Every 6 months	EN 14792
30 Sac Oven release point A9 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 2					
30 Sac Oven release point 10 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 3					
30 Sac Oven release point a11 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 4					
30 Sac Oven release point A8 on site plan in Schedule 7	30 sack 1.2 MWth natural gas	Carbon Monoxide	10kg/hr note 1	Averaged over a minimum	Every 6 months	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
	oven burner 1			period of 1 hour		
30 Sac Oven release point A9 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 2					
30 Sac Oven release point 10 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 3					
30 Sac Oven release point a11 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 4					
30 Sac Oven release point A8 on site plan in Schedule 7	30 sack 1.2 MWth natural gas oven burner 1	Volatile Organic Compounds (as carbon)	10kg/hr note 1	Averaged over a minimum period of 1 hour	Every 6 months	EN 12619
30 Sac Oven release point A9 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 2					
30 Sac Oven release point 10 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 3					
30 Sac Oven release point a11 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 4					
30 Sac Oven release point A8 on site plan in Schedule 7	30 sack 1.2 MWth natural gas					

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
	oven burner 1			period of 1 hour		team for the test method
30 Sac Oven release point A9 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 2					
30 Sac Oven release point 10 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 3					
30 Sac Oven release point a11 on site plan in Schedule 7	30 sack 0.6 MWth natural gas oven burner 4					
A12 [Point A12 on site plan in Schedule 7]	30 sack cooler / air extraction	No parameters set	No limit set	--	--	--
A13 [Point A13 on site plan in Schedule 7]	0.293 MWth Basket wash heater	No parameters set	No limit set	--	--	--
A19 [Point A19 on site plan in Schedule 7]	50 sack Sack oven extraction	No parameters set	No limit set	--	--	--
50 Sac Oven Release point A20 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 1	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	2kg/hr ^[Note 1]	Average over a minimum period of 1 hour	Every 6 months	MCERTS BS EN 14792
50 Sac Oven Release point A21 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 2					
50 Sac Oven Release point A22 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 3					

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
50 Sac Oven Release point A23 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 4					
50 Sac Oven Release point A20	50 sack 1.2MWth natural gas oven burners 1	Carbon monoxide	6kg/hr ^[Note 1]	Average over a minimum period of 1 hour	Every 6 months	MCERTS BS EN 15058
50 Sac Oven Release point A21 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 2					
50 Sac Oven Release point A22 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 3					
50 Sac Oven Release point A23 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 4					
50 Sac Oven Release point A20 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 1					
50 Sac Oven Release point A21 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 2	Volatile Organic Compounds (as carbon)	15kg/hr ^[Note 1]	Average over a minimum period of 1 hour	Every 6 months	EN 12619
50 Sac Oven Release point A22 on site plan in Schedule 7	50 sack 1.2MWth natural gas					

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
	oven burners 3					
50 Sac Oven Release point A23 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 4					
50 Sac Oven Release point A20 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 1	Sulphur dioxide	No limit set	--	--	--
50 Sac Oven Release point A21 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 2					
50 Sac Oven Release point A22 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 3					
50 Sac Oven Release point A23 on site plan in Schedule 7	50 sack 1.2MWth natural gas oven burners 4					
A24 [Point A24 on site plan in Schedule 7]	50 sack oven hood extraction					
A25 [Point A25 on site plan in Schedule 7]	50 sack prover air extraction	No parameters set	No limit set	--	--	--

Note 1: Limit is for the aggregated emissions from the oven and not individual exhausts

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site–emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 [Point S1 on site plan in schedule 7] emission to Thames Water Beckton Sewage Treatment Works	Untreated process effluent, surface water run off and domestic effluent	No parameters Set	No limit set	--	--	--
S2 [Point S2 on site plan in schedule 7] emission to Thames Water Beckton Sewage Treatment Works	Untreated process effluent and surface water run off	No parameters Set	No limit set	--	--	--
S3 [Point S3 on site plan in schedule 7] emission to Thames Water Beckton Sewage Treatment Works	Untreated process effluent	No parameters Set	No limit set	--	--	--
S4 [Point S4 on site plan in schedule 7] emission to Thames Water Beckton Sewage Treatment Works	Untreated process effluent	No parameters Set	No limit set	--	--	--
S5 [Point S5 on site plan in schedule 7] emission to Thames Water Beckton Sewage Treatment Works	Untreated process effluent and surface water run off	No parameters Set	No limit set	--	--	--
S6 [Point S6 on site plan in schedule 7] emission to Thames Water Beckton Sewage Treatment Works	Surface water run off	No parameters Set	No limit set	--	--	--
S7 [Point S7 on site plan in schedule 7] emission to Thames Water	Surface water run off	No parameters Set	No limit set	--	--	--

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site—emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
Beckton Sewage Treatment Works						

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	A8 – A11 A20 – A23	Every 6 months	1 January

Table S4.2: Annual production/treatment	
Parameter	Units
Total product produced.	tonnes

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	m ³
Energy usage	Annually	MWh
Waste	Annually	tonnes
COD loss efficiency	Annually*	COD te/te product
Food waste	Annually	Tonnes

*COD efficiency to be calculated on a weekly frequency, reported annually or equivalent calculation as agreed in writing by the Environment Agency

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
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.

“average over the sampling period” means the average value of three consecutive measurements of at least 30 minutes each, unless otherwise stated, as defined in the General Considerations section of the Food, Drink & Milk Industries BAT Conclusions.

“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.

“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.

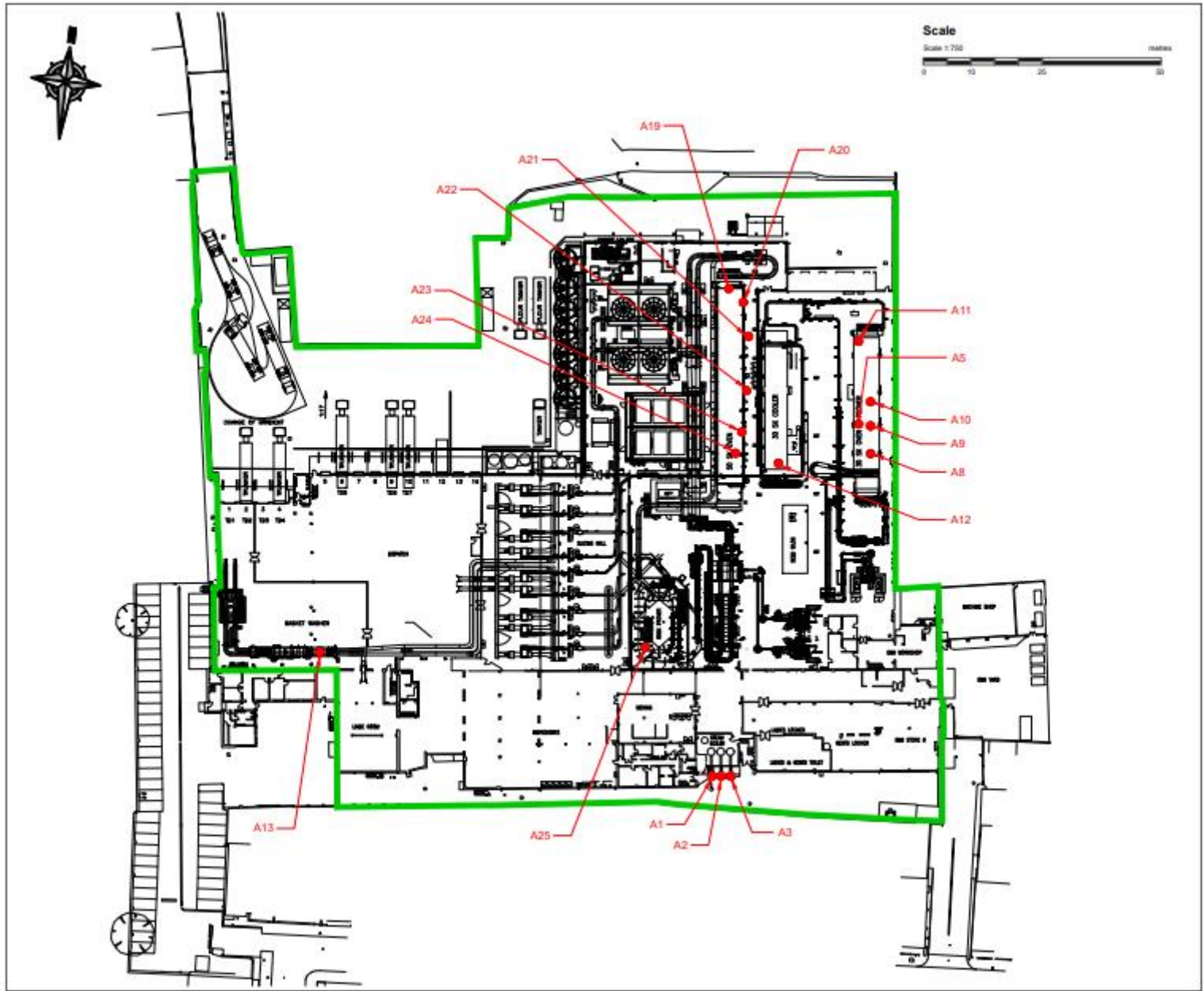
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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 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



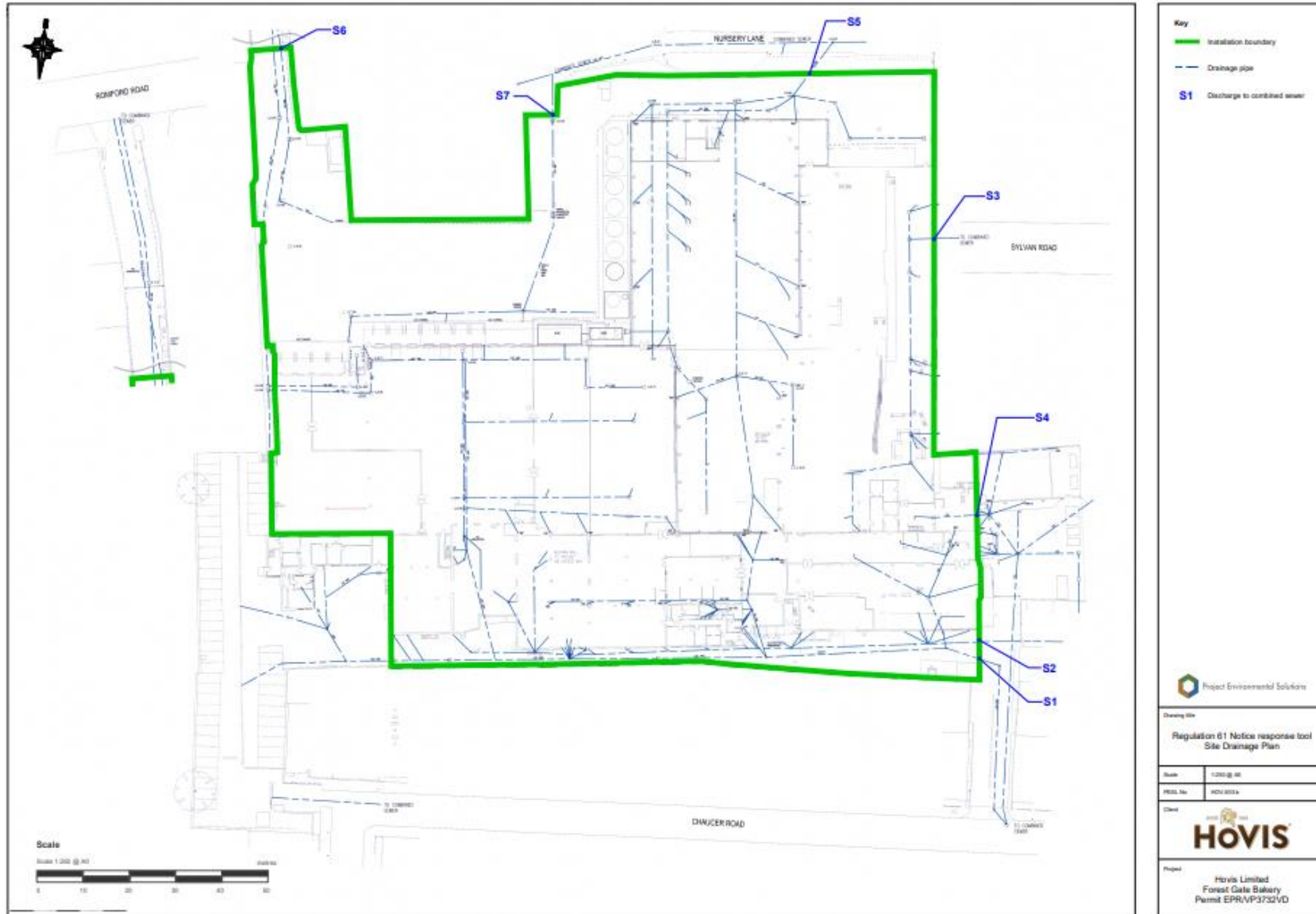
Key

- Installation boundary
- Emission point to air

Project Environmental Solutions

Drawing title
Regulation 61 Notice response for
Site plan showing
emission points to air

Scale	1:750 @ A3
PCS No.	HOV 933.a
Client	HOVIS
Project	Hovis Limited Forest Gate Bakery Permit EPR/VP3732VD



END OF PERMIT

Permit number
EPR/VP3732VD

Emissions to Air Reporting Form

Permit number: EPR/VP3732VD

Operator: Hovis Limited

Facility name: Forest Gate Bakery

Emissions to Air Reporting Form: version 1, 08/03/2021

Reporting of emissions to air for the period from [DD/MM/YY] to [DD/MM/YY]

Emission point	Substance / parameter	Emission Limit Value	Reference period	Test method ¹	Result ²	Sample dates and times ³	Uncertainty ⁴
<i>[e.g. A1]</i>	<i>[e.g. Oxides of nitrogen (NO and NO₂ expressed as NO₂)]</i>	<i>[e.g. 200 mg/m³]</i>	<i>[e.g. daily average]</i>	<i>[e.g. BS EN 14181]</i>	<i>[State result]</i>	<i>[State relevant dates and time periods]</i>	<i>[State uncertainty if not 95% confidence interval]</i>

Signed: [Name]

Date: [DD/MM/YY]

(Authorised to sign as representative of the Operator)

Guidance for use: Use this form to report your monitoring results.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Complete columns 1 to 5 using the information from schedule 3 of your permit. Complete columns 6 to 8 with your monitoring data. Add additional rows as necessary.

- ¹ Where an internationally recognised standard test method is used, give the reference number. Where another method that has been formally agreed with the Environment Agency, give the appropriate identifier. In other cases state the principal technique, for example gas chromatography.
- ² Give the result as the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, give the result as the 'minimum to maximum' of the measured values.
- ³ For non-continuous measurements give the date and time of the sample that produced the result. For continuous measurements give the percentage of the process operating time covered by the result.
- ⁴ Complete if the uncertainty associated with the result is not a 95% confidence interval. Leave blank for 95% confidence intervals.

Water Usage Reporting Form

Permit number: EPR/VP3732VD

Operator: Hovis Limited

Facility name: Forest Gate Bakery

Water Usage Reporting Form: version 1, 08/03/2021

Reporting of water usage for the year [YYYY]

Water source	Water usage (m ³)	Specific water usage (m ³ /tonne of product) ²
Mains water	<i>[insert annual usage in m³ where mains water is used]</i>	Not Applicable
Site borehole	<i>[insert annual usage in m³ where water is used from a site borehole]</i>	Not Applicable
River abstraction	<i>[insert annual usage in m³ where abstracted river water is used]</i>	Not Applicable
Other – <i>[specify other water source where applicable]. Add extra rows where needed]</i>	<i>[insert annual usage in m³ where applicable]</i>	Not Applicable
Total water usage	<i>[insert total annual water usage in m³]</i>	<i>[insert total water use per tonne of product produced m³/t]</i>

Operator's comments

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Operator's comments

Signed: *[Name]*

Date: *[DD/MM/YY]*

(Authorised to sign as representative of the Operator)

Guidance for use: Use this form to report your annual water usage.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Add additional rows as necessary.

Energy Usage Reporting Form

Permit number: EPR/VP3732VD

Operator: Hovis Limited

Facility name: Forest gate Bakery

Energy Usage Reporting Form: version 1, 08/03/2021

Reporting of energy usage for the year [YYYY]

Energy source	Energy consumption / production (MWh)	Specific energy consumption (MWh/tonne of product) ²
Total	<i>[insert total energy use in MWh]</i>	<i>[insert total energy use per tonne of product MWh/tonne of product]</i>

Operator's comments

Signed: *[Name]*

Date: *[DD/MM/YY]*

(Authorised to sign as representative of the Operator)

Guidance for use: Use this form to report your annual energy usage.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Add additional rows as necessary.

¹ Multiply delivered electricity by 2.4 to convert to primary energy where the electricity is supplied from the national grid. If the electricity is supplied from another source, specify the conversion factor used. Add additional rows as needed if electricity is imported from multiple sources.

² Divide energy consumption by an appropriate unit of raw material processed or product output.

Food Waste Reporting Form

Permit number: **EPR/VP3732VD**

Operator: **Hovis Limited**

Facility name: **Forest Gate Bakery**

Food Waste Reporting Form: version 1, 06/02/2023

Reporting of food waste for the period from *[DD/MM/YY]* to *[DD/MM/YY]*

Overall food waste (tonnes)	
Food waste as % of product	
Food waste disposal routes	<i>As specified below</i>

Source	Tonnage
Redistribution for human consumption	
Animal feed	
Bio-based materials/biochemical processing (e.g. feedstock for other industrial products)	
Anaerobic digestion/codigestion	
Composting/aerobic processes	
Incineration/controlled combustion	

Land application	
Landfill	
Sewer/wastewater treatment (e.g. as COD)	
Other (Please specify)	

Signed: [Name]

Date: [DD/MM/YY]

(Authorised to sign as representative of the Operator)

Guidance for use: Use this form to report your food waste metrics.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information.

Rationale: Avoidance of food waste is a key issue for the sector, both nationally and globally, and is subject to a United Nations Sustainable Development Goal: SDG 12.3: “By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses”.

This complements Defra’s Food and drink waste hierarchy: deal with surplus and waste - GOV.UK (www.gov.uk) and WRAP’s Target Measure Act Initiative.

Reporting of food waste should be to a set methodology such as the global Food Loss and Waste Accounting and Reporting Standard (FLW standard).

Other Performance Parameters Reporting Form

Permit number: EPR/VP3732VD

Operator: Hovis Limited

Facility name: Foret Gate Bakery
08/03/2021

Other Performance Parameters Reporting Form: version 1,

Reporting of other performance parameters for the period from *[DD/MM/YY]* to *[DD/MM/YY]*

Parameter	Units
<i>[e.g. Total raw material usage]</i>	<i>[e.g. tonnes per production unit]</i>

Operator's comments

Operator's comments

Signed: *[Name]*

Date: *[DD/MM/YY]*

(Authorised to sign as representative of the Operator)

Guidance for use: Use this form to report the performance parameters (other than water and energy) required by your permit. Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. The parameters to report and units to be used can be found in the 'Performance parameters' table in schedule 4 of your permit. Add additional rows as necessary.