

Permitting decisions

Bespoke permit

We have decided to grant the permit for Charnwood Bakery operated by Samworth Brothers Limited.

The permit number is EPR/ZP3039WB/A001.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken in to account.

This decision document provides a record of the decision making process. It:

- highlights [key issues](#) in the determination
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account
- shows how we have considered the [consultation responses](#).

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

Key issues of the decision

The determination of the application raised several key issues, as follows:

- The Industrial Emissions Directive
- Air quality assessment
- Improvement conditions

1. The Industrial Emissions Directive

The Industrial Emissions Directive (IED) was transposed in England and Wales by the Environmental Permitting (England and Wales) (Amendment) Regulations 2013 on 27 February 2013. This application implements the changes brought about by the IED for “existing facilities operating newly prescribed activities” and completes the transition of this to an IED Installation.

2. Air quality assessment

The site is an existing food production operation and should be noted that the assessed impact to air quality is the modelled existing situation. There is no change or increase in emissions permitted as a result of this new permit. The operator’s air quality assessment addresses the air quality impacts from four of its permit applications due to the geographical proximity of three of the sites. For the purposes of the permit application at Charnwood Bakery, emissions have been grouped with the nearby Bradgate Bakery (subject to a separate permit application, EPR/CP3430WV/A001). The sites are separate legal entities, however, they are geographically very close. Charnwood Bakery is adjacent to the Madeline Road site and approximately 450m from the Ashton Green site (Ashton Green and Madeline Road are technically connected and are classed as Bradgate Bakery). The air dispersion modelling report classifies emissions from these sites as Study Area 1.

The air dispersion modelling highlighted 14 sensitive receptors (No. 1 – 14) in Study Area 1. These consist of residential properties and schools. These are defined as relevant sensitive receptors under the Ambient Air Directive (AAD) and London Local Air Quality Management Technical Guidance (LLAQM TG16).

Sources of combustion will produce the following pollutants; nitrogen dioxide and carbon monoxide. In addition, combustion sources involved in the cooking of food (ovens at Charnwood Bakery) may result in the emission of volatile organic compounds (VOC). The operator has not undertaken modelling of the pollutant as they do not yet have representative VOC monitoring data from their relevant emission points. An improvement condition is included in the permit requiring the operator to undertake this monitoring. See section on improvement conditions for more information (section 3 below).

Assessment of emissions criteria

The Environment Agency considers emissions to be insignificant if process contributions (PC) are:

- Less than 1% of the environmental standard for long term PCs; and
- Less than 10% of the environmental standard for short term PCs.

Where the PC is above the insignificance threshold, but the predicted environmental concentration (PEC) (sum of PC and the pollutant background concentration) is below the relevant environmental standard the impact from air quality can be considered to be not significant and no further action needs to be taken.

Nitrogen dioxide (NO₂)

The relevant environmental standard for NO₂ are as follows:

- Long term (annual average) – 40 µg/m³
- Short term (1 hour average) – 200 µg/m³

The operator's modelling predicts relatively high PCs for both long and short term emissions at human receptors (No.3 – Primary School Sports Field & No.6 – residences at Lords Avenue). The receptors that have the highest concentrations have been used.

Table 1 Maximum process contributions – NO₂

Study Area	PC short term (µg/m ³)	% of environmental standard	PC long term (µg/m ³)	% of environmental standard
1	29 ¹	14.5 ¹	2.8 ²	7 ²

¹ Highest concentration for short term emissions is at receptor No.3

² Highest concentration for long term emission is at receptor No.6

Table 2 Maximum PECs Long term emissions – NO₂

Study Area	Background concentration (µg/m ³)	PC long term (µg/m ³)	PEC (µg/m ³)	PEC % of environmental standard
1 (Receptor No.6)	22.7	2.8	25.5	63.75

Table 3 Maximum PECs short term emissions – NO₂

Study Area	Background concentration (µg/m ³)	PC short term (µg/m ³)	PEC (µg/m ³)	PEC % of environmental standard
1 (Receptor No.3)	45.4	29	74.4	37.2

The operator's modelling does not acknowledge that the PCs for both long and short term emissions exceed the insignificance threshold. However, the operator's modelling does show that the PEC of the operations do not exceed the relevant environmental standard due to the relatively low background concentrations of NO₂. We can therefore conclude that there is a sufficient enough headroom for the risk from NO₂ at human receptors to be considered low.

Carbon monoxide (CO)

The relevant environmental standard for CO are as follows:

- Short term (8 hour running average across a 24 hour period) – 10 mg/m³
- There is no long term environmental standard for CO

The operator's modelling predicts low PCs for short term emissions of CO at human receptors (maximum impact is predicted at receptor No.3 – sports playing field at Beaumont Lodge).

Table 4 Maximum process contributions – CO

Study Area	PC short term (mg/m ³)	% of environmental standard
1	0.4	4

The operator's predicted results show that only a 4% impact of the environmental standard may occur at the sensitive receptor with greatest impact. This process contribution can be considered insignificant and no further assessment is required.

Ecological assessment

The thermal input of the facility is 11.66MW. Where a thermal input is <20MW, the screening distance for ecological assessment is set at 500m from the facility. This is based on the Environment Agency's guidance, AQTAG14. Only one ecological receptor is located within 500m of the site, *Ashton Green* Local Wildlife Site (LWS).

Ashford Green LWS was not included within the operator's modelling assessment for NO_x emissions, nitrogen and acid deposition. However, during the Environment Agency's audit of the modelling and our check modelling shows that no exceedances of the environmental standard were predicted at any ecological site.

Environment Agency audit

We undertook an audit of the operator's modelling due to a level of inconsistency found within the modelling methodology. Our check modelling, while producing different results to the operator's model, provided the same conclusions. The PCs are not insignificant at some receptors but exceedances of the environmental standard for NO₂ are unlikely due to the low background.

3. Improvement conditions

The permit contains improvement conditions which the operator must complete within the specified timescales given in the permit. Improvement conditions have been set to address the remaining deficiencies within aspects of the operator's proposals. As a newly prescribed operation under the IED, improvement conditions are necessary to enable the operator to meet the requirements of the relevant Best Available Techniques. There are 6 improvement conditions which require the operator to address issue including odour, noise, accident management, air emissions and sewer emissions. The site is currently in full operation and setting of these requirements does not increase the environmental risk posed by the site operations.

Odour

An odour management plan was submitted to the Environment Agency under a request for further information. The submitted document was not acceptable in line with our odour guidance. As a newly prescribed activity under the IED, we have included an improvement condition to provide the operator an opportunity to upgrade their odour management plan to meet the requirements of the following Environment Agency guidance documents:

- *Horizontal Guidance H4 – Odour Management*, and;
- *How to comply with your environmental permit. Additional guidance for: The Food and Drink Sector (EPR 6.10)*.

Samworth Brothers Limited are currently operating and the granting of this permit will not increase the risk of odour from the site.

Noise

A noise survey was submitted to the Environment Agency under a request for further information for a noise management plan. The submitted document was not acceptable in line with our noise guidance. As a newly prescribed activity under the IED, we have included an improvement condition to provide the operator an

opportunity to upgrade their noise survey into a noise management plan to meet the requirements of the following Environment Agency guidance documents:

- Section 3 of *Horizontal Guidance H3 – Noise Assessment and Control*.

Samworth Brothers Limited are currently operating and the granting of this permit will not increase the risk of noise from the site.

Accidents

An accident management plan was submitted to the Environment Agency under a request for further information. The submitted document was not acceptable in line with our guidance. As a newly prescribed activity under the IED, we have included an improvement condition to provide the operator an opportunity to upgrade their accident management plan to meet the requirements of the following Environment Agency guidance documents:

- *Accident prevention and management plan* as specified in the Environment Agency's web guidance, *Develop a management system: environmental permits*.
- *How to comply with your environmental permit. Additional guidance for: The Food and Drink Sector (EPR 6.10)*.

Samworth Brothers Limited are currently operating and the granting of this permit will not increase the environmental risk from the site.

Air quality

The operator's air quality modelling assessment used independent monitoring data from each of their point source combustion emissions. We audited the suite of monitoring data used for the model and we concluded that the data collected was not representative, for example, the test time for the emission points was 4 minutes. The minimum test time should be 30 minutes in line with the MCERTS standard (Environment Agency's Monitoring Certification Scheme). While this has implications on the existing modelling results (described in section 2 above), we can conclude that due to the low background concentrations of NO₂, exceedances of the environmental standard is unlikely. There will be no increased risk of air pollution as a result of this permit. However, in order to gather evidence which reaffirms the above, we have imposed improvement conditions 4 and 5.

IC4 requires the operator to conduct a representative round of monitoring exercises to MCERTS accreditation for point source emissions from all combustion sources. The pollutants which require monitoring are NO₂, CO and VOCs. Upon gathering this data within the specified period, IC5 requires the operator to undertake detailed air modelling of these pollutants to ensure that the impacts on air quality on human and ecological receptors are accurate.

Effluent monitoring

The operator does not undertake monitoring of its emissions to foul sewer after treatment of the effluent in the effluent treatment plan. The operator currently relies on the sewerage undertaker to take samples up to 20 times per year for chemical oxygen demand (COD), suspended solids, sulphides and sporadic sampling of pH. *How to comply with your environmental permit. Additional guidance for: The Food and Drink Sector (EPR 6.10)*, requires the following monitoring to be undertaken for emissions to sewer:

- *Flow rate – continuous and integrated daily flow rate*
- *pH – continuous*
- *Temperature – continuous monitoring is appropriate if the temperature of the discharge is above 25°C*
- *COD/BOD – Flow weighted sample or composite samples, weekly analysis, reported as flow weighted monthly averages*
- *TOC – continuous*

IC6 requires the operator to submit a report outlining how effluent generated from the process and treated by the ETP is monitored, in line with the BAT requirements stated above.

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.
Consultation	
Consultation	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <ul style="list-style-type: none"> • Food Standards Agency • Health and Safety Executive • Severn Trent Water • The Department of Public Health • Leicestershire County Council Environmental Health • Leicestershire County Council Planning Authority <p>The comments and our responses are summarised in the consultation section.</p>
Operator	
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.
The facility	
The regulated facility	<p>We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits.</p> <p>The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.</p>
The site	
Extent of the site of the facility	The operator has provided plans which we consider are satisfactory, showing the extent of the site of the facility. The plan is included in the permit.
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports.

Aspect considered	Decision
	<p>The operator has not provided baseline data with their application. As an existing non-permitted operation, there is the potential for historic contamination to be present. Without the baseline data, any contamination found at the point of surrendering the permit will need to be subject to remediation to bring the site into satisfactory state. Baseline data is not required to determine the permit application.</p> <p>We have advised the operator what measures they need to take to improve the site condition report.</p>
<p>Biodiversity, heritage, landscape and nature conservation</p>	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. There are ten local sites comprising of Local Wildlife Sites and Local Nature Reserves.</p> <p>We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.</p> <p>We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.</p>
Environmental risk assessment	
<p>Environmental risk</p>	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment all emissions may be categorised as environmentally insignificant with the exception of odour and noise.</p> <p>The operator's odour and noise management plans do not fully consider the requirements of the potential risks posed by the operations. We have included improvement conditions and have addressed this in further detail in the key issues section.</p>
Operating techniques	
<p>Operating techniques</p>	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The operator has provided details to demonstrate that their operating techniques are in line with our guidance on; <i>How to comply with your environmental permit. Additional guidance for: The Food and Drink Sector (EPR 6.10)</i>. This includes:</p> <ul style="list-style-type: none"> • Accident management • Energy efficiency • Efficient use of raw materials and water • Avoidance, recovery and disposal of wastes

Aspect considered	Decision
	<ul style="list-style-type: none"> • Operating techniques • Process controls • Raw materials preparation • Heat processing using heat or water • Cooling and chilling • Cleaning and sanitisation • Emissions
Odour management	<p>We have reviewed the odour management plan in accordance with our guidance on odour management.</p> <p>The plan is sufficient to enable us to issue the permit but has deficiencies. We have included an improvement condition to provide the operator an opportunity to upgrade their odour management plan. The plan must address the following points in line with the Environment Agency's <i>Horizontal Guidance H4 – Odour Management</i>.</p> <ul style="list-style-type: none"> • Details of sensitive receptors (dwellings and workplaces). • A map showing the installation in relation to the sensitive receptors. • Odour sources. • Odour pathways. • Odour management and control measures. • Process monitoring of potentially odorous sources. • Odour complaints procedure. • Odour monitoring. • Community engagement. • Abnormal operations and contingency measures. <p>See the key issues section for more information.</p>
Noise management	<p>We have reviewed the noise management plan in accordance with our guidance on noise assessment and control.</p> <p>We do not consider that the noise management plan to be satisfactory. We have included an improvement condition to provide the operator an opportunity to upgrade their noise management plan in line with the Environment Agency's <i>Horizontal Guidance H3 – Noise Assessment and Control</i>.</p> <p>See the key issues section for more information.</p>
Permit conditions	
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.
Improvement programme	<p>Based on the information on the application, we consider that we need to impose an improvement programme.</p> <p>See the key issues section for more information.</p>
Emission limits	<p>We have decided that emission limits should not be set for the points listed in the permit.</p> <p>The operator's assessment indicated that emissions are insignificant at the</p>

Aspect considered	Decision
	relevant sensitive receptors. Additional samples of emissions to air will be taken as part of an improvement condition. This data will be used to validate the air dispersion modelling submitted with the application, following which emissions limit values may be set if deemed appropriate.
Reporting	We have specified reporting in the permit.
Operator competence	
Management system	There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions. The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
Relevant convictions	The Case Management System and National Enforcement Database has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit. Paragraph 1.3 of the guidance says: “The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.” We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections. We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Consultation

The following summarises the responses to consultation with other organisations and our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section:

No responses from the public or organisations listed in the table above responded.