

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Premier Foods Carlton operated by Premier Foods Group Limited.

The permit number is EPR/YP3336VQ/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:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Structure of this document

- Key issues
- Annex 1 the decision checklist

Key issues of the decision

This document should be read in conjunction with the Duly Making checklist, the application and supporting information and permit/~~notice~~.

Premier Food Group Ltd (Premier) operates a bakery manufacturing cakes and pastry products, at Carlton, near Barnsley. The site produces principally cakes, tarts and pies which are packed in plastic and cardboard before being distributed. The site is capable of producing in excess of 300 tonnes of finished products in a day and is now considered a Schedule 1 Activity under Part 6.8 (1) (d) (iii) of the Environmental Permitting Regulations (2010) (EPR). Changes in the EPR, changes triggered by the implementation of the Industrial Emissions Directive, now require that Premier apply for an Environmental Permit.

Noise

The application contained a noise impact assessment which identified local noise-sensitive receptors. Measurements were taken of the prevailing ambient noise levels to produce a baseline noise survey and an assessment was carried out in accordance with BS4142:1997 methodology to compare the predicted plant rating noise levels with background levels. The applicant has predicted a significant adverse impact at 6 receptor locations.

The applicant states 'there is a risk that noise from the Installation has the potential to disturb sensitive receptor in the vicinity'. The applicant acknowledges that the 2m high wooden boundary fence being development as part of the Highgrove Court housing development does not provide sufficient noise mitigation for the various exiting noise sources on site to meet the BS4142:2014 assessment criteria.

The operator has requested that the requirement for reducing noise emissions be handled through the implementation of site wide noise management plan (NMP). This will look to identify and produced a hierarchy of specific noise emissions at the closet receptors, and the development of an improvements programme with the aim of reducing emissions.

The applicant identified seven priority sources for noise mitigation and proposes a noise management plan (NMP) using cost benefit analysis for those sources:

- BAC/BCH Chillers;
- Two Mince Kettle stacks ;
- Three High Level Vents associated with the extract fans for the BCH room;

- Fats Tank exhaust;
- Partially open door to the WWTW Effluent Plant Blowers;
- Bulk raw materials offloading (note this has been modelled as glycerine and granulated sugar)

As a result of our audit checks, we agree in general that focusing on the sources identified by the applicant will most likely contribute to noise reductions at receptors. The applicants background data indicates that there is a significant variation (Daytime: 37dB to 66dB, Night time: 36dB to 61dB) between minimum and maximum values. It is noted that should there be a reduction in the current operational sources, this would likely reduce background noise levels (LA90). Considering this in context, for our sensitivity checks we have used the minimum_background noise levels monitored by the applicant's consultant which will likely exclude noise emissions from the existing operations (including the intermittent noise source) that is causing localised noise issues, we consider this to represent a conservative approach.

The facility is existing and has not been the subject of noise pollution complaints, however it appears that the site has been subject of residential encroachment over recent years. As the facility is already existing. We agree with applicant that that the development of a site wide noise management plan is appropriate and we have included an IC for the operator to review mitigation measures as described in the noise risk assessment and modelling remain appropriate.

Air

The facility consists of two natural gas fired dry low NO_x (DLN) 7.68MWth steam raising boilers and 54 other small emission points from a range of natural gas/LPG fired ovens ranging from 300KWth to 1.4MWth. Exhaust gas for the main natural gas fired boiler is passed through a flue gas economiser prior to discharge to atmosphere via a 14m high stack.

The operation of the facility gives rise to the potential impact on the local air quality of emissions from the combustion of natural gas. The emissions of potential concern are those of nitrogen oxide (NO_x) and Carbon Monoxide (CO).

The applicant has assessed the contributions of the installations point source emissions on nearby human receptors and habitats from the process using the Agency's H1 methodology and ADMS 5.0 (Advanced atmospheric dispersion model). In terms of predicted impacts from the facility the applicant has carried out detailed air dispersion modelling of short and long term impacts based on a single gas fired boiler (one of two operating duty and standby) and 54 other emission points from a range of natural gas ovens.

NO₂

The applicant calculates the maximum 'grid' process contribution and combined background level (PEC) to be approximately 81.4% of the long term (LT) NO₂ Environmental Quality Standard (EQS) of 40ug/m³ at 32.5ug/m³. The applicant has used a background NO₂ concentration of 24.3ug/m³ for the PEC calculation which we consider appropriate, in addition we consider the calculated PEC to be conservative as this may include an element of 'double counting' due to historical/ongoing process contributions from the existing operations already being reflected in the background concentration used. In addition modelling was based on worst case scenario emission limits from DEFRA PART B Guidance (only really applicable to individual plant sized over 20MWth) and combustion sources operating at full load for the entire year.

The applicant concludes that NO_x emissions from the facility are unlikely to result in a breach of any air quality standards.

CO

The applicant concludes that the emissions of CO are unlikely to result in a breach of air quality standards. The maximum predicted 8 hour mean PC is 126ug/m³ which is less than 10% of the EAL and therefore deemed insignificant.

In order to verify the applicant's conclusion the Environment Agency has undertaken a detailed audit and review of the applicant's dispersion modelling taking background and modelling uncertainties into account.

We agree with the operators conclusions that plant emissions are unlikely to lead to a breach any air quality standard outside of the permitted boundary. We have not set any limits on any of the emissions to air in accordance with our guidance, as the main boilers are considered relatively small <20MWth. Limits may need to be applied in the future however (by 2025) when the EU 'Medium Combustion Plant Directive' is enabled under UK law, this will be undertaken by the sector review process at the appropriate time.

The operator has confirmed that activities will be managed and operated in accordance with a management system including the inspection and maintenance of equipment/engine management systems. The activities are not being carried out within an AQMA designated for NO_x.

Annex 1: decision checklist

Aspect considered	Justification / Detail	Criteria met
		Yes
Receipt of submission		
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.	✓
Confidential information	A claim for commercial or industrial confidentiality has not been made.	✓
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.	✓
Responses to consultation	The responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
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 EPR RGN 1 Understanding the meaning of operator.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Site condition report	<p>The operator has provided a description of the condition of the site.</p> <p>We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED–guidance and templates (H5).</p>	✓
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a nature conservation site.</p> <ul style="list-style-type: none"> • Carlton Marsh (Local Nature Reserve/Wildlife Site) ~700m/East • Barnsley Canal (Local Nature Reserve/Wildlife Site) <p>An assessment of the application and its potential to affect the sites habitat has been carried out as part of the permitting process. We consider that the application will not affect the features of the habitat.</p> <p><u>Emissions to Water</u></p> <p>There are no direct discharges to controlled waters except clean uncontaminated surface waters via appropriate interceptor (Emission Point W1 on Drawing Reference: Figure 4, drainage Plan). All process water discharges are made to sewer under a relevant discharge consent issued by Yorkshire Water (Emission Point E1 shown on drawing Figure 4, Drainage Plan, July 2014) Process effluent emissions to sewer contain mostly sanitary determinands which are readily treated at the STW, there are no species within 10km of the final fate discharge location.</p> <p><u>Atmospheric NOx</u></p> <p>The operators results show that all Process contributions are considered insignificant being <100% of the relevant Short Term and Long Term EAL's.</p>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p><u>Nitrogen Deposition</u></p> <p>The operators results show that the maximum nitrogen deposition PC at Barnsley Canal LWS is 11.1% (tall vegetation) and 5.5% (short vegetation) of the critical load and 4.0% (tall vegetation) and 2.0% (short vegetation) at Carlton Marsh LNR. The PCs are considered to represent small increases in existing nutrient nitrogen deposition levels of between 0.6% – 2.6% and are therefore not considered to be significant as the process contribution is less than 100% of the critical load in accordance with our guidance.</p> <p><u>Acid Deposition</u></p> <p>The operators results show that the maximum acid deposition PC at Barnsley Canal LWS is 6.0% of the critical load and a maximum of 0.9% of the critical load at Carlton Marsh LNR. The PCs are considered to represent small increases in existing acid deposition levels of between 2.4% and 0.7% and are therefore not considered to be as the process contribution is less than 100% of the critical load in accordance with our guidance.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p>	
Environmental Risk Assessment and operating techniques		
Environmental risk	<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>Based upon the information in the application the assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, emissions may be categorised as environmentally insignificant.</p>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p><u>Discharges to Sewer</u></p> <p>For pollutants that are readily treated/removed by the sewage treatment works, where we are satisfied that BAT has been applied at the facility, and the operator has a Trade effluent agreement in place we can accept that these emissions will be acceptable as the final discharge will be controlled by a water quality environmental permit (discharge consent).</p> <p><u>Noise</u></p> <p>Please see Key Issues section.</p> <p><u>Point Source Emissions to Air (Combustion)</u></p> <p>Please see key issues section.</p> <p><u>Odour</u></p> <p>The applicant has confirmed that the facility has been subject to odour complaints originating from the abnormal operation of the effluent treatment plant and waste storage areas. Concerns were also raised by Public Health England as a result of our external consultation with them on the application (Please see Annex 2). An improvement condition has been incorporated within the permit for the operator to provide an odour management plan for Environment Agency Approval.</p>	
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The operator has indicated the use of techniques and standards in line with technical guidance notes EPR 6.10 'The food and drink sector', IPPC Sector Guidance Note S5.06, BREF (08.2006) - Food, Drink and Milk Industries and EPR 1.00 "How to comply with your Environmental Permit.</p> <p>The Key issues for determining BAT for the facility are described SGN EPR6.10 'The food and drink sector', Sections 1.1 to 1.4, 2.1 to 2.5, 2.7 and 3.1 to 3.4 the operator has provided a comprehensive site specific BAT</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>conclusion document confirming use of the standards as set out in the TGN.</p> <p>The proposed techniques for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions.</p> <p>The facility has an ISO14001 certified management system in place.</p>	
The permit conditions		
Improvement conditions	<p>Based on the information on the application, we consider that we need to impose improvement conditions.</p> <p>We have imposed improvement conditions to ensure that appropriate measures are in place to prevent pollution from odour and noise (IC1 and IC2).</p> <p>We consider these conditions to be proportionate to the risk posed by the operation of the facility.</p>	✓
Incorporating the application	<p>We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.</p> <p>These descriptions are specified in the Operating Techniques table S1.2 in the permit.</p>	✓
Monitoring	<p>We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.</p> <p>These monitoring requirements have been imposed in order to prevent pollution and protect surface waters, and are incorporated in accordance with Food and Drink Sector Guidance S6.10 and How to comply with your Environmental permit EPR 1.00.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>The operator has a suitable monitoring programme in place for emissions to sewer as agreed with the Sewage Undertaker</p> <p>Based on the information in the application we are satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.</p>	
Reporting	<p>We have specified reporting in the permit.</p> <p>Reporting requirements for, emissions to water, annual production of cakes and pastry products and performance parameters are included, these are proportionate to the process and in accordance with sector guidance S6.10 and EPR 1.00.</p> <p>Appropriate reporting forms have been included.</p>	✓
Operator Competence		
Environment management system	<p>There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.</p>	✓
Relevant convictions	<p>The National Enforcement Database has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found. The operator satisfies the criteria in RGN 5 on Operator Competence.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Financial provision	<p>There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.</p> <p>The facility has an ISO14001 certified management system in place.</p>	✓

Annex 2: External Consultation

Summary of responses to consultation and the way in which we have taken these into account in the determination process.

Response received from
Public Health England
Brief summary of issues raised
<p>While combustion gas emissions have been modelled and do not indicate any exceedance of Environmental or Air Quality Standards, the applicant notes within the application that there are occasional complaints associated with the operation of the effluent treatment plant.</p> <p>As such, the regulator may wish to consider a review of the odour management practices around the effluent treatment plant and if it is BAT-compliant as the applicant states.</p> <p>This consultation response is based on the assumption that the permit holder shall take all appropriate measures to prevent or control pollution, in accordance with the relevant sector guidance and industry best practice.</p>
Summary of actions taken or show how this has been covered
<p>The EPR permit contains necessary conditions in relation to all point source and fugitive emissions from the facility to the environment including odour. These are described in 'Section 3' Emissions and Monitoring within the permit. In addition relevant operating techniques are included with section 1.2 of the EPR Permit. An improvement condition has been included in the permit for the operator to provide an odour management plan.</p>

Response received from
Environmental Health
Brief summary of issues raised
<p>Further to the Environment Agency's recent consultation regarding Premier Food Carlton's permit application I can confirm Barnsley Metropolitan Borough Council Regulatory Services have received no complaints about noise or other amenity issues. I can therefore confirm we have no comments to make.</p>
Summary of actions taken or show how this has been covered
<p>No action required. Improvement condition included in the Environmental permit to include a noise assessment and management plan.</p>