

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Burtons Biscuits operated by Burton's Foods Limited.

The permit number is EPR/YP3338RQ/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

- Description of main features of the installation
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

Description of the main features of the Installation

The Schedule 1 activity undertaken at the installation falls under S6.8 A1 (d) (iii) (bb) of The Environmental Permitting (England and Wales) Regulations (2010). Chocolate is made using a mix of raw materials of both vegetable and animal origin. The capacity of the plant and the proportion of animal derivatives within the final product means that a permit is required.

This installation is a chocolate refinery which produces chocolates either as a liquid or as chips. The key stages in the production of liquid chocolate are mixing, pre-refining, refining and conching. The refining process reduces the particle size to achieve 180-220 microns and then to 28-38 microns to produce chocolate flake. The flake then goes through a conching process where fats, emulsifiers, flavouring and heat are added to produce a chocolate liquid which can then go for bulk distribution via tanker.

Liquid chocolate not going for bulk distribution is tempered, deposited on a band, cooled (solidified), chipped and bagged. Bags are palletised and moved to warehousing prior to distribution via road using HGVs.

The refrigerants used on site are R407c, R134a, R417a and R410a. These have a high global warming potential. The refrigerant systems require leak checking and the use of these types of refrigerants will require reviewing in the future.

Annex 1: decision checklist

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

Aspect considered	Justification / Detail	Criteria met
		Yes
Receipt of submission		
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. The decision was taken in accordance with our guidance on commercial confidentiality.	✓
Consultation		
Scope of consultation	<p>The consultation requirements were identified and implemented. The decision was taken in accordance with our Public Participation Statement and our Working Together Agreements.</p> <p>For this application we consulted the following bodies:</p> <ul style="list-style-type: none">• Environmental Health – Wirral Metropolitan Borough Council• Health and Safety Executive• Sewerage Undertaker - United Utilities	✓
Responses to consultation and web publicising	<p>The consultation and web publicising responses (Annex 2) were taken into account in the decision.</p> <p>The decision was taken in accordance with our guidance.</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 what a legal operator is.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		

Aspect considered	Justification / Detail	Criteria met
		Yes
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.</p>	✓
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 site of heritage, landscape or nature conservation, and/or protected species or habitat .</p> <p>A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. We consider that the application will not affect the features of the sites.</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>Point Source Emissions to Air</p> <p>The emissions from the gas fired boilers were screened using the Environment Agency's H1 screening tool. The screening was undertaken based on one 12.7MWth boiler operating at 50%loading. The boilers were designed to meet the needs of a much larger site, which this installation (chocolate refinery) was part of. Their capacity is thus much greater than the installation requires. Only one boiler is operable on site at any one time at a loading</p>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>of 20-30%. This is the standard mode of operation for the boilers. Screening at 50% loading is thus considered to represent a worst case scenario for this installation.</p> <p>The key pollutant from natural gas is nitrogen dioxide which was included in the assessment. The assessment did not consider sulphur dioxide or particulates as these are not significant pollutants from natural gas.</p> <p>The emissions screened out for both short and long term criteria as shown below at 50% loading, which has been set as a maximum permitted loading in the permit. No further assessment is necessary:</p> <p>Nitrogen Dioxide:</p> <p>Short term (Insignificance = <10% of EAL*) EAL – 200ug/m3 PC** – 2.57ug/m3 %PC – 1.29%</p> <p>Long term (Insignificant = <1% of EAL) EAL – 40ug/m3 PC – 0.0567ug/m3 %PC – 0.142%</p> <p>*EAL – Environmental Assessment Limit **PC – Process Contribution</p> <p>Point Source Emissions to Water</p> <p>Process waters are discharged to the foul sewer and are treated by the sewerage undertaker before discharging to water. Surface waters arising from roofs and the yard are discharged via surface water drains to Birket Stream. There is a shut off valve on the surface water drains. This is a penstock valve which is manually operated. The valve is closed in the event of a spill. There are also spill kits at the installation. An improvement condition (ICO4) has been included in the permit requiring the review of surface water drainage arrangements with the</p>	

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>consideration of interceptors. These measures are considered sufficient for the protection of water.</p> <p>Emissions to Ground The processing area is on an impermeable surface. The risk of ground contamination is thus low.</p> <p>Odour and Noise The site has been in operation since 1953. The scale of the operation is much reduced and now only consists of chocolate manufacture, The Local Environmental Health Department were consulted during this determination. There is no history of odour or noise complaints on record arising from this site. This permit application will not result in an increase in production at the facility. Instead it brings the site into the permitting regime as result of legislative changes made through the Industrial Emissions Directive. The site has been operating at the current level of production (approximately 30,000 tonnes per year) since 2006. The existing measures in place at the site for managing odour and noise as described in the Nuisance Management Plan are thus considered to be suitable. The management of odour and noise will require reviewing in the event that additional sensitive receptors are introduced into the area, this requirement has been included as improvement condition IC03.</p> <p>Waste Generation Waste generated during chocolate manufacture is reworked into the process where possible. Unrecoverable material is sold as animal feed. Other waste materials such as scrap metal from redundant equipment, wood from pellets, card and paper are collected by a licensed waste contractor for recycling. General waste that cannot be recycled is collected and used as Refuse Derived Fuel (RDF). No material is sent to Landfill. These measures are considered to represent the best environmental options and are in line with the Environment Agency's Food and Drink Sector Guidance (EPR 6.10).</p>	
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>The measures that are in place are in line with the Food and Drink Sector Guidance (EPR 6.10). Therefore, they are considered to represent Best Available Techniques. Some of these measures include:</p> <ul style="list-style-type: none"> • Process Monitoring and Control – The manufacture process is highly automated and is controlled through computer systems, which monitor key process parameters. Alarms are triggered in the event that the parameters are out of the acceptable range. Yields are measured in terms of waste, weight and flow. Any variations beyond predetermined thresholds are investigated and resolved. • Use of a recirculating system to recycle water instead of once through cooling – The production of chocolate chips requires extensive cooling. This is provided by refrigeration units which provide a recirculate flow of chilled water to cool the heat exchangers, which provide the required flow of chilled air. The refrigerants used on site are R407c, R134a, R417a and R410a. • Cleaning and Sanitation – good housekeeping measures are in place throughout the factory. These include: dry cleaning procedures minimising water usage, use of catchment trays where there is a risk of drips, cleaning schedule and use of water optimisation spray jets to minimise water usage. 	
The 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, which was developed in consultation with industry having regard to the relevant legislation.	✓
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:</p> <ul style="list-style-type: none"> ➤ ICO1 - appropriate management systems and management structures are in place and that sufficient financial, technical and manpower 	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>resources are available to the operator to ensure compliance with all the permit conditions.</p> <ul style="list-style-type: none"> ➤ ICO2 - appropriate infrastructure and procedures are in place for the storage of raw materials at the installation. ➤ ICO3 - the appropriate measures are in place to prevent pollution from odour and noise ➤ ICO4 - the appropriate infrastructure is in place to prevent pollution of surface waters. ➤ ICO5 – the appropriate measures are in place to prevent pollution of surface waters. ➤ ICO6 – the appropriate measures are in place to ensure that energy is used efficiently. 	
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 in the permit.</p>	✓
Reporting	<p>We have specified reporting in the permit.</p> <p>This has been included in order to measure the performance of the site with regards to water usage, energy usage, waste disposal and/or recovery and total discharge volume to sewer.</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 our guidance on what a competent operator is.</p>	✓
Relevant convictions	<p>The Case Management System has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Financial provision	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 our guidance on what a competent operator is.	✓

Annex 2: Consultation and web publicising

Summary of responses to consultation and web publication and the way in which we have taken these into account in the determination process. (Newspaper advertising is only carried out for certain application types, in line with our guidance.)

Response received from
Environmental Health – Wirral Metropolitan Borough Council – Received on 07/09/16, 02/11/16
Brief summary of issues raised
No substantiated noise or odour complaints from the site. Details provided with regards to a planning application for residential development adjacent to this installation. Concerns raised in relation to the potential noise and odour impacts from this installation on the proposed residential development.
Summary of actions taken or show how this has been covered
Since this consultation response has been received the Local Authority have granted outline planning permissions for this development. The Local Authority have no history of odour or noise complaints arising from this installation. The closest existing residential receptors are 35m to the south of the installation. This indicates that the existing measures on site are effective at controlling noise and odour. The proposed residential development is located at a similar distance to the west of the installation. An improvement condition (ICO3) has been included in the permit requiring that the management of odour and noise is reviewed if and when ‘reserved matters’ are approved by the Planning Authority, which is required before development can commence.

The application was advertised on our website from 22/08/16 to 20/09/16 no representations were received.

We also consulted the United Utilities – Sewerage Undertaker and The Health and Safety Executive. However, no responses were received.