

# Environment Agency permitting decisions

## Variation

We have decided to issue the variation for Leeming Bar Ice Cream Factory operated by R&R Ice Cream UK Limited.

The variation number is EPR/BP4062IB/V011

Determined: 29/09/2014

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

### Increase to the installation Boundary

The installation boundary has been increased to include a relatively small area of land that was formally used as a showroom for bathroom furniture. The former activities took place on top of a concrete slab, the Operator states in the application that at no time has any activity taken place on that land that would have caused pollution. The site condition report has been updated by the Operator. Based on the information provided by the Operator 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).

#### Addition of emission points to air.

Table 2.2.1 in the permit has been updated following a review of the emission points. We are satisfied that the permit reflects the actual situation on site.

#### Addition of 7 new production lines

7 new product lines have been added to the installation in phase 5. The Operator has submitted an assessment of the risk of pollution from the operation of these lines. The new production activities do not significantly differ from the production activities already carried out on site and share common infrastructure such as loading and unloading areas.

The main risk of pollution in the production area is considered to be spillages of raw materials and the risk of the spillage entering and polluting surface waters or land. The Operator has stated that within production areas all drains lead to the effluent treatment plant, therefore any spillages that entered the drains would be treated along with the site effluent prior to discharge and would be subject to further treatment at the nearby WwTW.

#### Expansion of the existing effluent treatment plant from 400,000 l/day to 1,500,000 l/day.

The existing effluent treatment plant is being expanded to allow treatment of an additional 1,100,000 l/day of effluent. The existing plant uses ultra filtration and reverse osmosis to treat on site effluent. The treated effluent is either discharged to sewer for further treatment at the nearby WwTW or re used on site for CIP or within the onsite cooling system. The existing effluent treatment process is considered BAT, this variation will not result in a change to treatment methodology therefore it will still be considered BAT following expansion.

The nature of the discharge remains unchanged from that already permitted and the Operator has stated that whilst the volume of the discharge will increase, the daily load will remain unchanged. The Operator has stated that they will continue to comply with their existing discharge consent.

#### Addition of 2 CHP Gas Engines

The Operator has proposed the addition of 2 new CHP gas engines (burning natural gas). The engines have a thermal input of 3.5MW each. The existing site has 3 boilers (however only 2 will be operational with the other kept for a spare). The key potential impacts from the CHP engines are considered to be from emissions to air and noise.

**Emissions to air:**

The Operator has submitted detailed air dispersion modelling. This has modelled the impact on air quality from the combustion plant emissions. The Operator has stated that the proposed CHP plant is expected to run continuously and the existing boilers are only expected to run when the CHP units are not running or when the steam demand is greater than the CHP boilers can provide. The only pollutant likely to be significant from the combustion of natural gas combustion plant of this size is NO<sub>x</sub>, therefore the modelling has been restricted to this pollutant. For the purpose of the assessment the following operating profiles were assumed:

Scenario 1: Typical Operation - CHP Units operating continuously at 75% load and 2 boilers operating 20% of the time.

Scenario 2: Worst case operation - Both CHP units operating at full load and 2 boilers operating continuously.

NO<sub>x</sub> emissions from Scenario 1 have been modelled for both long term and short term emissions of NO<sub>x</sub>, this is considered to be a reflection of the normal operating conditions. The conclusions of the modelling are that there will be no exceedance of the relevant air quality standards for NO<sub>x</sub> at residential receptors.

NO<sub>x</sub> emissions from Scenario 2 have been modelled for short term impacts only, this is considered a worst case assessment because the operation of all combustion plant simultaneously would be a rare event. The conclusions from the modelling are that there will be no exceedance of the relevant air quality standard for NO<sub>x</sub> at residential receptors.

We have assessed the modelling report submitted by the Operator and agree with its conclusions.

**Noise**

The Operator has assessed the risk from noise on nearby residential housing and business and concluded it is very low. They have provided details of typical engine noise levels and have stated that the engines will be enclosed with acoustic housing to minimise noise. Based on the information provided by the Operator we are satisfied the impact of noise on nearby sensitive receptors is not likely to be significant. The Operator has proposed to carry out a noise assessment following installation and commissioning of the CHP engines. We have included an improvement condition in the permit (4) to ensure that we receive a report detailing the findings of the assessment. The IC is as follows:

4	The operator shall provide a report to the Environment Agency detailing the findings of the noise survey conducted in accordance with BS4142:1997 (or replacement standard) as described in variation application EPR/BP4062IB/V011. If the findings indicate that the plant might give rise to disturbance then the report will include further investigation and studies undertaken to identify the specific source(s) of the problematic noise and measures proposed to mitigate the potential impact to acceptable levels in accordance with BS4142:1997 (or replacement standard).	Within 3 months of commissioning of the CHP gas engines.
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### Ammonia Storage

The operator has expanded the refrigeration system on site by building a new plant room and adding 3 ammonia compressors. For this reason we have included an improvement condition in the permit for the Operator to review their operating procedures and accident management plan to account for the increased ammonia storage on site. The improvement condition reads as follows:

IC3	The Operator shall undertake a review of their operating procedures and accident management plan associated with storage, transfer and use of Ammonia on site. A report detailing the outcome of the review and a timetable for the implementation of any identified improvements where relevant shall be submitted to the Environment Agency in writing for approval.	3 months from variation issue
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### Inclusion of conditions relating to Amended EPR regulations.

Conditions have been added to the permit relating to periodic monitoring of groundwater and soils (condition 2.10.11) and notification requirements (conditions 5.11 & 5.22 and Schedule 1). These have been included as a direct requirement of the updated Environmental Permitting (England and Wales) (Amendment) Regulations 2013 which was amended to reflect the implementation of the Industrial Emissions Directive.

### Other changes

The description for the emission point to sewer has been amended. The existing permit referenced the point as S1, however this was not the point at which the emissions to sewer from site joined the public sewer. We have therefore amended the point to reflect the connection to public sewer as shown on the drainage diagram submitted with this application. Point S1 remains referenced in the permit, however this is as a monitoring point only.

## Annex 1: decision checklist

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

Aspect considered	Justification / Detail	Criteria met
		Yes
<b>Receipt of submission</b>		
Confidential information	A claim for commercial or industrial confidentiality has NOT been made.	✓
<b>Consultation</b>		
Scope of consultation	<p>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.</p> <p>The application was advertised on our website for on month, and the following bodies were consulted:</p> <p>Director of Public Health -North Yorkshire County Council Hambleton District Council Health and Safety Executive Public Heath England Yorkshire Water</p>	✓
Responses to consultation and web publicising	<p>The web publicising and consultation responses (Annex 2) were taken into account in the decision.</p> <p>The decision was taken in accordance with our guidance.</p>	✓
<b>European Directives</b>		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
<b>The site</b>		
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. The site boundary has been amended , this is discussed in Key Issues above.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	boundary.	
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>Crakehall Ings Local Wildlife Site is located approximately 1.5 km from the site, we have assessed any impacts from the proposed changes and have concluded that there will be no likely significant impact.</p>	✓
<b>Environmental Risk Assessment and operating techniques</b>		
Environmental risk	Consideration of the Environment Risks have been discussed in the key issues section above.	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The proposed techniques/ emission levels for priorities 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, and ELVs deliver compliance with BAT-AELs.</p>	✓
<b>The permit conditions</b>		
Improvement conditions	Based on the information on the application, we consider that we need to impose improvement conditions. See key issues section above for further details.	✓
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>	✓
<b>Operator Competence</b>		
Environment management system	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.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes

## Annex 2: Consultation, web publicising and newspaper advertising responses

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
Yorkshire Water
Brief summary of issues raised
Provided that the trade effluent discharge from R&R shall meet those conditions Yorkshire Water Services have no further comments in this matter.
Summary of actions taken or show how this has been covered
The Operator has stated that they will continue to meet the conditions in the existing discharge consent for the site.

Response received from
Health and Safety Executive
Brief summary of issues raised
HSE do not have any comments to make on this application
Summary of actions taken or show how this has been covered
N/A

Response received from
Public Health England
Brief summary of issues raised
Based on the information contained in the application supplied to us, Public Health England has no significant concerns regarding the risk to the health of the local population from this facility.
Summary of actions taken or show how this has been covered
N/A