

# Permitting decisions

## Bespoke permit

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We have decided to grant the permit for Bugbrooke Animal Feed Mill operated by Heygates Country Feeds Limited.

The permit number is EPR/KP3739DU

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:

- 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 main features of the installation

Bugbrooke Animal Feed Mill is an animal feed manufacturing facility operated by Heygates Country Feeds Limited in Bugbrooke, Northampton. The mill installation manufactures compound and blended animal feeds i.e. feeds which are suitable for consumption by an animal without further processing.

The site has been operating since the mid-1970's and was previously regulated under the Local Authority Pollution Prevention and Control (LAPPC) regime but now requires an environmental permit following the 2013 update to the Environmental Permitting Regulations, which implemented the Industrial Emissions Directive, and redefined permit thresholds for the food and drink sector based on the maximum production capacity of the installation.

*Section 6.8 Part A(1)d(ii) - Treatment and processing of vegetable raw materials with a finished product production capacity greater than 300 tonnes per day or 600 tonnes per day where the installation operates for a period of no more than 90 consecutive days in any year.*

The products manufactured in the mill are based upon core formulations of cereals (such as wheat), soya, rapeseed and molasses, plus specific additives, such as mineral supplements. The processing is undertaken to a specific formulation on a batch basis, with the key stages being weighing, grinding, mixing, conditioning, pressing, cooling and coating. Depending upon the specific formulation, the required cereals are weighed out prior to grinding to a uniform grist size. The ground materials are then transferred to the mixing stage of the process, where they are mixed with liquid materials (e.g. water and vegetable oils) and pre-weighed

supplements. Some material ('meal') will be extracted directly from the mixer as product, but the majority will be conditioned through the addition of steam to improve its workability. After conditioning the hot mix is conveyed to one of a number of press lines, where it is extruded through dies to produce pellets. The hot pellets are then passed through a counter flow air cooler to reduce their temperature, causing them to harden and become durable. The majority of the pellets are subsequently coated in fat to produce the finished product, however some of the pellets are crumbed prior to coating with fats. Pelleted product is used as feed for larger animals, such as pigs whilst crumbed product and meal is used as chicken feed. The finished product is then stored in silos prior to being automatically loaded to bulk vehicles for delivery.

The main emissions to air arise from four product coolers, each abated by a cyclone dust separation unit, which vent through a single shared stack. There are two medium fuel oil fired boilers operated on site which vent to air, and the tanks used to store fuel oil, vegetable oil and molasses also have breathing vents.

The main emissions to water arise from a small volume of boiler and compressor blowdown which discharges along with yard run-off (site drainage) into the River Nene via an interceptor.

The only habitats site within the relevant screening distance is Bugbrook Meadows Site of Special Scientific Interest (SSSI) which lies 400m to the West of the installation.

## Key issues of the decision

The application submission contains a number of supporting documents that describe the controls and operating techniques at the installation, having regard for Best Available Technique (BAT) requirements, as specified in our guidance, and to ensure compliance with the environmental permit conditions. These key controls and techniques are described in the following sections.

### General management

Heygates Country Feeds Limited operate the site with a Quality Management System that is industry specific and complies with Universal Feed Assurance Scheme (UFAS). The company does not currently operate a formal Environmental Management System (EMS), but has developed additional systems and procedures consistent with the principles of the Environment Agency's requirements on Environmental Management. Formal policies and procedures address the environmental aspects of the operation of the installation. The environmental performance of the plant is a key consideration when changes to the process are proposed and when significant capital expenditure is required. The applicant will undertake regular reviews of the EMS to ensure its ongoing relevance through the identification of:

- The status of current legislation and whether any new or impending legislation may have a bearing on the installation's activities; and
- The extent to which objectives and targets in environmental improvement programmes are being met and whether or not some targets may require redefinition.

The adjacent installation, Bugbrooke Mills, is operated by Heygates Limited, a separate company. The two installations do share a pneumatic blow line but the 'operator' of this plant is Heygates Engineering Limited. The roles and responsibilities of these operators are clearly defined and distinguishable within the respective Environmental Management Systems.

### Odour

Odorous raw materials are consumed in the process and the installation could have the potential for causing odorous emissions primarily through various stages of the process such as receipt and cooling. However, monitoring of odours at the boundary of the installation (sniff testing) undertaken by the operator appears to indicate that the off-site impact of the plant is not significant. The installation is not known to be the source of any odour complaints.

At this time we are satisfied that a site specific Odour Management Plan (OMP) is not required beyond the controls detailed in the management system. However, the permit conditions contain a provision for the Environment Agency to request the applicant to produce and implement an OMP should the activities give rise to odour beyond the installation boundary.

## **Noise and vibration**

As part of the ongoing operating and maintenance procedures implemented by the applicant, noise assessments for key operational equipment are undertaken and corrective action is taken in the event that a specific item of equipment is emitting an abnormal noise. The site is not considered to be the source of any significant off-site noise and is not a known source of any noise complaints.

At this time we are satisfied that a site specific Noise Management Plan (NMP) is not required beyond the controls detailed in the management system. However, the permit conditions contain a provision for the Environment Agency to request the applicant to produce and implement a NMP should the activities give rise to noise and/or vibration beyond the installation boundary.

## **Fugitive emissions**

### Emissions to air

The installation has the potential to release fugitive emissions, in particular particulate matter to air. The applicant has identified the sources of fugitive emissions and will ensure sufficient management and controls are in place to minimise these. These controls include:

- During raw material deliveries, lines are securely fastened and air is vented to arrestment plant or back vented to the delivery tanker.
- Bins & silos are fitted with arrestment plant and high-level probes to warn of overfilling.
- Doorways are kept closed where possible during normal operations.
- Windows are kept closed during normal operations.
- Skips are kept covered during normal operations.
- Roadways are regularly cleaned to remove dusty residues.
- All other operations are managed such that losses of both raw materials and products are avoided.

### Emissions to sewer, surface water and groundwater

Fugitive emissions to water could potentially arise through spillages and leaks. Operational procedures are in place to ensure that all spills and leaks are promptly reported, managed and mitigated. The condition of the drains at the installation are periodically checked to ensure that the potential for effluent to leak to ground is minimised. Maintenance that is required following drainage condition surveys is conducted by approved third party subcontractors. Records of this maintenance programme are maintained on site. Operational areas have an impervious surface and areas where substances that may have an environmental impact are used (e.g. oils) are further protected with spill kits. The condition of surfacing is regularly inspected for signs of deterioration.

## **Point source emissions**

### Emissions to air

The main emissions to air are particulate matter arising from the single stack serving product coolers A, B, C & D and the products of combustion arising from the two steam raising boilers.

Particulate matter:

The applicant currently undertakes emissions monitoring of the product cooler emission point as part of their previous Local Authority permit. The applicant has demonstrated through this emissions monitoring that the typical concentration of particulate matter emissions (9mg/m<sup>3</sup>) from this point source are well below the

Benchmark value of 50mg/m<sup>3</sup>. The emissions are also abated by a cyclone dust separation unit. This demonstrates BAT for the sector.

Notwithstanding the controls outlined above, the H1 risk assessment submitted with the application concluded that the particulate emissions arising from the installation could not be deemed insignificant. Based on the information submitted by the applicant, additional screening was carried out by us. We can conclude that the process contribution to ambient PM<sub>10</sub> concentrations at all relevant nearby receptors would screen out as insignificant (less than 1% and 10% for long term and short term predictions respectively) with respect to both the long term and short term air quality standards. We are therefore satisfied that emissions of particulates from the process would not result in significant impacts at nearby receptor locations with respect to the long term and short term air quality standard for PM<sub>10</sub>. On that basis, no additional assessment from the applicant is required.

Products of combustion:

Whilst no monitoring of the boiler emissions has been undertaken by the applicant, there are unlikely to be any significant emissions of products of combustion from the boiler plant used on site due to their small size and the regular maintenance programme in place to ensure efficiency. In accordance with our guidance, no further assessment is required.

#### Emissions to sewer, surface water and groundwater

There are minimal discharges of water from the process. Emissions are generated from rainfall dependent yard run-off together with compressor and boiler blowdown. These emissions are discharged to the River Nene (the immediate area is not served by the public foul sewer network) via an interceptor.

Good housekeeping and diversion through an interceptor should ensure that the potential for yard run-off to be contaminated is low. Whilst compressor and boiler blowdown are also discharged via this route, it is likely to be very low in volume and subject to dilution, initially from the quench tank (used to cool the blowdown), as well as from the yard run-off. In addition, hydrocarbon removal is likely to be provided by the interceptor. The current overall Water Framework Directive status of the River Nene is 'moderate'. However, the Chemical status and Priority Hazardous Substance status are both classed as 'good'. Whilst the objective is to have overall good status; this discharge has also been in operation for some time and there is no evidence that the installation is having any significant negative impact upon the Water Framework Directive status of the River Nene.

There are no emissions from the site to groundwater.

### **Resource efficiency and waste management**

#### Raw materials

Raw materials are selected to meet the requirements of the end market. All the raw materials used in the product are approved for use under the Agriculture Feeding Stuffs Regulations 2000 and the Medicated Feeding Stuffs Regulations 2002. As part of the management system other raw materials consumed (such as process oils) are frequently reviewed, with the aim of these reviews being to improve process performance and to minimise potential environmental impact. The installation is part of an industry where the minimisation of raw material and water use is fundamental for productivity and profitability.

Consequently, the process is designed to minimise process losses and waste generation. The installation product yield on raw materials consumed is close to 100% (based on dry mass).

#### Waste handling

The installation generates and subsequently handles only small quantities of waste. As part of the management system these wastes are appropriately handled, segregated and stored on site according to type. The installation generates non-hazardous waste and minimal quantities of hazardous waste, such as waste oils. The waste storage areas are appropriately designed and maintained. These areas have adequate capacity for the quantity of wastes generated.

### Waste recovery or disposal

In order to maximise production yields, the installation recovers/reworks all out of specification product. Appropriately licensed third parties are contracted to collect and dispose of and/or recover, off site, all of the site's waste.

### Energy

The applicant has a Climate Change Levy Agreement (CCA) in place for the installation and detailed energy efficiency data are available. The applicant is committed to the implementation of appropriate cost-effective energy efficiency measures and, as part of a trade body initiative, has implemented an energy efficiency plan.

# Decision checklist

Aspect considered	Decision
<b>Receipt of application</b>	
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.
<b>Consultation</b>	
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"> <li>- South Northamptonshire Council Planning &amp; Environmental Health</li> <li>- Public Health England</li> <li>- Director of Public Health</li> <li>- Health &amp; Safety Executive</li> </ul> <p>No responses were received.</p>
<b>Operator</b>	
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.
<b>The facility</b>	
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' and Appendix 1 of RGN 2 'Interpretation of Schedule 1'.</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> <p>There is an adjacent facility known as Bugbrooke Flour Mill operated by Heygates Limited under permit number EPR/BO2641IU. The two installations share a pneumatic blowing line but is operated by Heygate Engineering Limited, a separate entity. This is reflected within the Environment Management System.</p> <p>The operator has demonstrated that there are sufficient differences and separation between the two sites such as management structure, management systems and workforce to establish that they are two separate facilities.</p>

Aspect considered	Decision
<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.</p> <p>The plan is included in the permit.</p>
Site condition report	<p>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.</p> <p>Our assessment concluded that there is a potential for historical soil and groundwater contamination at the site due long history of a mill occupying the site. We have advised the operator what measures they should consider to take to improve the site condition report. We recommended that baseline data is obtained from around the six emission points identified on Drawing 3 of the application documents.</p> <p>The operator has stated that due to the nature of the site, the six emissions points are to air and surface water and are located either on buildings or on areas benefiting from hardstanding. Therefore, taking samples of soil or groundwater to measuring levels of contamination in these locations is not possible.</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>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>
<b>Environmental risk assessment</b>	
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 for the purposes of initial screening. Further screening was undertaken by us.</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.</p>
<b>Operating techniques</b>	
General operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.</p>

Aspect considered	Decision
	<p>The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.</p>
<p>Operating techniques for emissions that screen out as insignificant</p>	<p>The impact from emissions of particulate matter and products of combustion have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation.</p> <p>We consider that the emission limits included in the installation permit reflect the BAT for the sector.</p>
<p><b>Permit conditions</b></p>	
<p>Emission limits</p>	<p>We have decided that emission limit values (ELVs) are required in the permit. These ELVs are based on BAT and have been set for particulate matter from the product cooler emission point (A1) at 50mg/m<sup>3</sup> in accordance with PGN 6/26(13).</p>
<p>Monitoring</p>	<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 ensure compliance with the ELVs.</p> <p>We made these decisions in accordance with TGN EPR 6.10 and PGN 6/26(13).</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>
<p>Reporting</p>	<p>We have specified reporting in the permit.</p> <p>Reports are to be provided to the Environment Agency on an annual basis.</p> <p>We made these decisions in accordance with TGN EPR 6.10 and PGN 6/26(13).</p>
<p><b>Operator competence</b></p>	
<p>Management system</p>	<p>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.</p> <p>The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.</p>
<p>Relevant convictions</p>	<p>The Case Management System 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 our guidance on operator competence.</p>



Aspect considered	Decision
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
<b>Growth Duty</b>	
Section 108 Deregulation Act 2015 – Growth duty	<p>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.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“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.”</p> <p>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.</p> <p>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.</p>

## Consultation

The following summarises the responses to consultation with other organisations, 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 received.

### **Representations from individual members of the public.**

No responses received.