

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Piercebridge Mill operated by Lloyds Animal Feeds (Piercebridge) Limited.

The permit number is EPR/YP3433DB.

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
- Annex 2 the consultation and web publicising responses.

Key issues of the decision

Lloyds Animal Feeds (Piercebridge) Limited have applied for an Environmental Permit to operate an installation for the manufacture of compound and blended animal feeds suitable for consumption without further processing. The key stages of the process are receipt, acceptance checks and storage of raw materials, weighing, grinding, mixing, conditioning, pressing, cooling, coating and product storage and dispatch. The installation has a maximum production capacity of 110,000 tonnes per annum and two operational process lines.

The site has been operating since the late 1960's and was previously regulated under the Local Authority Pollution, Prevention and Control (LAPPC) regime but now requires an environmental permit regulated by the Environment Agency as a result of the 2013 amendment to the Environmental Permitting Regulations to implement the Industrial Emissions Directive. This amendment put into effect the change in permit thresholds for the food and drink sector from production output to maximum production capacity.

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.*

Emissions to air

Throughout the process, appropriate controls, both manual and automated, are applied to ensure that emissions to air are minimised and where appropriate abated. Suitable controls are in place for the handling of raw materials, wastes and products such that the potential for emissions from these activities is minimised.

A range of abatement systems are employed throughout the process especially to remove particulate matter:

- Dust filters and Dust Separation Units (DSU), as required, for various stages of processing (grinding and cooling operations); and
- Local exhaust ventilation, where required.

These control measures are considered BAT for the sector.

Coolers:

The H1 risk assessment submitted with the application concluded that the particulate emissions arising from the coolers at the installation could not be deemed as insignificant, despite the controls outlined above. Therefore we undertook further screening steps, based on the information submitted by the applicant, to identify if dispersion modelling is required. This approach was taken as the installation is already in operation and the requirement for a permit is a result of the implementation of IED.

We can conclude that the process contribution to ambient PM10 concentrations at all relevant nearby receptors would screen out as insignificant with respect to both the long term and short term air quality objectives. 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 objectives for PM10 and, as such, no further assessment needs to be undertaken by the applicant.

Whilst the emissions of particulate matter from the coolers has been concluded as not being emitted in significant quantities, emission limits have been set within the permit in order to ensure protection of nearby receptors. These limits have been set in accordance with the Benchmark levels identified in Defra Process Guidance Note (PGN) 6/26(13) and TGN EPR 6.10.

Grinder:

The grinder is vented via a reverse jet bag filter abatement unit which discharges to atmosphere. The grinder filter unit is equipped with continuous indicative monitoring that provides ongoing confirmation that the grinder emissions are insignificant. An emission limit has been set for the grinder in order to protect nearby sensitive receptors and to ensure compliance with the Benchmark levels identified in Defra PGN 6/26(13) and TGN EPR 6.10.

Boiler:

The steam raising boiler at the facility has a very low capacity, with a thermal input of 1.3MW. It is therefore considered that the emissions can be deemed insignificant. Appropriately qualified third party contractors undertake regular optimisation and combustion efficiency checks of the steam raising boiler on an annual basis.

Emissions to sewer, surface water and groundwater

There are no emissions to groundwater or sewer from the site, and the only emission to surface water is clean surface water run-off. Except for occasional boiler blowdown and cleaning water, the site does not generate a significant amount of trade effluent. The total volume of effluent produced by the facility is typically less than 10 m³ per day.

Effluents arising from the facility are as follows:

- Boiler blowdown.
- Wet washings from factory cleaning.
- Surface water from roof drainage, road and other impermeable surface drainage (clean surface water).
- Foul water from staff welfare facilities.

| Emission to | Unit process or activity |
|---|--|
| Surface water drainage system discharging to Piercebridge Beck via interceptor | Surface water from roof drainage, road and other impermeable surface drainage (clean surface water). |
| On-site cess pit – referred to as septic tank in application supporting information (to off-site treatment) | Staff welfare facilities Factory cleaning |
| Off-site treatment | Boiler blowdown |

Surface drainage system:

The surface water drainage system for the estate discharges via an interceptor into the nearby Piercebridge Beck. Maintenance of the surface drainage system on the mill site is the responsibility of the applicant and the associated interceptor also lies within the site boundary. All surface drainage outside of the mill boundary is the responsibility of the neighbouring company.

Cess pit:

Factory cleaning is typically a dry activity, but if any wet washings are produced then they are directed to the cess pit. No industrial chemicals are used for cleaning, as the site only utilises mild household detergents.

Foul water from the staff welfare facilities is also directed to the cess pit, and the contents are tankered away under contract when required.

The standalone septic tank has been included in the permit as a Directly Associated Activity (DAA), as it serves the process and it is considered that the factory cleaning and domestic sewage are equally dependent upon the tank. RGN 2 states that for an activity to be a DAA it must serve the unit and the unit must be at least the 'equal' user of the DAA. This will also include the pipeline/drain into the cess pit.

Boiler blowdown:

This effluent occurs as a result of an automatic, timed blowdown from the installation boiler, which is necessary to control the build-up of solids in the boiler water. The volume of blowdown effluent is estimated to be 5,400 litres per annum, and is tested for density, alkalinity, pH and sulphite contents.

The boiler blowdown effluent was previously stored within IBC's in a bunded area and then tankered away under contract when the bund is also emptied. The process has since been changed to discharging the blowdown effluent directly into the bund, where it is stored for a period of up to six months before disposal off-site. This is not considered to be BAT, as the bund is a secondary containment measure, and so therefore an improvement condition (IC2) has been included within the permit for the operator to review the containment measures for the storage of the blowdown effluent and implement any improvements required.

The emissions and drainage plans reference a soakaway, which is labelled as S1. The site boundary was initially incorrect and the soakaway actually connects to the septic tank of the neighbouring building. It does not take any process effluents or cleaning wash waters from the installation.

Fugitive emissions of substances

The installation has the potential to release fugitive emissions to air, in particular particulate matter. There are management and plant controls in place in order to minimise the potential for airborne particulates. These controls include:

- A planned, preventative and reactive maintenance programme that covers all of the productive and ancillary plant to minimise leaks.
- Enclosed storage and maintenance areas; including bulk storage, primary packaging and waste management.
- The use of abatement equipment throughout the process, where required, consisting of dust filters, DSU's and local exhaust ventilation.
- Effective housekeeping and external cleaning of the process building and stockyards.
- The site drainage system includes a penstock valve that can be isolated in the event of any spillages occurring to prevent discharge.

Odour

The installation has the potential for causing odorous emissions through various stages of the process, such as conditioning, cooling and receipt of raw materials. The operator has identified that the nearest human receptors are approximately 90 metres from the site, and has confirmed that no odour complaints have been received.

The site has control measures in place in order to reduce odorous emissions, which include the following:

- Raw material delivery and storage – All bulk raw materials used in the installation are transferred within enclosed systems to their ultimate point of storage, such as bulk storage tanks. Packed materials are kept within their primary packaging and are stored in the main warehouse until required for use.
- Materials conveyance – All odorous materials used in the process are stored in appropriate sealed containers, such as bulk storage tanks, prior to incorporation into the product. Conveyance is all within enclosed systems, which do not vent externally, to the main factory building.
- Conditioning and cooling – Whilst it is recognised that low levels of odours are emitted from the conditioning and cooling processes, the applicant does not consider these odours to cause off-site nuisance.

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

Noise and vibration

The installation has the potential to cause noise and vibration through the site operation. However, the majority of noise sources associated with the facility, such as the processing line, are internal to the process buildings. Additionally as part of the ongoing operating and maintenance programmes implemented at the site, noise assessments for key operational equipment are undertaken and corrective action taken in the event that a specific item of equipment is emitting an abnormal noise. This preventative action minimises the likelihood of noise being generated as parts degrade. The applicant has also confirmed that no complaints have been received in relation to noise or vibration since the site became operational.

At this time we are satisfied that a site specific Noise and Vibration Management Plan is not required beyond the controls detailed in the EMS. However, the permit conditions contain a provision for the Environment Agency to request the operator to produce and implement a Noise and Vibration Management Plan should the activities give rise to pollution outside the site due to noise and/or vibration.

Dust

The site infrastructure and operations will be managed in order to minimise the risk of dust emissions. These control measures include:

- Preventative and reactive maintenance programmes to minimise leaks from the process;
- Storage and maintenance of dusty materials within enclosed or covered areas (such as silos for bulk materials, primary packaging for packaged materials and skips for waste);
- The use of abatement equipment, where necessary, and any dust collected is returned to the process for reuse wherever possible;
- Effective housekeeping and external cleaning of the process building and stockyards; and
- The site buildings are maintained to ensure that they remain, wherever possible, dust tight (e.g. by only keeping process building doors open when necessary).

Pests

The site infrastructure and operations will be managed in order to minimise the risk of pests. These measures include:

- All areas of the plant are cleaned on a routine basis;
- All waste is properly disposed of where recycling into the process is not possible;
- The building structure is maintained to prevent access to the production and dispatch areas from birds, rodents and insects, which may adversely affect the quality of the finished goods.

- Pest control programmes are operated by approved third party contractors, in accordance with the Universal Feed Assurance Scheme (UFAS) code of practice.

At this time we are satisfied that a site specific Pest Management Plan is not required beyond the controls detailed in the EMS. However, the permit conditions contain a provision for the Environment Agency to request the operator to produce and implement a Pest Management Plan should the activities give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site.

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"> • Director of Public Health/PHE • Local Authority – Planning • Local Authority – Environmental Health • Food Standards Agency • Health and Safety Executive | ✓ |
| 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> | ✓ |
| 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. | ✓ |

| Aspect considered | Justification / Detail | Criteria met |
|---|--|--------------|
| | | Yes |
| The site | | |
| 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.</p> | ✓ |
| Biodiversity, Heritage, Landscape and Nature Conservation | <p>The application is not within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat . 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>Additional Environment Agency assessment was required regarding emissions from the installation, as covered above in the 'Emissions to air' section in the Key Issues of this document. The conclusion of this assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment all emissions may be categorised as environmentally insignificant.</p> <p>In all other aspects the operator's risk assessment was considered satisfactory. Please refer to the Key Issues Section of this document for further detail.</p> | ✓ |

| Aspect considered | Justification / Detail | Criteria met |
|-------------------------------|---|--------------|
| | | Yes |
| Operating techniques | <p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and sector guidance (TGN EPR 6.10).</p> <p>Other than surface water run-off, there are no emissions to sewer, water or land from the installation. It has been concluded that the air emissions from the installation are not significant (see Key Issues section for further detail). The Environment Agency agrees that the Applicant's proposed techniques are BAT for the installation and for the Sector.</p> <p>The application provides information on how the installation meets these requirements. This is explained in more detail in the Key Issues section of this document.</p> | ✓ |
| The permit conditions | | |
| Improvement conditions | <p>Based on the information on the application, we consider that we need to impose improvement conditions to ensure that:</p> <ul style="list-style-type: none"> • A site specific closure plan is produced for the installation. • A report is submitted following a review of the provision of containment measures for the storage of boiler blowdown effluent. | ✓ |
| 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> | ✓ |
| Emission limits | <p>We have decided that emission limits should be set for the parameters listed in the permit. Please refer to the Key Issues Section for further details.</p> <p>Whilst the emissions of particulate matter has been concluded as not being emitted in significant quantities, ELVs have been set in order to ensure protection of nearby receptors. These limits have been set in</p> | ✓ |

| Aspect considered | Justification / Detail | Criteria met |
|-------------------------------|--|--------------|
| | | Yes |
| | accordance with the Benchmark levels identified in Defra PGN 6/26(13) and TGN EPR 6.10. | |
| 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. Please refer to the Key Issues Section for further details.</p> <p>These monitoring requirements have been imposed in order to ensure the dust abatement on the two coolers is effective.</p> <p>We made these decisions in accordance with Defra PGN 6/26(13) and TGN EPR 6.10.</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 the reporting of monitoring, annual production and performance parameter data in the permit.</p> <p>We made these decisions in accordance with Defra PGN 6/26(13) and TGN EPR 6.10.</p> | ✓ |
| Operator Competence | | |
| 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 our guidance on what a competent operator is. | ✓ |
| 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: External 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.

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| Response received from |
| Darlington Borough Council – received 08.02.2017 |
| Brief summary of issues raised |
| No substantiated complaints received in relation to the site during the time it was regulated by Darlington Borough Council. |
| Summary of actions taken or show how this has been covered |
| No action necessary. |

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| Response received from |
| Public Health England – received 20.02.2017 |
| Brief summary of issues raised |
| The main emissions of potential concern are dust emissions primarily from the cooler exhaust. This exhaust is mitigated by Dust Separation Units. Monitoring data indicates that dust levels are low and that most dust detected are large non-respirable fractions. The current monitoring regime for dust, that is in place from the previous Part B permit, needs to be assessed by EA and deemed suitable. 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. |
| Summary of actions taken or show how this has been covered |
| Whilst the emissions of particulate matter from the coolers has been concluded as not being emitted in significant quantities, emission limits have been set within the permit in order to ensure protection of nearby receptors. These limits have been set in accordance with the Benchmark levels identified in Defra PGN 6/26(13) and TGN EPR 6.10. |

No responses were received from the following:

- Members of the public via web publication
- Local Authority – Planning
- Food Standards Agency
- Health and Safety Executive