Permitting decisions

Bespoke permit

We have decided to grant the permit for Speke Mill operated by B. Tickle & Sons Limited.

The permit number is EPR/KP3839DG.

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 introductory note summarises what the permit covers.

Description of the main features of the Installation

Speke Mill, operated by B. Tickle & Sons Limited, is an installation located in Speke, Liverpool which manufactures a range of agronomic and animal feed products.

The site was previously regulated under the Part B LAPPC regime but now requires a Part A environmental permit following the 2013 update to the Environmental Permitting Regulations which implemented the Industrial Emissions Directive. This redefined the 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 capacity greater than 300 tonnes per day.

The key stages of the process are the receipt and storage of raw materials, weighing, grinding, mixing, conditioning, pressing, cooling and coating, with storage prior to dispatch. Emissions to air are from two small steam-raising boilers and the product cooler. All site run-off and process effluents are directed to the sewer.

The Mersey Estuary SPA and Ramsar site are within 2.5km of the installation. There are no designated SSSI's within 2 km 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.

The most significant environmental issues associated with feed mill operations are typically emissions of particulate from the product coolers, abatement of those emissions, monitoring methods employed to measure particulate emissions, and/or indicative monitoring to test for abatement failure. Also odours from raw material storage or process and bulk storage of liquids (such as oils & fats for coating the feed).

The key controls and techniques are described in the following sections.

Emissions to air and abatement
The principle component of emissions to air at feed mill installations is particulate matter. 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 to remove particulate matter:

- Dust separation unit (DSU) on the main process line cooler exhaust, with a continuous indicative dust monitor (due for replacement).
- Fabric filters as required, for the various stages of processing (grinding, raw material intake/storage/conveyance and product storage/out loading). These vent within the process building.
- Local exhaust ventilation e.g. material storage and conveyance. These vent within the process building.

The application includes an appraisal of BAT for control of emissions to air and we are satisfied that the chosen methods are BAT for the installation.

The application includes information on the emissions of particulates from the cooler vent:

Table 5.5 Emissions to air (based on annual monitoring - November 2014)

ID	Source	Components of release	Height	Diam.	Release Temp. (K)	Flow Rate (Nm^3/hr)	Benchmark (mg/Nm^3)	Release Rate (mg/Nm^3)	Release type
A1	Cooler 1 vent	Total particulate matter	16m	0.61m	318	14,000	20	6.1	Continuous

It can be seen that the site is easily meeting the benchmark for particulate matter of 20 mg/Nm^3. The applicant has not carried out any assessment of the impacts on local air quality from this emission. As such, we have followed our screening criteria for particulate matter (PM) from animal feed mills, which determines the minimum distances under which the process contributions to ambient PM_{10} concentration would be unlikely to result in an exceedence of the annual mean or 24-hour mean air quality objectives for PM_{10}.

We recommend that modelling is **not** required as part of an EP application where the following conditions are met:

- Grinders have no external emission points
- Background PM10 concentrations are less than 20 $\mu g/m^3$
- Volume flow from the plant of less than 25,000 m^3/hour
- A stack height or release point greater than 10 m above ground level
- Where an emission limit of 20 mg/m^3 has been agreed, for 2 coolers or less, no sensitive receptors are located within 150 m.

The background PM_{10} concentration from the Estimated Background Air Pollution Maps (base year 2013), downloaded from http://uk-air.defra.gov.uk/data/laqm-background-home for the relevant grid square is 14.5 $\mu g/m^3$. The stack height is greater than 10 metres above ground level and we have confirmed that there are no sensitive receptors within 150 metres of the release. As such, we are satisfied that emissions of particulates from the process would not result in significant impacts on the long term and short term air quality objectives for PM_{10}. No further assessment needs to be undertaken by the applicant.

There is also a point source emission to air from the boiler. Due to the small net thermal input of the boilers (0.5MW each) combined with the boiler efficiency optimisation and regular maintenance, we are satisfied that emissions of NOx, PM, SOx and CO from the boiler plant can be considered to be insignificant. No monitoring regime is required.

On the basis of the above discussion together with the controls in place at the installation and the Emission Limit Values (ELVs) set in the permit, we are satisfied that the point source emissions to air from the installation will not have a significant adverse impact upon amenity or public health.

Odour
Odorous raw materials are consumed in the process and the installation could have the potential to cause odorous emissions, primarily through various stages of the process such as receipt of raw materials and cooling. However, monitoring of odours at the boundary of the installation ("sniff testing") indicates that the off-site impact of the plant is not significant and the installation has never been the source of any odour complaints.

At this stage, we are satisfied that a site specific Odour Management Plan (OMP) is not required beyond the controls detailed in the risk assessment, operating standards and EMS:

- Receipt: Liquid materials are transferred within enclosed systems. Bulk solid materials are received in enclosed vehicles and tipped within the enclosed raw material store.
- Storage and conveyance: All odorous materials used in the process are stored in appropriate sealed containers, such as bulk storage prior to incorporation into the product. While these tanks are fitted with breathing vents (to facilitate material receipt/discharge) the operator believes that the operation of these facilities does not result in the emission of offensive odours beyond the site perimeter.
- Processing storage and conveyance: All odorous materials are transferred/processed in enclosed systems. Whilst it is recognised that low levels of odours are emitted from certain point source emissions from the process, such as coolers, the operator believes that these odours do not result in the emission of offensive odours beyond the site perimeter.
- Dispatch: All odorous materials are transferred/processed in enclosed systems prior to discharge within the building into specialised vehicles.

However, the permit conditions contain a provision for the Environment Agency to request the operator to produce and implement an OMP should activities give rise to odour beyond the installation boundary.

Noise and vibration
As part of the ongoing operating and maintenance procedures implemented by B Tickle & Sons, 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. The nearest domestic receptors are located at least 400 metres from the site, in addition there are numerous other noise sources associated with the industrial nature of the area which includes a railway line, a major trunk road A561 and an international airport. The natural attenuation ensures the installation will not cause a noise nuisance.

Notwithstanding the above, the permit conditions contain a provision for the Environment Agency to request the operator to produce and implement a Noise Management Plan (NMP) should activities give rise to noise beyond the installation boundary.

Fugitive emissions
There are several potential sources of fugitive emissions to air from a feed mill. Fugitive losses are typically highest in the intake area and dispatch area. However as these activities take place within the buildings, fugitive emissions will be minimised. 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) with effective housekeeping and external cleaning. There are preventative and reactive maintenance programmes to minimise leaks from the process.

Fugitive emissions to water could potentially arise through spillages, leaks and firewater discharge. The liquids infrastructure is subject to a regular and routine inspection regime under various parts of the environmental management system (EMS). There are work instructions on emergency spill procedures, bund and pipework inspection & pumping out procedure, annual drainage inspection procedure, IBC deliveries, roadway & hardstanding inspection procedure, red diesel oil deliveries, and daily equipment & emissions to ground & water checks. There are operational procedures for bulk liquid storage & delivery,

drainage system, planned preventative maintenance. The requirement to operate in accordance with a written EMS will be included as a condition in the permit.

Tanks are self-bunded or in a bund, on impermeable hard surfacing, with drainage connected to the foul sewer. External roadways are correctly metalled with a drainage system. There is no pathway to ground. Spill kits are provided for accidental releases. An improvement program is proposed for an appropriately bunded tank farm for the molasses/vegetable oil and resurfacing of the yard area at the northwest corner of the site. Conditions will be included in the permit to ensure these requirements are completed.

Emissions to water

Effluent generated at the installation is discharged to a combined foul sewer. This includes process effluent (boiler blow down, wash water) and site run-off. There are no wet cleaning in place (CIP) systems within the installation and vehicle washing operations are carried out off site. The volume of process effluent is very small, at less than $1m^3$/day. The applicant has provided evidence that they are a customer of United Utilities, who process all effluent off site. We have consulted with UU regarding the discharge and whether a trade effluent consent exists or is required. Although there is no record on their register, we are satisfied that a sewer connection is in place and that we have raised the question of a trade effluent consent with the sewerage undertaker and the applicant as a matter for their resolution.

Resource efficiency and waste management

Raw materials are selected to meet the requirements of the end market, with competitive drivers determining in some cases the specific materials consumed. As part of the EMS other raw materials consumed (such as process oils) are frequently reviewed, with the aims of these reviews being to improve process performance and to minimise potential environmental impact. The installation is part of a high-volume, low-margin 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).

The installation generates and subsequently handles only small quantities of waste. As part of the EMS these wastes are appropriately handled, segregated and stored on site according to type. Licensed third parties are contracted to collect and dispose of and/or recover, off site, all of the site's waste. The operator has an ongoing programme to review potential opportunities to increase the recovery of usable materials from its waste streams.

Decision checklist

Aspect considered	Decision
Receipt of application	
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 confidentiality.
Consultation	
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement. The application was publicised on the GOV.UK website. We consulted the following organisations: • Liverpool City Council • Health and Safety Executive • Public Health England • United Utilities (sewerage undertaker) The comments and our responses are summarised in the consultation section.
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 legal operator for environmental permits.
The facility	
The regulated facility	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'. 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.
The site	
Extent of the site of the facility	The operator has provided plans which we consider are satisfactory, showing the extent of the site of the facility including the discharge points. The emission point plan is included in the permit.
Site condition report	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 and baseline reporting under the Industrial Emissions Directive.

Aspect considered	Decision
	Based on the information provided within the SCR it appears appropriate pollution measures are in place to prevent pollution of soil and/or groundwater and therefore the setting of baseline reference data for relevant hazardous substances (RHS) would not appear to be warranted to comply with the new IED requirements. The operator should ensure pollution prevention measures are appropriately inspected/maintained during the life of the permit and should any change in activities occur (i.e the storage/use of new RHS substances) the operator should review whether baseline reference data for any other additional RHS needs to set in the future. The applicant has been advised that should a baseline not be established they may be liable for any contamination that is present within the soil and/or groundwater at surrender.
Biodiversity, heritage, landscape and nature conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. These are identified in the nature conservation screening report as part of the permitting process. However, our guidance on identifying 'relevance' for assessment under the Habitats Regulations for installations with combustion processes does not require assessment of plant less than 5 MW. In addition, we are satisfied that the discharge to sewer is BAT for the disposal of the site drainage and process effluent and will not have an adverse impact on the River Mersey and its protected species. No further assessment is required. We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified. We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.
Environmental risk assessment	
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is unsatisfactory and required additional Environment Agency assessment. We have followed our screening criteria for particulate matter from animal feed mills - see key issues section. The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment, all emissions may be categorised as environmentally insignificant with the exception of particulate matter from the cooler. This will be controlled with an emission limit.
Operating techniques	
General operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes (The Food & Drink Sector EPR 6.10, PGN 6/26 Statutory guidance for animal feed compounding and the Food, Drink and Milk Industries BREF 2006) and we consider them to represent appropriate techniques for the facility. The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

Aspect considered	Decision
Operating techniques for emissions that do not screen out as insignificant	Emissions of particulate matter cannot be screened out as insignificant. We are satisfied that the impacts are not significant and have assessed whether the proposed techniques for control are BAT. The requirement for abatement and an emission limit value is discussed in the key issues section. The proposed techniques/emission levels for emissions that do not screen out as insignificant are in line with the techniques and benchmark levels contained in the technical guidance 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.
Permit conditions	
Raw materials	We have specified limits and controls on the use of raw materials and fuels. Gas oil - not exceeding 0.1% w/w sulphur content.
Improvement programme	Based on the information on the application, we consider that we need to impose an improvement programme. We have imposed an improvement programme to ensure that: ➢ appropriate monitoring systems are in place to prevent pollution from the emission of particulate matter (replacement monitor, IC1). ➢ the appropriate measures are in place to prevent fugitive emissions (containment of liquid raw materials and re-surfacing of yard, IC2 – IC4).
Emission limits	Whilst the emission of particulate matter has been identified as not being emitted in significant quantities, an ELV has been set for the particulate matter from the cooler (20 mg/m^3) in order to ensure protection of nearby receptors and to ensure compliance with the Benchmark levels identified in Process Guidance Note 6/26(13) and TGN EPR 6.10. The application includes monitoring data to show that the installation can comfortably meet this limit.
Monitoring	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. These monitoring requirements have been imposed in order to ensure the dust abatement on the cooler is effective. Annual independent sampling of particulate matter to MCerts standards is carried out by accredited third party specialists. We made these decisions in accordance with Defra PGN 6/26(13) and TGN EPR 6.10. 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.
Reporting	We have specified reporting in the permit – annually for particulate matter from the cooler exhaust. We made these decisions in accordance with Defra PGN 6/26(13) and TGN EPR 6.10.

Aspect considered	Decision
Operator competence	
Management system	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. The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	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. Paragraph 1.3 of the guidance says: "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." 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. 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.

Consultation

The following summarises the responses to consultation with other organisations and 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

Response received from
Public Health England
Brief summary of issues raised
We recommend that any environmental permit issued for this site should contain conditions to ensure that the following potential emissions do not impact upon public health: point source and fugitive emissions of particulate matter and odour emissions.
Summary of actions taken or show how this has been covered
These impacts are controlled by conditions in the permit and specific controls are detailed in the Key Issues section and Annex 1 above.

Response received from
United Utilities
Brief summary of issues raised
Provision of a link to their Trade Effluent Consent register (following our direct request for information on any TE Consent) - https://www.unitedutilities.com/trade-effluent-consent-register/
Summary of actions taken or show how this has been covered
We responded to confirm that for the purposes of our environmental permitting, we are satisfied that all surface run-off and process effluents from the site are being discharged to the UU sewer. The volume/contamination of the process effluent is low and we believe that there are combined sewers on the Woodend Industrial Estate. However, we are not certain the applicant holds the correct permissions from UU. We requested any advice/guidance that UU can provide on this matter – none has been forthcoming. We are satisfied that a sewer connection is in place and that we have raised the question of a trade effluent consent with the sewerage undertaker and the applicant as a matter for their resolution.

No responses were received from the following:

- Members of the public via web publication
- Health & Safety Executive