

Permitting Decisions- Bespoke Permit

We have decided to grant the permit for Larkshall Pet Food Site operated by C&D Foods (Larkshall) Unlimited.

The permit number is EPR/AP3125SZ.

The permit was granted on 22/04/2025.

The application is for a new bespoke application:

- Dry Pet Food Production facility which has a maximum production capacity of 137 tonnes per day.
- Processes on site can be summarised as: intake of raw materials, grinding, mixing of ingredients, extruder, cooler, packing of finished product, storage and chilling via refrigeration before the finished product is exported offsite.

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:

- summarises the decision making process in the [decision considerations](#) section to show how the main relevant factors have been taken into account
- highlights [key issues](#) in the determination
- 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.

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 Techniques (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

The installation has a bespoke Environment Management System (EMS) in place which is designed to ensure that environmental management is a high priority within the sites operations. The aims, objectives and targets will be designed to control the environmental aspects and reduce the environmental impacts of the production/kegging/bottling process.

Odour

The installation has the potential to cause odorous emissions through various stages of the process such as processing raw materials, mixing and grinding of cereals and meats, and adding fats and oils to the product.

The applicant employs a range of controls to reduce odorous emissions such as:

- Cleaning in Place (CIP): as a food and drink site CIP is an ongoing process each process has a separate procedure for cleaning equipment.
- Potentially odorous material will be stored with a permanent cover with frequent removal.
- Waste is segregated at source and recycled or disposed of appropriately.
- Appropriate mitigation measures are in place.
- Dirty wash water is stored in sealed tanks and removed from site twice weekly.

The applicant provided an Odour Management Plan (OMP) with the application, however, at this time, we do not require a site-specific OMP. Therefore, we have not formally approved the OMP submitted but we are satisfied the controls will be integrated into the operator EMS. The permit condition 3.3 enables the Environment Agency to require the operator to develop and implement an OMP if deemed necessary.

Noise

The installation has the potential to cause noise emissions through various stages of the process. Potential sources of onsite noise include noise from equipment, machinery, delivery/dispatch vehicles and employees. The nearest sensitive receptor would be residential receptors which are located 120m south of the site boundary.

We have determined that at this time we would not require a Noise Impact Assessment (NIA) and site specific Noise Management Plan (NMP) to be produced as we have screened the site out using internal screening tools. We are also satisfied that the applicant employs a range of procedures and control measures to ensure noise is minimised on site.

The applicant provided an NMP with the application, however, at this time, we do not require a site-specific NMP. Therefore, we have not formally approved the NMP submitted but we are satisfied the controls will be integrated into the operator EMS. The permit condition 3.4 enables the Environment Agency to require the operator to develop and implement an NMP if deemed necessary.

Point Source Emissions

Emissions to air

Point source emissions to air arises from the operation of one 3.05 MWth Liquid Petroleum Gas (LPG) fired steam boiler. Due to the size of the plant, this falls under the scope of the Medium Combustion Plant Directive (MPCD). There are also point source emissions from the grinders, cooler and dryer on site associated with the pet food processing.

Point source emissions from the boiler comprise combustion gases which include oxides of nitrogen (NO_x) and carbon monoxide (CO), we have also included a limit for Sulphur Dioxide (SO₂) due to the requirements of the MCPD, however, we have limited the sulphur content of the LPG fuel in table S2.1 of the permit therefore SO₂ emissions should be minimal. The boiler emissions are released to atmosphere via a 12 m stack.

The site has two grinders (A4) that emit from one stack, one dryer (A5) and one cooler (A6). The emission sources A4, A5 and A6 all emit particulate emissions.

The applicant provided an Air Quality Assessment (AQA) which included air dispersion modelling assessing the long term and short term impacts of emissions from the sources identified above on both human health and ecological receptors. The Environment Agency completed an audit of the AQA, this audit concluded we are able to utilise the conclusions for human health for the permit determination.

Human Health Impacts

The operator's maximum predicted long term and short term process contributions (PCs) are either insignificant or the predicted environmental concentration (PEC) does not exceed the relevant environmental standards (ES).

Ecological Receptors

We have used the consultant's maximum annual NO_x PC for each ecological site and updated APIS background data and find a potential exceedance of the minimum critical load for nitrogen deposition of 1.48% (PEC of 447%) at Breckland Forest SSSI. We have increased the consultant's NO_x PC at this location by 27% to account for a NO_x emission rate disparity of 27%. Given the high nitrogen deposition PC at Breckland Forest, we have consulted with the Habitats Assessment Team. The Habitats Assessment Team have consulted with Natural England. The outcome is that Natural England are satisfied that the installation will have no significant impact on the surrounding conservation sites.

There are the following designated sites within 2km of the site; Breckland SPA, SAC, Norfolk Valley Fens SAC, Breckland Forest SSSI, Bridgham & Brettenham Heaths SSSI, East Wretham Heath SSSI, and five LWS sites.

On the basis of the above, we have permitted the boiler is permitted to operate for up to 8,760 hours per annum at the NO_x Emission Limit Value (ELV) of 250mg/Nm³ (3% O₂, 273.15K, dry), in line with MCPD requirements. We have also permitted A4, A5 and A6 to operate for up to 8,760 hours per annum at the modelled particulate matter ELV of 10 mg/Nm³ (A4) and 20 mg/Nm³ (A5 and A6), in line with the Food, Drink and Milk Best Available Techniques – Associated Emission Levels (BAT-AELs).

Resource Efficiency and Waste Management

Raw Materials

Raw materials are delivered to the site via tankers and stored on site before discharged to the weighing scales – minor ingredients including vitamins and minerals. Raw materials are purchased on a just-in-time basis to hold a minimal amount of stock on site.

Waste Handling

All waste products are stored in covered bins inside the facility until full or when daily production ends are is then moved to external covered trailers prior to collection. Waste collection is carried out daily and can be more frequent if needed. Dry waste is stored in sealed, covered bulkers and is collected weekly while wet waste is stored in tanks to be collected twice weekly.

Energy Usage

Resource efficiency is monitored closely with regards electricity, water, and fuel usage. This is carried out by the engineering department in conjunction with the HSE officer and the group Environmental Dept.

The refrigeration plant in use at the installation is all of a modern type, regularly inspected and subject to a service contract. Operational procedures ensure chiller/freezer doors are open for the minimum amount of time.

Compressed air systems are operated at the minimum pressure required to adequately operate the installations equipment and is regularly inspected and subject to a service contract. Routine air leakage detection is undertaken.

Steam on site is used to provide water and thermal energy into the batch mixing process, providing a steam jacket on the extruder, and warming fats for use in the process. The steam and hot water pipework is, as far as possible, lagged to increase efficiency. Water usage is minimised by knee and operated washes. Line motors are where possible on Variable Speed Drives to improve efficiency.

The kibble dryer burners take in cold air and mix with LPG before burning. Control of the burners and flame units with variable speed usage which control the temperature and volume of hot air, depending on throughput and zoning of the dryers so that the hot air hits at the end and moves back facilitating heat-recovery.

Lighting is, where possible, of an energy efficient type. Replacement units when fitted will be of an energy efficient type.

C&D Larkshall is a dry food site and only uses water for washdown and during mixing/blending process to create "Mush".

The operator has confirmed that they comply with the required BAT conditions for energy efficiency.

Best Available Techniques

Table 1 – Food Drink and Milk BAT Assessment

BAT conclusion	Assessment of the proposal to ensure they are in line with the BAT Conclusion requirements
BATc 1 and BATc 2 Environmental Management System (EMS)	<p>The operator has stated that their EMS is equivalent to the ISO14001 standard. The operator has confirmed that the site will be risk assessing the new environmental aspects and impacts associated with the new production process and that relevant EMS documentation will be updated to effectively manage risk and adhere to the relevant standards required through environmental permitting.</p> <p>Water, energy and raw materials usage are all monitored, recorded and reviewed regularly with management and group environmental against key performance indicators. All parameters are measured and analysed for possible reduction opportunities. Process flow emissions are kept on site. Water usage is monitored on site and by group environmental and reviewed regularly in metrics meetings. Reduction projects are always being looked into. All air emission points are monitored annually for flow, temperature and relevant pollutants. Resource efficiency is monitored at all times and discussed continuously for monitoring strategies.</p> <p>We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 1 and BATc 2.</p>
BATc 3 Monitoring for emissions to water	<p>The operator has confirmed that wastewater on site is collected in storage tanks and emptied regularly by a licenced 3rd party haulier. They have confirmed that there is no treatment of wastewater on site and therefore no parameters of effluent are recorded prior to removal from site.</p> <p>We are satisfied that BATc 3 is not applicable to the site.</p>
BATc 4 Monitoring for emissions to water	<p>There are no direct discharges to surface water. Wastewater is not discharged from site and is tankered offsite, for anaerobic digestion.</p> <p>We are satisfied that BATc 4 is not applicable to the site.</p>

<p>BATc 5</p> <p>Monitoring for channelled emissions to air</p>	<p>The operator has confirmed that emissions to air are monitored regularly. The permit has included monitoring of particulate matter annually to the appropriate BAT standard in table S3.1 for the cooler and grinder emission points A2, A3, A4, A5 and A6.</p> <p>We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 5.</p>
<p>BATc 6</p> <p>Energy Efficiency</p>	<p>The operator has confirmed Energy Savings Opportunity Scheme (ESOS) audits are carried out as required and any recommendations that arise from the audits are implemented where possible. They have also confirmed they utilise an appropriate combination of common techniques as listed in BATc6b, these include: Burner regulation and controls; energy efficient motors; LED lighting; boiler blowdown is minimised with preventative maintenance; steam distribution systems are optimised; preheating of feed water; process controls are in place; reduction of air leaks; heat loss is reduced via insulation; and variable speed drives.</p> <p>ENERGY EFFICIENCY PLAN</p> <p>We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6.</p>
<p>BATc 7</p> <p>Water consumption and wastewater minimisation</p>	<p>Dry Pet Food Manufacturing is a fairly a dry process, with low water usage and limited potential for water saving & application of BAT techniques. However, the operator has confirmed they do utilise an appropriate combination of techniques as listed in BATc7 including: optimised flow using flow meters, valves and KPIs; optimised hoses and nozzles for washdown and general cleaning; foul and storm lines are segregated to different drainage channels; dry cleaning in place; high pressure cleaning is in place; Cleaning-in-Place (CIP) is carried out; water reduction is considered when designed and constructing the facility and its equipment; and cleaning is done daily to ensure hygiene standards.</p> <p>We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7.</p>

<p>BATc 8</p> <p>Prevent or reduce the use of harmful substances</p>	<p>The operator has confirmed they utilise an appropriate combination of techniques as listed in BATc8 which include proper selection of chemicals carried out based on the needs of the facility and the process activities; dry cleaning is carried out; optimisation of chemical use is done by daily measurement and control usage as well as up to date chemical awareness training.</p> <p>We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.</p>
<p>BATc 9</p> <p>Refrigerants</p>	<p>The operator has confirmed that they have an action log with times scales for replacement of refrigerants with a global warming potential greater than 1,400.</p> <p>We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 9.</p>
<p>BATc 10</p> <p>Resource Efficiency</p>	<p>The operator has confirmed they utilise an appropriate combination of techniques in line with BATc 10, including sending wastes and wastewater for anaerobic digestion and separation of residues for appropriate disposal. They have also confirmed that no waste goes to landfill and that cardboard and plastic are bailed on site and sent for recycling, and all other wastes go to incineration.</p> <p>We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.</p>
<p>BATc 11</p> <p>Wastewater buffer storage</p>	<p>BATc 11 is not applicable to this site due to the fairly dry nature of the processes on site. The minimal wastewater produced on site is collected in storage tanks and collected by a licensed 3rd party haulier for anaerobic digestion.</p>
<p>BATc 12</p> <p>Emissions to water – treatment</p>	<p>BATc 12 is not applicable to this site due to the fairly dry nature of the processes on site therefore, minimal wastewater is produced on site. Wastewater that is produced is collected in storage tanks and collected by a licensed 3rd party haulier and sent for anaerobic digestion. Wastewater effluent is not treated on site prior to collection.</p>

BATc 13 Noise Management Plan	BATc 13 is only applicable to cases where noise may be a nuisance at sensitive receptors, either where it is expected and/or has been substantiated. We are satisfied that a Noise Management Plan (NMP) is not required for the site currently. However, the operator does have a NMP integrated into there EMS.
BATc 14 Noise management	<p>The operator has confirmed that they implement an appropriate combination of techniques as stated in BATc 14, which include: enclosed equipment; regular inspections and maintenance of plant equipment is undertaken by maintenance staff; staff using equipment are trained and competent; and provisions for noise control during the day and night are in place as part of the NMP.</p> <p>We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.</p>
BATc 15 Odour Management Plan	BAT 15 is only applicable to cases where an odour maybe a nuisance at sensitive receptors, either where it is expected and/or has been substantiated. We have determined odour to be a low risk from the site therefore, an approved odour management plan is not currently required.
BAT Conclusions specific to Animal Feed	
BATc 16 Green fodder	BATc 16 is not applicable at this site as green fodder is not processed.
BATc17 Dust Emissions	<p>The operator utilises bag filters as abatement of particulate matter on the grinder, and cyclone abatement on coolers and dryers in addition to an airlift to remove particulate matter.</p> <p>We have included the appropriate limits in line with BATc17 for grinding and pellet cooling on site, see table S3.1 of the permit.</p> <p>We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 17.</p>
Indicative Environmental Performance Levels	

Specific Energy Consumption	The applicant has provided the data and calculated it to be 0.69 MWh/tonne of product. The operator has stated this is due to meat being processed which requires more energy consumption than grain pet foods. The operator has provided sufficient information that we are satisfied with.
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Decision considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

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

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

We consulted the local authority.

No response was received.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

- Director of PH/UKHSA
- Health & Safety Executive
- Food Standards Agency
- Sewerage Authorities

The comments and our responses are summarised in the [consultation responses](#) section.

Operator

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 regulated facility

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility' and Appendix 2 of RGN2 'Defining the scope of the installation' and Appendix 1 of RGN 2 'Interpretation of Schedule 1'.

The site

The operator has provided a plan which we consider to be satisfactory.

This show the extent of the site of the facility.

The 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.

Nature conservation, landscape, heritage and protected species and habitat designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

See the key issues section for detailed information.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have consulted Natural England on our on our Habitats Regulation assessments, and taken their comments into account in the permitting decision.

The decision was taken in accordance with our guidance.

Environmental risk

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator's risk assessment is satisfactory.

Operating techniques

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

General operating techniques

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.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

Operating techniques for emissions that do not screen out as insignificant

Emissions of NO_x cannot be screened out as insignificant. We have assessed whether the proposed techniques are Best Available Techniques (BAT).

The 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 enable compliance the Medium Combustion Plant Directive.

Operating techniques for emissions that screen out as insignificant

Emissions of SO₂, CO and particulate matter have been screened out as insignificant, and so we agree that the applicant's proposed techniques are Best Available Techniques (BAT) for the installation.

We consider that the emission limits included in the installation permit reflect the BAT for the sector.

National Air Pollution Control Programme

We have considered the National Air Pollution Control Programme as required by the National Emissions Ceilings Regulations 2018. By setting emission limit values in line with technical guidance we are minimising emissions to air. This will aid the delivery of national air quality targets. We do not consider that we need to include any additional conditions in this permit.

Raw materials

We have specified limits and controls on the use of raw materials and fuels.

We have set a limit for the Liquid Petroleum Gas (LPG) fuel to not exceeding 0.1% w/w sulphur content.

Improvement programme

Based on the information on the application, we consider that we need to include an improvement programme.

See the BAT Conditions table within the Key Issues section for details of why an improvement condition was included.

Emission Limits

Emission Limit Values (ELVs) and equivalent parameters or technical measures based on Best Available Techniques (BAT) have been added for the following substances:

Emission Point A1

- Oxides of Nitrogen – 250 mg/m³
- Sulphur dioxide- 200mg/m³

We have included these limits based on the Medium Combustion Plant Directive

Emission Points A2, A5, A6

- Particulate matter- 20mg/m³

Emission Points A3, A4

- Particulate matter- 10mg/m³

We have included these limits based on the Food Drink and Milk Best Available Techniques BAT conclusion 17.

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.

Emission Point A1

- NO_x, SO₂ and CO – Every 3 years

We have included these monitoring requirements in line with Medium Combustion Plant Directive.

Emission Points A2, A3, A4, A5, A6

- Particulate Matter (dust) – annually

We have included these monitoring requirements in line with the Food Drink and Milk Best Available Techniques – BAT conclusion 5.

Reporting

We have specified reporting in the permit.

We made these decisions in accordance with the Medium Combustion Plant Directive; Food, Drink and Milk Industries BRef; and Industrial Emissions Directive.

Management System

We are not aware of any 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.

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

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 Responses

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:

Response received from UKHSA.

Brief summary of issues raised: Initially there was no odour management plan, therefore this was required by UKHSA.

Summary of actions taken: Odour management plan received and assessed as satisfactory.