

## **Permitting Decisions- Bespoke Permit**

We have decided to grant the permit for Rudie's Kitchen Facility operated by Dogmates Ltd, trading as Butternut Box.

The permit number is NP3600MA.

The application is for manufacture of dog food products. Raw ingredients are received which are then prepared by grinding, mixing, and sealing in individual pouches prior to cooking in 2 gas fired steam boilers. The final product is frozen and stored prior to dispatch. The effluent is physically treated to remove solids and the pH balanced prior to transfer to a storage tank and is tankered offsite for disposal to sewage treatment works. Energy use, water use, raw materials use and waste arisings are all measured and monitored.

The operator has a Climate Change Agreement in place (23/05/2022).

The gas boilers are currently regulated under a standard rules permit which will be consolidated into this permit under this application. The original standard rules permit will need to be surrendered following permit issue.

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 <u>decision considerations</u> 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

#### **Best Available Techniques (BAT) Assessment**

. The BAT conclusions for the food, drink and milk industries were published by the European Commission on 19 December 2019. We have reviewed the key measures proposed by the Operator for this application and assessed them against the relevant BAT requirements. The measures provided in the application are summarised below.

BAT ref.	Indicative BAT	Key measures proposed				
		The site operates with an EMS which incorporates the ten ISO components. Has IMS ISO14001:2015. The site completes regula internal audits of the IMS.				
1	EMS	Permit conditions and continued site compliance will ensure that the BATc 1 is complied with.				
		We are satisfied that the operator has demonstrated compliant with BATc 1.				
2	EMS – inventory of inputs & outputs to increase resource efficiency and reduce emissions.	The site monitors energy, materials and water usage. Air emissions have been risk assessed and limits are included in the permit.				
		We are satisfied that the operator has demonstrated compliant with BATc 2 at this time.				
3	Emissions to water – monitor key process parameters	Other – the effluent is tankered off site as no connection to sewer. The necessary controls are in place for the receiving wor under a trade effluent consent.				
		The operator has demonstrated compliance with BATc 3.				
4	Monitor emissions to water	N/A applies to direct discharges to water. Only clean/uncontaminated rainfall is discharged from non process areas of the site.				
5	Monitor channelled emissions to air	Other – monitoring requirements for the gas boilers are set in t permit in line with requirements for new MCP.				
6	Energy efficiency	Site measures energy consumption and benchmarks against KP Ongoing projects as part of Continuous Improvement to meet energy efficiency targets.				
-		We are satisfied that the operator has demonstrated compliant with BATc 6.				
7	Water and wastewater minimisation	Queried water usage during permit determination. Operator is an average of 1.77m3 waste water produced per tonne of product (2022 ytd data) and therefore within the range of 1.3-2.4m3 for wet food manufacture required under BAT. Site utilizes a "clean as you go" system to minimise waste to drain. Dry cleaning is used to remove gross contamination is utilized across the site. Water recycling opportunities are review as par of the CI process.				
		We are satisfied that the operator has demonstrated complian with BATc 7.				

8	Use of harmful substances	The Operator has provided information on the chemicals and cleaning methods used which are appropriate to meet customer and food standards. Dry cleaning equipment is also available.  We are satisfied that the operator has demonstrated compliance with BATc 8.				
		Ammonia is main refrigerant gas with low GWP.				
9	Use of refrigerants	We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 9.				
10	Resource efficiency	The Operator has provided information on the waste minimisation techniques used. All waste streams are segregated. Effluent sludge is sent to AD avoiding landfill.				
		We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10.				
		The Operator has provided information to prevent the uncontrolled emissions to water.				
11	Emissions to water – waste water buffer storage	There is sufficient divert capacity on the effluent plant. Effluent is continuously monitored to allow for automatic divert back to the head of the treatment process if required. All treated effluent is tankered from site.				
		All storage areas and process areas are situated on impermeable concrete surfacing. Spill kits and absorption materials are located on site to deal with minor spills.				
		We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 11.				
12	Emissions to water - treatment	N/A – applies to direct discharges to water.				
13 Noise – management plan (NMP)		N/A – A noise management plan is not considered necessary.				
13	Noise – management plan (NMP)	Activities are undertaken within a building. Under the IMS the operator has all the components of a noise management plan in place. Noise monitoring is periodically undertaken (including vibration (internally) as part of occupational H&S).  We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 13.				
13	Noise – management plan (NMP)	operator has all the components of a noise management plan in place. Noise monitoring is periodically undertaken (including vibration (internally) as part of occupational H&S).				
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#### **Emissions to air**

The operator has provided an H1 assessment for air emission from the boilers.

The H1 stage two screening assessment which takes account of the background NOx levels demonstrates that there is no impact predicted for NOx releases in the long term however the short term impact of NOx cannot be screened out.

Dispersion modelling of NOx emissions was undertaken using ADMS-5. Impacts at sensitive receptors were quantified and the results compared with the relevant Environmental Quality Standards (EQS) and significance criteria.

Predicted pollutant concentrations were below the relevant EQSs at all locations for all meteorological data sets modelled. Resultant impacts were classified as not significant for both human sensitive receptors and relevant ecological sites.

The above screening and dispersion model account for the potential for the facility to operate up to four identical boilers. As the operator is only commissioning two units, the modelling report assessment is considered conservative.

The modelling was conservative/worst case as undertaken on 4 boilers (4 x 3.95MWth- 15.8MWth) all operating at 100% 24/7. The subsequent change to 2 boilers (3.95 and 8.23 each, total 11.99MWth) although different in configuration would have a negligible effect and likely lower impact due to reduced overall size and operation on the emissions modelled previously. The resultant emissions are still unlikely to exceed the local EQS.

As indicated in Table 19 below, PECs were below 70% of the EQS at all human receptor locations. As such, predicted effects on annual mean NO<sub>2</sub> concentrations are considered to be not significant, in accordance with the stated criteria.

As indicated in Table 23 below, the PC proportion of the EQS was below 10% at all human receptor locations. As such, predicted effects on 8-hour rolling mean CO concentrations are considered to be not significant in accordance with the stated criteria.

As shown in Table 25 below, PCs were below 100% of the EQS at all ecological receptor locations. As such, predicted impacts on annual mean NOx concentrations are considered to be not significant in accordance with the stated criteria.

Table 19 Maximum Predicted Annual Mean NO<sub>2</sub> Concentrations

Receptor		Maximum Predicted Annual Mean NO <sub>2</sub> Concentration (µg/m³)		Proportion of EQS (%)	
		PC	PEC	PC	PEC
R1	Residential - Blyth Road	1.43	12.64	3.6	31.6
R2	Residential - Bawtry Road	1.55	12.76	3.9	31.9

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Receptor		Annual Mea	aximum Predicted nnual Mean NO2 oncentration (µg/m³)		Proportion of EQS (%)	
		PC	PEC	PC	PEC	
R3	Residential - Harworth Avenue	2.02	13.23	5.1	33.1	
R4	Residential - Blyth Road	1.11	12.32	2.8	30.8	
R5	Residential - Blyth Road	0.58	11.79	1.4	29.5	
R6	Residential - Bawtry Road	0.69	11.90	1.7	29.8	
R7	Commercial - Blyth Services	0.28	11.49	0.7	28.7	
R8	Commercial - Symmetry Drive	0.61	11.82	1.5	29.6	
R9	Commercial - Sawtry Koad 29 of	5 <sub>0.24</sub> €	n₁.45 ∕2	0.6	28.6	

Table 23 Maximum Predicted 8-hour Rolling Mean CO Concentrations

Receptor		Maximum Predicted 8- hour Rolling Mean CO Concentration (µg/m³)		PC Proportion of EQS (%)	PC Proportion of EQS Headroom
			PEC		(%) <sup>(0)</sup>
R1	Residential - Blyth Road	6.63	320.63	0.1	3.2
R2	Residential - Bawtry Road	3.37	317.37	0.0	3.2
R3	Residential - Harworth Avenue	4.21	318.21	0.0	3.2
R4	Residential - Blyth Road	2.70	316.70	0.0	3.2
R5	Residential - Blyth Road	1.77	315.77	0.0	3.2
R6	Residential - Bawtry Road	2.16	316.16	0.0	3.2
R7	Commercial - Blyth Services	2.03	316.03	0.0	3.2
R8	Commercial - Symmetry Drive	2.75	316.75	0.0	3.2
R9	Commercial - Bawtry Road	1.32	315.32	0.0	3.2

NOTE (a) PC proportion of EQS minus twice the long-term background concentration.

Table 25 Maximum Predicted Annual Mean NO<sub>x</sub> Concentrations

Receptor		Maximum Predicted Annual Mean NO <sub>x</sub> Concentration (µg/m²)		Proportion of EQS (%)	
		PC	PEC	PC	PEC
ER1	Blyth Wood AW and LWS	0.43	18.42	1.4	61.4
ER2	Blyth Wood AW and LWS	0.25	18.24	0.8	60.8
ERS	Styrupp Sand Quarry LWS	0.10	14.52	0.3	48.4
ER4	Ash Holt, Styrrup with Oldcotes Toad LWS	0.13	14.11	0.4	47.0
ER5	Holes Wood, Hodstock LWS	0.20	15.83	0.7	52.8

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Receptor		Maximum Predicted Annual Mean NO <sub>x</sub> Concentration (µg/m³)		Proportion of EQS (%)	
		PC	PEC	PC	PEC
ER6	Seriby Park Wetlands LWS	0.29	15.44	1.0	51.5
ER7	Seriby Park Wetlands LWS	0.44	18.43	1.5	61.4
ER8	Seriby Park Golf Course LWS	0.22	13.88	0.7	46.3
ERP	Roe Hill Green Lane LWS	0.15	13.81	0.5	46.0
ER10	Brecks Wood and Hodgkinson's Holf LWS	0.14	13.80	0.5	46.0

#### **Containment**

The operator has measures in place to protect drainage systems from spills of raw materials or wastes, including secondary containment of bulk tanks, level sensors for tanks, spill procedures and spill kits including drain mats, and the ability to contain spills within the bunded effluent treatment compound. All potential accident scenarios, mitigation measures and response actions are included in the operators Accident Management Plan.

All chemicals and oils are stored in a separate building in spill control areas with bunding. Materials suitable for absorbing and containing minor spillages are stored on site. The site is surfaced with impermeable concrete.

Surface waters from external yard areas are collected (rainwater) and discharged to surface water sewer via interceptor.

#### **Effluent Treatment**

All process effluents are routed to a tank within the main building where they receive basic treatment (screening/ solids removal and pH balancing). The effluent is tankered off site for treatment a sewage treatment works under a trade effluent consent. No further treatment is undertaken.

#### Odour Management Plan

The Operator has submitted an Odour Management Plan (version 3 dated 10/10/2022) on request as part of their variation application. We have reviewed the revised OMP for compliance in respect of our guidance H4 Odour Management, How to comply with your environmental permit. The OMP is referenced within Table S1.2 of the permit as it forms part of the Operating Techniques. The OMP details the methods employed at the site, including onsite monitoring and contingencies to prevent, control and minimise odour pollution.

We are satisfied that by employing the measures contained in the OMP the Operator has mitigated against odours being emitted from the site. We therefore believe that odour should not cause a nuisance at the site. However, the standard odour condition has been included in the permit which means a revised odour management plan can be requested if concerns regarding odour are raised.

## **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.

The comments and our responses are summarised in the <u>consultation responses</u> section.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

Food Standards Agency

Local Authority – Planning

Local Authority Public Health

Health and Safety Executive

Director of Public Health and Public Health England

The comments and our responses are summarised in the <u>consultation</u> <u>responses</u> 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', Appendix 2 of RGN2 'Defining the scope of the installation'. UK Sector Specific Interpretation Guidance on the Food Drink and Milk Industries (FDM) Best Available Techniques (BAT) Conclusions. Working draft 19th May 2021.

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 Boilers are currently operating under a Standard Rules permit (SR 2018 No 7). The combined net rated thermal input of the plant boilers is less than 20 MW (11.99MWth) therefore this activity has been incorporated into this permit as a Directly Associated Activity (DAA).

#### The site

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

These show the extent of the site of the facility including the air emission and surface water discharge points.

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. The activities take place within a building on concrete site surfacing with sealed drainage and bunding around storage tanks. No baseline reporting was provided with the application and the operator has accepted this and acknowledged the lands previous use as undeveloped agricultural land.

# 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. (10 Local wildlife sites have been identified the operators Air Quality Impacts assessment-See Environmental Risk section in Key issues section more details).

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 not consulted Natural England.

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.

The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment all emissions may be screened out as environmentally insignificant.

## **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 screen out as insignificant

Emissions of NOx and CO 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.

## **Odour management**

We have reviewed the odour management plan in accordance with our guidance on odour management.

We consider that the odour management plan is satisfactory and we approve this plan.

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We have approved the odour management plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The applicant should keep the plans under constant review and revise them annually or if necessary sooner if there have been complaints arising from operations on site or if circumstances change. This is in accordance with our guidance 'Control and monitor emissions for your environmental permit'.

The plan has been incorporated into the operating techniques S1.2.

#### **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: Oxides of Nitrogen

An ELV of 100 mg/m<sup>3</sup> Oxides of nitrogen (NO and NO<sub>2</sub> expressed as NO<sub>2</sub>)
has been set for the boilers which are fired on natural gas.

## **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.

Oxides of nitrogen

These monitoring requirements have been included in order to ensure that the plant operates within the emission limits specified in the permit.

The Operator will carry out monitoring in accordance with the relevant methods specified in our guidance TGN M5.

We made these decisions in accordance with BAT for the sector MCP technical guidance.

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 added reporting in the permit for the following parameters:

#### Oxides of nitrogen

We have specified reporting in the permit. For the Medium Combustion Plant monitoring is required 3 months following permit issue then every 3 years in line with the Medium Combustion Plant 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.

We only review a summary of the management system during determination. We have therefore only reviewed the summary points. A full review of the management system is undertaken during compliance checks.

## 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 Bassetlaw District Council, Environmental Health 12/09/22

**Brief summary of issues raised**: No comments raised regarding air extraction, noise or lighting. OMP appears sufficient to prevent release of fugitive emissions at levels likely to affect local amenity. The council has received no odour complaints about the site. The council has had issues with a private sewage holding tank on the Industrial Estate previously, but now resolved.

**Summary of actions taken:** No significant concerns raised. OMP in place.

Response received from UK Health Security Agency (formally Public Health England) 08/09/22

**Brief summary of issues raised:** Main potential concern is odour. The applicants OMP considers potential and reasonable mitigation measures presented. No significant concerns on risk to health of local population. Noted that the accident management plan refers to site fire risk assessment and fire response plan which are not included as part of the application. Requested that EA check are happy with these plans.

**Summary of actions taken:** OMP in place at site. Site is not required to have a fire prevention plan in pace as not accepting storing combustible materials. Operator has supplied accident management plan for environmental incidents (Table 7) in main document as part of overall EMS. Fire response plan also would fall under general EMS requirements (and accident management plan) and condition 1.1.1 of the permit.

Response received from Director of Public Health, Notts County Council, 13/09/22

**Brief summary of issues raised:** Also highlight UKHSA response regarding fire risk assessment and response plans. Also ensure all measures in place to prevent or control pollution in line with relevant Industry and best practice.

**Summary of actions taken**: Application has been assessed in line with best available techniques (BAT) to prevent or control pollution. Operator has supplied accident management plan for environmental incidents (Table 7) in main document as part of overall EMS. Fire response plan also would fall under general EMS requirements (and accident management plan) and condition 1.1.1 of the permit.

Representations from individual members of the public

None