

## Permitting Decisions - Bespoke Permit

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We have decided to grant the permit for Knoxbridge Farm Anaerobic Digestion Facility operated by Green Create W2V Kent Ltd.

The permit number is EPR/PP3939QL.

The Installation is an anaerobic digestion facility which processes poultry manure feedstock from laying chickens. The anaerobic digestion process produces biogas. The biogas will be upgraded via a biogas upgrading plant (BUP) to produce biomethane that can be exported to the national gas grid. There is also a combined heat and power plant (CHP) to generate electricity and heat for on-site consumption for less than 500 hours per annum, and an emergency flare. An ammonia stripper removes ammonia from the liquid digestate so it can be recycled, and produces ammonium sulphate as a by-product. Digestate is stored in an on-site lagoon prior to being taken off-site. The plant can process a maximum of 62,000 tonnes of manure annually.

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

## Air quality

This is an application that includes the following channelled air emission sources:

- A combined heat and power plant (defined as a Medium Combustion Plant (MCP) under Schedule 25A of the EP regulations), fired on biogas which is <1MWth and has Limited Operating Hours (<500 hours per annum). New MCPs operating less than 500 hours per year as a 3 year rolling average are exempt from meeting MCPD ELVs;
- A boiler (defined as a Medium Combustion Plant (MCP) under Schedule 25A of the EP regulations), fired on natural gas. This will be subject to MCPD ELVs;
- A biogas emergency flare, used for burning gas at very high temperatures, in the event of breakdown, or maintenance;
- An ammonia scrubber on the ammonia stripper unit;
- An odour control unit (odour abatement plant) serving the operations building; and
- A biomethane upgrade plant (BUP).

In line with our application guidance, we require applicants to submit detailed air dispersion modelling and impact assessment to assess the predicted impacts on human receptors (for example dwellings, work places and parks) and ecological sites, as appropriate.

A methodology for risk assessment of point source emissions to air is set out in our guidance <https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit>.

The applicant provided an assessment of the impact of emissions to air with the application which is detailed in Technical Note – Environmental Permit Air Emission Risk Assessment, ref TN\_001\_Rev3, dated 16/06/2021. The assessment has been undertaken in accordance with the principles of Environment Agency (EA) AERA guidance<sup>1</sup> whereby potential sources of emissions to air have been identified, emissions of potential pollutants quantified, and their potential impact at sensitive receptor locations (human and ecological) determined. The applicant used SCAIL agriculture and SCAIL combustion.

We have reviewed the assessment and are satisfied that it has taken into account all relevant ecological and human health receptors, that the model and its inputs are appropriate and that the assessment has been carried out in accordance with our guidance.

We agree with the applicant's conclusions that the impact of the emissions at human and ecological receptors is insignificant/not significant.

## **Decision considerations**

### **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**

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 [consultation responses](#) section.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

- Food Standards Agency
- Tunbridge Wells Borough Council
- Animal and Plant Health Agency
- Health and Safety Executive
- Kent County Council
- Public Health England

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'.

The operator has provided the grid reference for the emission points, including from the medium combustion plant.

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**

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

It shows 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.

- Sissinghurst Park Wood SSSI – at 1974m away, (just within 2000m screening criteria)
- 4 Local Wildlife Sites (between 450 and 1943 m away)
- Ancient Woodland (closest at 450 m)

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 (see Key Issues section above).

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.

## **Climate change adaptation**

We have assessed the climate change adaptation risk assessment.

We consider the climate change adaptation 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**

Guidance relevant to the facility include the following:

- Waste Treatment BREF, 10/08/2018
- Sector Guidance Note SGN 5.06
- How to comply – AD facility
- Medium combustion plant regulations and guidance

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 combustion plant**

We have specified the operating techniques and the operator must use the operating techniques specified in table S1.2 of the permit.

## **Operating techniques for emissions that screen out as insignificant**

Emissions of NO<sub>x</sub>, SO<sub>x</sub>, odour and NH<sub>3</sub> have been screened out as insignificant (see Key Issues section above), and so we agree that the applicant's proposed techniques are Best Available Techniques (BAT) for the installation.

## **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.

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.

## **Dust management**

We have reviewed the dust and emission management plan (referred to as the Fugitive Emissions Management Plan by the operator) in accordance with our guidance on emissions management plans for dust.

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

We have approved the dust and emission 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.

## **Waste types**

We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.

We are satisfied that the operator can accept these wastes for the following reasons:

- they are suitable for the proposed activities
- the proposed infrastructure is appropriate; and
- the environmental risk assessment is acceptable.

## **Improvement programme**

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

Improvement conditions 1 and 2 require the operator to undertake air emission monitoring, and to use these results to check that the assumptions made in the air quality model are correct.

Improvement condition 3 requires the operator to review the effectiveness of the odour abatement following operation, and a proposal for site specific action limits.

Improvement condition 4 requires a review of the air extraction and ventilation system of the operations building to ensure that the design is effective.

## **Emission Limits**

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

- Nitrogen oxides, carbon monoxide, and total volatile organic compounds for the emergency flare

- Nitrogen oxides for the natural gas boiler.

## **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 included in order to comply with legal and technical requirements.

## **Reporting**

We have specified reporting in the permit.

We made these decisions in accordance with relevant legal and technical requirements.

## **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.

The applicant submitted their full management system. 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.

## **Technical Competence**

Technical competence is required for activities permitted.

The operator has a technically competent manager, who is being assessed for continuing competence. There is a grace period due to COVID causing delays in continuing competence assessments.

## **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, and the way in which we have considered these in the determination process.

### **Responses from organisations listed in the consultation section:**

Response received from PHE.

Brief summary of issues raised:

- Concern over whether maturation activity will take place within 250m of the nearest sensitive receptors. This was a misunderstanding as operational activities take place indoors.
- Queried a comment in the operators risk assessment on effective stack height but this was an error in the application.

Updated response:

Based on the above, PHE had no further comments.