

Permitting decisions

Variation

We have decided to grant the variation for Ryedale Farm Organics Recycling Facility operated by Ryedale Organics Limited.

The variation number is EPR/DB3701LG/V003.

We have also carried out an Environment Agency initiated variation to the permit.

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
- explains why we have also made an Environment Agency initiated variation
- 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 and the variation notice. The introductory note summarises what the variation covers.

Key issues of the decision

Emission Limit Values (ELV) for stack emissions from the biomass boiler

We have set ELV for emissions to air from the biomass boiler stack for the following parameters: oxides of nitrogen (NO_x), total volatile organic compounds (VOCs) and dust. The ELV were set in accordance with Process Guidance Note PG1/12(13). Statutory guidance for the combustion of waste wood.

The biomass boiler has a rated thermal input of 1.1 MWth and is not excluded plant so will fall within the scope of the Medium Combustion Plant Directive (MCPD). However as the biomass boiler was operational before 20 December 2018, it will be considered existing plant for the purpose of MCPD until 31st December 2029.

We have included the emission limits for plants with a rated thermal input of 1 MW or more but less 5 MW for existing plants as set out in table 5.4 from PG1/12(13). The emission limits are specified in table S3.1 of the consolidated permit.

Environment Agency initiated variation and Improvement conditions

The applicant provided a bioaerosols risk assessment during the determination. The risk assessment showed that levels of mesophilic bacteria were significantly above the recommended threshold of 1,000 CFU m⁻³ as the downwind and sensitive receptor readings are well in excess of the background concentrations for April and August 2017.

A windrose submitted by the applicant showed that the prevailing wind blows towards a nearby sensitive receptor 11% of the time which is significant when compared with winds from the North West, South west, South and West.

We did not agree with the applicant's conclusion that the results indicated the risk of bioaerosols emissions to sensitive receptors was negligible to moderate and that the current activities were acceptable and tolerable in terms of risk tolerability. In addition, the risk assessment did not reference the revised monitoring guidance, emissions from the open bed biofilters were not taken into account and the mitigation measures were recommendations of the writer and not that of the operator.

In their consultation response, Public Health England were concerned that the risk assessment did not demonstrate that adequate control measures were in place to maintain bioaerosols emissions at acceptable levels, due to the reliance on wind direction as a mitigating measure. They recommended that the Environment Agency ensures that emissions from the site are brought to an acceptable standard prior to commencement of the variation.

We requested a revised bioaerosols risk assessment which addressed the inconsistencies in the previous assessment. We have reviewed the revised risk assessment dated 19 December 2018 and we are satisfied with the mitigation measures outlined in section 7.0 and 7.1 of the report.

Due to the levels of mesophilic bacteria which were high in 2017, we consider it prudent to insert improvement condition 1 (IC1) which requires the operator to undertake at least 2 sampling rounds within 6 months following the issue of the variation notice.

Improvement condition 2 (IC2) requires the operator to revise the bioaerosols risk assessment in light of the monitoring campaign and to incorporate the monitoring requirements of the TGN M9. Following the monitoring campaigns and revised risk assessment, we will decide whether further mitigation measures are considered necessary.

We have updated the consolidated permit to include the revised bioaerosols monitoring requirements (see table S3.4) in accordance the Technical Guidance Note M9 (version 2, July 2018).

Fire prevention plan

We have assessed the fire prevention plan (FPP) following a number of revisions we are satisfied that FPP RYE-WB09 Issue 05 dated 19/10/2018 and Site plan (19/10/2018) meets the measures and objectives set out in the FPP guidance.

The plan does set out a number of alternative measures that we consider meet the objectives of the FPP.

These are:

- **Section 8.2 Monitor and control temperature.** Trigger levels for woodchip and oversize material set to 50°C which is in line with the FPP guidance. The operator proposed a trigger temperature of 75°C, for the compost windrows. They will be monitoring temperature and moisture on a daily basis during sanitation and on a weekly basis during stabilisation. We are satisfied with the alternative measures as the operator has an action plan and is actively managing the compost.
- **Section 11 Prevent fire spreading.** Separation distances of 6 m are not applied to compost windrows, which is in accordance with the FPP guidance. However ignition sources will be kept at least 6 m from combustible waste. Section 2.4.1 and 2.4.2 state that oversize material and non-PAS 100 treated waste will be stored in accordance with the FPP guidance. We are satisfied with the alternative measures.
- **Section 14 Suppressing fires** – proportionate suppression system – no automatic suppression systems, but fire extinguishers are located around the site along with fire alarm sounders and break-glass fire call points situated on the compost reception shed and machinery shed. For major fires especially within the biomass shed, the fire service will be called to fight the fire. The biomass shed has 4 fast-action roller shutter doors, two along the southern edge of the building and two along the eastern edge. The two doors along the eastern edge provide access to the two drying floors in the biomass shed. Therefore, in the event of a fire, there is sufficient access to the biomass shed to enable the fire service to fight the fire from outside the building. The biomass shed has separation distances on all sides, preventing the fire from spreading and providing access for the fire service. To the east, the nearest waste pile is >10m away from the biomass shed. The nearest building to the south is 38 m away. The nearest building to the south-west is 28 m away. There are no waste piles or buildings to the north.
- **Section 16 Water Supply** –the water requirements relate to only waste wood and waste oversize pile, and not the active windrow compost this is considered appropriate.

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.
Consultation/Engagement	
Consultation	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <p>Local authority environmental protection</p> <p>Food Standards Agency</p> <p>Health and Safety Executive</p> <p>Public Health England and the Director of Public Health</p> <p>The comments and our responses are summarised in the consultation section.</p>
The facility	
The regulated facility	<p>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'.</p> <p>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.</p> <p>There is a technical connection and relationship between this site and the adjacent site- Ryedale Poultry Farm (EPR/EP3736JQ). The sites share the same directly associated activity , the storage and treatment of waste wood pallets which will be used as fuel for the biomass boilers at each of the sites. The storage and treatment of the waste wood will be carried out at Ryedale Organics Recycling site, with half the waste wood being used at Ryedale Poultry Farm. In addition the sites share the same surface water drainage tank, however Ryedale Organics Recycling have confirmed they will take responsibility for any risk arising from this tank. As the activities between sites are linked they are considered a multiple operator installation. The permit includes a multiple operator installation condition and the site plans show the extent of the installation.</p> <p>This permit includes an activity that is a directly associated activity to two installations. The wood chipping activity generates wood chips to be used as fuel in two biomass boilers: one operated as part of the facility under this permit, the other one located on the adjacent poultry farm that holds a</p>

Aspect considered	Decision
	separate installation permit. The name and permit number of the operator of the other installation is detailed in the permit's introductory note.
The site	
Biodiversity, heritage, landscape and nature conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <p>However, due to the size of the combustion plant (<5MW), no assessment under the Habitats Directive is required for addition of the biomass boiler. This is in accordance with our guidance set out in AQTAG014: Guidance on identifying 'relevance' for assessment under the Habitats Regulations for PPC installations with combustion processes.</p> <p>We have assessed the application for the addition of the oversize treatment line and drying floors and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.</p> <p>We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.</p>
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 satisfactory.
Operating techniques	
General operating techniques	<p>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.</p> <p>We have considered technical guidance "Develop a management system: environmental permits", "fire prevention plans: environmental permits", "Sector Guidance Note IPPC S5.06: Recovery and Disposal of Hazardous and Non-hazardous waste" and "H4 Odour management".</p> <p>The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.</p>
Operating techniques for emissions that screen out as insignificant	<p>The Air Quality Impact Assessment provided with the application identified risks on modelled sensitive receptors to be insignificant or negligible. We have undertaken an audit and sensitivity analysis of the input parameter using our screening tool version 5.2. Emissions of NO_x, SO₂, PM₁₀ and CO have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation.</p> <p>We consider that the emission limits included in the installation permit reflect the BAT for the sector.</p>

Aspect considered	Decision
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.
Fire prevention plan	We have assessed the fire prevention plan and are satisfied that it meets the measures and objectives set out in the Fire Prevention Plan guidance. See key issues .
Permit conditions	
Changes to the permit conditions due to an Environment Agency initiated variation	We have varied the permit as stated in the variation notice to update the permit conditions to those in the current generic permit template.
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.
Raw materials	We have not specified limits and controls on the use of raw materials and fuels.
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: <ul style="list-style-type: none"> • 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 impose an improvement programme. We have imposed an improvement programme. See key issues
Emission limits	ELVs based on BAT have been added for the following substances: carbon monoxide, dust, oxides of nitrogen and total volatile organic compounds See key issues .
Monitoring	We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified: carbon monoxide, dust, oxides of nitrogen and TVOC. These monitoring requirements have been inserted in line with Process Guidance Note PG1/12(13): Statutory guidance for the combustion of waste wood. We made these decisions in accordance with the 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. We have decided that monitoring should be amended for bioaerosols, using the methods detailed and to the frequencies specified in the permit. These

Aspect considered	Decision
	<p>monitoring requirements have been imposed in order to update them to those in the current permit template for biowaste treatment facilities.</p> <p>We made these decisions in accordance with guidance: 'Bioaerosol monitoring at regulated facilities – use of M9: RPS 209'.</p>
Reporting	We have added reporting in the permit for emissions to air.
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.
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	<p>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.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“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.”</p> <p>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.</p> <p>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.</p>

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
<p>“This application contains a site specific bioaerosol risk assessment for the whole site as it is currently run. However this fails to demonstrate that adequate control measures are in place to maintain bioaerosol emissions at acceptable levels, due to the reliance on wind direction as a mitigating measure. It is recommended that the Environment Agency ensures that emissions from the site are brought to an acceptable standard prior to commencement of the variation.</p> <p>Based on the information contained in the application supplied to us, Public Health England has no significant concerns regarding the risk to the health of the local population from the variation installation, but is concerned by the current bioaerosol emissions from the site, any increase due to the wood drying, and their potential for public health impact.”</p>
<p>We have included improvement condition 1 in the permit which requires the operator to undertake at least 2 sampling rounds for ambient Total bacteria and <i>Aspergillus fumigatus</i>, following the issue of the variation notice.</p> <p>We have updated the consolidated permit to include table S3.4 bioaerosols monitoring requirements in accordance with technical guidance note M9.</p> <p>Improvement condition 2 is included to require the operator to revise the bioaerosols risk assessment in light of the monitoring and to incorporate the monitoring requirements of the TGN M9. If the monitoring results show exceedance of the thresholds set out in S3.4, then further mitigation measures and an action plan to reduce impacts will need to be proposed by the operator.</p>

No representations received from:
<ul style="list-style-type: none">• Local authority environmental protection• Food Standards Agency• Health and Safety Executive• Director of Public Health