

# **Environment Agency permitting decisions**

## **Bespoke permit**

We have decided to grant the permit for South Milford AD Plant operated by AB Agri Limited.

The permit number is EPR/VP3533DP/A001.

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:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

## **Structure of this document**

- Description of main features of the installation
- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

## Description of the main features of the Installation

The installation is centred at grid reference SE 50518 31352 and located approximately 600 metres to the east of South Milford, North Yorkshire. The site is located within a predominantly rural area. It is adjacent to the existing composting facility, and beyond the composting stockpile area is a railway line. There are a number of discreet residential properties located near to the site. The closest of these are the Wood Haven Boarding Kennels and Cattery located approximately 150 metres to the east and Westholme Farm 160 metres to the west. There is a Site of Special Scientific Interest (SSSI) Sherburn Willows and some Local Wildlife sites within 2 km of the site.

The anaerobic digestion facility will process up to 82,500 tonnes per annum of organic waste including food waste, green waste and liquids and will comprise the following listed activities of the Schedule 1 of the Environmental Permitting Regulations:

- S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 100 tonnes per day involving biological treatment.

In addition the installation consist of Directly Associated Activities (DAAs) such as combustion of biogas in a combined heat and power (CHP) engine, use of emergency flare and gas injection into the National Grid.

Following waste acceptance checks the waste will be delivered to the site's intake building either by bulk tankers containing liquid feedstock or wheeled loaders transporting solid feedstock. The solid wastes will be fed into a pre-treatment unit comprising a macerator, mixer, screen and pump to combine the liquid and solid feedstocks prior to pumping into two buffer tanks. From the buffer tanks, substrate will be pumped into two digesters for treatment. The anaerobic digestion processes will take place within fermenters and a post-fermenter for a period exceeding 54 days before the resulting digestate is pasteurised at 70°C for one hour. Pasteurised digestate is stored in tanks and sampled and tested in accordance with the requirements of PAS110 prior to off-site recovery. This environmental permit does not authorise the spreading of digestate on land.

The biogas produced will be stored in the head space of the tanks awaiting utilisation by combustion in a CHP engine and a boiler to produce heat and electricity for the process requirements. The excess gas is utilised for the production of electricity within a CHP engine or upgraded by membrane separation for injection into the gas grid.

Main releases to air will be from the CHP engine, biogas upgrading plant, boiler and emergency flare. Biogas will be burnt in the emergency flare in the event of breakdown and/or maintenance of the biogas upgrading plant, CHP engine and/or auxiliary boiler. Uncontaminated roof, bund, sump and site surface water is reused within the facility or discharged via an interceptor to a surface water

ditch to the east of the site. There are no direct discharges of process water from the site.

Assessment by the Environment Agency shows that emissions from the activities undertaken at the facility are unlikely to have a significant impact on human health or nature conservation sites.

## Key issues of the decision

### 1. Air quality and odour assessments

Our Air Quality Modelling and Assessment Unit (AQMAU) audited an air quality assessment submitted in support of an application for the proposed South Milford Anaerobic Digestion (AD) Plant.

The applicant's air dispersion modelling assessment considers combustion emissions to air from the proposed CHP engine and boiler and emissions from the gas clean-up plant vent. The assessment also considers odour emissions to air from the odour abatement plant that treats extracted reception building air. The applicant considered two alternative scenarios in the assessment: an enclosed biofilter with emissions vented via a stack; and an open biofilter surface. This is because at the time of the application the applicant had not decided which system to install. During the determination the applicant confirmed that the enclosed system with a stack will be fitted.

The applicant's assessment made the following conclusions:

- the Process Contribution (PC) of combustion pollutants (Oxides of nitrogen (NO<sub>x</sub> expressed as NO<sub>2</sub>), Sulphur Dioxide (SO<sub>2</sub>), and Carbon Monoxide (CO)) from the CHP engine and the boiler are not predicted to lead to exceedences of their respective Air Quality Objectives;
- The PCs of NO<sub>x</sub> and SO<sub>2</sub> to Critical Levels and Critical Loads can be concluded to cause 'no damage' at the Site of Special Scientific Interest (SSSI), and 'no significant pollution' at the Sites of Importance for Nature Conservation (SINC's);
- Odour emissions from the abatement plant give predicted odour concentrations below the benchmark of 1.5 ou<sub>E</sub>/m<sup>3</sup> for an enclosed biofilter discharging via a stack. For an open biofilter predicted concentrations at some receptors are above the benchmark of 1.5 ou<sub>E</sub>/m<sup>3</sup>.

We audited the consultant's assessments including detailed check modelling and calculations including sensitivity analysis to our observations.

#### 1.1 Air Quality Assessment

The applicant used air dispersion modelling software Aermid View (Version 8.9.0) for their assessment. They used five years of meteorological data obtained from the Global Forecast System (GFS). GFS data are produced at a resolution of approximately 50 km and therefore may not adequately capture the meteorological conditions at the site. The applicant has not provided justification for why these data can be considered representative of meteorological conditions at the site location. We tested sensitivity to the use of locally observed meteorological data.

To reflect variations in land use the applicant applied a varying surface roughness around the site, with values ranging from 0.0939 to 0.3054. We are

satisfied that this approach is appropriate, however the selected values may be too low for the land use around the site. We therefore tested sensitivity to higher values for this parameter.

The applicant stated that the emission rate of SO<sub>2</sub> from the boiler was calculated from the Sulphur composition in biogas of 200 ppm. We were unable to replicate the consultant's emission rate, however our calculations indicate that the values calculated by the applicant are conservative.

For all other sources and pollutants we were able to replicate the applicant's emission rates. The applicant did not provide details of the actual oxygen and moisture concentrations. We tested sensitivity to using typical values for this type of facility and are satisfied that the applicant's values are conservative.

The applicant made predictions at a number of sensitive human health receptors located near the facility. They also included a receptor grid and presented contour plots to show predicted concentrations over a wider area.

The applicant included multiple site buildings within the model to consider the implications of building downwash. Building downwash effects can change the predicted concentrations offsite and therefore we have tested sensitivity to the inclusion of buildings.

The applicant predicted that, at all relevant receptor locations, the process contribution (PC) of hourly average NO<sub>2</sub>, and daily and hourly average SO<sub>2</sub> screen out as insignificant.

The applicant predicted that the PC of annual average NO<sub>2</sub> will be above 1% of the relevant EQS at nearby residential receptors, and therefore cannot be screened out as insignificant. However they predicted that, when taking background concentrations into account, the predicted environmental contribution (PECs) at any receptor are unlikely to exceed the relevant environmental quality standard (EQS).

The applicant predicted that the PC of 15 minute SO<sub>2</sub> will be above 10% of the relevant EQS at nearby residential receptors, and therefore cannot be screened out as insignificant. However, they predicted that, when taking background concentrations into account, the PECs at any receptor are unlikely to exceed the relevant EQS.

The applicant has used background concentration obtained from the Department for Environment, Food and Rural Affairs' (Defra's)<sup>1</sup> background maps for 2016, which predict background concentrations over 1 km by 1 km grid squares. No locally monitored data are available and therefore we are satisfied that the use of Defra background maps is appropriate. Monitoring data is collected at a number of sites in the nearby Aire Valley, which can give some indication of likely worst case concentrations in the locality. We have therefore tested sensitivity to using background data monitored in the nearby Aire Valley.

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<sup>1</sup> <http://www.uk-air.defra.gov.uk/>

As a result of our audit, check modelling and sensitivity analysis we agree that any modelling uncertainties are unlikely to affect the conclusions.

Therefore for human health receptors we can agree with the applicant's conclusion that it is unlikely the proposed installation will result in an exceedence of the EQS' for any pollutants.

## **1.2 Ecological impact assessment**

The applicant presented predictions at a range of ecological receptors including the Sherburn Willows Site of Special Scientific Interest (SSSI) and a number of Local Wildlife Sites (LWSs)/Sites of Importance for Nature Conservation (SINCs). We are satisfied that all habitat sites within the relevant distance screening criteria set out in H1 risk assessment guidance<sup>2</sup> have been included. The applicant has also included a number of deleted SINCs in their assessment. It is unnecessary to consider these sites and therefore we have not included these within our sensitivity testing.

The applicant assessed against the critical levels for daily NO<sub>x</sub>, annual NO<sub>x</sub> and annual SO<sub>2</sub>, and predicted that there will be a PC of less than 1% of the critical levels at Sherburn Willows SSSI and a PC of less than 100% at all other habitat sites.

Only two sites, Sherburn Willows SSSI and Ash Tree Dyke and Ponds LWS/SINC, are sensitive to nutrient nitrogen deposition and acidification. The consultant has assessed these following our guidance<sup>3</sup>. We have checked the critical load values used by the consultant with data from the APIS website<sup>4</sup> and are satisfied that they are correct.

The applicant predicted that the PC to nutrient nitrogen and acid deposition is not significant at the SSSI (less than 1% of the critical load) or LWS/SINC (less than 100% of the critical loads), therefore no further assessment is required.

As a result of our audit, check modelling and sensitivity analysis we agree that any modelling uncertainties are unlikely to affect the conclusions.

Therefore for ecological receptors we can agree with the applicant's conclusion that no damage will be caused by the proposed installation. PC's will be less than 1% the relevant critical levels and loads at the SSSI and less than 100% of the relevant critical levels and loads at all other sites.

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<sup>2</sup> <https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit> - Environment Agency - March 2016

<sup>3</sup> AQTAG06 – Technical guidance on detailed modelling approach for an appropriate assessment for emissions to air

<sup>4</sup> [www.apis.ac.uk](http://www.apis.ac.uk)

### 1.3 Odour assessment

The applicant modelled odour emissions from a biofilter and from the gas clean-up plant vent. Two alternative scenarios were considered in the assessment: an enclosed biofilter with emissions vented via a stack; and an open biofilter surface. However, after submission of the assessment the applicant confirmed that the installation will be fitted with an enclosed biofilter with emissions vented via stack.

The applicant used an odour emission concentration of 120 ouE/m<sup>2</sup>/s from the biofilter. They calculated this based on 3 air changes per hour on the AD buildings and headspaces of storage tanks, assuming an odour concentration of 2000 ouE/m<sup>3</sup>.

The applicant's report states that "The residual odour concentration will depend on the final design of the odour control plant, however manufacturers frequently offer performance guarantees of <1,000 ouE/m<sup>3</sup> for organic waste treatment facilities of this type". For this assessment a residual odour concentration of 2,000 ouE/m<sup>3</sup> was applied. We have compared this with typical odour concentrations from similar plant and consider that this is a representative value; however it cannot be considered to be conservative as some similar plant quote values as high as 3000 ouE/m<sup>3</sup>. We have tested sensitivity to a higher odour concentration in our check modelling.

Applicant's report states that "Additionally the gas clean-up plant vent has been assigned an odour emission concentration of 5,000ouE/m<sup>3</sup> although under normal operating conditions such breakthrough would not occur." We consider this as a conservative assumption.

The applicant has predicted the 98<sup>th</sup> percentile of hourly average odour concentrations at a number of discrete residential and commercial receptor locations. They also predicted odour concentrations across a receptor grid and presented contour plots to show impacts over a wider area.

Although the applicant discusses the use of alternative benchmarks, for this type of waste (food waste), Environment Agency H4<sup>5</sup> guidance suggests the use of a benchmark of 1.5 ouE/m<sup>3</sup>.

For the enclosed biofilter scenario, where emissions are vented via a stack, building effects have been included in the model. For the open biofilter scenario, the biofilter has been modelled as an area source. In Aermid View the effects of building downwash on area source releases cannot be modelled, therefore for the open biofilter scenario building effects have not been included.

The applicant's results show that, for the enclosed biofilter, the maximum predicted odour concentration at a relevant receptor is 0.79 uE/m<sup>3</sup>, below the benchmark of 1.5 ouE/m<sup>3</sup>. For the open biofilter, the consultant predicts that there are two locations where the maximum predicted odour concentration

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<sup>5</sup> H4 Horizontal guidance – Odour Management

exceeds the benchmark of 1.5 ouE/m<sup>3</sup>: Westholme Farm and Woodhaven Kennels & Cattery.

As a result of our audit, check modelling and sensitivity analysis we agree that any modelling uncertainties are unlikely to affect the conclusions.

Therefore for odour we can agree with the applicant's findings that:

- For the enclosed biofilter, odour concentrations are likely to be below the benchmark of 1.5 ouE/m<sup>3</sup>.
- For the open biofilter, odour concentrations are likely to be above the benchmark of 1.5 ouE/m<sup>3</sup> at nearby receptors, and therefore under this scenario we cannot rule out the potential for odour pollution at adjacent commercial and nearby properties.

However, these conclusions are dependent upon the applicant being able to achieve the stated odour emission concentration of 2000 ouE/m<sup>3</sup> and therefore we have decided to request the operator to provide us with evidence that the biofilter is able to achieve the stated odour emission concentration of 2000 ouE/m<sup>3</sup>. This information is requested via pre-operational condition 4 in the permit.

## **2. Impact of noise emissions**

The Air Quality Modelling and Assessment Unit (AQMAU) audited the applicant's noise assessment report<sup>6</sup> submitted in support of an application for the proposed South Milford Anaerobic Digestion (AD) Plant.

The applicant made noise predictions at 4 receptors to calculate the impact from the proposed AD facility. With the exception of Woodhaven, their predicted day-time and night-time noise levels were below measured background. At Woodhaven, their night-time rating level was predicted to be approaching an adverse impact of 5 dB(A) above background. The applicant concluded that the AD facility should not give rise to adverse impacts.

We made a number of observations on the approach and assumptions used by the applicant, and undertook our own check modelling. With the exception of the point below, our sensitivity to our observations, do not affect the consultant's conclusions.

- The applicant did not provide justification that the noise levels modelled are representative of those proposed. Noise levels used by the applicant fall within the typical range for those plant, however emissions could be higher if alternative equipment or building specifications were selected.

Therefore we have decided to include pre-operational condition 3 in the permit that requests the operator to provide evidence that plant installed does not

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<sup>6</sup> SLR global environmental solutions, 2016, South Milford Anaerobic Digestion Plant, Environmental Permit Application BS4142:2014 Noise Assessment Version No: 2, August 2016.

result in noise levels greater than those modelled. If evidence cannot be provided to satisfy this requirement, we request the operator to re-assess the noise impact using actual noise levels representative of the plant installed.

### **3. Impact of fugitive emissions to air, land and water**

Activities on site will be managed in accordance with the site's management system. This includes regular inspections and maintenance of equipment to ensure they continue to operate at optimum conditions.

Good housekeeping practices will be applied in accordance with the site's Environmental Management System which will be in place prior to site operation.

The waste treatment processes will benefit from a number of process control features and prevent the development of abnormal operating conditions. Operations will be controlled and monitored using the Supervisory Control and Data Acquisition (SCADA) system which creates documentation that can be accessed in remote locations. The system will provide a range of control and monitoring functions that automate and monitor actions throughout the plant. These procedures are designed to ensure the integrity of the plant throughout the life of the facility.

Secondary containment will be provided for all tanks containing liquids whose spillage could be harmful to the environment. The proposed site secondary containment is designed to hold a minimum of 110% of the capacity of the largest tank or 25% of total tank volume, whichever is the greater.

We consider that the applicant has proposed appropriate measures to minimise any impact of fugitive emissions on nearby sensitive receptors. The proposed procedures satisfy the requirements of the Environment Agency's Technical Guidance IPPC S5.06 - *Guidance for the Recovery and Disposal of Hazardous and Non-hazardous Waste* and are considered BAT for this installation. The permit conditions (3.2.1 to 3.2.3) are sufficient to ensure that emissions of substances not controlled by emission limits do not cause pollution. The operator is required to implement mitigation measures in line with their management system in the event activities on site are causing pollution.

Based upon the information provided, we are satisfied that appropriate measures are in place to prevent fugitive emissions to air, land and water.

### **4. Monitoring and compliance**

We have specified that monitoring should be carried out for the parameters listed in Schedule 3 table S3.1, S3.2 and S3.3 in the permit, using the methods and to the frequencies in those tables. These monitoring requirements have been imposed in order to demonstrate compliance with emission limit values.

#### Air

Annual monitoring of emissions (Table S3.1 in the permit) from the CHP engine and flare will be undertaken by MCERTS accredited personnel using MCERTS approved methods. The Environment Agency has specified that monitoring of the CHP engine should be carried out in accordance with emission standards in LFTGN 08 - *Guidance for monitoring landfill gas engine emissions* (see Table below) and the monitoring requirements of M2 - *Technical Guidance Note, Monitoring of stack emissions to air*.

Parameter	Emission standard (mg/m <sup>3</sup> )
Nitrogen oxides	500
Carbon monoxide	1400
Total volatile organic compounds	1000
Sulphur dioxide	350

We have also specified in the permit that emissions testing on the emergency flare should be undertaken 12 months following commissioning and then in the event the flare has been operational for over 10% of the year (876 hours). Guidance for monitoring enclosed landfill gas flares (LFTGN 05) sets out the emission standards for enclosed gas flares (see Table below).

Parameter	Emission standard (mg/m <sup>3</sup> )
Oxides of nitrogen as NO <sub>2</sub>	150
Carbon monoxide	50
Total volatile organic compounds	10

### Water

Weekly visual monitoring has been specified in the permit to ensure early detection of contaminated water entering to surface water ditch (see Table S3.2 in the permit).

### Process monitoring

We have specified monitoring of the AD process as a whole (see Table S3.3 in the permit). This includes monitoring of key digestion parameters, daily olfactory checks and structural integrity checks of the digesters and storage tanks. These monitoring checks are included to ensure that any malfunction of plant/equipment on site are detected early to reduce serious pollution.

## Annex 1: decision checklist

This document should be read in conjunction with the application, supporting information and permit/notice.

Aspect considered	Justification / Detail	Criteria met
		Yes
<b>Receipt of submission</b>		
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 commercial confidentiality.	✓
<b>Consultation</b>		
Scope of consultation	<p>The consultation requirements were identified and implemented. The decision was taken in accordance with our Public Participation Statement and our Working Together Agreements.</p> <p>For this application we consulted the following bodies:</p> <ul style="list-style-type: none"> <li>• Animal Health (now known as Animal Health and Plant Agency)</li> <li>• North Yorkshire County Council</li> <li>• Selby District Council</li> <li>• Food Standards Agency</li> <li>• Health and Safety Executive</li> <li>• Public Health England</li> <li>• National Grid Plant Protection</li> </ul>	✓
Responses to consultation and web publicising	<p>The web publicising and consultation responses (Annex 2) were taken into account in the decision.</p> <p>The decision was taken in accordance with our guidance.</p>	✓
<b>Operator</b>		
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 what a legal operator is.	✓
<b>The facility</b>		

Aspect considered	Justification / Detail	Criteria met
		Yes
The regulated facility	<p>The extent/nature of the activities and operations taking place at the site required clarification.</p> <p>The decision on the facility was taken in accordance with Appendix 2 of RGN 2 “Defining the scope of the installation”, Appendix 1 of RGN 2 “Interpretation of Schedule 1”.</p> <p>The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations and the following directly associated activities.</p> <ul style="list-style-type: none"> <li>• S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 100 tonnes per day involving biological treatment.</li> <li>• Storage of waste pending recovery or disposal</li> <li>• Physical treatment for the purpose of recycling</li> <li>• Steam and electrical power supply</li> <li>• Emergency flare operation</li> <li>• Gas upgrading</li> <li>• Raw material storage</li> <li>• Digestate storage</li> <li>• Surface water collection and storage</li> </ul>	✓
<b>European Directives</b>		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
<b>The site</b>		
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility including discharge points.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.</p> <p>At the time of the permit issue the area within the site boundary was still part of The Maltings Organic Treatment Limited permit. The Maltings Organic Treatment Limited</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	operates the composting facility adjacent to the operation authorised under this permit. However, we are satisfied that it is clear that AB Agri Limited is now operating on this area and that application to remove the area from The Maltings Organic Treatment Limited permit under partial surrender application has been submitted to the Environment Agency on 28 <sup>th</sup> September 2016.	
Site condition report	<p>The operator has provided a description of the condition of the site.</p> <p>We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED–guidance and templates (H5).</p>	✓
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a nature conservation sites (Sherburn Willows SSSI and some Local Wildlife Sites).</p> <p>A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. We consider that the application will not affect the features of the site.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p> <p>See Section on Ecological Impact Assessment in Key Issues section for further detail.</p>	✓
<b>Environmental Risk Assessment and operating techniques</b>		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, all emissions may be categorised as environmentally insignificant.</p> <p>See Key Issues section for further detail.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes –</p> <ul style="list-style-type: none"> <li>• <i>Sector Guidance Note IPPC S5.06 – Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste;</i></li> <li>• <i>IPPC Sector Guidance Note EPR 1.01 – Combustion Activities;</i></li> <li>• <i>Draft Guidance, How to comply with your environmental permit. Additional guidance for: Anaerobic Digestion.</i></li> <li>• <i>How to Comply with Your Environmental Permit and H4 – Odour Management.</i></li> </ul> <p>The proposed techniques/emission levels for priorities for control are in line with the benchmark levels contained in the above technical guidance notes and we consider them to represent appropriate techniques for the facility. The BAT assessment provided by the operator adequately addresses:</p> <ul style="list-style-type: none"> <li>• pre-acceptance of waste</li> <li>• acceptance of waste</li> <li>• storage and handling of waste</li> <li>• process (treatment) description</li> <li>• fugitive emissions to air</li> <li>• fugitive emissions to surface and groundwater (secondary containment, site drainage plan)</li> <li>• odour management</li> <li>• point source emissions to air, water or land</li> <li>• monitoring</li> <li>• accidents</li> </ul> <p>We, the Environment Agency, have reviewed and approved the Odour Management Plan and consider it complies with the requirements of our H4 Odour management guidance note. We agree with the scope and suitability of key measures but this should not be taken as confirmation that the details of equipment specification design, operation and maintenance are suitable and sufficient. That remains the responsibility of the operator.</p>	✓
<b>The permit conditions</b>		

Aspect considered	Justification / Detail	Criteria met
		Yes
Waste types	<p>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 because they have the necessary infrastructure, operating systems and technical capability to manage these wastes in an appropriate manner.</p> <p>The wastes types can be treated via anaerobic digestion as they are included in the revised Anaerobic Digestate Quality Protocol (ADQP). We made these decisions with respect to waste types in accordance with our Technical Guidance Note – <i>Framework for assessing suitability of wastes going to anaerobic digestion, composting and biological treatment.</i></p>	✓
Pre-operational conditions	<p>Based on the information in the application, we consider that we need to impose pre-operational conditions. We have imposed pre-operational conditions to ensure that prior to commencement of the operation of the installation:</p> <ul style="list-style-type: none"> <li>➤ method of construction and integrity of the proposed site secondary containment is in accordance with relevant industry standards (PO 1).</li> <li>➤ appropriate management systems and management structures are in place to ensure compliance with all the permit conditions (PO2).</li> <li>➤ the actual noise levels are in line with the emissions specifications modelled in the application and that the appropriate measures are in place to prevent pollution from noise (PO3).</li> <li>➤ detailed information about the biofilter design and operation is submitted to the Environment Agency (PO4).</li> <li>➤ baseline monitoring of biofilter is carried out (PO5).</li> <li>➤ appropriate measures are in place to ensure that accidents that may cause pollution are minimised (PO6).</li> <li>➤ the appropriate measures are in place to prevent fugitive emissions (PO7).</li> </ul>	✓
Improvement conditions	<p>Based on the information on the application, we consider that we need to impose improvement conditions.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>We have imposed improvement conditions to ensure that:</p> <ul style="list-style-type: none"> <li>➤ through actual monitoring data the assumptions made in the application in relation to the point source releases to air can be verified as representative (IC1 and IC2).</li> </ul>	
Incorporating the application	<p>We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.</p> <p>These descriptions are specified in the Operating Techniques table in the permit.</p>	✓
Emission limits	<p>We have decided that emission limits should be set for the parameters listed in the permit (<i>See section on Monitoring and Compliance in Key Issues</i>).</p> <p>The following substances (Nitrogen oxides, Sulphur dioxide, Carbon monoxide, Total volatile organic compounds) have been identified as being emitted in significant quantities and ELVs, based on BAT have been set for those substances with respect to air emissions.</p> <p>It is considered that the ELVs described above will ensure that significant pollution of the environment is prevented and a high level of protection for the environment secured.</p> <p>The substances above have been set at the benchmark levels quoted in <i>LFTGN 08: Guidance for monitoring landfill gas engine emissions</i> and <i>Guidance for monitoring enclosed landfill gas flares</i> (LFTGN 05).</p>	✓
Monitoring	<p>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.</p> <p>These monitoring requirements have been imposed in order to demonstrate compliance with the conditions of the permit for operations requiring the management of air emissions. We made these decisions in accordance with <i>LFTGN 08: Guidance for monitoring landfill gas engine emissions</i> and <i>Guidance for monitoring enclosed landfill gas flares</i> (LFTGN 05) which are considered the most appropriate technical guidance note (TGN) for this activity.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>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.</p> <p>We have also required a monitoring of water from bunded areas/storage sumps prior to discharge to attenuation tank and from there to surface water ditch. This is to ensure that water is uncontaminated.</p>	
Reporting	<p>We have specified reporting in the permit. As the monitoring of point source emissions to air is only required annually, reporting is also required annually. Reporting forms have been prepared to facilitate reporting of data in a consistent format. These reporting requirements are deemed sufficient and proportional for the Installation. We made these decisions in accordance with our guidance <i>How to Comply with your Environmental Permit</i> (this guidance has now been translated to webpages on Gov.uk).</p>	✓
<b>Operator Competence</b>		
Environment management system	<p>There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with our guidance on what a competent operator is.</p>	✓
Technical competence	<p>Technical competency is required for activities permitted. The operator is a member of an agreed scheme.</p>	✓
Relevant convictions	<p>The Case Management System and National Enforcement Database have been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found.</p>	✓
Financial provision	<p>There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with our guidance on what a competent operator is.</p>	✓

## Annex 2: Consultation and web publicising responses

Summary of responses to consultation and web publication and the way in which we have taken these into account in the determination process.

Response received from
Public Health England
Brief summary of issues raised
Noted that it is not clear from the application whether the applicant's odour assessment takes into account odour relating to the operations at the adjacent composting facility. Noted that a period of poor odour abatement is anticipated during commissioning of the operation. Suitable start up conditions should be set to ensure odour impacts are acceptable for nearby receptors.
Summary of actions taken or show how this has been covered
Our H4 Guidance on odour does not require an assessment of odour relating to the adjacent operations as these are beyond the control of the operator. The operator will liaise with the local Environment Agency office to agree suitable start up conditions including odour management prior to commissioning of the operation of the installation.

Response received from
Selby District Council
Brief summary of issues raised
Highlighted that Selby District Council has received complaints previously relating to the odour from the site. Noted that the Noise Assessment submitted within the application has not been undertaken in accordance with the latest guidance BS4142:2014.
Summary of actions taken or show how this has been covered
This is a new permit and therefore any previous odour complaints must be linked to the existing composting operation adjacent to the site. We are satisfied that the operator has appropriate measures in place to prevent odour beyond the site boundary. We have approved the operator's Odour Management Plan as a part of the determination process. We requested the operator to revise their Noise Assessment using the latest guidance BS4142:2014. We have audited the operator's assessment and are satisfied with the operator's conclusions. We have included a pre-operational condition (PO3) in the permit that requires the operator to provide evidence that the equipment to be installed on site has emission specifications consistent with noise emission levels used in the noise modelling.