

# Environment Agency permitting decisions

## Bespoke permit

We have decided to grant the permit for Leeming Biogas Facility operated by Veolia ES (UK) Limited.

The permit number is EPR/MP3730RL.

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 facility will process up to 80,000 tonnes of organic waste per year. New feedstock wastes to be received at the site are subject to a pre-screening assessment and audit. Once assessed as acceptable, sealed tankers delivering the liquid wastes will be directed from the weighbridge where the quantity and nature of the load can be verified prior to the waste being directly sampled from the tanker. Subject to passing this initial check, waste is pumped directly into one of two reception tanks where the waste is sampled immediately and then analysed within 24 hours. This is to confirm that the waste is within the specified thresholds set prior to anaerobic treatment. Waste is then fed via a macerator (20 mm particle size) to the two concrete primary digesters. After a hydraulic retention time (HRT) of 21 days at mesophilic temperatures, waste is transferred to the secondary stage concrete digestion tank. Waste remains in this tank for a further 19 days HRT.

The digested material is then pasteurised to meet ABP requirements, prior to being pumped into the two final digestate storage tanks. The storage tanks are not gas tight but are covered by a semi porous floating cover.

The overall process is a sealed system where biogas is collected and stored in the digesters. The only emission point for displaced air is via a stack with a carbon filter at the pasteurisation stage. Gases developed up to this point are stored in a flexible membrane cover in the secondary digester. The purpose of the facility is to maximise gas generation so biogas is passed to a gas-upgrading facility (compression, dewatering and membrane separation) prior injection into the national grid as biomethane. A combined heat and power (CHP) engine is also on-site to burn biogas, providing heating and electricity. Digestate is exported off site to be used as a soil fertiliser.

## Key issues of the decision

### Air Quality

The Applicant (now the operator) has undertaken air dispersion modelling to assess the impact of the proposed operation of an anaerobic digestion facility on human receptors. Ecological receptors were not considered within this assessment as there were no designated ecological sites within the relevant proximity to the proposed facility. Emissions to air will arise through the operation of the combined heat and power engine (CHP) with a thermal input of 0.55 MW, and the standby flare. The report is titled, *Air Quality Assessment. Clapham Lodge Anaerobic Digestion Plant, Leeming*. Ref 1049r1.

Modelling was carried out using the dispersion model ADMS (version 5.1) software developed by Cambridge Environmental Research Consultants (CERC). The model used meteorological data from the years 2010 – 2014 based on the Leeming observation station located approximately 780 m north of the facility. Surface roughness of the surrounding areas around the site has been considered through the use of a terrain function within the ADMS software. The facility is located in a largely rural setting. Background concentrations were taken from Defra's predicted air pollution background concentration maps.

The Environment Agency considers that the normal operating conditions are appropriate and provide a "worst-case" scenario with regards to maximum emissions from the Installation. The pollutants considered in the assessment are those associated with combustion activities, namely nitrogen dioxide, sulphur dioxide, carbon monoxide and volatile organic compounds (benzene was modelled as a worst case scenario). We are satisfied that there is no need to consider any other pollutants as the fuel is biogas produced from source-segregated biodegradable waste. The operator's modelling predictions are presented in Tables 1 – 4 below.

**Table 1 Maximum modelled nitrogen dioxide concentrations at the most sensitive human receptor (R1 in modelling report)**

| Pollutant         | EQS / EAL | Back-ground | Process Contribution (PC) |        | Predicted Environmental Concentration (PEC) |       |
|-------------------|-----------|-------------|---------------------------|--------|---|-------|
|                   | µg/m3     |             | µg/m3                     | µg/m3  | % of EAL                                    | µg/m3 |
| NO2 (annual mean) | 40        | 9.64        | 12.20                     | 30.5   | 21.84                                       | 54.6  |
| NO2 (1 hour mean) | 200       | 9.64        | 98.29                     | 49.145 | 107.93                                      | 53.97 |

From the table above, nitrogen dioxide cannot be screened out as insignificant in that the process contribution is >1% of the long term AQS and >10% of the short term AQS.

Although nitrogen dioxide did not screen out as insignificant, we consider that it is unlikely to give rise to significant pollution in that the predicted environmental concentration (PEC) is less than 70% of both the long term and short term AQS.

**Table 2 Maximum modelled sulphur dioxide concentrations at the most sensitive human receptor (R1 in modelling report)**

| Pollutant                        | AQS               | Back-ground | Process Contribution (PC) |                   | Predicted Environmental Concentration (PEC) |                   |
|----------------------------------|-------------------|-------------|---------------------------|-------------------|---|-------------------|
|                                  | µg/m <sup>3</sup> |             | µg/m <sup>3</sup>         | µg/m <sup>3</sup> | % of EAL                                    | µg/m <sup>3</sup> |
| SO <sub>2</sub> (24 hour mean)   | 125               | 2.76        | 16.06                     | 12.85             | 18.82                                       | 15.06             |
| SO <sub>2</sub> (1 hour mean)    | 350               | 2.76        | 26.96                     | 7.7               | 29.72                                       | 8.49              |
| SO <sub>2</sub> (15 minute mean) | 266               | 2.76        | 34.78                     | 13.07             | 37.54                                       | 14.11             |

From the table above, sulphur dioxide can be screened out as insignificant in that the process contribution is <10% of the short term AQS for the 1 hour mean measurement. However, the short term AQS concentrations of 15 minute mean and 24 hour mean cannot be screened out as insignificant as they are >10% of the AQS.

Although sulphur dioxide did not screen out as insignificant, we consider that it is unlikely to give rise to significant pollution in that the predicted environmental concentration (PEC) is less than 70% of the short term AQS. Annual mean measurements were not included in the model as this long term AQS is only for the purpose of predicting concentrations for the protection of vegetation and ecosystems.

**Table 3 Maximum modelled total VOC concentrations (measured as benzene) at the most sensitive human receptor (R1 in modelling report)**

| Pollutant                                   | AQS               | Back-ground | Process Contribution (PC) |                   | Predicted Environmental Concentration (PEC) |                   |
|---|-------------------|-------------|---------------------------|-------------------|---|-------------------|
|   | µg/m <sup>3</sup> |             | µg/m <sup>3</sup>         | µg/m <sup>3</sup> | % of EAL                                    | µg/m <sup>3</sup> |
| C <sub>6</sub> H <sub>6</sub> (Annual mean) | 5                 | 0.152       | 0.20                      | 4                 | 0.352                                       | 7.04              |

From the table above, benzene cannot be screened out as insignificant in that the process contribution is >1% of the long term AQS.

Although benzene did not screen out as insignificant, we consider that it is unlikely to give rise to significant pollution in that the predicted environmental concentration (PEC) is less than 70% of the long term AQS.

**Table 4 Maximum modelled carbon monoxide concentrations at the most sensitive human receptor (R1 in modelling report)**

| Pollutant                | AQS    | Back-ground | Process Contribution (PC) |          | Predicted Environmental Concentration (PEC) |          |
|--------------------------|--------|-------------|---------------------------|----------|---|----------|
|                          | µg/m3  | µg/m3       | µg/m3                     | % of EAL | µg/m3                                       | % of EAL |
| CO (Rolling 8 hour mean) | 10,000 | 201         | 490.11                    | 4.9      | 691.11                                      | 6.9      |

From the table above, carbon monoxide can be screened out as insignificant in that the process contribution is <10% of the short term AQS.

The results of the assessment show that emissions of nitrogen dioxide, sulphur dioxide, carbon monoxide and volatile organic compounds are below the relevant Air Quality Objectives. We have used the Environment Agency's Air Quality Modelling and Assessment Unit screening tool (version 5.1) to check that emissions from the modelled sources will not cause unacceptable pollution. While the results differ from the modelled predictions, the conclusions remain the same, that all PECs are less than the relevant AQSs.

We agree with the Operator's numerical predictions that it is unlikely the proposed facility will result in an exceedance of the relevant Air Quality Standards. The conclusion is that there will be no significant impact to human and ecological receptors caused by the operation of the AD facility. The emission limits set in the permit are considered adequate to ensure continued protection of the environment.

**Odour and proposed digestate tank storage**

The operator has submitted an assessment of the odour emissions from the site using dispersion modelling and an odour management plan to demonstrate how odours will be minimised and controlled. Odour emissions can arise from the odour abatement emission point, fugitive emissions and digestate storage tanks. The odour dispersion modelling for point sources is titled, *Schedule 5 Notice Response – Clapham Lodge Anaerobic Digestion Plant, Leeming*. Ref 1185r2.

## Odour modelling assessment

Modelling was carried out using the dispersion model ADMS (version 5.1) software developed by Cambridge Environmental Research Consultants (CERC). The model used meteorological data from the years 2010 – 2014 based on the Leeming observation station located approximately 780 m north of the facility. Surface roughness of the surrounding areas around the site has been considered through the use of a terrain function within the ADMS software. The facility is located in a largely rural setting.

The model assesses predicted odour concentrations from the following sources; pasteurisation tank, carbon filter stack, digestate tankers, digestate storage tanks and gas upgrading unit stack. It measures predicted concentrations against the appropriate benchmark,  $1.5 \text{ OU}_E/\text{m}^3$  as defined in the Environment Agency's H4 Odour Management guidance.

The model concludes that all predicted odour concentrations are less than the benchmark at all of the receptors and that odour impacts from these sources will not be significant. The modelling report has been audited by the Environment Agency's Air Quality Modelling and Assessment Unit and we consider that the methodology undertaken by the operator to be appropriate.

However, we do not consider the operator's justification for their specified odour rates to be representative, in particular, for the digestate storage tanks. The proposed method of storage is a novel approach and has no comparable use to justify the odour rates. In addition, we also consider that the results presented by the model are subject to high uncertainties especially where human receptors are close to the facility. We therefore required the operator to produce a robust odour management plan.

## Odour management plan and improvement conditions

The operator has provided an odour management plan to demonstrate how odours will be minimised and controlled during site operations. The OMP is a flexible, live document which would be reviewed and updated periodically as set out in the Leeming Biogas – Odour Management Plan. It contains the following sections:

- Odour source inventory, inclusive of potential fugitive odour emissions
- Waste and feedstock inventory
- Measures to reduce odorous emissions from sources identified
- Routine and backstop contingency measures
- Description of containment and abatement systems
- Odour monitoring
- Responses to abnormal events
- Complaints procedures and monitoring
- Community and engagement with external stakeholders

We have assessed the plan with regard to site-specific circumstances at the installation against the requirements of the Environment Agency's H4

guidance document. We consider that the plan goes some way to meet the requirements of the H4 guidance document, albeit with some deficiencies. . We have therefore imposed improvement condition (IC7) in the permit with respect to the following issues:

- Additional controls for the management of odours from highly odorous feedstock, in particular waste blood;
- Details on how the operator will prevent point source odour emissions during the replacement of carbon filter media;
- Improvements to the routine contingency measures to proposed site specific remedial actions for each odour source; and
- Details of the individual(s) who will undertake sniff testing on site.

#### Digestate storage and proposed cover

The operator proposes to deviate from BAT for the storage of digestate by using a novel method to cover the tanks. BAT states, “storage equipment should always be covered with a gastight cover” and be provided by appropriate emissions control and abatement. The proposed floating ball cover is semi-porous (described as a lightweight expanded clay aggregate) and claims to reduce odorous emissions rather than just containing them. The Environment Agency accepts that this method is considered to be BAT in the sector for intensive livestock rearing of pigs and poultry. However, we are not aware of any case studies which can be used to corroborate its effectiveness in the anaerobic digestion process.

We have imposed improvement conditions (IC 8 and IC9) which require the operator to provide evidence that the proposed cover is able to prevent odorous emissions impacting on the nearby human receptors. The operator shall propose a procedure for monitoring of odours specifically from the digestate storage tanks. Should the operator determine that the cover is ineffective, they will need to submit plans for alternative odour containment at the digestate storage tanks and a timetable for its implementation.

Despite the deviation from BAT requirements, the Environment Agency considers the cover to be acceptable subject to the operator providing sufficient evidence which proves that condition 3.3.1 of the permit can be complied with.

#### Odour abatement

The anaerobic digestion process at Leeming Biogas Facility takes place in a sealed system where displaced gases are balanced throughout the system. Potentially odorous air emissions are discharged prior to some form of abatement (including the CHP and gas upgrading process). The only emission point for displaced odorous air is after the pasteurisation unit where air passes through a carbon filter using absorption to remove odorous compounds. This is a BAT odour abatement technology, however, in certain circumstances; it is possible that the carbon filter may not be effective.

Odorous compounds in hot and humid air may not be properly absorbed by the filter and vent to atmosphere. Therefore, we require the operator to demonstrate that the odour abatement after the pasteurisation process remains effective. We have imposed improvement conditions (IC5 and IC6) which require the operator to undertake a performance review of the abatement system. If the operator is unable to demonstrate that the carbon filter is effective, they will need to propose an alternative odour abatement technology more appropriate to the specific conditions on site.

### **Secondary containment**

The operator has outlined in their application that the process areas of the site (excluding the loading and unloading points) will be provided with secondary containment using a geotextile liner base, clay bunds and concrete walls. There is a polyethylene foil liner below the 2 mm geotextile lining. The liner is then covered with a layer of gravel. This is designed to be impermeable and to meet BAT requirements of providing a capacity greater than 110 % of the largest tank.

The bund design is a novel approach not commonly used within the AD sector. Surface water collected passes to a collection point before being discharged from the bund via a penstock valve. Furthermore, contaminated waters from the bund (separated from the clean surface water collection) follow gullies to a pump house within the bund. The contaminated water is then routed below the bund to the onsite underground effluent tank.

The operator reports that:

- The penstock valve will remain locked shut at all times.
- The penstock valve seal integrity will be checked on a daily basis via a visual inspection.
- The seal will be tested further by seepage testing during non-flowing conditions.
- The pump house is separately sealed with a further impermeable liner welded to the inside of the pump house overlying a concrete floor. This creates a separate drainage system to the rest of the bunded area.
- Should any leaks into the pump house from any spills occur, the drainage system will take any contaminated material to the underground effluent tank.
- The surface of the bund liner will be inspected by excavating the gravel in areas where the operator believes the bund liner could have been damaged. Should damage be found, the liner will be repaired by welding additional geotextile surface patches to the damaged area. Repairs will be subject to spark testing for impermeability.

The measures stated do not implement a routine and periodical procedure for monitoring the integrity of the bund liner. Therefore, we have imposed an improvement condition (IC10) in the permit, which requires the operator to propose procedures and monitoring to demonstrate that the bund remains impermeable throughout the duration of the permitted activities.



## **Biogas upgrading plant**

The operator proposes to use a “membrane-based technology” to upgrade raw biogas to biomethane. The membrane proposed uses separation with a gas phase on both sides of the membrane (dry membrane).

The operator proposes to use the dry membrane technique. The membrane either works at high pressure >20 bar or at low pressures 8–10 bar. The separation is driven by the fact that different molecules of different sizes have different permeability through the membrane. Other important factors for the separation are the pressure difference between the two sides of the membrane and temperature of the gas. Carbon dioxide and hydrogen sulphide pass through the membrane to the permeate side whereas methane is retained on the inlet side.

The biogas is cooled to remove water, compressed and dried before being led to the membrane where carbon dioxide and hydrogen sulphide are separated. Further separation of hydrogen sulphide is needed before the biomethane can be fed into the grid.

The operator submitted an H1 assessment to consider the impact of air emissions from the biogas upgrading plant. The results showed that emissions of hydrogen sulphide were insignificant, in that process contributions were <1% of the long term AQS and <10% of the short term AQS.

The emissions data (H<sub>2</sub>S) from the biogas upgrading plant were obtained from the manufacturer and not based on real-time operational monitoring data. We consider it appropriate to set an improvement condition (IC1) which requires the operator to undertake a monitoring survey (of H<sub>2</sub>S and VOCs) following the commissioning of the biogas upgrading plant to obtain actual (real-time) operational monitoring data.

We have also set improvement condition (IC2) which requires the operator to undertake an air emissions impact assessment (H1 software tool) using the results of the monitoring survey and compare the long and short term impacts of pollutants in accordance with the Environment Agency guidance on air quality risk assessments. Following the review of results from the monitoring survey and impact assessment, the Environment Agency shall consider whether or not emission limits are appropriate at the biogas upgrading plant. In the event that emission limits are not considered necessary, the use of surrogate monitoring shall be employed. We have used this consistent approach for biowaste facilities proposing to install biogas upgrading plants across England.

## 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 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 RGN 6 High Profile Sites, 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>• The Health and Safety Executive</li> <li>• Public Health England</li> <li>• The Local Planning Authority – North Yorkshire County Council</li> <li>• Environmental Health – North Yorkshire County Council</li> <li>• Food Standards Agency</li> <li>• The Director of Public Health</li> <li>• The Royal Air Force</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 EPR RGN 1 Understanding the meaning of operator.  | ✓            |

| Aspect considered   | Justification / Detail   | Criteria met |
|---|--|--------------|
|   |  | Yes          |
| <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 plans which we consider are 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>  | ✓            |
| 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     | The application is not within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. We have not formally consulted on the application. The decision was taken in accordance with our guidance AQTAG 14.   | ✓            |
| <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. However, the risk assessment undertaken for the floating digestate storage cover does not satisfy our concerns. Therefore we have implemented improvement conditions (see key issues).</p> | ✓            |
| 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>• H4 – Odour Management</li> <li>• Draft Guidance, How to comply with your environmental permit. Additional guidance for:</li> </ul>  | ✓            |

| Aspect considered            | Justification / Detail  | Criteria met |
|------------------------------|---|--------------|
|                              |   | Yes          |
|                              | <p style="text-align: center;"><b>Anaerobic Digestion</b></p> <p>The proposed techniques/emission levels for priorities for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility. Key measures proposed by the operator include:</p> <ul style="list-style-type: none"> <li>• pre-acceptance of waste procedures</li> <li>• acceptance of waste procedures</li> <li>• storage of waste</li> <li>• treatment of waste</li> <li>• point source emissions to air and water</li> <li>• fugitive emissions to air, surface and ground water</li> <li>• odour</li> </ul> <p>We have assessed the applicants Odour Management Plan and we approve the OMP in as far as it goes, but set out in the key issues section the ways in which we consider it to be deficient and, in particular, which additional appropriate measures the operator needs to take.</p> <p>We are not satisfied that the operator's storage proposals for digestate constitute BAT. The operator has proposed a novel approach which is not supported by field evidence. However, we have allowed this technique to be used subject to the monitoring of its efficacy and performance in ensuring odour emissions do not extend beyond the permit boundary. See key issues for further information.</p> |              |
| <b>The permit conditions</b> |   |              |
| Raw materials                | We have 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. Descriptions of waste types were taken from the Environment Agency's biowaste treatment template. These differ from the descriptions made by the operator. The descriptions in the permit are based on agreed acceptable waste types for the use in anaerobic digestion as outlined in the relevant standard rules set.  | ✓            |

| Aspect considered             | Justification / Detail  | Criteria met |
|-------------------------------|---|--------------|
|                               |   | Yes          |
|                               | <p>We have excluded the following wastes for the following reasons:</p> <p>19 05 99 <i>wastes not otherwise specified</i>. Waste code 16 10 02 <i>liquor/leachate from a composting process that accepts waste input types listed in this table only</i> adequately covers the unspecified waste code which has been included in the permit. In addition, the operator did not specify any justification for the inclusion of this waste type.</p> <p>We made these decisions with respect to waste types in accordance with the relevant standard rules permits and the Anaerobic Digestion Quality Protocol.</p>  |              |
| Improvement conditions        | <p>Based on the information on the application, we consider that we need to impose improvement conditions.</p> <p>We have imposed improvement conditions to ensure that:</p> <ul style="list-style-type: none"> <li>• appropriate measures are in place to ensure that accidents that may cause pollution are minimised.</li> <li>• appropriate infrastructure and procedures are in place to ensure that site remains secure.</li> <li>• the appropriate measures are in place to prevent fugitive emissions.</li> <li>• the appropriate measures are in place to prevent pollution from odour.</li> <li>• the environmental management system is externally verified.</li> <li>• appropriate monitoring of point source emissions from the biogas upgrading plant.</li> </ul> <p>See key issues section for more details.</p> | ✓            |
| 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.</p>  | ✓            |

| Aspect considered             | Justification / Detail  | Criteria met |
|-------------------------------|---|--------------|
|                               |   | Yes          |
|                               | <p>The following substances have been identified as being emitted in significant quantities and ELVs have been set for those substances:</p> <ul style="list-style-type: none"> <li>• Oxides of nitrogen</li> <li>• Sulphur dioxide</li> <li>• Carbon monoxide</li> <li>• Total VOCs</li> </ul> <p>It is considered that the ELVs/equivalent parameters or technical measures described above will ensure that significant pollution of the environment is prevented and a high level of protection for the environment secured.</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 meet the requirements of the Landfill Directive to monitor emissions from landfill gas engines. The limits are taken from the Environment Agency's <i>Guidance for monitoring landfill gas engine emissions</i>. Ref LFTGN08 v2.</p> <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> | ✓            |
| 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.</p> <p>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 the requirements of the Industrial Emissions Directive (IED).</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 RGN 5 on Operator Competence.</p>   | ✓            |

| Aspect considered    | Justification / Detail  | Criteria met |
|----------------------|---|--------------|
|                      |   | Yes          |
|                      |   |              |
| Technical competence | <p>Technical competency is required for activities permitted.</p> <p>The operator is a member of an agreed scheme.</p>  | ✓            |
| Relevant convictions | <p>The National Enforcement Database has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found. The operator satisfies the criteria in RGN 5 on Operator Competence.</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 RGN 5 on Operator Competence.</p>                              | ✓            |

## Annex 2: Consultation and web publicising

Summary of responses to consultation and web publication and the way in which we have taken these into account in the determination process (Newspaper advertising is only carried out for certain application types, in line with our guidance).

### Response received from

Centre for Radiation, Chemical and Environmental Hazards (CRCE) at Public Health England 24 November 2015

### Brief summary of issues raised

*The main emissions of concern are associated with the combustion of biogas within the proposed Combined Heat and Power (CHP) unit and flare have the potential to cause increases in pollutant concentrations in the vicinity of the site. The applicant has provided an air quality assessment as part of the application and the results of the air dispersions modelling indicates no significant impacts on air quality for nearby receptors.*

*The applicant has also considered potential nuisance issues (e.g. noise and odour) from the site as part of the application. The assessment of these potential emissions has found that the impact of the proposed site is low and adverse effects are unlikely at residential properties. The application sets out mitigation measures to control and minimise emissions from the site. It is proposed that monitoring/visual inspections of the site will be undertaken, with action taken should odours or dust emissions be detected.*

*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 installation.*

*This consultation response is based on the assumption that the permit holder shall take all appropriate measures to prevent or control pollution, in accordance with the relevant sector guidance and industry best practice.*

### Summary of actions taken or show how this has been covered

We have taken into consideration the points outlined above as part of our determination of this application and we are satisfied that no action is required.



**Response received from**

The Local Planning Authority – North Yorkshire County Council

**Brief summary of issues raised**

*A search of our planning records for the land in question has produced the following:*

*NY/2013/0237/FUL (C2/13/01761/CCC)- Planning permission for an Anaerobic Digestion and combined heat and power plant facility for the treatment of food waste on land to the rear of Clapham Lodge, Dere Street, Leeming, Northallerton, DL7 9LY- **GRANTED 1 April 2014***

*NY/2014/0335/A30- Application for the approval of details reserved by condition No's 4, 9, 12, 13, 15 & 17 of Planning Permission Ref. No. C2/13/01761/CCC- **APPROVED 11 December 2014***

*The development at the site should be operated in accordance with the details approved under applications ref's NY/2013/0237/FUL & NY/2014/0335/A3*

**Summary of actions taken or show how this has been covered**

We have taken into consideration the points outlined above as part of our determination of this application and we are satisfied that no action is required.

The Local Authority Environmental Protection Department, Health and Safety Executive, The Food Standards Agency, the Director of Public Health and the Royal Air Force (RAF) were consulted however; consultation responses from these parties were not received (deadline for comments to be received by 7th December 2015). A second opportunity was provided to the RAF to comment on the application (4<sup>th</sup> March – 25<sup>th</sup> March). No comments or representations were received during the web consultation period (10<sup>th</sup> November 2015 – 8<sup>th</sup> December 2015).