## **Appeal Decision**

Inquiry held on 12 July and 1 November 2016 Site visit made on 11 July 2016

#### by Stephen Roscoe BEng MSc CEng MICE

an Inspector appointed by the Secretary of State for Environment, Food and Rural Affairs

Decision date: 16 December 2016

#### Appeal Ref: APP/EPR/15/437 Land Adjacent to Foston Prison, Derby, Derbyshire DE65 5DN

• The appeal is made under Regulation 31(1)(a) of the Environmental Permitting (England and Wales) Regulations 2010.

• The appeal is made by Midland Pig Producers Limited against the refusal of the Environment Agency to grant an application for an Environmental Permit.

• The application Ref. EPR/LP3930FA/A001, duly made on 29 March 2011, was refused by notice dated 10 February 2015.

The proposed activity is a pig unit and anaerobic digestion plant.

#### **Decision**

1. The appeal is allowed, and the Environment Agency is directed to grant a permit for the Foston Pig Unit and Anaerobic Digestion Plant, in the terms of the draft permit attached as Schedule 1 to this decision, with the following addition. This addition is the replacement of '& S3.5' with ', S3.5 & S3.6' in Condition 3.5.4 of the draft permit.

#### **Procedural Matters**

- 2. Prior to the opening of the Inquiry, the Environment Agency (EA) requested that the appeal proceedings be adjourned for a period of three months. This request was made on the basis of, what the EA considered to be, a substantial amount of new information and material, much of it technical and complex, in proofs of evidence which had not previously been provided by the appellant. Whilst the appellant did not accept that any information and material had been provided otherwise than in accordance with the procedural rules, it was prepared to agree to an adjournment of some two to three months.
- 3. At the time of this request, the opening of the Inquiry had already been publicised and notification letters had been sent. Furthermore, a number of third parties had submitted representations objecting to the proposal and the appellant had previously suggested, in its appeal procedure reasons, that the level of public participation was expected to be high. I therefore considered that, in the interests of natural justice, the opening of the Inquiry should remain as previously programmed and that a future programme for the proceedings could be set following this opening.

- 4. I opened the Inquiry as programmed. Following consideration of mechanisms by which the outstanding matters between the main parties could potentially be addressed, I set the following timetable, which was accepted by the main parties. The Inquiry was to resume on 1 November 2016 with any supplementary proofs being exchanged and a revised (or subsequently titled supplementary) Statement of Common Ground (SoCG) submitted on or before 11 October 2016. Any rebuttal proofs were to be exchanged on or before 25 October 2016. No evidence was heard before the Inquiry was adjourned.
- 5. I resumed the Inquiry as programmed. Following this resumption, a second supplementary SoCG was submitted. In this SoCG, the EA confirmed that it now had enough information in order that it no longer opposed the granting of an Environmental Permit for the proposed development. As a consequence of this SoCG, neither main party wished to call any witnesses and, at that stage in the proceedings, no other party present wished to speak.
- 6. I then proceeded to consider a draft permit that had been submitted by the EA during the Inquiry [EA/5]. During the Inquiry, the main parties identified bioaerosol monitoring within the draft permit as an area on which they had been unable to reach agreement. They suggested that their positions may become closer given a short period of time for discussions following closure of the Inquiry. I therefore agreed to the submission, following closure of the Inquiry, of a further and final position from the EA on this matter with a subsequent response from the appellant. These were received, and I then proceeded to make my decision.

#### Main Issue

7. In view of the outstanding matter between the main parties, I consider the main issue in this case to be whether the EA's final position on bioaerosol monitoring within the draft permit is necessary and reasonable.

#### **Background**

- 8. The EA's refusal, which has led to the appeal, describes the proposed development as an intensive pig unit and anaerobic digestion (AD) plant with subsequent biogas combustion for the treatment of pig manures and slurries generated by the intensive farming activities, and mixed with imported maize and spoiled wheat straw.
- 9. The appellant's appeal application advises that the development would comprise a 2,500 sow pig unit, equating to approximately 25,000 pigs on site including progeny and producing approximately 1,000 bacon pigs per week. It would include four dry sow units, two farrowing units, two grower units and 6 finishing units. Waste materials would fall continuously into the below-floor tanks which would be flushed every 48 hours. The waste materials would then be piped directly to the AD plant, which would generate electricity and heat. The buildings associated with the development have been designed to contain any odours or other air pollutants, with air extracted to dedicated odour control systems.

#### Reasons

#### General

- 10. In view of a reduced requirement for antibiotics within the pig housing and also pig house abatement system effectiveness, I acknowledge that emissions of, and therefore risk from, bioaerosols from the proposed development should be low. However, as a result of an increase in the number of point source emissions and work on human health effects, the EA has emerging draft guidance on the monitoring of bioaerosols at regulated facilities (draft Technical Note M9).
- 11. Whilst this guidance is not yet formally in place, the latest draft has been submitted during these proceedings, and it appears to me to be likely that this guidance, or something similar to it, will be published in the near future. The principles of the measurement approaches within the guidance can be applied to various types of facility, and I therefore consider that the guidance is relevant to this case.
- 12. Whereas the proposed three stage abatement system may be regarded as the most robust mitigation possible for dust, including bioaerosols, the envisaged reduction in bioaerosol levels would be dependent on the future performance of this system. Furthermore, no dust management plan or monitoring would be required under the draft permit unless future circumstances warrant it, and bioaerosol presence is not as obvious as dust pollution. All of these factors lead towards a need for future bioaerosol monitoring.
- 13. I do not consider that the absence of standard requirements or an industry standard protocol is sufficient to set aside any such need for the monitoring of the performance of the AD plant in relation to bioaerosols. Indeed, the absence of such standards could be seen as evidence that the proposed facility is towards the forefront of advancing technology for pig farm units, as suggested in the appellant's case.
- 14. The appellant is concerned that a mechanism to require the submission of a bioaerosol monitoring plan for approval by the EA prior to the commencement of operations would simply defer discussion of this matter until a later date. This is however not the only matter to be agreed by the EA prior to the commencement of operations. There also now appears to be a far higher level of agreement and understanding between the main parties than has been the case previously. I therefore do not consider that any potential effect of deferring of these discussions carries any material weight against the imposition of such a mechanism for future EA approval of a monitoring plan.
- 15. Against this background, I consider that it would be necessary and reasonable for the draft permit to provide a mechanism for the confirmation of anticipated bioaerosol levels and to regulate the operation of the facility in this regard.
- 16. The emerging EA guidance also includes advice on upwind and downwind ambient sampling to assess facility related contributions. In view of the extent of the proposed development, I consider that such an approach may be relevant here, and the potential for monitoring at remote locations should be incorporated in the above mechanism for bioaerosol monitoring.

The Draft Permit

- 17. At the close of the Inquiry, a draft permit was agreed between the main parties with the exception of matters relating to bioaerosols. In this decision, I have therefore taken the draft permit submitted by the appellant [MID/9] on 1 November 2016, following closure of the Inquiry, as my starting point. This draft included matters agreed between the main parties during the Inquiry.
- 18. The EA has suggested, in its 4 November 2016 submission, that a Pre-Operational Measure PO13 should be added to the draft permit. This would require a bioaerosol monitoring plan to be approved by the EA prior to the commencement of operation of the facility and is somewhat similar to Pre-Operational Measure PO2 for ammonia monitoring.
- 19. The EA's suggested measure refers to 'relevant guidance'. In this regard, I am satisfied that the reference would cover: the EA's Technical Note M1 guidance; the VDI 4257 Part 2 standards referred to by the appellant; and any Technical Note M9 guidance, again referred to by the appellant, published by the EA in its final form. I therefore consider that the reference to 'relevant guidance' would be sufficiently specific.
- 20. The EA's suggested Pre-Operational Measure PO13 would also require that the plan provides for the monitoring of Aspergillus fumigatus, total bacteria and gram-negative bacteria. The EA draft guidance M9 focuses on Aspergillus fumigatus and total mesophilic bacteria, which grows best at moderate temperatures. In view of the measures and temperatures that would be likely to be used to grow cultures following sampling, as set out in the draft guidance, I can see little practical difference between the use of the term mesophilic or not. I therefore do not consider that it would need to be used in the manner suggested by the appellant. In relation to gram-negative bacteria, I consider that its monitoring would be sufficiently related to the human health effects identified in the draft guidance to be relevant to the aim of this monitoring plan.
- 21. In view of all of the above points, I consider that the EA's suggested Pre-Operational Measure PO13 would be necessary and reasonable.
- 22. The EA has also suggested that a bioaerosol monitoring requirements Table S3.6 is added to the draft permit. This suggested table refers to the approved monitoring plan, with the potential for remote monitoring as I have set out previously, for measurement and monitoring parameters. It also identifies bioaerosol threshold limits for Aspergillus fumigatus and for gram-negative and total bacteria. There is nothing to cogently suggest that these limits would be unreasonable, and I have already found that they represent factors that would justifiably be within the monitoring plan.
- 23. The appellant has suggested, in its Table S3.1 addition to the draft permit, that the only point source emission to air to be monitored should be mesophilic bacteria, and that this monitoring should only take place at the stack. For the reasons already given relating to the inclusion of Aspergillus fumigatus and gram-negative bacteria in the monitoring plan, I do not consider that the sole monitoring of mesophilic bacteria would provide an adequate level of monitoring protection. Moreover, I have already found that there is a potential need for remote monitoring away from the stack. I do not therefore agree with the appellant's suggestions in this regard.

- 24. The appellant's Table S3.1, and its suggested Improvement Programme Requirement IC6, would require monitoring to be carried out once, within three months of commissioning of the facility. The appellant has also suggested that the limit for total mesophilic bacteria, in its Table S3.1, would need to be agreed with the EA. It has also suggested that this could be based on the monitoring work carried out within the first three months of operation of the facility. The limit would therefore only be agreed with the EA after the bioaerosol testing under the appellant's suggested Requirement IC6, which would not have had the prior review of the EA. If this was to be the only testing to be carried out, I consider that EA review would be necessary.
- 25. Under the appellant's suggested Improvement Programme Requirement IC6, any further monitoring would only take place if results from the initial bioaerosol monitoring showed that abatement systems were not adequate to prevent risk and alternative mitigation was required. This mechanism therefore would not provide any ongoing monitoring which would detect any future deterioration in facility performance in relation to bioaerosols. I do not consider that this would be acceptable in the context of the emerging guidance, which advises that monitoring should assess whether control measures are maintaining acceptable bioaerosol levels.
- 26. In view of all of the above points, I consider that the EA's suggested Table S3.6 would be necessary and reasonable.
- 27. The EA has also suggested amendments to Condition 3.5.1 of the draft permit to engage Table S3.6 and to Table S4.1 to require the reporting of bioaerosol monitoring data. As a consequence of my findings above, I consider that both of these amendments would be reasonable and necessary. In terms of stack monitoring, the EA's draft guidance M9 suggests that retro-fitting of monitoring access is usually very difficult. I therefore consider that reference to Table S3.6 should be added to Condition 3.5.4.
- 28. I therefore conclude that the EA's final position on bioaerosol monitoring within the draft permit [EA/7] is necessary and reasonable and that Condition 3.5.4 should also be amended as set out above.

#### **Other Matters**

- 29. Concerns have been raised in respect of the emergence of disease resistant bacteria within the proposed development. The application includes a bioaerosol risk assessment which shows how the need for feed additives would be reduced and concludes that there would be no significant risks in relation to disease resistant bacteria. This risk assessment has been reviewed by Public Health England who did not raise any concerns on this matter, and I can see no reason to disagree.
- 30. In terms of the AD plant, concerns have been raised in relation to its performance, the importation of material for use in it, odour and noise. The importation of waste is a particular concern of Mrs H Wheeler MP for South Derbyshire. The performance of the AD plant in terms of impacts outside of the proposed development is an integral part of the draft permit. In view of my findings on the matters set out above, and the fact that all other matters relating to the proposal have been agreed with the EA, I am of the view that the plant would be sufficiently regulated in respect of future performance.

- 31. The materials to be imported for use in the AD plant are set out in Activity Ref. A3 of Table S1.1 of the draft permit. These restrictions would effectively limit the level of use of the AD plant. This is because the efficient use of raw materials would be required by Condition 1.3.1 of the permit and the imported materials would be required to balance the materials obtained on-site from the pig unit. This balance would make it possible for the combined mix to be used in the AD plant. Importation quantities for the AD plant would also be reported under raw material usage in Condition 4.2.2 and Table S4.3 of the permit using data from a weighbridge arrangement within the proposed development. I am therefore satisfied that the types and quantities of imported materials would be sufficiently regulated.
- 32. The prevention of unacceptable odour and noise would be regulated under Conditions 3.3.1 and 3.4.1 of the draft permit. Odour and noise management plans would be approved by the EA under Pre-Operational Measures PO11 and PO8 of the permit. They would be reviewed following the completion of commissioning under Improvement Programme Requirements IC4 and IC1. These mechanisms have been agreed with the EA, and I can see no reason to suggest that they would not be effective.
- 33. It is the applicant's case that an NO2 emission limit of 300mg/m³ could be achieved at the facility, whereas the limit set for the gas engine exhaust stack in Table S3.1 is 500mg/m³. This limit is based on what has been seen to be acceptable by the EA, and exceedance of this limit is seen by the appellant as being unlikely. The operator would however be required, under Condition 1.1.1 of the draft permit, to minimise pollution, which would be to achieve levels below 500mg/m³ wherever reasonable to do so. I am satisfied that the limit of 500mg/m³ would represent a reasonable balance between the avoidance of unacceptable odour and proportionate measures within the facility itself to control odour.
- 34. The draft permit would require the operator to minimise the risks of pollution arising from incidents, such as an accident or an outbreak of disease, under Condition 1.1.1, with the EA being immediately notified under Condition 4.3.1. The appellant is also of the view that such an incident would form part of the approved accident management plan for the site, which would be approved by the EA under Pre-Operational Measure PO6. I am satisfied that all appropriate receptors have been identified, and the notification and incident management provisions would be appropriate for the proper management of an incident.
- 35. Dust control would be regulated under Condition 3.2 of the draft permit. The EA does not consider that dust would be sufficient of an issue to warrant the preparation of a dust management plan. If any activities gave rise to dust impacts, the EA could, under the permit, require a management plan to be submitted to it for approval and implementation.
- 36. Impact on ecological receptors was one of the reasons given by the EA for refusal of the permit application. The EA is however now content, following the receipt of further information, that the proposal would not result in any unacceptable impacts in terms of the ecology of the surrounding area. I can see no reason to disagree with this position.

#### **Overall Conclusion**

37. I view of all of the above points, I conclude that refusal of the Environmental Permit application is not justified. In coming to this view, I have also taken into account all other matters raised. I therefore conclude that the appeal should be allowed.

Stephen Roscoe

**INSPECTOR** 

#### **APPEARANCES**

FOR THE ENVIRONMENT AGENCY:

Mr C Banner of counsel, instructed by Mr R Seymour

Mr R Seymour Senior Lawyer (Team Leader) – National

Permitting Service

FOR THE APPELLANT:

Mr D Hardy Barrister and Solicitor, Partner, Squire Patton

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C Biol, FRSB

Process Consultant, PROjEN Bioenergy

**INTERESTED PERSONS:** 

Ms A Holgate

Local Resident

## **DOCUMENTS**

#### General

G1	Letter of notification of the Inquiry
G2	Letters from Interested Persons
G3	Statement of Common Ground dated 13 June 2016
G4	Supplementary Statement of Common Ground dated 11 October 2016
G5	Second Supplementary Statement of Common Ground dated 1 November 2016

## **Core Documents**

Application Documents
Appeal documents files 1-8 (inclusive)
MPPL's 10 October 2014 response to the EA's Schedule 5 Notice for further information (issued 4 March 2014) made under paragraph 4 part 1 of Schedule 5 of the Environmental Permitting (England and Wales Regulations) 2010
Decision Documents
Notice of Refusal dated 10 February 2015 and accompanying decision Document
Appeal Documents
Appellant's Pre-Inquiry Statement (29 September 2015)
EA's Statement of Case (undated)
Legislation and Directives
Environmental Permitting (England and Wales) Regulations 2010 (extracts: Regulations 1-31 (inclusive) and Schedule 1, Section 6.9 Part A(1) and Schedule 6)
Pollution Prevention and Control Act 1999
Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (recast)
The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 (2010 No. 639) (as amended)
Government Publications

CDE1 The Natural Environment White Paper "The Natural Choice: Securing the value of nature" (Defra) (June 2011) CDF2 Odour Guidance for Local Authorities; Defra, (March 2010) CDF3 Defra Environmental Permitting Guidance - Core Guidance - For the Environmental Permitting (England and Wales) Regulations 2010 (last revised March 2013) CDF Environment Agency Publications and Journal Articles H4 - Odour Management. How to comply with your environmental permit CDF1 (March 2011) CDF2 How to comply with your environmental permit for intensive farming (v.2 January 2010) CDF3 EPR Intensive Farming Example Application - Broiler Farm (Version 2, January 2012) CDF4 Assessment of community response to odorous emissions -R&D Technical Report P4-095 (October 2002) CDF5 AQTAG06 Technical guidance on detailed modelling approach for an appropriate assessment for emissions to air Status: Updated version, (Approved March 2014) Sector Guidance Note IPPC S5.06: Guidance for the recovery and CDF6 disposal of hazardous and non-hazardous waste (2004) Guidance for monitoring landfill gas engine emissions (version 2, 2010) CDF7 Technical Guidance Note (Monitoring) M1. Sampling requirements for CDF8 stack emission monitoring. (Version 7 March 2016) CDF9 What you can expect from us. Our Service Commitment (2011) CDF10 Science Report: SC030170/SR3 Review of Dispersion Modelling for Odour Predictions CDF11 An industry guide for the prevention and control of odours at bio-waste processing facilities 2007; Published by the Composting Association, co-authored with Jeremy Jacobs of the Composting Association (now the Organic Recycling Group as part of the Renewable Energy Association). CDF12 Odour Management-Measurement of Oxygen in Compost; Bio-cycle December 2013; co-authored with Dr Eric Crouch from Compost Manager https://www.biocycle.net/2013/12/17/measuring-oxygen-incompost/ CDF13 Cost Effective Odour Control; Biocycle, November 2014 https://www.biocycle.net/2014/11/17/cost-effective-odor-control/ CDF14 Characterization of odour released during handling of swine slurry: Part I. Relationship between odorants and perceived odour concentrations, Banes- Vidal et al, Atmospheric Environment 43 (2009) 2997 - 3005

- CDF15 Psychophysical and Behavioural Characteristics of Olfactory Adaptation, Pamela Dalton, Chem. Senses 25: 487-492, 2000
- CDF16 The Cellular and Molecular Basis of Odour Adaptation, Zufall et.al. Chem. Senses 25 (4): 473-481 http://chemse.oxfordjournals.org/content/25/4/473.full
- CDF17 Odour influence on well-being and health with specific focus on animal production emissions, Sven Nimmermark, Ann Agric Environ Med 2004, 11, 163–173
- CDF18 Odour-associated Health Complaints: Competing Explanatory Models, Dennis Shusterman, Chem. Senses 26: 339 343, 2001
- CDF19 Odour intensity and hedonic tone important parameters to describe odour annoyance to residents, R. Both et al, Water Science and Technology Vol 50 No 4 pp 83-92
- CDF20 Separating the impact of exposure and personality in annoyance response to environmental stressors, particularly odours, G. Winneke et al., Environment International, Vol 22, No 1, pp. 73 81, 1996
- CDF21 Review Olfactory/trigeminal interactions in nasal chemoreception, G. Brand, Neuroscience and Bio-behavioural Reviews 30 (2006) 908-917
- CDG Miscellaneous Documents
- CDG1 (a) BPEX "Advancing Together A Roadmap for the English Pig Industry. Towards Better Performance." (April 2011); and (b) Positive Progress An Update on the Roadmap for the environmental sustainability of the English Pig Industry (January 2014)
- (a) BREF document; "Integrated Pollution Prevention and Control (IPPC) Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs" (July 2003); (b)Draft 2 (August 2013) (excluding pages 40-64 "Poultry Production" and 327 to 384 "Techniques for the reduction of emissions from poultry housing"); and (c) Final Draft (August 2015) (excluding pages 6-19 "The Poultry Production Sector in Europe" and pages 45-68 "Poultry Production" and 318-380 "Techniques for the reduction of emissions from poultry housing")
- CDG3 BPEX, NPA, Environment Agency and NFU. "Pig Industry Good Practice Checklist Version 2" (August 2013)
- CDG4 Environmental Protection Agency "Odour Impacts and Odour Emission Control Measures for Intensive Agriculture" (2001)
- CDH Appeal Decisions
- CDH1 Environmental Permitting (England and Wales) Regulations 2010, Regulation 31: Appeal by Elsham Linc Limited, Samuel Godfrey: Site Somerby Top Pig Farm, Somerby Wold Lane, Somerby, Barnetby, Lincolnshire DN38 6BN; Appeal Ref. APP/EPR/13/111; Decision Date 19 March 2014

## **Documents Submitted by the Environment Agency**

- EA/1.1 Mr P Kelly: Proof of Evidence
- EA/1.2 Mr P Kelly: Appendices to Proof of Evidence
- EA/2.1 Ms M O'Driscoll: Proof of Evidence
- EA/2.2 Ms M O'Driscoll: Appendices to Proof of Evidence
- EA/3.1 Mr N Saur: Proof of Evidence
- EA/3.2 Mr N Saur: Supplementary Proof of Evidence
- EA/4.1 Mr S Wigglesworth: Proof of Evidence
- EA/4.2 Mr S Wigglesworth: Supplementary Proof of Evidence

#### Submitted During the Inquiry

EA/5 Draft Permit Submitted on 1 November 2016

#### Submitted Following the Inquiry

- EA/6 Email dated 4 November 2016 from Mr R Seymour
- EA/7 Draft Permit Submitted on 4 November 2016
- EA/8 Draft Environment Agency Technical Note (Monitoring) M9

## **Documents Submitted by the Appellant**

- MID/1.1 Mr J Leavesley: Summary Proof of Evidence
- MID/1.2 Mr J Leavesley: Proof of Evidence
- MID/1.3 Mr J Leavesley: Appendices to Proof of Evidence
- MID/2.1 Mr M Barker: Summary Proof of Evidence
- MID/2.2 Mr M Barker: Proof of Evidence
- MID/3.1 Mr D Prior: Proof of Evidence
- MID/4.1 Dr A Roth: Summary Proof of Evidence
- MID/4.2 Dr A Roth: Proof of Evidence
- MID/4.3 Dr A Roth: Appendices to Proof of Evidence
- MID/5.1 Mr M Stoaling: Summary Proof of Evidence
- MID/5.2 Mr M Stoaling: Proof of Evidence
- MID/5.3 Mr M Stoaling: Appendices to Proof of Evidence
- MID/5.4 Mr M Stoaling: Supplemental Rebuttal Proof of Evidence
- MID/6.1 Dr L Gornall: Summary Proof of Evidence
- MID/6.2 Dr L Gornall: Proof of Evidence

Dr L Gornall: Appendices to Proof of Evidence MID/6.3Dr L Gornall: Supplementary Proof of Evidence MID/6.4 Mr N Penlington: Summary Proof of Evidence MID/7.1 Mr N Penlington: Proof of Evidence MID/7.2 Mr N Penlington: Appendices to Proof of Evidence MID/7.3 Submitted Following the Inquiry Email dated 1 November 2016 from Ms J Dixon MID/8 Draft Permit Submitted on 1 November 2016 MID/9 Email dated 8 November 2016 from Ms J Dixon MID/10

## **Schedule 1: Draft Environmental Permit**



# Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Midland Pig Producers Limited

Foston Pig Unit and Anaerobic Digestion Plant Land Adjacent to Foston Prison Uttoxeter Road Foston Derbyshire DE65 5DN

Permit number

EPR/LP3930FA

# Foston Pig Unit and Anaerobic Digestion Plant Permit number EPR/LP3930FA

## Introductory note

## This introductory note does not form a part of the notice.

The main features of the permit are as follows.

#### General overview

This new bespoke permit has been granted for an intensive pig unit and anaerobic digester with associated biogas combustion unit. The combustion unit utilises biogas from the treatment of pig manures and slurries generated from the pig farming activities which are mixed with maize and the spoiled straw bedding and other manipulable materials added for the comfort of the pigs. In addition there is an associated on-site effluent treatment plant. The installation includes four scheduled activities as detailed in table \$1.1.

The installation is approximately centred on National Grid Reference SK 18262 31638 and is surrounded predominantly by arable farmland. The installation is bordered by H.M. Foston Prison to the east and Maidensley Farm to the west. To the north, the installation is bordered by Uttoxeter Road and the A50, whilst to the south it adjoins Pudding Covert, Roundabout Covert and Fishpond Plantation. The installation is situated approximately 1.5km north west of the village of Scropton and approximately 9km east of Uttoxeter. The site will be accessed via an improved junction directly off the west bound carriageway of the A50. A site location plan is provided in schedule 7, together with a site plan which shows the installation boundary.

The installation is within the applicable screening distance (2km) of nine nature conservation sites comprising of seven Local Wildlife Sites (LWS) and 2 ancient and semi-natural woodland. The distances are calculated from the approximate centre point of the installation to the nearest point of the nature conservation site, and an additional buffer of 400m is included to account for sites within the 2km distance from the boundary, rather than the centre point. These sites are:

Puddingbag Covert LWS on southern installation boundary

Fishpond Plantation and The Church LWS within 250m of installation boundary

Conygreave and Rough Woods LWS, 1.3km from the installation.

An unnamed ancient woodland, 1.3km from the installation.

Sudbury Willow Carr LWS, 1.5km from the installation.

The Coppice LWS and ancient woodland, 1.7km from the installation.

Pennywaste Wood LWS, 2.3km from the installation.

Sudbury Hall Grounds and Lake LWS, 2.3km from the Installation

Midland Pig Producers Limited proposes the operation of an intensive pig unit with up to 2500 sows (of which 400 are farrowing), 4000 pigs of weight 7 - 15kg, 4000 pigs of weight 15 - 30kg and 14,000 finishing production pigs (>30kg and including 500 unserved gilts). Pigs which die during the production cycle are recorded and incinerated in an on-site carcass incinerator.

The installation will include 14 houses (4 dry sow houses, 2 farrowing houses, 2 growing houses and 6 finishing houses), all of which will have abatement equipment. Hot water generated by the anaerobic digestion plant will be pumped back in to the pig units providing either under floor heating for the pigs or a cooling system through heat transfer technologies. All housing is linked via an enclosed pig race which allows for movement through the system as the animals grow. Ventilation of the pig houses will be via a three phase abatement system located at the ends of each of the 14 houses, comprising of water, acid and biological filters.

The housing will comprise a partially slatted floor, with slurry collected underneath in channels which are flushed a minimum of once every 48 hours with acidified flush water. The waste materials are piped directly to the primary separator where it is split into solid and liquid fractions. The solids and a proportion of the flush water are mixed with sileage and fed to the anaerobic digester (AD) system. The liquidfraction is returned after acidification to the pig waste flushing system. Digestate from the AD system is separated into a digested cake. Liquid fractions of digestate are passed through an effluent treatment plant and either reused as flush water and livestock drinking water or discharged to sewer. Whole unseparated digestate produced from the AD plant will be pasteurised and exported off-site and spread on land either owned by the Operator or third parties. There is 6 months storage capacity for digestate on the installation.

The AD Plant comprises a series of plug flow digesters that will treat an estimated 45,000 tonnes per annum (tpa) pig slurry from the on-site activities mixed with 9,200 tpa of maize and 3,200 tpa of spoiled straw, and other manipulable materials added for the comfort of the pigs and a biogas combustion unit with an associated engine exhaust stack. The engine has a thermal input of 2.75 megawatts (MWth).

Roof water is collected in a rainwater retention area to the west of the site, within the installation boundary. A storm tank will provide additional capacity in the event of high rainfall. The roof water will be used to either top up the water within the flushing system or be treated and used for drinking water for the pigs. Any excess water from the rainwater tanks will be discharged through an attenuation pond, which acts as a soakaway, and an overflow drain from the pond channels further excess water on to fields to the south of the installation. Surface water from roadways will pass through an interceptor and into the rainwater retention tanks.

This permit implements the requirements of the European Union Directive on Industrial Emissions.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

Description	Date	Comments
Application EPR/LP3930FA/A001	Duly made 29/03/11	Application for an intensive farming pig installation permit and associated anaerobic digestion plant and biogas combustion unit.
Additional information received (Schedule 5 Notice issued 01/02/12)	30/04/13	Revised application forms and supporting documents for intensive farming facility with associated anaerobic digestion plant and biogas combustion unit and response to Schedule 5 Notice Request for Information (dated 01/02/12) including a summary of environment management systems, raw materials inventory, energy efficiency plan, staff qualifications, clarification of pig numbers, effluent treatment plant, anaerobic digestion plant, site drainage and odour and noise assessments and management plans.
Additional information received	10/06/13	All information submitted on 30/04/13, resubmitted with referencing amended since 30/04/13 submission, and in addition the response to Request for Further Information (dated 29/05/13) including clarification of pig numbers, effluent treatment plant, site drainage, incinerator, feed mill, scrubber units, and odour and noise assessments input data.
Additional information received (Schedule 5 Notice issued 04/03/14, email dated 16/04/14 and letter dated 18/09/14)	24/10/14	Responses to Schedule 5 Notice issued 04/03/14, email dated 16/04/14, letter dated 18/09/14 and complete re-submission of application forms and supporting documents for intensive farming facility with associated anaerobic digestion plant and biogas combustion unit, superseding all previous information supplied.
Refusal	10/02/15	Application refused
Appeal additional information received	13/06/16 & 14/06/16	Additional information received within Proofs of Evidence submitted on behalf of Midland Pig Producers Limited
	09/08/16	Additional information received following request for further information (requested 13/07/16)
	28/09/16	Additional information received following request for further information (requested on 13/09/16)
	11/10/16 & 21/10/16	Additional information received within Supplementary Proofs of Evidence submitted on behalf of Midland Pig Producers Limited
Permit determined EPR/LP3930FA (Billing reference: LP3930FA)	DD/MM/YY	Permit issued to Midland Pig Producers Limited.

End of introductory note

## **Permit**

## The Environmental Permitting (England and Wales) Regulations 2010

#### Permit number

#### EPR/LP3930FA

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

Midland Pig Producers Limited ("the operator"),

whose registered office is

Ryknield House Alrewas Burton on Trent DE13 7AB

company registration number 995699

to operate an installation at

Foston Pig Unit and Anaerobic Digestion Plant Land Adjacent to Foston Prison Uttoxeter Road Foston Derbyshire DE65 5DN

to the extent authorised by and subject to the conditions of this permit.

Name	Date
[name of authorised person]	[DD/MM/YYYY]

Authorised on behalf of the Environment Agency

## **Conditions**

## 1 Management

## 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The Operator shall comply with the requirements of an approved competence scheme.

## 1.2 Energy efficiency

- 1.2.1 The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.

#### 1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
  - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities:
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

# 1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities;
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## 2 Operations

#### 2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

#### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

## 2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified in writing by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within such time period reasonably specified in such written notification, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 The operator shall maintain and implement a system to record the number of animal places and animal movements.
- 2.3.4 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.5 The operator shall take appropriate measures in off-site disposal or recovery of solid manure or slurry to prevent, or where this is not practicable, to minimise pollution.
- 2.3.6 The operator shall:
  - (a) maintain and implement a manure management plan;
  - (b) review and record at least every four years whether changes to the plan should be made; and
  - (c) make any appropriate changes to the plan identified by the review.
- 2.3.7 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
  - (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.8 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

## 2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

## 2.5 Pre-operational conditions

2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed.

## 3 Emissions and monitoring

## 3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

## 3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits; and
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

#### 3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

#### 3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

## 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1. S3.2 and S3.3;
  - (b) surface water or groundwater specified in table S3.4;
  - (c) process monitoring specified in table S3.5; and

- (c)(d) Bioaerosol monitoring as specified in table S3.6.-
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data...
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, S3.3, S3.4 & S3.5 unless otherwise agreed in writing by the Environment Agency.

#### 3.6 Pests

- 3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.6.2 The operator shall:
  - if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution, hazard or annoyance from pests;
  - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 4 Information

#### 4.1 Records

- 4.1.1 All records required to be made by this permit shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - a) off-site environmental effects; and
    - b) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

## 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
  - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data.
  - (b) the annual production /treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
  - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

#### 4.3 Notifications

#### 4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
  - inform the Environment Agency,
  - take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - III. take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
  - I. inform the Environment Agency, and
  - take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

## 4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

# Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations (if applicable)	Limits of specified activity and waste types
A1	Section 6.9 A(1)(a)(ii) Rearing of pigs intensively in an installation with more than 2,000 places for production pigs (over 30 kg)	Rearing of pigs intensively in an installation with a capacity for 14,000 production pig (over 30 kg) places, [including 22 boars].	Keeping of production pigs and not served gilts (over 30 kg), including from receipt of raw materials and fuels on to the site to pigs and associated wastes being removed from site.
A2	Section 6.9 A(1)(a)(iii) Rearing of pigs intensively in an installation with more than 750 places for sows	Rearing of pigs intensively in an installation with a capacity for 2,500 sow places.	Keeping of sows and served gilts for production of piglets, from receipt of raw materials and fuels on to the site to removal of sows and associated wastes from site.
A3	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste (generated by activities A1 and A2) and raw materials through to digestion and recovery of by-products (digestate). Only pig slurry and wheat-straw bedding (from on site activities); and other manipulable materials added for the comfort of the pigs and imported maize silage shall be treated.  Anaerobic digestion of waste in 10 subsurface plug flow digesters followed by burning of biogas produced from the process.  Use of pressure release valves shall not be used routinely to vent unburnt biogas
A4	Section 5.4, Part A(1)(a)(i), Biological treatment of non- hazardous waste	Treatment of effluent from AD plant and from pig rearing activity in a facility with a capacity of >50 tonnes/ day	Effluent arising from on-site activities only.
		D8 – Biological treatment of	

Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations (if applicable)	Limits of specified activity and waste types
	waste	
Directly Associated Activity	/	
-	Storage of waste pending recovery or disposal	Undertaken in relation to Activity A3.
	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)	From the receipt of permitted waste to pretreatment and despatch for anaerobic digestion on site
		enclosed building fitted with appropriate odour abatement and on an impermeable surface with sealed drainage.
-	Physical treatment for the purpose of recycling	Undertaken in relation to Activity A3.
	R3: Recycling/reclamation of organic substances which are not used as solvents	From the receipt of waste to despatch for anaerobic digestion.
		Pre-treatment of waste in enclosed bunded vessel or building and on impermeable surface with sealed drainage system including screening, mixing and maceration.
		Post-treatment of digestate in an enclosed bunded vessel or building and on a impermeable surface with sealed drainage system, including pasteurisation, screening to remove contraries, centrifuge or pressing and addition of thickening agents (polymers) or drying for use as a fertiliser or soil conditioner (drying for the purpose of use as a fuel is not permitted).
	1 of the EP Regulations  Directly Associated Activity -	1 of the EP Regulations  activity and WFD Annex I and II operations (if applicable)  waste  Directly Associated Activity  - Storage of waste pending recovery or disposal  R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)  - Physical treatment for the purpose of recycling  R3: Recycling/reclamation of organic substances which are not used as

Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations (if applicable)	Limits of specified activity and waste types
			or chemical scrubbing.
A7	-	Burning of biogas in a combined heat and power engine	Undertaken in relation to Activity A3.
		R1:Use principally as a fuel to generate energy	Combustion of biogas in 1 combined heat and power (CHP) engine with thermal input of 2.75 MWth.
			All biogas condensate shall be discharged into a sealed drainage system or recirculated back to the digester.
A8	-	Emergency flare operation	Undertaken in relation to Activity A3.
		D10: Incineration on land	Use of 1 auxiliary flare only during periods of breakdown or maintenance of the gas engine.
A9	-	Storage of raw materials.	Undertaken in relation to Activity A1 - A4.
A10	-	Storage of biogas produced from on-site anaerobic digestion of permitted waste	Undertaken in relation to Activity A3.
		in 1 stand-alone biogas holder.	From the receipt of biogas produced at the on-site anaerobic digestion proces to the utilisation in the gas engine/flare.
A11		Storage of liquid digestate in 2 storage tanks. Storage of solid digestate on an impermeable surface in 1 building.	Undertaken in relation to Activity A3.  From the receipt of digestate produced from the on-site anaerobic digestion
		R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)	process to despatch for us off-site.

Table S1.1 activ	Table S1.1 activities		
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations (if applicable)	Limits of specified activity and waste types
A12	-	Collection and storage of uncontaminated roof and site surface water in rainwater retention area.	Undertaken in relation to Activity A3.  From the collection of uncontaminated roof and site surface water from non operational areas only to reuse within the facility or discharge off-site.
A13	-	Rearing of 8,000 pigs to 30 kg.	Undertaken in relation to Activity A1 & A2. From weaning of pigs and receipt of raw materials and fuels on to the site up to pigs reaching 30 kg and removal of pigs and associated wastes from site.
A14	-	Operation of an Incinerator for carcass disposal Animal and Plant Health Agency (APHA) approved < 50 kg/hr.	Undertaken in relation to Activity A1 & A2.  From receipt of raw materials, fuels and input of carcasses to release of combustion products to air and associated wastes removed from site.
A15	-	The milling, mixing and transfer of feedstuff to and from storage areas.	Undertaken in relation to Activity A1 & A2.  From receipt of raw materials and fuels onto the site to removal of feed and associated wastes.

Table S1.2 Operating techniques			
Description	Parts	Date Received	
Application EPR/LP3930FA/A001	Responses to Parts B2 and B3 of the application form and referenced supporting documentation received in complete re-submission of application forms and supporting documents, superseding all previous information supplied.	24/10/2014	
	In addition responses to Schedule 5 Notice issued 04/03/14, email dated 16/04/14 and letter dated 18/09/14.		
	<b>Excluding</b> the parts of the application superseded by the operating techniques agreed by the Environment Agency in accordance with Table S1.4 Pre-operational Conditions PO1-PO4 and PO6-PO11 in table S1.4.		
Additional information received during the appeal process	Additional information received within Proofs of Evidence submitted on behalf of Midland Pig Producers Limited	13/06/16 & 14/06/16	
	Additional information received following request for further information (requested 13/07/16)	09/08/16	
	Additional information received following request for further information (requested on 13/09/16)	28/09/16	
	Additional information received within Supplementary Proofs of Evidence submitted on behalf of Midland Pig Producers Limited	11/10/16 & 21/10/16	
The documents approved by the Environment Agency in accordance with Pre Operational conditions PO1-PO4 and PO6-PO11 in table S1.4	As specified in the relevant approval.	On completion of pre- operational conditions PO1 – PO4 and PO6 – PO11 in table S1.4	

Reference	Requirement	Date
IC1	The Operator shall complete a review of the noise impact of the installation at sensitive receptors, when the installation is fully operational. The scope of the review shall be agreed in advance with the Environment Agency and shall compare the actual noise emissions and impacts at receptors with the noise emissions and impacts at receptors predicted in the noise assessment submitted in response to pre-operational condition PO8 in table S1.4. The review shall include appropriate measurements to verify any modelling work undertaken.  Following the review a written report shall be submitted to the	Within 12 months from completion of commissioning

Reference	Requirement	Date
	Environment Agency for its written approval detailing the review findings including, if necessary, proposals for further noise mitigation (including timescales for implementation). The mitigation measures shall be implemented in accordance with the timescales specified in the written approval.	
IC2	The Operator shall submit a written report to the Environment Agency on the commissioning of the installation. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the response to pre-operational condition PO1. The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions and confirm that the Environmental Management System (EMS) has been updated accordingly.	Within 4 months of the completion of commissioning
IC3	The Operator shall submit a written report to the Environment Agency on the implementation of its Environmental Management System (EMS) and the progress made in the certification of the system by an external body.	Within 12 months of the completion of commissioning
IC4	The Operator shall submit to the Environment Agency a written review of the Odour Management Plan (OMP), and if appropriate a revised OMP for the Environment Agency's written approval. It shall be reviewed in light of IC2 commissioning report response and in accordance with Environment Agency's H4 Odour Management guidance.	Within 4 months of the completion of commissioning
	The review shall cover all odour risk assessments associated with the facility, effectiveness of odour controls, monitoring and contingency action plan in event of abnormal operations. Any revised OMP shall include a list of all relevant additional measures for effective odour control, in light of installation commissioning, including as appropriate timescales for future improvements.	
IC5	a) The Operator shall undertake a review of the ammonia monitoring results at the installation, as specified in Table S3.1, 12 months after completion of commissioning, and provide a written report to the Environment Agency detailing the results of the monitoring programme within 1 calendar month of that date.	Within 13 months of the completion of commissioning
	b) If the results do not indicate that ammonia emission concentrations from the abatement systems are at or below 1 mg/m³ then alternative mitigation proposals including time scales for implementation are to be submitted for written approval.	Within 2 months of completion of IC5 a)
	Following approval, the operator shall implement the proposals in accordance with the Environment Agency's written approval.	

Table S1.4 Pre-	-operational measures
Reference	Pre-operational measures
PO1	Not later than one month prior to the commencement of construction of the installation, the Operator shall submit to the Environment Agency a written report with final design details of the pig rearing buildings ventilation system, pig rearing buildings abatement and the final design of the service room and anaerobic digestion (AD) Plant abatement facilities and obtain the Environment Agency's written approval to it.  This report shall include but not be limited to  a) Final ventilation design performance criteria for effective fugitive odorous emission control
W 13 03 00	b) Final design of the odour abatement systems that will ensure compliance with the odour condition 3.3. The report shall include a demonstration (whether by a detailed review of technical papers or by trial results) that all odorous chemical compounds and their loading rates expected in the relevant air streams have been considered in the design; and supporting evidence that the odorous compounds will be controlled and/or abated either by operating techniques or by the proposed odour abatement systems.
	<ul> <li>c) Final design alarms and triggers for each relevant scenario to alert operator to the malfunction of both ventilation and abatement systems. The report should further list all relevant contingency mitigation actions to minimise risk of elevated odour pollution from the installation linked to each malfunction scenario and detail the actions to restore systems to normal operating conditions for effective odour control.</li> <li>Ventilation and abatement systems should be designed by suitably qualified named engineers who can supervise and sign off on construction quality assurance.</li> </ul>
PO2	Not later than one month prior to the commencement of construction of the installation, the Operator shall submit a written report to the Environment Agency, which details proposals for an ammonia monitoring programme to demonstrate the effectiveness of the proposed abatement measures and obtain the Environment Agency's written approval to it.  The report shall include, but not be limited to
	a) proposals for the monitoring, sampling and analysis methodologies used to obtain the data     b) details of types and locations of sensors.
PO3	The Operator shall:  a) Not later than one month prior to the commencement of construction of the installation, submit to the Environment Agency in writing the final design and construction proposals for the containment bunding and surfacing for anaerobic digestion plant and effluent treatment plant. The proposals shall also
	include details of the bentonite/geotextile layer proposed as containment for the sub surface digesters and obtain the Environment Agency's written approval to the proposals.
	b) Following construction in accordance with the approved proposals, carry out a

Reference	Pre-operational measures
	review led by a qualified structural engineer of the construction and integrity of bunds surrounding above grounds tanks, sub surface digesters and the entire site containment. A written report of the findings shall be submitted to the Environment Agency.
PO4	Not later than one month prior to the commencement of construction of the installation, the Operator shall submit to the Environment Agency a written commissioning plan for the AD plant, effluent treatment plant and pig rearing abatement systems and obtain the Environment Agency's written approval to it. The plan shall include but not be limited to the following:
	a) the expected emissions to the environment during the different stages of commissioning and the provision of individual reports to cover the individual stages
	b) the timescale for and definition of commissioning
	c) details for process monitoring and stack emission monitoring to quantify emissions during the commissioning period
	d) the expected duration of activities and the actions to be taken to protect the environment
	e) procedures for reporting exceedances of expected emissions to the Environment Agency
	The plan shall give particular attention to a schedule of actions to provide evidence of effectiveness of odour controls performance to minimise risk of odour pollution beyond the installation boundary. Commissioning shall be carried out in accordance with the approved commissioning plan.
PO5	Not later than one month prior to the commencement of construction of the installation, the Operator shall make available electronically to the Environment Agency for inspection the anaerobic digestion plant, effluent treatment plant and pig rearing abatement systems operational, training and maintenance manuals for the site.
PO6	Not later than one month prior to the commencement of construction of the installation the Operator shall submit to the Environment Agency an updated accident management plan based on a detailed HAZOP analysis for the site and obtain the Environment Agency's written approval to it.
	The detailed HAZOP analysis should be undertaken by suitably qualified personnel, with particular attention to process control. Complete HAZOP results should be documented and recommended control measures implemented.
PO7	Not later than one month prior to the commencement of construction of the installation the Operator shall
	<ul> <li>a) submit to the Environment Agency final written proposals for the disposal of liquid effluent from the on-site effluent treatment plant. The proposals shall include appropriate risk assessments written in accordance with the Environment Agency's risk assessment guidance (<u>risk assessments for your environmental permit</u> - <u>www.gov.uk</u>) and drawings showing the location of proposed drainage and emission points.</li> </ul>
	b) submit to the Environment Agency final written proposals for the disposal of surface water from the roofs of pig housing and yard areas and obtain the Environment Agency's written approval to them.

Reference	Pre-operational measures
	and obtain the Environment Agency's written approval to them.
	Should the proposals submitted above include a discharge to Dale Brook the proposals shall include an assessment of the risk to the surface water quality in Dale Brook and proposals to prevent pollution of Dale Brook including proposed compliance limits if appropriate. The risk assessment shall be written in accordance with the Environment Agency's risk assessment guidance.
PO8	Not later than one month prior to the commencement of construction of the installation, the Operator shall submit to the Environment Agency a written noise management plan based on the final design of the installation and obtain the Environment Agency's written approval to it. The plan should include but not be limited to the following:
	<ul> <li>An assessment of the potential of noise generated at the installation to cause an unacceptable impact at the surrounding receptors.</li> </ul>
	b) A list of activities that are a significant source of noise.
	c) Noise modelling to assess the potential of the site activities to cause a noise nuisance at off site receptors. Concurrent activities should be considered. The assessment shall be undertaken in accordance with the procedures given in BS4142: 1997 (Rating industrial noise affecting mixed residential and industrial areas) and BS7445: 2003 (Description and measurement of environmental noise) unless otherwise agreed with the Agency.
	d) Details of noise management measures to include those already described, together with details of further measures as deemed necessary by the noise assessment. Including justification for the choice of further measures based on costs and benefits.
	e) Details of any monitoring identified as necessary for any receptor, together with associated noise action plans.
PO9	The Operator shall:
	a) not later than one month prior to the commencement of construction of the boreholes to be used in monitoring of emissions from the anaerobic digestion plant, provide a written report outlining the proposed construction, including timescales for construction and location of the boreholes and obtain the Environment Agency's written approval to it.
	<ul> <li>following approval of (a) then the operator shall inform the Environment Agency when the borehole system for monitoring the anaerobic digestion plant has been constructed.</li> </ul>
PO10	Not later than one month prior to the commencement of construction of the installation, the Operator shall send a summary of the site Environment Management System (EMS) to the Environment Agency and make available for inspection all documents and procedures which form part of the EMS and obtain the Environment Agency's written approval to them. The EMS shall be developed in line with the requirements set out in Environment Agency web guide on developing a management system for environmental permits (found on www.gov.uk). The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.

Reference	Pre-operational measures
Reference	the Operator shall submit to the Environment Agency an updated odour management plan (OMP) for the site, having regard to the H4 Odour Guidance and SGN How to comply – Intensive Farming 6.09 Appendix 4 or equivalent Environment Agency guidance, and obtain the Environment Agency's written approval to it.
	The OMP shall cover the pig rearing facilities, anaerobic digestion plant and feed milling activities.
	The OMP shall include but not be limited to
	<ul> <li>a) Final operating procedures for flushing of slurry from pig houses including relevant controls to minimise risk of elevated odour levels backed up by very frequent or continuous monitoring of relevant indicative parameters (such as digestate maturity, temperature, dissolved oxygen levels).</li> <li>b) Final material inventory control plan for all odorous and potentially odorous materials held on site. Emphasis should be on minimising quantities and holding times for all odorous and potentially odorous materials which are not consistently held under sealed conditions (e.g. materials in sealed AD tanks).</li> <li>c) Final ventilation and abatement system design in light of pre-operational condition PO1</li> </ul>
	<ul> <li>d) Final proposed reporting schedule for abatement system critical parameter process monitoring performance data and post abatement odour level monitoring and analysis assessed in line with MCERTS standard BS EN 13725 (dilution olfactometry) parameters and comparison with final design odour levels provided in pre-operational condition PO1. This schedule is to include frequencies for all relevant monitoring. Clear and specific procedures should be provided for prompt follow up investigations into possible performance lapses, prompt remedial action to prevent further such lapses and further odour control mitigation plans.</li> <li>e) Final contingency action plans to minimise risk of elevated odour pollution from the installation linked to each malfunction scenario and detail the actions to restore systems to normal operating conditions for effective odour control.</li> <li>f) Periodic maintenance procedures for effective continuing performance of all relevant measures for odour control.</li> </ul>
PO12	Not later than one month prior to the commencement of construction of the installation the Operator shall submit to the Environment Agency a plan showing the location of all point source emissions to air.
<u>PO13</u>	Not later than one month prior to the commencement of construction of the installation the Operator shall submit to the Environment Agency a written bioaerosol monitoring plan and obtain the Environment Agency's written approval to it. The plan shall take into account any relevant guidance and provide as a minimum for monitoring for gram negative bacteria, total bacteria and Aspergillus fumigatus.

# Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels		
Raw materials and fuel description	Specification	
	n- 1, 5	

# Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
A1 - A14 as shown on the plan submitted in accordance with pre- operational condition PO12 in table S1.4	Exhaust stack from odour abatement system of pig houses 1 to 14	Odour Units	No limit set	[note 4]	[note 4]	BSEN 1 3725 (sampling and analysis)
A1 - A14 as shown on the plan submitted in accordance with pre- operational condition PO12 in table S1.4	Exhaust stack from odour abatement system of pig houses 1 to 14	Ammonia	1 mg/m <sup>3</sup>	[note 5]	[note 5]	[note 5]
A15 as shown on the plan submitted in accordance with pre- operational condition PO12 in table S1.4	Chimney from carcass incinerator					
A16 as shown on the plan submitted in accordance with pre- operational condition PO12 in table S1.4	Outlet from heat exchanger					
A17 as shown on the plan submitted in accordance with pre-operational	Gas Engine exhaust stack (note 1)	Oxides of Nitrogen (NO and NO2 expressed as NO2)	500 mg/m3	Hourly average	Annual	BS EN 14792
condition PO12 in table S1.4		Sulphur dioxide	350 mg/m <sup>3</sup>			BS EN 14791
		Carbon monoxide	1400 mg/m <sup>3</sup>			BS EN 15058
		Total volatile organic	1000 mg/m <sup>3</sup>			BS EN 12619:2013

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
	T. (12.22)	compounds			and in the	
A18 as shown on the plan submitted in accordance with pre-operational	Oxides of Nitrogen (NO and NO2 expressed as NO2)	150 mg/m3	Hourly average	[note 3]	BS EN 14792	
in table S1.4	ondition PO12 n table S1.4	Carbon monoxide	50 mg/m3			BS EN 15058
		Total VOCs	10 mg/m3			BS EN 12619:2013
A19 as shown on the plan submitted in accordance with pre- operational condition PO12 in table S1.4	Service room and associated AD facilities abatement	Odour	No limit set	[note 4]	[note 4]	BSEN 1 3725 (sampling and analysis)
Pressure relief valves	Digesters/Digestate storage tank(s)	No parameter set	No limit set		Record of operating hours	
Vents from tanks	Oil/Fuel Storage tank(s)	No parameter set	No limit set			-

Note 1 - These limits are based on normal operating conditions and load - temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 5 per cent (dry gas). The measurement uncertainty specified in LFTGN08 v2 2010 shall apply.

Note 2 - These limits are based on normal operating conditions and load - temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 3 per cent (dry gas). The measurement uncertainty specified in LFTGN05 v2 2010 shall apply.

Note 3 - Following commissioning, monitoring to be undertaken in the event the emergency flare has been operational for more than 10 per cent of a year (876 hours). Record of operating hours to be submitted annually to the Environment Agency.

Note 4 – Reference period and monitoring frequency as stated in approved Odour Management Plan, submitted in accordance with pre-operational condition PO11.

Note 5 - Reference period, monitoring frequency and monitoring standard or method as approved in accordance with pre operational condition PO2.

Table S3.2 Point Sour monitoring requireme		o water (other	r than sev	ver) and land -	- emission lim	its and
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
Location as approved in accordance with pre-operational condition PO7 in table S1.4	Roof water from pig housing and yard surface water	As approved table S1.4	in accord	lance with pre-c	perational con	dition PO7 in

emission limits a	nd monitoring	requirements				
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
Location as approved in accordance with pre-operational condition PO7 in table S1.4	Effluent treatment plant	No parameter sent	No limit set	-	-	-

Table S3.4 Surface water or groundwater monitoring requirements						
Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications		
As approved in accordance with pre-operational condition PO7 in table S1.4	Roof water from pig housing and yard surface water	As approved in accordance with pre-operational condition PO7 in table S1.4		pre-operational condition		

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Biogas from Digester(s)	Flow	Continuous	In accordance with EU weights and measures Regulations	
Biogas from Digester(s)	Methane	Continuous	None specified	Gas monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations.
	Hydrogen sulphide	Continuous	None specified	
Site tour at locations as agreed in the approved odour management plan	Odour	In accordance with the approved odour management plan.	In accordance with the approved odour management plan.	Odour detection at the site boundary, methodology as agreed in the approved odour management plan.
Digester(s) and storage tank(s)	Integrity checks	Weekly	Visual assessment	
Three phase abatement systems(including wet scrubber and biofilter) located on Pig houses 1 -14 and AD service building	Key process parameters in accordance with the approved odour management plan	In accordance with the approved odour management plan.	In accordance with the approved odour management plan.	Odour abatement system shall be regularly monitored and maintained in accordance with the approved odour management plan.

Table S3.6 Bioa	aerosol monito	ring requirements			
Location or description of point of measurement	<u>Parameter</u>	Bioaerosol threshold limits (CFU m-3)	Monitoring frequency	Monitoring standard or method	Other specifications
In accordance with the bioaerosol monitoring plan approved under PO13 in table S1.4	Gram- negative bacteria	300	In accordance with the bioaerosol monitoring plan approved	In accordance with the bioaerosol monitoring plan approved under PO13 in table S1.4.	In accordance with the bioaerosol monitoring plan approved under PO13 in table S1.4.
	Total bacteria	<u>1000</u>	under PO13 in table S1.4		
	Aspergillus fumigatus	<u>500</u>			

# Schedule 4 – Reporting

Table S4.1 Reporting of monitoring	ı data	*-		
Parameter	Emission or monitoring point/reference	Reporting period	Period begins	
Emissions to air Parameters as required by condition 3.5.1.	A1 – A14 & A19	As agreed in writing with Environment Agency	As agreed in writing with Environment Agency	
	A17 &A18	Annually	1 January	
Emissions to water and land Parameters as required by condition 3.5.1	As agreed in accordance with pre-operational condition PO7 in table S1.4	As agreed in writing with Environment Agency	As agreed in writing with Environment Agency	
Process Monitoring Parameters as required by condition 3.5.1	Reporting requirements as detailed in table S3.5	Reporting period as agreed in writing with the Environment agency	As agreed in writing with the Environment Agency	
Bioaerosol monitoring Parameters as required by condition 3.5.1	As approved in accordance with preoperational condition PO13 in table S1.4	As agreed in writing with Environment Agency	As agreed in writing with Environment Agency	

Table S4.2 Annual production/treatment		
Parameter	Units	
Electricity generated	MWh	
Liquid digestate	tonnes or m3	
Solid digestate	tonnes	

Table S4.3 Performance parameter	rs	
Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes or m3
Energy usage	Annually	MWh
Raw material usage	Annually	tonnes or m3
Emergency flare operation	Annually	hours
Electricity exported	Annually	MWh
Operation of pressure relief valves	Annually	hours
CHP engine usage	Annually	hours
CHP engine efficiency	Annually	%

Table S4.4 Reporting forms				
Media/parameter	Reporting format	Date of form		
Air	Form air 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY		
Water and Land	Form water 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY		
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY		
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY		
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY		
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY		

### Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

#### Part A

Permit Number

Name of operator

Location of Facility	
Time and date of the detection	
	any malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is pollution
To be notified within 24 hours of	detection
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit				
To be notified within 24 hours of detection				
Emission point reference/ source				
Parameter(s)				
Limit				
Measured value and uncertainty				
Date and time of monitoring				
Measures taken, or intended to be				

Permit number EPR/LP3930FA

(b) Notification requirements for the breach of a limit							
To be notified within 24 hours of detection							
taken, to stop the emission							
Time periods for notification following detection of a breach of a limit							
Parameter			Notification period				
(c) Notification requirements for the detection of any significant adverse environmental effect							
To be notified within 24 hours of	detection		8				
Description of where the effect on the environment was detected							
Substances(s) detected							
Concentrations of substances detected							
Date of monitoring/sampling							
Part B – to be submited  Any more accurate information on the notification under Part A.		n as practicable	<b>)</b>				
Measures taken, or intended to be to a recurrence of the incident	aken, to prevent						
Measures taken, or intended to be to limit or prevent any pollution of the which has been or may be caused by	environment	9					
The dates of any unauthorised emis facility in the preceding 24 months.	sions from the						
Name*							
Post							
Signature							

Date

<sup>\*</sup> authorised to sign on behalf of the operator

#### Schedule 6 - Interpretation

"accident" means an accident that may result in pollution.

"Animal and Plant Health Agency (APHA)" is the government agency that licences small on farm incinerators; formerly known as the Animal Health and Veterinary Laboratories Agency.

"application" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

"authorised officer" means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"building" means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

"completion of commissioning" means when the Biogas Combustion Unit is producing 800kWe for 7 consecutive days

"construction of the installation" means any development as defined by section 55 of the Town and Country Planning Act 1990 (as amended) but excluding works for landscaping.

"emissions to land" includes emissions to groundwater.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

'Hazardous property' has the meaning in Annex III of the Waste Framework Directive.

"Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions.

'List of Wastes' means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

"Manure and slurry" have the following meaning:

- Manures may be either slurries or solid manures.
- Slurries consist of excreta produced by livestock whilst in a yard or building mixed with rainwater and wash water and, in some cases, waste bedding and feed. Slurries can be pumped or discharged by gravity.
- Slurry includes duck effluent, seepage from manure and wash water.
- Solid manures include farmyard manure (FYM) and comprise material from straw-based housing systems, excreta with lots of straw/sawdust/woodchips in it, or solids from mechanical separators.
- · Most poultry systems produce solid manure (litter).
- Solid manure can generally be stacked.

"manure management plan" means the requirements described in Section 2.3 of SGN 6.09 How to Comply – Intensive Farming.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"pests" means Birds, Vermin and Insects.

"SGN How to comply – Intensive Farming" The EPR Sector Guidance Note 6.09 for intensive pig and poultry farmers, Version 2 published January 2010.

'Waste code' means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk

"Waste Framework Directive" or "WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

"year" means calendar year ending 31 December.

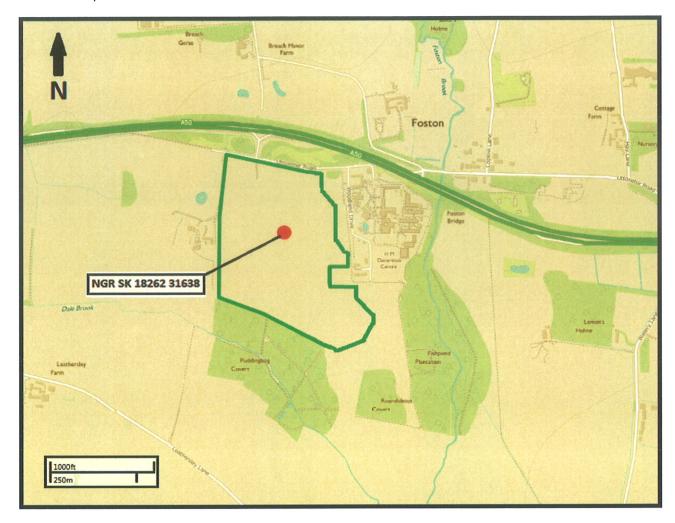
## Schedule 7 – Site plan

Site plan



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#### Site location plan



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**END OF PERMIT**