3/14/1827/FP – Erection of an Anaerobic Digester plant and associated silage compound at Clements Farm, Brickendon Lane, Brickendon, Hertford, Herts, SG13 8FG for R Bone

**<u>Date of Receipt:</u>** 13.10.2014 **<u>Type:</u>** Full – Major

Parish: BRICKENDON LIBERTY

**Ward:** HERTFORD HEATH

### **RECOMMENDATION:**

That planning permission be **GRANTED** subject to the following conditions:

- 1. Three Year Time Limit (1T121)
- Approved plans (2E103) (CE-BD0784-DW01a, DW01, Revised site layout B, B01/23/06, B01/23/07 A, B01/23/09, B01/23/02 B, B01/23/05 B, B01/23/08)
- 3. Prior to the commencement of the development, a 'Construction Traffic Management Plan' shall be submitted to and approved in writing by the Local Planning Authority in consultation with the Highway Authority. Thereafter the construction of the development shall only be carried out in accordance with the approved Plan. The 'Construction Traffic Management Plan' shall identify details of:
  - Phasing for the development of the site, including all highway works;
  - Methods for accessing the site, including construction vehicle numbers and routing;
  - Location and details of wheel washing facilities;
  - Associated parking areas and storage of materials clear of the public highway

Reason: In the interests of highway safety and amenity

4. Prior to the commencement of the development, full details of both hard and soft landscape proposals shall be submitted to and approved in writing by the Local Planning Authority. These details shall include, as appropriate: (a) a detailed layout of the attenuation pond and surrounding areas based on the indicative plan received on 8th January 2015 (b) Planting plans (c) Written specifications (including cultivation and other operations associated with plant and grass establishment) (d) Schedules of plants, noting species, planting sizes and proposed numbers/densities where appropriate (e) Implementation timetables. Thereafter the development shall proceed in accordance with the approved details.

<u>Reason:</u> To ensure the provision of amenity afforded by appropriate landscape design, in accordance with policies ENV1, ENV2 and ENV11 of the East Herts Local Plan Second Review April 2007.

5. The anaerobic digestion plant shall only be operated in accordance with the odour management recommendations set out in the Odour Impact Assessment produced by Crestwood Environmental Ltd dated December 2014 unless otherwise agreed in writing by the Local Planning Authority.

<u>Reason:</u> To prevent the generation of odours harmful to the amenity of local residents contrary to the requirements of policy ENV1 of the East Herts Local Plan Second Review April 2007 and the National Planning Policy Framework.

6. Only feedstock, crop waste and animal waste grown or generated at the holdings of A T Bones and Sons Ltd at the date of this decision shall be used to fuel the approved anaerobic digestion plant unless otherwise agreed in writing with the Local Planning Authority.

Reason: To prevent the approved plant from being used as a general waste management facility, in the interests of the character and appearance of the surrounding area, highway safety and the amenities of the nearby residents in accordance with policies GBC1 and ENV1 of the East Herts Local Plan Second Review April 2007.

7. No more than 10,000 tonnes of material shall be digested within the plant per annum.

Reason: To prevent the approved plant from being used as a general waste management facility, in the interests of the character and appearance of the surrounding area, highway safety and the amenities of the nearby residents in accordance with policies GBC1 and ENV1 of the East Herts Local Plan Second Review April 2007.

8. The development hereby permitted shall not be commenced until a detailed surface water drainage scheme for the site, based on the agreed flood risk assessment (FRA) (Reference K0574/1 dated December 2014 by Crestwood Environmental Ltd) has been submitted to and approved in writing by the local planning authority. The drainage strategy shall include a restriction in run-off and surface water storage on site as outlined in the FRA. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed.

Reason: To prevent the increased risk of flooding, and to improve and protect water quality habitat and amenity in accordance with the requirements of policy ENV21 of the East Herts Local Plan Second Review April 2007 and the National Planning Policy Framework.

9. The development hereby permitted shall not be commenced until such time as a scheme to dispose of surface water drainage has been submitted to, and approved in writing by, the local planning authority. The scheme shall be implemented as approved.

<u>Reason:</u> To protect the water quality of the Brickendon brook by ensuring the proposed pollution prevention controls are implemented in the final detailed drainage design in accordance with the requirements of policy ENV20 of the East Herts Local Plan Second Review April 2007 and the National Planning Policy Framework.

### Directives:

- 1. Other legislation (01OL1)
- 2. All works, including vehicle movements and the storage of materials and waste, must be kept strictly within the curtilage of the proposed development site and hardstanding access roads. Under no circumstances should there be any detrimental physical impact to the adjacent Wildlife Site (ref: 71/027, Light's Wood)
- 3. In the event of Great Crested Newts being found within the application site all works must stop immediately and ecological advice taken on how to proceed lawfully from a qualified ecological consultant, Natural England (Tel: 0845 601 4523) or the Herts Amphibian and Reptile Group. Keep any areas of grass as short as possible up to, and including the time when the building works take place so that is remains/becomes unsuitable for Great Crested Newts to cross. Stored materials, which may act as temporary resting places, should be raised off the ground (e.g. on pallets or batons) and any rubbish should be cleared away to minimise the risks of Great Crested Newts using the piles for shelter. Any trenches or excavations should be backfilled before nightfall or ramps provided to allow Great Crested Newts and other animals that may become trapped to escape easily.
- 4. The applicant is advised that the storage of materials associated with the construction of this development should be provided within the site on land which is not public highway or public right of way, and the use of such areas must not interfere with the public highway. If this is not possible, authorisation should be sought from the Highway Authority

before construction works commence. Further information is available via the website

http://www.hertsdirect.org/services/transtreets/highways/ or by telephoning 0300 1234047.

- Obstruction of public highway land: It is an offence under section 137 of the Highways Act 1980 for any person, without lawful authority or excuse, in any way to wilfully obstruct the free passage along a highway or public right of way. If this development is likely to result in the public highway or public right of way network becoming routinely blocked (fully or partly) the applicant must contact the Highway Authority to obtain their permission and requirements before construction works commence. Further information is available at <a href="http://www.hertsdirect.org/services/transtreets/highways/">http://www.hertsdirect.org/services/transtreets/highways/</a> or by telephoning 0300 1234047.
- 6. It is an offence under section 148 of the Highways Act 1980 to deposit mud or other debris on the public highway, and section 149 of the same Act gives the Highway Authority powers to remove such material at the expense of the party responsible. Therefore, best practical means shall be taken at all times to ensure that all vehicles leaving the site during construction of the development are in a condition such as not to emit dust or deposit mud, slurry or other debris on the highway. Further information is available via the website <a href="http://www.hertsdirect.org/services/transtreets/highways/">http://www.hertsdirect.org/services/transtreets/highways/</a> or by telephoning 0300 1234047.
- 7. The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 known as "The SSAFO Regulations" must be complied with for this activity. Use of purpose grown crops for anaerobic digestion may not require a permit. Digestate storage from an anaerobic digestion plant may not be controlled by a permit if it has ceased to be waste. If the applicant proposes to use waste products in the future they will require an Environmental Permit. This is a requirement of Regulation 12 under the Environment Permitting Regulations 2010.

## Summary of Reasons for Decision

East Herts Council has considered the applicant's proposal in a positive and proactive manner with regard to the policies of the Development Plan (Minerals Local Plan, Waste Core Strategy and Development Management Policies DPD 2012 and the 'saved' policies of the East Herts Local Plan Second Review April 2007); the National Planning Policy Framework and in accordance with the Town and Country Planning (Development Management

Procedure) (England) Order 2012 (as amended). The balance of the considerations having regard to those policies and the very special circumstances present in this case is that permission should be granted.

### 1.0 Background

- 1.1 The application site is shown on the attached Ordnance Survey extract. It forms part of an existing farm holding owned by the applicants. It is primarily arable land and includes two grain stores, permitted in 2000 and 2008, as well as a cattle shed and hay store permitted in 2009. The site broadly comprises open land to the north, south and east. Dense, mature landscaping along the west boundary of the site provides screening from Brickendon Lane.
- 1.2 Permission was granted in 2014 for a farm worker's dwelling to the west of the farm buildings, as well as for an extension to the hay store.
- 1.3 The application seeks permission for the erection of an anaerobic digestion plant to the east of the agricultural buildings and south of the National Grid compound on site. The plan would comprise the following:
  - Three tanks for digestion (18 metres wide by 6 metres high), post digestion (24 metres by 6 metres) and storage of liquid digestate (30 metres by 6 metres). The tanks would be constructed of concrete and clad in green metal cladding.
  - A 3 metre high control room linking the post digester and digestate tanks.
  - A feeder which delivers the feedstock into the digester.
  - A pre-digestion tank (6 metres by 6 metres) where the feedstock is mixed with water and prepared for digestion.
  - A 2 metre boundary comprising a bund and concrete retaining wall around the tanks and associated buildings identified above.
  - A silage clamp comprising 3 individual bays, the whole being 60 metres wide and 50 metres long. The clamps would comprise 4 metre walls, with sheeting to cover each individual bay.
  - A technical building with a ridge height of 9.9 metres housing a combined heat and power (CHP) unit and storage for the dried digestate.
  - An evaporator (maximum height 5.9 metres) between the tanks and technical building to remove the liquid from the digestate and prepare it for storage.
  - A gas flare, height of 4 metres, to the west of the complex. The

- flare would be used for emergencies and maintenance only.
- An attenuation pond to the south-east of the silage clamps to accommodate run-off from the clamps.
- 1.4 The anaerobic digester unit would operate solely on feedstock produced on land owned or managed by the owners of the farm. It would produce heat and gas that would be used to produce around 500 kilowatts of electricity from an on-site combined heat and power plant. The majority of the electricity (around 70%) would be used to power the farm buildings. The remainder would be fed into the National Grid.
- 1.5 The plant would also produce around 2,000 tonnes of digestate fertiliser which would be used on the applicant's farm holdings.

### 2.0 Site History

- 2.1 The relevant planning history for the site is as follows:
  - 3/00/1481/FP Proposed portal framed replacement building consisting of grain store, implement shed and general store – Approved September 2000
  - 3/07/2464/FP Erection of grain store Approved February 2008
  - 3/09/1066/FP Temporary residential mobile home and agricultural buildings – Approved September 2009
  - 3/12/1587/FP Retention of timber-clad mobile home for occupation by agricultural worker – Approved November 2012
  - 3/14/0596/FP Permanent dwellinghouse for farm manager Refused June 2014 – Appeal allowed October 2014
  - 3/14/1441/FP Extension to existing straw barn Approved October 2014

# 3.0 <u>Consultation Responses</u>

- 3.1 The Council's <u>Environmental Health</u> section has no objection to the development, provided that the identified odour control measures are fully implemented.
- 3.2 The <u>Environment Agency</u> objected to the application as first submitted on the grounds that there was insufficient information to demonstrate that the risk of pollution to controlled waters from the development would be acceptable.
- 3.3 Additional information has been submitted, and the Agency has withdraw their objection subject to recommended conditions requiring

- the implementation of the proposed pollution and flooding control measures.
- 3.4 <u>Hertfordshire Ecology</u> have recommended informatives to prevent harm from coming to the adjacent Wildlife Site or any Great Crested Newts on site during construction.
- 3.5 The County Council's <u>Highways</u> Officers have confirmed that they have no objection to the proposed development subject to the implementation of a construction traffic management plan.
- The Highways Officers agree with the assessment in the submitted transport statement that "other than localised movements during harvest time, the traffic movements over the year will be very modest (less than 1 every day)". They conclude that "Such a modest increase would not justify a refusal on the basis of the slightly substandard visibility at the junction, or those few sections of Brickendon Lane where the carriageway width is below standards".
- 3.7 The <u>National Grid</u> have advised that the site is within close proximity to a high/intermediate pressure gas line, and that the application is being reviewed by the gas distribution pipelines team.
- 3.8 The team's response will be reported to the Committee once it has been received. However, it is important to note that there is separate legislation to control this matter.
- 3.9 The Council's <u>Landscape</u> Officer has no objection to the development, noting that "The site is screened by mature trees and vegetation fronting Brickendon Lane and so adverse visual impact will be low".
- 3.10 The County Council's <u>Minerals and Waste</u> Officers have drawn attention to the County Waste Core Strategy, and in particular a number of policies that are of relevance to the proposed development. Conditions limiting the operation of the plant to feedstock and waste from the applicant's own holdings, and placing a cap on the maximum throughput of the plant each year, are recommended in order that the plant does not become a general waste disposal facility.

## 4.0 Parish Council Representations

4.1 <u>Brickendon Liberty Parish Council</u> initially commented that the potential for harmful odours from the development was unacceptable. The Council noted that many local residents bought their properties when the land at Clements Farm was only in use by a single grain storage

barn, rather than an active farm.

- 4.2 The Council also raised concerns about traffic generation from the proposed use. A recent traffic survey suggests that Brickendon Lane sees approximately 300,000 vehicle movements per year, of which around 26,000 are LGV and HGV movements. Some sections of Brickendon Lane are too narrow for wider vehicles such as these to travel without crossing the centre line, and there is no verge along other sections.
- 4.3 The Council also noted that the traffic assessment does not make any reference to vehicles to be employed in the construction or maintenance of the proposed development.
- 4.4 The Parish Council suggests that a Section 106 agreement should be sought to secure funding for highways improvements if permission were to be granted. However, they have stated that they would resist the loss of a country lane approach to Brickendon.
- 4.5 Following the receipt of revised drawings the Parish Council expressed further concern that they did not believe that the County Highways response showed familiarity with the suitability of Brickendon Lane for the proposed use.

# 5.0 Other Representations

- 5.1 The application has been advertised by way of press notice, site notice and neighbour notification.
- 5.2 A total of 31 letters of representation have been received from 20 local residents/households in response to the original and revised proposals which can be summarised as follows:
  - Increased traffic on the local road network with Brickendon Lane being too narrow to allow the easy passing of larger vehicles; Impact of increased traffic on usability of road for other users; The traffic accident records used in the assessment of road safety do not accurately reflect the actual experience of local residents
  - Potential for unacceptable odours from the plant; Potential for health impacts from the release of toxins from the plant; The revised siting of the silage clamps would not be a sufficient amendment to ensure that odour emissions would not be harmful to local residents
  - Potential for noise disturbance from the proposed machinery

- The development is only intended to make money for the applicant without any wider environmental benefits
- The proposal is inappropriate development in the Green Belt
- A number of responses to questions on the application form and biodiversity statement are considered to be incorrect
- The development would affect the setting of the nearby listed buildings at Clementsbury
- The development would have an unacceptable impact on local landscape character
- Proximity of the development to existing National Grid equipment was a concern, in the absence of a formal lack of objection from the National Grid
- Increased pollution from additional traffic
- Potential for contamination of local environment and groundwater in the event that proposed safety measures should fail
- Visual impact of proposed development within the surrounding rural landscape
- Other anaerobic digestion plants have been unsuccessful in preventing harmful odours from reaching nearby residents
- The development would involve the use of cereal crops for energy production rather than their sale for food
- The site is close to the habitat of protected species (Great Crested Newts)
- 5.3 In addition a petition of 108 signatures has been received in opposition to the proposed development.
- 5.4 Mark Prisk MP has expressed support for the concerns of local residents, and asked that the various objections made be taken full account of by the Council.

## 6.0 Policy

6.1 The relevant 'saved' Local Plan policies in this application include the following:

SD3 Renewable Energy

GBC1 Appropriate Development in the Green Belt

GBC7 Agricultural Development

**GBC8** Rural Diversification

GBC14 Landscape Character

ENV1 Design and Environmental Quality

ENV2 Landscaping

ENV11 Protection of Existing Hedges and Trees

ENV19 Development in Areas Liable to Flood

**ENV20 Groundwater Protection** 

**ENV21 Surface Water Drainage** 

**ENV24 Noise Generating Development** 

**ENV27** Air Quality

TR4 Travel Plans

TR20 Development Generating Traffic on Rural Roads

- 6.2 In addition, the policies of the County Council's Waste Core Strategy are of relevance to the consideration of this application.
- 6.3 The National Planning Policy Framework (NPPF) and National Planning Policy Guidance (NPPG) are also material considerations. Section 9 of the NPPF, Protecting Green Belt land, is of particular relevance in assessing the proposed development.
- 6.4 The NPPF supports development of renewable energy and the transition to a low carbon future, encouraging the use of renewable resources, for example, by the development of renewable energy resources (paragraph 17).
- 6.5 A presumption in favour of sustainable development is set out in paragraph 14 of the Framework and this indicates that, in respect of decision taking, planning permission should be granted for such development unless any adverse impacts of a proposal would 'significantly and demonstrably outweigh the benefits'.
- 6.6 Paragraph 97 of the NPPF indicates that local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable sources. Authorities should have a positive strategy to promote such development while ensuring that any adverse impacts are addressed satisfactorily.
- 6.7 In summary, there is therefore a clear presumption in favour of development for renewable energy development within the NPPF in principle, provided that the impact of the development is, or can be made, acceptable.
- 6.8 The NPPG highlights that Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable.
- 6.9 The Government has issued a <u>Anaerobic Digestion Strategy and Action Plan</u> in which it states that achieving green targets "will in part mean substantially increasing energy from waste through Anaerobic

Digestion". It recognises that the process has a number of advantages over other sources of renewable energy, including that it is a constant source of energy (unlike wind, solar or tidal power) and that the gas generated can be stored in the grid. In addition, the methane produced can be used to fuel vehicles, and the process also creates fertilisers that can be used on agricultural land. The Strategy and Action Plan recognises that anaerobic digestion can provide sustainability benefits for farmers through the re-use of agricultural products and by-products.

### 7.0 Considerations

- 7.1 The main planning issues for consideration in assessing this application are considered to be:
  - The principle of development in the Green Belt
  - The impact of traffic associated with the development on the local road network
  - The potential for an unacceptable increase in odours to neighbouring residents; The potential for harm to arise from air pollution
  - The potential for the development to cause increased flooding on Brickendon Lane
  - The potential for visual impact and impact on the character of the rural landscape
  - Any other matters

# Principle of development in the Green Belt

- 7.2 Policy GBC1 of the Local Plan identifies development that will be considered appropriate within the Green Belt. The creation of anaerobic digestion plants, or any type of renewable energy development, is not among the identified forms of development. Although the plant would be sited on agricultural land, use agricultural produce as fuel and around 70% of the power generated is projected to be used within the farm, the plant is not in itself an agricultural activity.
- 7.3 The proposed development is therefore inappropriate development within the Green Belt. It is necessary to show that there are very special circumstances present that clearly outweigh the harm to the Green Belt arising from the inappropriateness of the development, from the loss of openness by increase in built form, and any other harm.
- 7.4 Policy SD3 of the Local Plan supports proposals to harness renewable energy "in principle" and states that in assessing applications for

biomass energy generation development "particular regard will be paid to the impact on the local transport network, on nature conservation interests and on landscape and visual amenity. Such proposals should be accompanied by detailed information regarding the proposed raw materials (which should be locally sourced) and schemes to limit potential noise, smell and safety concerns".

- 7.5 A number of national and local policy statements refer to the benefit and requirement for the UK to move away from fossil fuel sources of energy generation and to move more toward renewable production. Whilst Local Plan Policy GBC1 does not identify renewable energy generation facilities as an appropriate form of development in the Green Belt, it is considered that the weight given to the policy must be seen in the context of the considerable weight of more recent national policy development.
- 7.6 Officers recognise that the greatest weight can be given to the benefits of renewable energy developments where they would make significant contributions to energy needs beyond the application site. In this instance the majority of energy would be used on site, but this would still remove the need for the site to draw on the National Grid, and some contribution would still be made. Officers also note that energy would be generated 24 hours a day, in comparison to wind and solar energy plants that are less consistent.
- 7.7 The site is one of a number of agricultural sites owned by the applicant as part of an enterprise comprising farming and other activities. In total the business farms around 1,000 hectares in the area around Hertford with sites at Hunsdon Farm, Widford Farm, Wadesmill, Ponsbourne, Bayford and Cole Green in addition to the application site as well as land near Borehamwood.
- 7.8 At present digestible waste from the sites is sent to Oxfordshire rather than processed locally, generating unnecessary vehicle journeys. The proposed plant would be wholly fuelled by feedstock and waste from the different sites with no external source of fuel. This can be controlled by planning condition in any event.
- 7.9 Any development to allow the generation of energy from agricultural products will inevitably be located within a rural location. In this instance it is proposed on active farmland, and represents a diversification of the currently wholly agricultural use of the land to support that ongoing use. In addition, the plant would produce a substantial volume of fertiliser for use on the applicant's farm sites. The development is therefore considered to be acceptable in principle in accordance with policy

GBC8 of the Local Plan.

### Impact on local roads

- 7.10 It is anticipated that the plant would require around 10,000 tonnes of fuel per year, with around 12-13% of this coming from cattle manure and waste grain and straw from within Clements Farm itself. Additional grain and straw waste, totalling around 100 tonnes, would be brought in from the applicant's site towards Borehamwood. This would require about 4 HGV movements onto and off the site, probably during the late summer.
- 7.11 About 5,000 tonnes of rye and maize would be grown for fuel on local sites, replacing the cereal crops currently grown on those sites. This would amount to approximately 170 HGV per annum movements onto and off the site, although this number may be somewhat lower as existing farm tracks can be used which would not require traffic using local roads. These movements are already occurring between the applicant's sites with the transfer of the cereal crops. The movements would occur in June, when rye is harvested, and October, when maize is harvested.
- 7.12 Around 3,500 tonnes of rye and maize would be grown for fuel outside of the local area, generating around 120 additional HGV per annum movements to and from the site.
- 7.13 Around 70 trips outward from the site would involve the HGVs employed to bring fuel onto the site then taking digestate and fertiliser to other sites owned by the applicant. The applicant has stated that the majority of these outward trips would be return trips from vehicles bringing fuel to the site, and they are therefore counted within the 170 and 120 trips noted above.
- 7.14 Around half the traffic associated with the development is already occurring as a result of activities at the site. The additional traffic movements, which would amount to approximately 130 HGV movements to and from the site per year, would be an increase on existing traffic on the local road network.
- 7.15 Policy TR20 of the Local Plan states that, where an application proposes a significant change in the amount of traffic on rural roads, development will not be permitted where:
  - (a) The road is poor in terms of width and alignment and construction;
  - (b) Increased traffic would have a significant adverse effect on the

local environment, either to the rural character of the road or residential properties along it

- 7.16 Brickendon Lane, along which all traffic to the site on the local road network would travel, is a single carriageway road of varying width. In places, particularly in the wooded section to the north of the site, the width of the road narrows to the point that traffic does not flow freely when one or more large vehicles passes traffic coming in the opposite direction. A local resident has provided evidence of larger vehicles straddling the centre line and obstructing traffic both on Brickendon Lane, and on Horns Mill Road which vehicles would use to reach Brickendon Lane from Hertford. In addition, evidence has been submitted showing flooding occurring from Brickendon Brook along Brickendon Lane to the north of the site, which causes problems for all traffic using this section of the road.
- 7.17 The County Highways team have advised that the additional traffic generated by the development is not considered to amount to a 'significant change'. The amount of traffic associated with the use would amount to around 300 HGV movements per year, or less than 1 per day (on average) with more than half of these movements already occurring. In light of this Highways conclude that "Such a modest increase would not justify a refusal on the basis of the slightly substandard visibility at the junction, or those few sections of Brickendon Lane where the carriageway width is below standards".
- 7.18 Based on this response, Officers consider that the rate of increase in vehicle movements, equivalent to approximately 130 additional movements or around 1 additional HGV movement every 3 days, would not be such a significant increase that it would be reasonable to refuse permission on Highways grounds.

## Impact from odours; Air pollution

7.19 Anaerobic digestion plants can produce odours and thereby cause a loss of amenity to local residents. Accordingly careful consideration must be given to the siting of such a development in order to ensure that no material harm arises to local residents. In this case the nearest properties are those at Clements Cottages, Thrift Cottages, Clements House and the Clementsbury estate, totalling around 30 residences within 500 metres of the site, with the nearest being around 120 metres to the closest part of the development, the digestate storage tank. The approved farm manager's dwelling would also fall within 500 metres of the site once constructed.

- 7.20 Odour generation from the digestion process can occur at various points, the following of which have been identified in the odour impact assessment:
  - Silage clamp: The maize silage is stored in a clamp which is covered with plastic and weighted down to exclude excess air to reduce degradation so odour is contained. Any liquid run off from the clamps would be fed into the pre-digestion tanks.
  - Silage working: An area of around 200 square metres (of a total 3,000 square metres) would be exposed at times of work on the silage. The potential from odour emission from this limited area is considered to be small given the small area exposed, and would be limited to the times when the area was exposed.
  - Digester and storage tank: Emissions are contained by virtue of the fact that the digester unit is sealed and airtight as part of the process of anaerobic digestion and biogas production. The methane produced by the digestion process would be fed into the CHP gas engine, which produces electricity and heat.
  - Digestate storage: The liquid digestate would be stored in an airtight tank to prevent odour emissions.
- 7.21 The applicants have provided an odour impact assessment that reviews the likely impact on the nearest properties, as well as more distant properties out to around 1.5 kilometres from the site. The impact assessment is based on the worst case scenario for the most sensitive part of the development, which would be a breach of the airtight tanks.
- 7.22 In the absence of data from the actual development, typical values have been used to calculate the likely odour impact of the development. Officers consider that this approach is acceptable. Although it would be ideal to have meteorological data for this exact site, that data cannot be obtained. Data from the weather station at Northholt, 30 kilometres to the south-west, has been chosen because of its similarity to the area around the application site.
- 7.23 The assessment concludes that detectable odours from the development would be limited to the immediate vicinity of the site, within approximately 150 metres of the silage clamps. Odour from the development would not therefore have a significant impact on the nearest residences, which are around 200 metres from the proposed clamps. Typically odours from the development would be dispersed to the south-east away from the nearest residences, which lie to the west.
- 7.24 The assessment has been reviewed by the Council's Environmental

Health Officers. They have confirmed that they have no objection to the development provided that the mitigation measures identified in the assessment are complied with. A condition to that effect is recommended.

- 7.25 Air pollution from toxic gases is considered unlikely due to the fuel source only being feedstock and animal waste. Where other anaerobic digestion plants are fuelled by more general waste, the feedstock would not generate toxic gases on any scale that would be harmful to human health.
- 7.26 Officers therefore conclude, based on the evidence submitted, that the development would not result in odour emissions or air pollution that would be materially harmful to the amenities of neighbouring occupiers.

### Visual and landscape impact

- 7.27 The buildings and tanks associated with the plant would be substantial structures introduced to this rural location. They would be erected on the southern edge of the group of buildings already existing on site.
- 7.28 The various structures would be utilitarian in appearance, with the buildings finished in green cladding with concrete roofs and the tanks finished in green cladding with a green foil membrane roof. Sited adjacent to the existing agricultural buildings on site, Officers consider that they would be viewed as structures of similar scale and height.
- 7.29 There are no public rights of way crossing the site. Main public views of the site would be from Brickendon Lane through the mature trees lining the west boundary of the site. These trees are quite densely planted and form a largely solid screen when in leaf. During autumn and winter there would be a clearer view from the west, but even at that time the site would largely be screened by the existing buildings on site from the houses to the west. There would be a loss of openness from the development, but even from viewpoints where the proposed structures would be more visible Officers consider that as a result of their design and scale they would not appear out of place within the landscape.
- 7.30 Longer views of the site are available from public footpaths to the east and south, but in these views the proposed development would appear much less prominent, and would be from such a distance that the structures would not be harmful in the landscape.
- 7.31 The Landscape Officer has reviewed the proposed development and has made no objection, commenting that "adverse visual impact will be

low".

- 7.32 Officers therefore conclude that the proposed development would not result in unacceptable harm to the appearance and rural character of the surrounding area.
  - <u>Potential for increased risk of flooding; Potential for groundwater</u> pollution
- 7.33 Concern has been expressed that the run-off from the increased areas of hardstanding associated with the development would result in a material worsening of existing occurrences of flooding along Brickendon Lane. Brickendon Brook, which receives run-off from the application site and which would be the ultimate recipient of channelled surface water run-off from the proposed hard surfacing, floods onto Brickendon Lane to the north of the application site.
- 7.34 In response to these concerns water management measures have been proposed as part of the proposed development. Surface run-off from the development would be channelled into an attenuation pond with water released into the Brook at a rate no greater than the existing. The pond has been designed to accommodate additional rainfall in accordance with projected climate change over the course of the life of the plant.
- 7.35 In addition to this the pond and other proposed drainage measures are designed to accommodate and filter any contaminated run-off from the site, for example if one of the tanks were to leak. The contaminated water would be contained within the drainage system until it could be treated to remove contaminants.
- 7.36 The proposals have been reviewed by the Environment Agency who have stated that the measures would be acceptable to address flooding and pollution concerns related to the development.
- 7.37 In addition to this the applicant is liaising with the Environment Agency to investigate measures for dredging the Brook. It is anticipated that this could significantly reduce instances of flooding as it would improve the flow volume of the Brook. At this time only preliminary discussions have taken place, and it may be that any works would not take place on land within the applicant's control. It is therefore not considered necessary or reasonable to require that such works take place before any development commences.

### Other considerations

#### Wildlife

- 7.38 Concerns have been raised regarding the potential impact of the development on wildlife in the local area. Great Crested Newts have been recorded at Clementsbury, and are known to travel as far as the site of the proposed development. Bats are known to roost within Clementsbury as well.
- 7.39 Hertfordshire Ecology have reviewed the proposal and noted that the development will not affect any pond used as a habitat. Provided that care is taken during construction no harm should come to Great Crested Newts as a result of the development. In addition, as no buildings or trees are present on the application site, no bats would be harmed by the development.

### Inaccuracies in application documents

7.40 Responses provided to questions on the application form and biodiversity questionnaire have been queried by residents, for example in relation to the potential impact on wildlife and trees and the possible production of hazardous materials. Officers have reviewed the matters in question and are satisfied that these arise from a difference in perspective. For example, while there are trees on the wider Clements Farm site, there are none on the site of the proposed development and none are proposed to be removed as a result of the development. With new landscaping there would be a net gain of tree cover around the application site with biodiversity benefits.

## Impact on listed buildings

7.41 The nearest listed buildings are those comprising the Clementsbury estate, the nearest of which is over 200 metres from the nearest point of the proposed development. Officers consider that the development would not be perceived from within the setting of these listed buildings given the separation distance and lack of points from which both the proposed plant and any of the buildings could be viewed in any detail at the same time.

#### National Grid

7.42 Concerns have been raised regarding the proximity of the development to National Grid plant, including a gas pipeline that crosses the site. A formal response from the National Grid is forthcoming, and in the event

of an objection then Officers would recommend deferral of the application to assess whether a revised siting could be achieved. It is important to note, however, that there are separate legislative controls to cover the protection of gas pipelines and the grant of any planning permission would not prevent the operation of those controls.

### 8.0 Conclusion

- 8.1 Officers recognise that the development is inappropriate within the Green Belt; that by definition it would be harmful to the Green Belt and that the proposed structures themselves would impact on openness. However, in this instance Officers consider that the principle of the development would be acceptable. This use can only reasonably be sited in a rural location; would deliver renewable energy benefits supported by local and national policy, and in this instance would represent the beneficial diversification of an established agricultural business.
- 8.2 The visual impact of the development would be limited due to the design of the proposed structures and their siting away from public view. Sufficient information has been submitted to show that the development would not result in harmful impacts in terms of odour, air or groundwater pollution or flood risk.
- 8.3 While the development would result in an increase in heavy goods vehicle traffic on the local road network, the proposed increase, amounting to approximately 1 additional HGV movement onto and off the site every 3 days on average, is considered by Officers to be acceptably low when considered against the benefits of the development.
- 8.4 The lack of visual impact and harm to neighbour amenities and the wider environment, together with the recognised benefits of renewable energy development and the diversification of an agricultural business, are considered by Officers to amount to very special circumstances to clearly outweigh the in principle harm arising from inappropriate development and loss of openness in this Green Belt location.
- 8.5 It is therefore recommended, subject to the imposition of the conditions outlined at the head of this report, that planning permission be granted for the proposed development.