

## Development Management Report

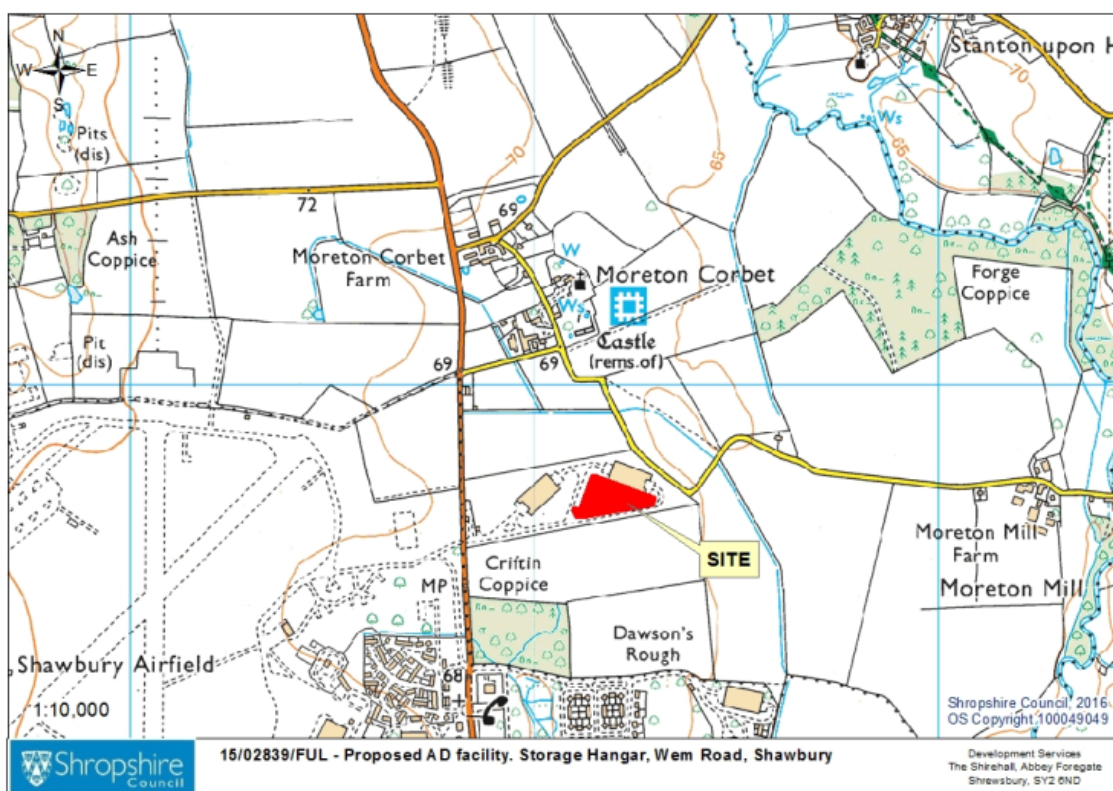
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### Summary of Application

<b><u>Application Number:</u></b> 15/02839/FUL	<b><u>Parish:</u></b> Moreton Corbet And Lee Brockhurst
<b><u>Proposal:</u></b> Construction of an Anaerobic digester facility comprising Digester, lagoon, technical building, storage tanks and flare stack	
<b><u>Site Address:</u></b> Storage Hangar, Wem Road, Shawbury, Shrewsbury, Shropshire	
<b><u>Applicant:</u></b> Oakland Farm Eggs Ltd	
<b><u>Case Officer:</u></b> Graham French	<b><u>email:</u></b> <a href="mailto:planningdmsw@shropshire.gov.uk">planningdmsw@shropshire.gov.uk</a>

**Recommendation:- Grant Permission subject to the conditions set out in Appendix 1.**



## REPORT

### 1.0 THE PROPOSAL

1.1 It is proposed to construct a 1.5MW anaerobic digester (AD) plant in order to process poultry manure from the applicant's egg production business which is based at a nearby farm, The Oaklands at Edstaston 2.2 miles north of Wem and 8.6 miles from the application site. The proposed AD facility will process and manage in the region of 50,000 tonnes of poultry manure per annum.

1.2 The AD plant would include the following structures:

- Digester –a rectangular flat roofed concrete structure 90m x 44m x 5m high (only 2m above existing ground level), contained within a 3m grassed earth bund;
- Digestate lagoon – 4,500m<sup>2</sup> in area, mostly underground and contained by 3m earth bunding;
- Control and electrical room – 40m x 15m x 6.5m high, located adjacent to the digester;
- Flare stack with associated small plant;
- Ammonium sulphate tank 21m diameter x 4.5m high
- Sulphuric acid storage tank, located within the technical building;
- Flare stack – 5.5m high steel pipe work;
- Reception pit – This will be covered to ensure no release of odour. Fresh manure will be fed straight into the system, instead of being stored in the building. An area of the existing hangar will be reserved for temporary manure storage in case the plant is temporarily down for maintenance.

The above structures would be located close to the existing hangar in order to screen the facility. A scheme of landscaping enhancement is also incorporated into the design to support the existing landscaping measures on site.

1.3 This application is a joint venture between Oakland Eggs Ltd and Rika Biofuel Developments Ltd (Rika Biofuels). The applicant's egg production business at the Oaklands started in 1967 and now produces nearly 500 million eggs per year. The business is managed by J.A & O Griffiths and Sons and employs around 162 people.

1.4 The proposed AD plant would divert all poultry manure produced on the holding through the AD process. The plant would process only poultry manure, which would be delivered throughout the week. The manure would be delivered directly into the digester reception pit. This will have a sealed automatic lid that will only be opened to allow unloading of the incoming manure. The fresh incoming manure will be put into the system as soon as it arrives.

1.5 The manure would be utilised as an energy resource by using biogas from the AD process to power a Combined Heat and Power (CHP) engine. The resulting liquid would be heated to remove ammonia gas which would be bubbled through a sulphuric acid tower to produce ammonium sulphate solution. This is a widely used agricultural fertiliser, normally produced by an energy intensive chemical manufacturing process.

1.6 The digestate end-product is virtually odour-free and would be separated into solid and liquid. Some of the liquid digestate would be used as a nutrient rich soil conditioner,

giving significant amenity benefits relative to the spreading of raw manure. The remainder would be used to dilute the fresh incoming manure, thereby reducing the usage of fresh water and the amount of material that needs to be exported off site and spread to land.

- 1.7 Foul odours would be eliminated throughout the process. The AD process is a sealed system (oxygen) and does not create any odour emissions under normal operating conditions. The system is designed to ensure that all biogas is captured as this product is the source of income for the plant.
- 1.8 A gas flare is proposed in common with all AD plants. This would ensure that if surplus gas is produced it can be safely released. Any “flaring” would be intermittent and would be an odourless, flameless and smokeless operation. Only a heat haze would be visible.
- 1.9 The AD process would capture methane (a strong greenhouse gas) from the manure, which would otherwise be released directly into the atmosphere from spreading of raw manure. The CHP engine would produce enough renewable electricity per annum to meet the needs of around 4000 homes, thereby helping the UK to shift away from fossil fuel technologies.
- 1.10 The digestate by-product has a lower biological oxygen demand than raw manure and is a more uniform and easily used fertiliser. This would help Oakland Eggs Ltd to address current Environmental Regulations which prevent manure being used as fertiliser throughout the year. The use of the digestate as a fertiliser also helps displace the fossil fuels used in the manufacture of artificial fertiliser, which the Government and DEFRA estimate can save 5 tonnes of CO<sub>2</sub> for every tonne of nitrogen displaced.
- 1.11 The proposals would generate 2 new full-time jobs. Other employment would include feed delivery drivers, digestate collection drivers, construction workers, cleaning teams, maintenance technicians, ground workers and landscape contractors.
- 1.12 The site will be monitored by computer systems 24 hours a day and will automatically alert site operators of any issues during non-working hours. CCTV will also be in operation. The management and operation of the proposed AD plant would also be subject to strict controls under the Environmental Permit Regulations administered by the Environment Agency.

## 2.0 SITE LOCATION / DESCRIPTION

- 2.1 The site (known as ‘Site E’) is located approximately 1.4km to the north of Shawbury Village Centre immediately adjacent to the B5063 Wem Road from which access is obtained. The site is flat and surrounded by arable land. The site area of 1.23 hectares and sits within a wider ownership boundary totalling 7.88 hectares. The adjoining land is in separate ownership and in arable cultivation.
- 2.2 The two existing aircraft hangars on the site are currently used for agricultural operations, weighbridge facilities and storage of manure, fertiliser, feedstock and grain. The surrounding landscape is either in military use forming part of the Airbase at Shawbury or in arable use interspersed with further woodland blocks. The site is otherwise unaffected by the relevant statutory designations.

- 2.3 The Hangars and associated infrastructure were constructed in 1940 as part of the Shawbury Airbase. The Ministry of Defence sold Site E during 2005. Since then it has been used as touring caravan storage facility and light industrial processes. In recent years it has been used for storage of vehicles associated with the farming enterprise, and storage of manure, Grain, fertilizers and other agricultural products/by-products. Oakland Eggs Ltd currently have an Operator's Licence to operate goods vehicles from the site for 15 Motor Vehicles and 45 Trailers (valid until May 2017).
- 2.4 Oakland Eggs Ltd is a family run business, farming both arable and livestock enterprises on farms across North Shropshire. The business farms over 1800 hectares, producing potatoes, cereals and oilseeds.
- 2.5 The site is adjacent to a business unit occupied by Oaklands Farm Eggs Ltd. The two nearest residential properties are located 290m to the east and 340m to the northwest. Other groups of properties are centred around Moreton Corbet 500m to the north, Moreton Mill 1.1km to the east and RAF Shawbury 470m to the south west and 440m to the south.

### 3. REASON FOR DELEGATED DETERMINATION OF APPLICATION

- 3.1 The proposals have attracted objection from the Parish Council and relates to major development of a complex nature. Accordingly the application is referred to the committee under the Council's Scheme of Delegation.

### 4. CONSULTEE RESPONSES

- 4.1 Moreton Corbet Parish Council - Objection on the grounds that the transportation of incoming and outgoing materials will substantially increase the amount of large vehicles using the busy A53 through Shawbury, turning at the traffic light junction and then travelling along the Wem Road. This will increase the inherent danger to other road users and pedestrians, including children who have to access this route to and from school. The recent placement of speed cushions on the Wem Road will certainly be an increased noise factor for that section.
- 4.2 Environment Agency (10/03/16) – No objection.
- i. Groundwater Vulnerability; Based on the site investigation report provided by the applicant, the 6 site investigation boreholes drilled in December 2015 confirm that the drift under the site to be composed of gravelly medium to coarse sand deposits to a minimum depth of 3.5 to 5mbgl. The borehole logs record groundwater levels at between 2 to 2.5mbgl, which coincide with the collapsing of the borehole at the groundwater contact demonstrating unstable running sand conditions. This is consistent with our initial hydrogeological assessment, and coincides with the regional groundwater head in the underlying Permo-Triassic sandstone Principal Aquifer contoured at 65 to 66mAOD (2 to 2.5mbgl). The borehole logs reinforce assessment of the site as being of high vulnerability, with very permeable drift over lying Principal Aquifer. The shallow groundwater level provides only 2 to 2.5mbgl of unsaturated zone in the underlying sand and gravel. This zone is likely to be reduced further once the foundation for the proposed structures is excavated in to the existing ground elevation. However, based on the information submitted we are satisfied that there should be no sub water table storage. This is also consistent with the tank design drawings as indicated on the amended plans. Preliminary Design – Clancy Consulting Ltd Drawing Ref: 4-5865-01-1 Preliminary Secondary/ Tertiary Containment details for AD Plant

submitted June 2016. Ideally the applicant should have twin tracked the planning application and permit as we currently have no sight of the detailed design for the principle components of the plant. We have some concerns on the preliminary design detail submitted at this stage (Drawing Reference 4-5865-01-1). However, we acknowledge the commitment to designing to CIRIA 736 and appropriate engineering standards. In the absence of further information, or the permit being twin tracked, the applicant should be made aware that improvements will be sought to ensure safe containment and protection of the groundwater environment from the out-set of the detailed design Bespoke Environmental Permit application. Whilst there is a commitment to designing to CIRIA 736 and engineering standards, we do have some concerns about the current preliminary design proposed, as part of the planning application, for the digester and storage lagoon structures. Further design discussion and assurances will be required at the permit stage to ensure safe containment and protection of the groundwater environment.

- ii. Comments on design: The design concerns relate to the proposed use of a bentonite lining system and the use of it on the vertical concrete walls of the digester as well as underneath it. As there is limited technical data at this stage it is presumed that the bentonite lining systems will comprise a Geosynthetic Clay Liner (GCL). Generally speaking where a GCL is to be used on slopes, the slopes should not exceed 1v:3h unless a slope stability analysis has been carried out which demonstrates that there is a factor of safety (FOS) of 1.5 or more. The slope stability analysis should consider the interface friction angles of the saturated GCL with the other components of the design. Issues can arise with respect to the internal shear strength of the GCL when used on slopes exceeding 1v:3h. Furthermore from the designs provided it is unclear how the bentonite liner is to be attached to the concrete walls in a manner that will prevent the forces created by the weight of the GCL exceeding its tensile strength and causing it to stretch or tear. GCLs are normally held in place with /secured using anchor trenches to prevent this scenario occurring. In addition if the predominately clay mineral component of the clay is sodium montmorillonite, and it comes into contact with liquids or vapours containing ionic species, the sodium can be replaced as a result of ion exchange. Such a process would result in the reduction in the swelling abilities of the bentonite and an increase in its permeability characteristics. Concrete structures such as the digester could provide such a source for ion exchange to occur. Has the load bearing capacity of the bentonite lining system for the AD plant and lagoon in its saturated state been taken into account? The weight of the digester could cause the bentonite in the GCL to decrease in places if the load is not evenly distributed. Altering the thickness of the GCL could impact on the hydraulic performance of the GCL. The hydraulic performance of geotextile supported GCLs depends on the distribution of bentonite mass/area within the material. Once hydrated the bentonite has a very low shear strength, it is possible in this case that stress concentration activities and permanent structural loads may cause the bentonite to squeeze laterally and lead to a local reduction in thickness which in turn can cause a higher flux at these locations ( Koerner and Narejo, 1995; Fox et al., 1996). To avoid local bentonite displacement and consequent possible impact on the hydraulic performance of a GCL, a cover soil of suitable thickness and particle size should be placed over a GCL before it hydrates and before it is subjected to concentrated surface loads. The presence of coarse -grained material such as gravel, proposed in the preliminary design, can also be another cause of bentonite migration due to stress concentration. What assurances can be given that will prevent the drainage stone beneath the base of the digester from being pushed into the bentonite liner, and thus compromising containment. Furthermore, like the cover soil, the subgrade on which the GCL is installed should also

be suitable with respect to particle size. Regards the soil beneath the bentonite liner, the surface on which a GCL is to be laid must be smooth, flat and free from any materials which threaten the physical or chemical properties of the GCL. An uneven subgrade may cause point loading on a GCL or bentonite migration, creating a higher area of permeability. It must not be laid against any subgrade rich in calcium or any other substances which could exchange ions with the sodium in the GCL and must have appropriate shear strength values. For sand the material must be >90% of its maximum dry density to ensure no movement will occur during or after placement. To ensure these criteria will be met an appropriate soils testing programme will need to be undertaken. The preliminary design as submitted makes no reference to the presence of an engineered subgrade. GCLs have been used as a single liner but are more commonly used and better suited to be used as a component of a composite lining system. All the above comments are applicable to the lagoon structure also, given that it is to be constructed to the same design as the digester.

iii. Summary:

1. The borehole logs submitted by the applicant reinforce the hydrogeological assessment of the site as being of high vulnerability. With very permeable drift overlying Principal Aquifer, and a shallow groundwater level encountered 2 to 2.5mbgl.
2. The very thin unsaturated zone will mean that any contaminants escaping to ground from the containing structures will quickly enter controlled waters and impact upon the groundwater quality of the underlying principal aquifer receptor. It is suggested that groundwater monitoring will be required and controlled as part of the Bespoke Permit application.
3. We currently have no sight of the detailed design for the principle components of the plant other than the limited set of drawings submitted in June 2016.
4. We have some concerns about the preliminary design proposed for the digester and storage lagoon structures. However, it is likely that an appropriate system can be developed and in the absence of further information at this stage, or the permit being twin tracked, this would be looked at in more detail and controlled at the permitting stage.

- iv. Emissions to air: We have reviewed the letter of 30 June 2016, from George Bagley at E4 Environment, to our objection letter of 15 August 2015; the air quality screening assessment of 11 July 2016 and subsequent revised air quality report of 23 July 2016 (received 25 July 2016). The air quality screening report confirms that the following pollutants are considered to require a further more detailed investigation with respect to the human health impact of releases to air: Nitrogen dioxide Nitrogen monoxide Formaldehyde. The further revised report of 23 July 2016 provides some more detail and concludes that the concentrations (conservative estimate) are based on pollutant contributions to ground level concentrations and at the nearest sensitive receptors would be insignificant. It is noted that the engine flue height is greater than 3 m and the report confirms the nearest 'residential' sensitive receptor is more 200 m from the site. However, there is a sensitive receptor – workplace unit within 50m. This is identified as Oaklands Farm Eggs Ltd general commercial unit. The report summary appears to suggest that the levels are down to the intricacies of the model parameters. There are technical reasons as to why the levels are present for Nitrogen dioxide, Nitrogen monoxide and Formaldehyde. They are generally present in all such emissions and in this instance, without prejudice to any future bespoke permit application, are unlikely to cause it to fail the H4 assessment. However, in the absence of the permit being twin tracked, we cannot give full certainty -this could be fully

confirmed through a H4 permit application technical assessment. Any necessary measures to avoid or control the elevated levels would be further considered as part of the Permit.

- v. Odour: We note the comments on odour and consideration of nearby receptors. A more detailed H4 assessment will likely be required as part of the Bespoke Permit. The further information at this stage provides some reassurances on the risk and control measures for odour and bio-aerosol risk management. It also confirms that an Odour Management Plan will be produced following H4 guidance.
  - vi. Noise: Similar to the above, the Bespoke Permit will likely require a noise assessment and secure a Noise Management Plan. The further information as submitted provides some reassurances on the likely impacts from the CHP engine upon local receptors and suggests measures to help reduce and minimise nuisance.
- 4.3 Natural England: No objection, no conditions requested. This application site is within the impact risk zone for Hencott Pool Site of Special Scientific Interest (SSSI). Natural England is satisfied that the proposed development being carried out in strict accordance with the details of the application, as submitted, will not damage or destroy the interest features for which the site has been notified. We therefore advise your authority that this SSSI does not represent a constraint in determining this application. Account should be taken of any local sites (biodiversity and geodiversity); local landscape character and local or national biodiversity priority habitats and species in determining the application. Standard comments are made with respect to protected species.
- 4.4i. Historic England: No objection subject to appropriate agreement on all details, and considering the balancing exercise required by the NPPF section 12. The site is within a disused part of an old airfield, to the east of the B5063, formally part of RAF Shawbury. The main part of the airfield, now to the west of the B5063 remains an active air force base. Although the development will be partially screened behind a c.12m tall c.WWII hanger, it is within the setting of the scheduled ancient monument of Moreton Corbet Castle, Heritage List for England ref: 1015317, and the adjacent Church of St Bartholomew, listed Grade I, Heritage List for England ref: 1307235. Moreton Corbet Castle is an impressive medieval castle that was developed into an early post-medieval mansion with formal gardens laid out to the south. The remains of the Castle and manor house survive as full height roofless ruins and are operated as a visitor destination by English Heritage. The former gardens to the south of the main facade are now largely altered and obscured by more recent incorporation into agricultural land and airfield construction activities. Two detached areas, one to the west and one to the south of the castle, do contain earthwork remains relating to the post-medieval mansion and are also protected as part of the scheduled ancient monument.
- ii. The development would include a very large concrete tank and associated landscaping and buildings. The site is largely screened behind the old hanger, and the tank would appear from the Castle area as a low mound c.2-3 metres tall, and covered in grass. It appears that the majority of associated buildings will be behind the hanger and hidden from direct view from the Castle, and its outlying scheduled areas that relate to the best surviving earthwork remains.
  - iii. Historic England attended a site visit on 14th May 2015 with the applicant and agents,

and representatives of Shropshire Council. The development will have an impact upon the setting of the designated heritage assets but this could be minimised by agreement on details. In order to minimise the impact upon heritage assets we recommend that the local authority consider conditions to ensure that:

- support buildings (including the flare) are located behind (i.e. to the south of) the hanger.
- the sides of the lagoon tank are landscaped and grassed over.
- that details are agreed regarding the use of recessive colours, materials, fencing and lighting in order to minimise overall impact.
- that noise impacts are minimised, including by considering routes and volume of heavy vehicle movements to and from the site.
- details of connection to the grid are agreed. We recommend that undergrounding of cables is considered within the vicinity due to the potential for impact within a generally open aspect.

We note that in accordance with the NPPF paragraphs 128 and 129, the application is accompanied by a Heritage Assessment. We are in broad agreement with the mitigation measures proposed within that report, and within the Planning Statement that also accompanies the planning application.

Internal Comments:

- 4.5i. SC Archaeology (Historic Environment): – No objection. The proposed development site is located c.400m south, and within the setting, of the Scheduled Monument and Grade I Listed Building of Moreton Corbet Castle (NHLE ref. 1015317 and 1366802), and Grade I Listed St. Bartholomew's Church (NHLE ref. 1307235).

The proposed development site itself is located to the south and adjacent to a World War II aircraft hanger that was built as part of RAF Shawbury (HER PRN 21982). This building will partially screen the proposed development in views towards the site from the above designated heritage assets. Otherwise, Shropshire Historic Environment Record contains no records relating to non-designated heritage assets with archaeological interest on the proposed development site itself. The site is, however, located c.400m west of the main Roman road north from Wroxeter to Whitchurch (HER PRN 00066), and the Heritage Assessment submitted with the application identifies the five archaeological cropmark sites within a 1km radius of it (HER PRNs 02261-2; 02264-66). As a consequence, whilst the archaeological potential of the proposed development site is assessed as being low, there remains a possibility that currently unknown archaeological remains may be present on it.

- ii. Recommendation: A Heritage Assessment has been submitted to support the planning application, and it is advised that this meets the requirements set out in Paragraph 128 of the NPPF and Policy MD13 of the Local Plan. Historic England have also confirmed in their consultation response of 16 June 2016 that they are in broad agreement with the recommendations contained within the Assessment. Historic England acknowledge that a significant proportion of the proposed development will be located to the south of the hanger building, and therefore screened by it from the designated heritage assets cited above. The development includes a large concrete tank that will be up to 2 ' 3m high but in views from the castle and church would appear as a low, turf covered mound. Historic England state that the proposed development will have an impact on the setting of the designated heritage assets listed above but that this impact can be



minimised by agreement of details. They advise a series of measures which they consider would achieve this and recommend that conditions are included on any planning permission to achieve this. We confirm that we concur with Historic England's advice and, without repeating it in full here, therefore recommend that appropriate conditions, including the standard conditions listed below, are included as part of any planning permission. With regard to the archaeological interest of the proposed development site itself, in with reference to Paragraph 141 of the NPPF Policy MD13 of the Local Plan, it is advised that a phased programme of archaeological work should also be made a condition of any planning permission for the proposed development. This should comprise an archaeological watching brief during all intrusive ground works for the proposed development.

- 4.6 SC Drainage: No objection. The proposed drainage details, plan and calculations should be conditioned if planning permission were to be granted. Conditions and informatives are recommended.
- 4.7 SC Ecology: – To be reported verbally.
- 4.8i. Highways Development Control: – No objection subject to the development being carried out in accordance with the approved details. It is assumed that the current storage hanger enjoys the benefit of a B2/B8 use class, with unrestricted use. It is further assumed therefore that this current planning application has been required due to the proposed 'waste' operations. It is considered, from a highway perspective, that under the existing use class, this site could potentially be used for many industrial/commercial activities generating similar HGV and general traffic than is currently proposed, without the need for further planning consent or highway consultation. The application indicates that the use of the building will have a positive effect upon the number of tractor and trailer movements on the local highway network by virtue of the current operations at the egg production unit at Edstaston. The proposal however results in HGV movements that are currently undertaken by tractor and trailer.
- ii. Notwithstanding the above, ultimately it is difficult to reconcile between the current permitted/potential use of the building set against the proposed waste activity but quite clearly the 'fall-back' position of the use of the building is a key factor in the decision making process. This proposed level of vehicular activity is commensurate with this type of development and is considered to sustainable, as the import and export of material/waste is relatively localised. It is sustainable in terms of the production of electricity from the chicken waste product with the final waste product from the AD Plant being spread on agricultural land. What the application does not indicate is the traffic routing between the Edstaston site and the A53 site. The highway authority would strongly recommend that routing through Wem is avoided and would request that a routing agreement is entered into which avoid routing through the town of Wem.
- 4.9 Public Protection: - No objection. Having considered the air quality report and noted the concentrations of potential pollutants emitted at source I can confirm that the concentrations noted are a conservative estimate based on release at ground rather than at the height of the flue which has taken place for technical reasons based on heights of surrounding buildings associated with the proposed development. Taking into consideration the potential impact of pollutants at nearest residential properties and the concluding remarks made by the consultant in report by E4 Environment Limited reference 160740 dated 21/7/2016 I confirm that I am in agreement with these

comments and do not consider there to be any likelihood of pollutant concentrations occurring at levels which would have an impact on the health of nearby residents and require any future mitigation. In respect of potential odours and noise I am satisfied that the land use proposed is suitable and therefore leave controls for the appropriate permitting regime which in this case falls to the Environment Agency to issue and regulate a permit.

### Public Representations

4.10 The application has been advertised and the nearest private properties have been individually notified. Four objections have been received. The main concerns are:

- i. Traffic: Adverse impact on the B5063. The Planning Statement states that there will be a reduction in the number of vehicle movements by moving the deliveries from tractors to 29 tonne HGV's, but I feel this masks the overall increase in activity. The B5063 is a poor road. Its geography will build up frustrations for following traffic such that they will be more eager to overtake. Certainly, locally, it is in a poor state of repair. After rain and in winter there can be significant amounts of standing water. From the traffic movement schedule the applicants envisage 51 round trips each week which averages out at approx. 7 round trips per day. It will be 7 days per week (excluding bank holidays), every week, thereby giving a level of consistency that is not present in the existing situation. Importantly all the trips from Oaklands are coming to this site rather than being spread over the road network. Based on this analysis the visits to the site will increase from 400 visits per annum (para 8.1.3) to 2652 per annum (51 x 52weeks). Before reaching a conclusion, a small committee of Councillors met with a representative of Ashley eggs to address concerns over this application. Some of these were effectively dealt with but the Parish Council still has reservations particularly in relation to the increased amount of HGVs using local roads, especially the B5063. It is still not clear to us precisely what the flow of traffic using this road and others for the movement of manure and digestate will be, but the B5063 from Rockhall Crossroads on the A49 to beyond Besford is narrow and winding and unsuitable for increased use by yet more HGVs. Further south towards Shawbury, the comments of Mrs Doxey and indeed Shawbury PC are very relevant. Significant work to improve the B5063 will be an essential prerequisite. The increased volume of traffic, over 20 tractor and trailer loads of chicken manure every day passing our home, is on top of the already existing Haulage Business running from the site. In addition all farming vehicles moving to and from the grain store on the same site. My drive comes out onto the B5063, travelling at National Speed Limit (more often or not over) with semi blind access. This makes approaching vehicles very difficult and dangerous to see. This road is in a poor state of repair, with no pavement and a very small grass verge. It is regularly used by the military from RAF Shawbury as a jogging route.
- ii. Health and safety: When up and running the digester will have 30 days worth of input in situ at any one time (see para3.1.2) so response times are important to have men and machines on site in order to minimise the effect of potential pollution, noise etc. so it is important that site maintenance, organisation, and cleanliness is consistently maintained.
- iii. Precedent for industrialisation: I would not want this becoming the "thin end of the wedge" application that will see applications for increases almost immediately this is allowed. This application increases the chances of success of future unrelated applications for other types of activity. This may have the effect of making the site more

of an industrial "eyesore" in an area of natural rural beauty and heritage. In the last 7 years since we moved into our existing family home, the increased activity and parked lorry trailers has become an ever increasing eyesore. Will we be subjected to even more industrialisation?

- iv. Pollution: Environmental issues-pollution of water courses, noise, and odour are natural concerns. Although extensively covered in the planning statement I would want these matters to be exhaustively reviewed, tested, and assessed during the application process. I am sure they will be, as already demonstrated in the recent response from the Environment Agency.
- v. Amenity: We are concerned to note that the AD could impact on residential property close to it and if this is the case we could not support the application. We are awakened frequently at 3am by the Haulage Lorries starting work, their reversing alarms sounding and very bright headlights shining into our property. With this proposed development are we going to be subjected to even more noise and light pollution 24 hours of the day? A similar Digester already exists in the village. The only thing the Anaerobic Digester offers is a sickening, stomach churning smell on a regular basis. Should this proposal be granted, it will significantly affect local people's quality of life (e.g. deterring locals and inhabitants of RAF Shawbury from spending time outdoors and in particular the play parks), it will deter people from visiting the English Heritage site to the North and also the neighbouring Church. Most people are in favour of green energy but if it makes people drive elsewhere to get fresh air, it's self-defeating.
- vi. Choice of site: Why is this development not being built nearer to the source of supply, surely it would be more environmentally friendly and economically sound? Why make over 20 tractor per day travel 14/15 miles round trip? What benefit is this development to the local community?

## 5. THE MAIN ISSUES

- The planning policy context;
- Assessment of the justification and benefits of the proposals;
- Whether the site is an appropriate location for the proposed development;
- Whether other off-site impacts are acceptable including with reference to:
  - Visual impact;
  - Residential amenity (noise, odour);
  - Water resources;
  - Traffic and vibration;
  - other environmental issues.

## 6. OFFICER APPRAISAL

### 6.1 Policy context:

- 6.1.1 The NPPF in paragraphs 97 and 98 recognises the need for renewable and low carbon energy. Shropshire Core strategy policy CS5 supports the retention and expansion of an existing established business. Policy CS8 positively encourages infrastructure, where it has no significant adverse impact on recognised environmental assets, that mitigates and adapts to climate change, including, low carbon and renewable energy generation. Policy CS13 seeks to promote economic development and recognizes the important role that

local food production has to the rural economy.

6.1.2 SAMDEV policy MD7b states that agricultural development will be permitted where:

1. it is of a size/scale and type consistent with the required purpose and the nature of the agricultural enterprise
2. it is well designed and...functionally and physically closely related to existing farm buildings
3. There will be no unacceptable impacts on environmental quality and existing residential amenity.

Policy MD8 confirms that new energy infrastructure will be supported to help meet national priorities and locally identified requirements, where the contribution to agreed objectives outweighs the potential of adverse impacts. The policy goes on to state that “particular attention will also be paid to the potential opportunities to recover heat and power” in anaerobic digestion schemes. Core Strategy Policy CS17 and SAMDev Policies MD12 and MD13 refer to the need to protect and conserve Shropshire’s natural and historic assets.

6.1.3 The scheme is therefore capable of being supported in principle by adopted national and local planning policy provided there are no unacceptably adverse environmental impacts.

6.2 Justification and benefits of the proposals

6.2.1 The site will contribute to the local electricity supply and reduce the need for energy produced from other, more environmentally damaging sources. The CHP engine would produce enough renewable electricity per annum to meet the needs of around 4000 homes. The facility would capture and offset energy from fossil fuels by some 60,000 net tons of CO<sub>2</sub> every year, or 1.2million tonnes over the anticipated 20 year minimum lifetime of the facility. The renewable energy and climate change benefits of the scheme are significant material planning considerations.

6.2.2 The proposals would help to eliminate the current practice of spreading raw manure from the applicant’s poultry egg operation direct onto the land with its consequent odours and environmental issues. Manure can only be spread at certain times of the year due to its high biological oxygen demand and the fact that much of the local area is within nitrate vulnerable zones. There are no equivalent restrictions for digestate, so the scheme provides an improved solution for manure management. Once the feedstock has been exhausted the resulting digestate will be used as a high-grade organic conditioner for farmland. The scheme would also produce ammonium sulphate which would replace the energy intensive production of artificial fertilisers.

6.2.3 In addition, the proposals would help to diversify the income of the business through renewable energy generation. This would help to sustain the 160+ jobs associated with the poultry enterprise, whilst creating 2 new full-time positions plus construction and maintenance jobs supporting local trades.

6.2.4 The NPPF advises that local planning authorities should not require applicants to demonstrate the overall need for low carbon energy and should approve the application if its impacts are (or can be made) acceptable (s98). The applicant has however put forward a number of justifications for choosing the current site:

- The immediate the area already has two large former aircraft hangars and access roads and so the proposals will represent an extension of the existing built industrial form, as opposed to isolated development in the countryside. The design of the

scheme has been carefully considered to minimise any visual impact by using the screening afforded by the large hangar buildings and due to the low profile nature of the proposed plant.

- Processing of manure through an AD plant would reduce the volume of material which needs to be disposed of and ensures that the remaining material has significantly less odour issues.
- There is also a reduction in vehicle movements to and from the Farm as the manure can be taken in bulk by HGV to the proposed AD plant and handled in a more efficient manner.
- The proposals allow heat from the CHP engine to be used in order to remove ammonia from the digestate;
- The site adjoins the hangar building which is an existing management hub for the poultry enterprise and is well located in relation to surrounding fields for digestate application.
- A connection can be made to the electrical grid;
- It has been surveyed and found to be suitable to accommodate the development.

### 6.3 Assessment of off-site environmental impacts:

- 6.3.1 Traffic: Objectors have expressed concerns about the potential for the proposals to generate additional traffic and of the limitations of the B5063 to accommodate such traffic. The applicant advises however that overall traffic levels will reduce whilst continuing the use of the established HGV routeing and timing of HGV movements to and from the site will continue to ensure that any impact on residents living adjacent to the public highway are minimised.
- 6.3.2 Access to the development site will be directly off the B5063. There is an existing access splay leading into the original Hangar access roads. Internal vehicular movements will be over the existing concreted areas. The proposed AD plant would process circa 50,000 tonnes of poultry manure per annum which would be imported from the main egg production unit at Edstaston. The farming operation already moves manure to the site for covered storage and in order to comply with Nitrate Vulnerable Zone regulations. The majority of lorries delivering manure will be loaded with digestate for a return trip, thus minimising the traffic movements in and out of the site.
- 6.3.3 The poultry manure currently produced at the Oaklands is transported by tractor and trailer loads to the end user at numerous locations around the County. During much of the winter months and in adverse weather, manure cannot be spread on land so is stored at the Shawbury hangar site until conditions allow onward transportation. The current operations involve importation of 400 loads (800 individual movements) of manure to the facility using tractors and trailers (15 tonne loads). The majority of these movements are between January and April each year when manure cannot be spread directly to farmland. This equates to approximately 25 tractor and trailer movements to the site per week during the peak period.
- 6.3.4 In addition, when conditions are favourable for spreading approximately 1000 tonnes of manure will be removed from the site each week resulting in a total of 64 tractor and trailer loads (128 individual movements) over a further 6 week period. The total duration of poultry manure movements to and from the site is therefore 5½ months. This leads to a total of 800 return movements or 1600 individual movements taking place over the 5½ month period.

- 6.3.5 The applicant states that the proposed AD plant would reduce traffic between The Oaklands and the hangar site. This would be achieved by using vehicles with 29 tonne loads rather than smaller tractor and trailer loads. These movements would also be evened out over the year, thereby avoiding the seasonal peaks of the current practice. The 29 tonne loads would all be covered, thereby reducing odour. The applicant states that in total there would be 51 return movements by 29 tonne vehicles per week, which equates to just over 7 movements per day. This assumes that 75% of vehicles importing manure to the site are 'backloaded' with digestate for the return trip and includes a further 18 vehicle movements per week associated with deliveries and export of other materials required in the AD process (sulphuric acid import and ammonium sulphate export). The running of the plant will be carried out by existing staff at the business and will therefore generate no additional vehicular movements to/from the site over and above the existing position.
- 6.3.6 The hangar site has an established storage and distribution use with a vehicle operator's license for 12 goods vehicles and a unit of this size could potentially generate significantly greater levels of traffic than that proposed under the AD facility. The AD facility would supersede the current use of the hangar as a manure storage facility. Therefore, a new use could potentially become established within the hangar which would be in addition to the traffic generated by the proposed AD facility. Notwithstanding this, it is considered that the reduction in size and peak numbers of vehicle movements to the site and the better containment of poultry manure during transport represents a general improvement in highway and amenity terms.
- 6.3.7 The highways officer has not objected to the proposals and has acknowledged the established business use of the hangar building. The highways officer has requested that consideration is given to a voluntary routing agreement to avoiding use of the access route through Wem. It should be noted however that the proposals would reduce peak traffic from 25 loads to 7 loads per day and would improve the containment of manure so the proposals would deliver an overall highway improvement. An alternative use for the hangar building with its operator's license for 12 vehicles could also potentially generate greater levels of traffic.
- 6.3.8 The planning case officer does not consider that a routing agreement would meet relevant legal tests in this context. The officer does consider however that a condition requiring submission of a traffic management code of conduct would be justified and this has been discussed with the highways officer. Such a condition would allow the Planning Authority to exercise an appropriate level of control to ensure the following:
- that the assumed rate of back-loading (and hence overall traffic movements) is achieved;
  - that despatch of vehicles in convoys is avoided;
  - that despatch of vehicles at peak times for other road traffic is avoided or minimised;
  - that the company's vehicles travelling to the AD site can be identified by clear markings in the event of any complaints;
  - that a procedure is agreed for dealing with any traffic related complaints.

Subject to this condition it is considered that the proposals can be accepted on balance highway terms.

- 6.3.9 Odour: Poultry manure is already stored on site during periods when it cannot be spread to land. The proposed AD facility offers benefits in terms of odour containment. The odour free digestate would be spread to the surrounding land in place of raw manure. The AD process is completely sealed in order to facilitate anaerobic gas collection and to eliminate odour release. Transfer of materials from the feeder to the digester tank is within fully enclosed pipework. Having left the feeder, at no time would any material be exposed directly to the atmosphere until digested and released as the odour-free digestate.
- 6.3.10 The AD plant would be subject to strict permitting by the Environment Agency who have not objected to the proposals. The permit would control potential releases to air, water and land. An Odour Management Plan has been prepared and is currently subject to review by the Environment Agency. Public Protection officers have also not objected. There are currently over 20 operational AD sites in Shropshire. None of these facilities has encountered any sustained odour problems. Notwithstanding this, an appropriate amenity complaints condition has been recommended to provide additional reassurance.
- 6.3.11 Noise: The applicant advises that scale of development proposed, the distance to sensitive receptors and the detailed design measures will ensure that there are no noise issues arising from the proposed development. The AD process itself is silent. The pumps and manure loading system will operate intermittently. The only continuous noise would emanate from the CHP unit, which is to be fitted within acoustic sound proofed housing. As such the proposed development is not anticipated to give rise to any impacts on residential amenity. The applicant states that noise tests carried out as part of similar projects have indicated that levels are satisfactory and this is generally supported by the experience of operational AD sites in Shropshire. Notwithstanding this, an amenity condition has been recommended to provide added reassurance.
- 6.3.12 Ecology: The proposed development site currently comprises a former RAF hangar site and associated hardstandings and managed grassland. Accordingly it is considered to be ecologically poor. A Phase 1 Ecological Survey concludes that the proposed development will not give rise to an adverse impact on protected species. The ecological report recommends that grass around the proposed site is regularly cut and this has been incorporated into the design of the scheme.
- 6.3.13 Flooding: The site is not located within an area at risk of flooding. A Flood Risk Assessment advises that surface water run-off from the new areas of impermeable surfaces will be directed into soakaways designed in accordance with relevant guidance. Appropriate drainage conditions have been recommended.
- 6.3.14 Drainage / Pollution: The site will be located within a bunded area, with capacity to deal with process overflow. The applicant has provided details to the Environment Agency indicating that there would be no contact between the base of the proposed tanks and groundwater. The scheme has been amended to take account of
- 6.3.15 Landscape Setting: The tallest of the AD structures have been positioned behind the larger Hanger building in order to shield the facility from Moreton Corbett Castle scheduled ancient monument and surrounding properties. Overall, it is considered that the AD plant would represent a minor addition visually to the existing hangar complex. None of the proposed tanks or silos would extend above the profile of the existing hangars. The proposed AD plant will be agricultural in appearance, with many of

the site components commonplace in the surrounding rural countryside (e.g. silage clamps). Relevant AD structures will be clad in an appropriate colour such as juniper green.

- 6.3.16 The applicant has included a schematic 3d view of the proposed site as seen from Moreton Corbet Castle. This demonstrates that the majority of the AD site will be completely screened from this scheduled ancient monument by the hangar building. Part of the proposed 'tank farm' would extend beyond the eastern edge of the hangar building, but would appear as a small feature relative to this larger building. Earth excavated as part of the levelling process would be reused in the bunding of the digester and lagoon and to soften above ground elevations of these structures. Landscaping would be completed during the first available planting season. Historic England and the Council's Historic Environment team have not objected on this basis.
- 6.3.17 Lighting: External lighting would be required for use during in the winter months to ensure a safe working environment. This would be at the minimum required level and would be directed downward and shielded to minimise any unnecessary light spill. There would be no round the clock external lighting. Any lighting would also be well screened from most views by the neighbouring hangar buildings. An appropriate lighting condition has been recommended.
- 6.3.18 Heritage: There are no known heritage assets within the application site itself. A heritage report advises that the site has been consistently disturbed in the past due to previous uses so has low archaeological potential. However, a condition requiring a phased programme of archaeological work has been included in appendix 1 based on the recommendation of the Historic Environment section.
- 6.3.19 Pollution: The proposed AD plant would comprise a sealed system. Once poultry manure is transferred to the digester tank, the process is totally enclosed and no material would leave the plant other than treated digestate. Plant design allows easy inspection of areas where leakage could occur, and where applicable, pipelines and joints are at low level and key areas would be subject to daily inspection. Prior to commissioning, all tanks would be hydraulically tested to check the integrity. Detailed records of inputs and outputs will be maintained so any loss of material can be detected early.
- 6.3.20 The applicant has provided further information regarding containment of the proposed facility and the Environment Agency has withdrawn a previous holding objection on this basis. The Agency refers in its consultation response to some detailed technical matters which would be addressed as part of the environmental permit application. However, there is no indication at this stage that appropriate technical solutions would not be available in principle.
- 6.3.21 Poultry manure is not considered a polluting waste when it is used directly as a fertiliser on land. However, the digestate produced by the plant would have environmental benefits by avoiding any impact of manure wash off into local watercourses. The air emissions from the CHP engine are equivalent to those released by a small car. The majority of this will be Carbon Dioxide, which would be reabsorbed by the crops growing the following year. CHP emissions would be monitored closely to ensure optimum combustion. The detailed design of the control equipment would be subject site will be subject to Environment Agency approval as part of the Environmental Permit.



6.3.22 Health and safety: All on-site personnel would undergo thorough training. A fire and gas detection system would monitor the plant. The fabric of the plant does not represent a fire hazard. The site has been designed to avoid the unnecessary need for vehicles to operate in close proximity to the tanks. In the event of surplus biogas production or if the CHP is shut down the biogas will automatically be diverted to the gas flare for burning. There would be no visible flame or smoke, just a slight heat shimmer. The site layout has good access for fire tenders and an on-site supply of water.

6.3.23 EIA screening: The proposals have been screened to determine whether the application should be accompanied by an Environmental Impact Assessment. Whilst highlighting detailed issues which the application would need to address it has been determined that the proposals would not meet relevant thresholds for EIA.

## 7.0 CONCLUSION

7.1 Objections to the scheme have been received from four local residents and the Parish Council. These mainly relate to concerns about traffic, pollution and amenity. In terms of traffic the proposed site is immediately adjacent to a large hanger building which already forms an important hub in the farms current manure management strategy. The proposals will remove seasonal peaks in traffic movements to and from the site from the applicant's egg production facility at Oaklands farm near Wern. Available evidence also indicates that the total annual number of vehicle movements would be significantly reduced.

7.2 In addition, there would be improved containment for poultry manure during transit and the proposals would allow improved manure management. This would be achieved by spreading digestate instead of raw manure on agricultural fields, because digestate is not subject to the seasonal spreading restrictions of raw manure. Additionally, the revenue generated by the renewable energy strengthens the foundation of the business, supports the significant number of associated jobs and helps augment the broader local economy. (Core Strategy Policies CS5, CS11)

7.3 In terms of other environmental and amenity impacts the applicant has demonstrated that the development would be well screened from Moreton Corbet Castle due to the large intervening hanger building. Appropriate safeguards have also been built into the design of the scheme to prevent any adverse impacts such as odour or noise. Existing on-site controls would be supplemented by the recommended planning conditions and by stringent controls under the environmental permitting system.

7.4 In terms of renewable energy and climate change the proposals would produce enough renewable electricity to meet the needs of around 4000 homes. This would capture and offset energy from fossil fuels by some 60,000 net tons of CO<sub>2</sub> every year, or 1.2million tonnes over the anticipated 20 year minimum lifetime of the facility. The climate change and renewable energy benefits of the scheme are significant material considerations. The NPPF advises that where renewable energy development can be accommodated without adverse impact it should be supported (NPPF s98, Core Strategy key objective 9, SAMDev Policy MD8).

7.5 It is concluded on balance that the proposals can be accepted in relation to relevant development plan policies, guidance and other local considerations, subject to the

recommended conditions.

## 8. RISK MANAGEMENT AND OPPORTUNITIES APPRAISAL

### 8.1 Risk Management

#### 8.1.1 There are two principal risks associated with this recommendation as follows:

- As with any planning decision the applicant has a right of appeal if they disagree with the decision and/or the imposition of conditions. Costs can be awarded irrespective of the mechanism for hearing the appeal, i.e. written representations, hearing or inquiry.
- The decision may be challenged by way of a Judicial Review by a third party. The courts become involved when there is a misinterpretation or misapplication of policy or some breach of the rules of procedure or the principles of natural justice. However their role is to review the way the authorities reach decisions, rather than to make a decision on the planning issues themselves, although they will interfere where the decision is so unreasonable as to be irrational or perverse. Therefore they are concerned with the legality of the decision, not its planning merits. A challenge by way of Judicial Review must be made a) promptly and b) in any event not later than three months after the grounds to make the claim first arose.

Both of these risks need to be balanced against the risk of not proceeding to determine the application. In this scenario there is also a right of appeal against non-determination for application for which costs can also be awarded.

### 8.2 Human Rights

#### 8.2.1 Article 8 give the right to respect for private and family life and First Protocol Article 1 allows for the peaceful enjoyment of possessions. These have to be balanced against the rights and freedoms of others and the orderly development of the County in the interests of the Community. First Protocol Article 1 requires that the desires of landowners must be balanced against the impact on residents. This legislation has been taken into account in arriving at the above recommendation.

### 8.3 Equalities

#### 8.3.1 The concern of planning law is to regulate the use of land in the interests of the public at large, rather than those of any particular group. Equality will be one of a number of 'relevant considerations' that need to be weighed in Planning Committee members' minds under section 70(2) of the Town and Country Planning Act 1970.

### 8.4 Financial Implications

#### 8.4.1 There are likely financial implications of the decision and/or imposition of conditions if challenged by a planning appeal or judicial review. The costs of defending any decision will be met by the authority and will vary dependant on the scale and nature of the proposal. Local financial considerations are capable of being taken into account when determining this planning application – in so far as they are material to the application. The weight given to this issue is a matter for the decision maker.

## 9. BACKGROUND

## RELEVANT PLANNING POLICIES

### Central Government Guidance:

#### 9.1 National Planning Policy Framework (NPPF) (DCLG – July 2011)

##### 9.1.1 The National Planning Policy Framework (NPPF) supports the transition to a low carbon economy in a changing climate, for instance, by the development of renewable energy (s17). To help increase the use and supply of renewable and low-carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low-carbon sources. They should:

- have a positive strategy to promote energy from renewable and low-carbon sources, including deep geothermal energy;
- design their policies to maximise renewable and low-carbon energy development while ensuring that adverse impacts are addressed satisfactorily;
- consider identifying suitable areas for renewable and low-carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources;
- support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and
- identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers (s97).

##### 9.1.2 When determining planning applications, local planning authorities should apply the presumption in favour of sustainable development and:

- not require applicants for energy development to demonstrate the overall need for renewable or low-carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and
- approve the application if its impacts are (or can be made) acceptable. Once opportunity areas for renewable and low-carbon energy have been mapped in plans, local planning authorities should also expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying opportunity areas (s98).

##### 9.1.3 Relevant areas covered by the NPPF include:

- 1. Building a strong, competitive economy;
- 3. Supporting a prosperous rural economy;
- 8. Promoting healthy communities;
- 9. Protecting Green Belt land;
- 10. Meeting the challenge of climate change, flooding and coastal change;
- 11. Conserving and enhancing the natural environment;
- 12. Conserving and enhancing the historic environment;

#### 9.2 Core Strategy:

##### 9.2.1 Policies of relevance to the current proposals include:

- Policy CS5: Countryside and Green Belt;
- Policy CS6: Sustainable Design and Development Principles;
- Policy CS7: Communications and Transport;
- Policy CS13: Economic Development, Enterprise and Employment;
- Policy CS17: Environmental Networks;
- Policy CS18: Sustainable Water Management;
- Policy CS19: Waste Management Infrastructure.

### 9.3 Site Management and Allocation of Development Document (SAMDEV)

#### 9.3.1 Relevant policies are:

- MD2 – Sustainable Design
- MD7b– General Management of Development in the Countryside
- MD8 – Infrastructure Provision
- MD12: The Natural Environment
- MD13: The Historic Environment
- MD14: Waste Management Facilities

#### 9.4 Other relevant considerations:

9.4.1 Sustainable Design Supplementary Planning Document Shropshire Council has a Sustainable Design SPD including a sustainability checklist, which is currently subject to consultation. The document promotes renewable forms of energy as part of a move away from fossil-power generation.

9.4.2 DEFRA's Climate Change Plan 2010 sets out how DEFRA will deal with the challenges of climate change. It refers to anaerobic digestion and states: "Anaerobic Digestion can reduce methane emissions from manures and slurries, whilst at the same time producing renewable energy in the form of biogas and digestate that can be used as fertiliser. The Anaerobic Digestion Implementation Plan published by DEFRA in March 2010, provides a framework for joint action by Government and Industry to drive a major increase in the use of anaerobic digestion."

#### 9.5. RELEVANT PLANNING AND SITE HISTORY:

- PREAPP/10/00241 Potential development REC;
- 15/01240/SCR Proposed anaerobic digester EAN 21st April 2015;
- 15/02839/FUL Construction of an anaerobic digester facility comprising Digester, lagoon, technical building, storage tanks and flare stick PDE.

### 10. ADDITIONAL INFORMATION

#### 10.1 Policies Material To The Determination Of The Application

In determining the Local Planning Authority gave consideration to the policies listed in section 9 of this report.

List of Background Papers: Planning application reference 15/02839/MAW and associated location plan and documents

Cabinet Member (Portfolio Holder) Cllr M. Price; Local Member: Cllr Simon Jones

Appendices: Appendix 1 – Conditions

## **APPENDIX 1**

### Statement of Compliance with Article 31 of the Town and Country Development Management Procedure Order 2012

The authority worked with the applicant in a positive and pro-active manner in order to seek solutions to problems arising in the processing of the planning application. The applicant sought and was provided with pre-application advice by the authority. The submitted scheme, has allowed the identified planning issues to be satisfactorily addressed, subject to the recommended planning conditions.

### **Conditions**

#### COMMENCEMENT OF DEVELOPMENT

- 1a. The development to which this planning permission relates must be begun not later than the expiration of three years from the date of this permission.
- b. Not less than fourteen days prior notice shall be given of the intended date for the commencement of any development under the terms of this permission, including Site preparation and construction works. Such date shall be referred to hereinafter as "the Commencement Date".

Reason: To comply with Section 91(1) of the Town and Country Planning Act 1990 (1a), to define and provide appropriate advance notice of the Commencement Date for the development hereby approved (1b).

#### DEFINITION OF SITE AND DEVELOPMENT

2. This planning permission shall only relate to the area coloured red on the approved 1:1250 scale location plan hereinafter referred to as "the Site".

Reason: To define the area to which this planning permission relates.

3. Except as otherwise provided in the conditions attached to this permission the operations and uses hereby permitted shall be carried out strictly in accordance with the approved scheme comprising:-
  - i. The application form dated 26<sup>th</sup> June 2015 and the accompanying Planning Statement.
  - ii. The documents submitted in support of the application, namely:
    - Appendix 5, Photographs of the site;
    - Appendix 6, Ecology Report;
    - Appendix 7, Heritage Assessment , June 2015, Castlering Archaeology;
    - Appendix 8, Flood Risk Assessment
    - Appendix 9, Site E, Shawbury, Traffic Movements;
    - Letter from E4 Environment to Environment Agency dated 30th June 2006;
    - Drawing No: 4-5865-01 Containment details Rika Biofuels;

- Letter from Clancy Consulting dated 16<sup>th</sup> December 2016 (groundwater);
  - Screening assessment of releases from processes at Shawbury anaerobic digestion plant E4 Environment, 21 July 2016.
- iii. The permitted drawings accompanying the planning application. For the avoidance of doubt these include:
- Location Plan, 1:25,000;
  - Site Location Plan 1508 / PA001;
  - OE1-CAP-00-XX-DR-M-0001-P1 - Plan View Of Anaerobic Digester Plant;
  - OE1-CAP-00-XX-DR-M-0002-P1-1 - Iso View of Buidling layout;
  - OE1-CAP-00-XX-DR-M-0003-P1 - Plan View & Site Layout Of Anaerobic Digester Plant;
  - OE1-CAP-00-XX-DR-M-0004-P1 - Section Views;
  - OE1-CAP-00-XX-DR-M-0005-P1 - Section Views;
  - OE1-CAP-00-XX-DR-M-0006-P1-1 - Isometric View of Plant Layout;
  - OE1-CAP-00-XX-DR-M-0007-P1 - Isometric View of Plant Layout Castle View.

Reason: To define the permitted development.

#### TRAFFIC AND ACCESS

4. No access to or egress from the Site shall take place other than by means of the approved internal track linking to the B5063 Wern Road.

**Reason:** In the interests of highway safety.

5. The site access road and internal circulation areas shall be cleaned as necessary with a tractor mounted brush or other similar device in order to prevent the trafficking of mud onto the public highway.

**Reason:** In the interests of highway safety.

6. Prior to the bringing into use of the facility a traffic management code of conduct scheme shall be submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall be designed to allow the Planning Authority to exercise an appropriate level of control over the delivery and dispatch of heavy goods vehicles from the Site in the interests of highway safety. The submitted scheme shall in particular make provision for the following matters:

- measures for ensuring that the anticipated 75% rate of back-loading of manure deliveries with digestate is achieved in practice;
- maintenance of records of goods vehicle movements to and from the site including back-loading, to be made available to the Local Planning Authority upon prior request;
- measures to ensure that goods vehicles are dispatched individually from the site so as to avoid convoying of vehicles;
- measures to avoid or minimise the dispatch of goods vehicles at peak times for other road traffic such as school opening and closing times;
- measures to ensure that all the developer's goods vehicles used in connection with the Site can be identified by clear markings in the event of any complaints;

- submission of a procedure for investigation and taking appropriate action in the event that any traffic related complaints are received and are subsequently validated by the Local Planning Authority.

Following its approval the scheme shall be implemented in accordance with the approved details.

#### USE OF THE FACILITY AND CONTROL OF TONNAGES

- 7a. The AD process hereby approved shall not use any feedstocks other than poultry manure imported from the developer's own egg production business based at Oaklands Farm, Edstaston unless otherwise first approved in writing by the Local Planning Authority.
- b. The total tonnage of feedstock imported to the facility in any calendar year shall not exceed 55,000 tonnes unless otherwise first approved in writing by the Local Planning Authority. Records of annual tonnages of feedstock imported to the Site shall be maintained and shall made available to the Local Planning Authority upon prior written request.

Reason: To ensure that the development remains within the general levels of activity specified in the planning application in the interests of highway safety and general amenity and to facilitate monitoring of tonnages imported to the anaerobic digestion facility by the Local Planning Authority.

#### NOISE

- 8a. All vehicles and mechanical plant employed at the Site shall be fitted with effective exhaust silencers which shall be maintained in good efficient working order.
- b. All mobile plant based at and operating within the Site shall be fitted with attenuated reversing alarms.

Reason: To minimise the possibility of adverse noise impact from Site operations at the closest receptor locations.

#### PESTS AND VERMIN

- 9a. No delivery of waste to the Site shall occur until a detailed scheme for the control of pests and vermin has been submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall in particular provide for:
- i. measures to reduce the attractiveness of the Site to pests and vermin, including maintenance of secure silage store areas;
  - ii. a timetable for the prompt implementation of appropriate control measures in the event that a pest control problem becomes apparent, with details to be provided to the Local Planning Authority upon implementation of the measures.
- b. Following its approval the Site shall thereafter be managed in accordance with the approved scheme.



Reason: To ensure that appropriate measures are in place to control the possible effects of pests and vermin.

#### ODOUR AND AIR EMISSIONS

- 10a. Prior to the Commencement Date the operator shall submit an odour management scheme for the approval in writing of the Local Planning Authority. The submitted scheme shall be designed to ensure that operations are carried out in such a way that odour is minimised so far as is reasonably practicable and that best practicable means are employed to avoid the creation of a statutory nuisance, including implementation of the following measures:
- i. management of stored feedstock materials to reduce odour emissions;
  - ii. measures to ensure that all personnel recognise the importance of odour reduction and that relevant personnel are aware of how to control odour emissions;
  - iii. ensuring that poultry manure is not imported to the Site via the public highway and site access road other than in covered loads and cattle slurry is not imported other than in tankers.
- b. Following its approval the Site shall thereafter be managed in accordance with the approved scheme.

**Reason:** To reduce the impact on local amenities of odour arising from Site operations.

#### MUD AND DUST CONTROL

11. All yard surfaces and circulation areas within the Site shall be swept as necessary to remove mud / debris and water shall be applied to such areas as appropriate during dry conditions in order to prevent the generation of dust.

**Reason:** To reduce the impact on local amenities and air quality of dust arising from Site operations.

#### HOURS OF OPERATION

- 12a. With the exception of running the generators and normal continuous running of the anaerobic digestion process no operations hereby permitted shall be undertaken at the Site, except during the following hours:

Mondays to Fridays	07.00 to 21.00 hours
Saturdays:	07.00 to 21.00 hours
Sundays / Bank Holidays	08.30 to 18.30 hours

- b. Construction activities involving external works shall be restricted to within the following times:

Monday to Friday: 07:30- 18:00,  
Saturdays: 07.30 - 13:00.

No external construction works shall occur on Sundays or bank holidays.

Reason: To ensure that operational times at the Site are controlled in order to reduce the impact of the development on the local area and amenities (12a). To ensure that the times for external construction works at the Site are controlled in order to reduce the impact of construction works on the local area and amenities (12b).

#### BUILDINGS, STRUCTURES AND PLANT

13. Prior to the Commencement Date the detailed specifications and surface treatments including cladding colour (BS reference) of the anaerobic digester buildings and structures shall be submitted for the approval of the Local Planning Authority. The structures and associated surface treatments shall be constructed in accordance with the approved details.

**Reason:** To ensure a satisfactory standard of construction and in the interests of visual amenity.

14. All buildings, hard surfaces and fencing within and on the boundaries of the Site shall be maintained in an orderly state and fit for purpose, including maintenance of even, pothole free running surfaces in circulation areas for vehicles and plant.

**Reason:** To ensure that the Site is maintained to an acceptable standard in the interests of health and safety and general amenity.

#### LANDSCAPING

15. The sides of the proposed earth bunds shall be grassed over using a suitable seeding mix in the first available seeding season following the completion of the construction works.

Reason: In the interests of visual amenity and to avoid the risk of surface water erosion.

#### ARCHAEOLOGY

16. No development approved by this permission shall commence until the applicant, or their agent or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation (WSI). This written scheme shall be approved in writing by the Local Planning Authority prior to the commencement of works.

Reason: The site is known to hold archaeological interest.

#### COMPLAINTS PROCEDURE

17. The operator shall implement a procedure for dealing with any verifiable amenity complaints relating to the site operations which are received by the Local Planning Authority and notified to the operator. This shall include:
- i. Investigation of the complaint;
  - ii. Reporting the results of the investigation to the Local Planning Authority;
  - iii. Implementation of any remedial actions agreed with the Authority within an agreed timescale.

Reason: To put agreed procedures in place to deal with any verified amenity related complaints which are received during site operation.

## LIGHTING

- 18a. No work shall commence until an external lighting scheme has been submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall include the following details:
- i. hours of use of external lighting,
  - ii. the exact location and nature of any lights;
  - iii. the specification including height any fixed or mobile structures;
  - iv. the intensity of the lights;
  - v. the identification of areas to be illuminated and any measures to prevent light spilling on to areas outside the Site;
  - vi. measures such as shrouding to minimise disturbance through glare.
- b. Following approval of the lighting scheme required under condition 18a external lighting shall be installed in accordance with the approved details.

**Reason:** To ensure a satisfactory standard of lighting for the development, balancing health and safety and security requirements with the visual amenity and ecological considerations.

*Note: The submitted scheme shall be designed to take into account the advice on lighting set out in the Bat Conservation Trust booklet Bats and Lighting in the UK to minimise disturbance to bats, a European Protected Species*

## DRAINAGE

19. Prior to the commencement date a surface water drainage scheme shall be submitted to and approved in writing by the Local Planning Authority. Use of soakaways shall be investigated in the first instance for surface water disposal. Percolation tests and the sizing of the soakaways shall be designed in accordance with BRE Digest 365 to cater for a 1 in 100 year return storm event plus an allowance of 25% for climate change. Full details, calculations, dimensions and location plan of the percolation tests and the proposed soakaways shall be submitted for approval. Surface water shall pass through a silt trap or catchpit prior to entering the soakaway to reduce sediment build up within the soakaway. Should soakaways not be feasible, drainage calculations to limit the discharge rate from the site equivalent to a greenfield runoff rate should be submitted for approval. The attenuation drainage system should be designed so that storm events of up to 1 in 100 year + 25% for climate change will not cause flooding of any property either within the proposed development or any other in the vicinity.

Reason: To ensure that the proposed surface water drainage systems for the site are fully compliant with regulations and are of robust design.

20. The proposed method of foul water sewage disposal shall be identified and submitted for approval, along with details of any agreements with the local water authority and the foul water drainage system should comply with the Building Regulations H2. If main foul sewer is not available for connection, full details, plan and sizing of the proposed septic

tank/ package sewage treatment plant including percolation tests for the drainage field soakaways shall be submitted for approval including the Foul Drainage Assessment Form (FDA1 Form). British Water 'Flows and Loads: 4' should be used to determine the number of persons for the proposed development and the sizing of the septic tank/ package sewage treatment plant and drainage fields should be designed to cater for the correct number of persons and in accordance with the Building Regulations H2. These documents should also be used if other form of treatment on site is proposed.

**Reason:** To ensure that the foul water drainage system complies with the Building Regulations H2.

#### CESSATION OF USE

- 21a. Not less than 2 weeks prior notice in writing shall be provided to the Local Planning Authority of the permanent cessation date for the operations hereby approved, or for any temporary cessation of operations for in excess of one month.
- b. Not less than 6 months prior to the planned date for any permanent decommissioning of the development hereby approved the operator shall submit proposals for decommissioning of the development within an agreed timescale for the approval of the Local Planning Authority. Such plans shall make provision for leaving the site in a condition suitable for future development, with provision to remove all buildings, hardstandings and structures which are not required in connection with the Site's subsequent afteruse.

**Reason:** To ensure that the Site is left in a tidy condition capable of a beneficial afteruse in the event of any permanent decommissioning of the development hereby approved.

#### Informative Notes

##### Drainage:

- i. *A sustainable drainage scheme for the disposal of surface water from the development should be designed and constructed in accordance with the Councils Surface Water Management: Interim Guidance for Developers document. It is available on the councils website at:*  
[www.shropshire.gov.uk/environmental-maintenance-and-enforcement/drainage-andflooding/flood-risk-management-and-the-planning-process](http://www.shropshire.gov.uk/environmental-maintenance-and-enforcement/drainage-andflooding/flood-risk-management-and-the-planning-process)  
*The provisions of the Planning Practice Guidance, in particular Section 21 'Reducing the causes and impacts of flooding', should be followed. Preference should be given to drainage measures which allow rainwater to soakaway naturally. Connection of new surface water drainage systems to existing drains / sewers should only be undertaken as a last resort, if it can be demonstrated that infiltration techniques are not achievable.*
- ii. *As part of the SuDS, the applicant should consider employing measures such as the following:*
- *Water Butts*
  - *Rainwater harvesting system*
  - *Permeable surfacing on any new access, driveway, parking/paved area*
  - *Attenuation*
  - *Greywater recycling system*

- *Green roofs*

*Pollution control:*

- iii. *Tank design should include for an appropriate impermeable liner membrane system to be installed around the concrete digester tank(s) and appropriate leak detection systems to indicate any problems.*

*Heritage:*

- iv. *Historic England has recommended undergrounding of any grid connection due to the potential for impact within a generally open aspect.*

*Ecology:*

- v. *Where possible trenches on the site to which this consent relates should be excavated and closed in the same day to prevent any wildlife becoming trapped. If it is necessary to leave a trench open overnight then a means of escape should be provided in the form of a sloped board, plank or earth ramp. All open trenches should be inspected at the start of each working day to ensure no animal is trapped.*