

Application No: 12/0705W

Location: FORMER FUEL STORAGE DEPOT, TWEMLOW LANE, TWEMLOW,  
CW4 8DS

Proposal: Proposed Anaerobic Digestion and Combined Heat and Power Plant

Applicant: Mr R Brown, C.R.E.S Biogas Ltd

Expiry Date: 13-Jun-2012

#### **SUMMARY**

The NPPF states that in assessing development proposals, local planning authorities should apply the presumption in favour of sustainable development.

The proposal presents a number of benefits in terms of sustainable waste management, driving waste up the waste hierarchy and contributing to renewable energy aspirations as set out in Government and European policy and legislation and in this respect accords with the approach of national planning policy and the Local Plan. The proposal also brings back into use a previously developed site and provides economic benefits in terms of job creation and supporting diversification of rural farming business, with indirect benefits to other local businesses.

However the benefits of the scheme should be balanced against any potential adverse harm created to the local environment and local community. The scheme has the potential to create adverse impacts on respect of air emissions, particularly odour. Given the close proximity of sensitive receptors, it has not been demonstrated that such harm could be controlled and mitigated to an acceptable level. As such the scheme there is potential for significant harm to the amenity of local residents which would conflict with the provisions of both the Local Plan, particularly policy 26 and the NPPW. Insufficient information has also been provided to demonstrate that the proposal would not present adverse impacts on human health which conflicts with policy 12 of Cheshire Replacement Waste Local Plan and the provisions of NPPW. The site also has the potential to be used by breeding birds and insufficient information has been supplied to make an informed assessment of the potential impacts of the proposed development on lapwings and to understand how important the site is for the species. This is contrary to policy 17 of Cheshire Replacement Waste Local Plan and the approach of the NPPW.

**RECOMMENDATION: Refuse**

## **REASON FOR REPORT**

The application has been referred to Strategic Planning Board as the proposal involves a major waste application.

## **DESCRIPTION OF SITE AND CONTEXT**

The application site is the former MOD fuel storage depot on Twemlow Lane, Twemlow, Holmes Chapel. The site comprises of a 0.48 hectare parcel of land bounded to the north by agricultural land, to the south by residential properties, to the east by Goostrey Lane and to the north west by the West Coast railway line beyond which are open agricultural fields. At the south west edge of the site is a gated vehicular access onto Twemlow Lane. A second access is located in the south eastern corner onto Goostrey Lane which is currently fenced off.

The majority of the site is taken up by six partially sunken steel storage tanks historically used for storage of jet fuel. The tanks are approximately 16m in diameter and project 7m above ground. They comprise an inner steel casing surrounded with a concrete outer casing, which are covered in earth and grassed over. A network of underground pipes feed the tanks whilst 1.5m high grassed earth bunds surround the tank area.

The remainder of the site comprises built infrastructure associated with the previous fuel storage activities. This includes the former fuel loading area and access road, fuel loading platforms, manifold pit, above ground storage tanks and interceptors, an electricity substation and transformer, generator building, maintenance shed, office and gate house and building formerly used as a Scout Hall as well as hard standing areas, fences and gates.

The site is bounded to the south by a row of mature trees which provides a degree of visual screening. Further limited small trees and hedgerow aligns the eastern boundary with Goostrey Lane whilst sporadic trees are located on the north western boundary with the railway line.

The closest residential property lies on Goostrey Lane approximately 10m from the southern site boundary. Further properties align Goostrey Lane on its western side, whilst a linear strip of properties is located on the eastern extent of Twemlow Lane, the closest of which is approximately 82m from the site entrance. A cluster of properties are also located directly to the south of the application site, approximately 45m from the southern site boundary.

Further properties lie in the vicinity of the site immediately off A535 and further west along Twemlow Lane. The settlement of Goostrey is located approximately 1.1km from the site. A primary school is located approximately 1km from the north western boundary, separated from the site by the railway line and open agricultural fields.

Public footpath FP3 is located west of the railway line approximately 174m from the site boundary. Footpath FP6 is located to the north east off Goostrey Lane approximately 338m from the site. A Grade II listed building (The Gables) is located approximately 200m to the south of the site on Goostrey Lane. Views to the site can be taken from properties on Twemlow Lane, Goostrey Lane, from the railway line, footpath FP3 and further long distance views can be obtained from some select areas of Goostrey.

## RELEVANT HISTORY

This is a previously developed site which was originally used as a fuel store by the Ministry of Defence. Construction of the fuel storage site began in 1953 and is thought to have been decommissioned during the mid 1990's although the exact date is unclear. The site was used for the storage of Jet A1 fuel as part of the Manchester Airport Pipeline System which ran by pipeline from Stanlow Refinery to the airport and providing a connection to the storage facility at Twemlow. On decommissioning it is understood that the pipelines were purged and all fuels removed. It is understood that one of the buildings on site has previously been used for scout meetings. Planning permission was also granted for a replacement pumping station in 1989.

## DETAILS OF PROPOSAL

The scheme proposes to re-use the six existing fuel storage tanks and pipework to treat waste by anaerobic digestion (AD). Wastes would be delivered into the reception building before being fed via a network of pipes into the steel fuel storage tanks (the digester tanks) where naturally occurring micro organisms breakdown the waste anaerobically under controlled conditions. The biogas released would be used in the CHP on site to generate electricity. The remaining digestate by-product would be exported off site to be used as a fertiliser.

The scheme proposes to import approximately 46,800 tonnes of waste per annum, comprising of approximately 32% cattle slurry (14967 tonnes), 8.6% poultry manure (4024 tonnes), 3.8% maize (1778 tonnes), 4.3% grass (2012 tonnes) and 51.3% food waste (24008 tonnes). The applicant indicates that in the early stages, agricultural waste would solely be used as this is a more stable feedstock to establish the AD process; after which they would build up to the higher levels of food waste proposed. Based on these waste inputs, an estimated 1.15 Megawatts of electricity would be generated, 15% of which would be consumed on site, with the remainder exported to the national grid via the site's existing sub-station which has a capacity of 3 Megawatts.

The scheme proposes the following new infrastructure/built development:

- Reception building

To be located between two steel tanks approximately 21m from the southern site boundary. It would comprise of two interconnecting sections; the first 36.6m by 12.2m with a height of 7.6m and the second 54.9m by 30.5m with a height of 12.2m. The building would be clad in green profiled sheet steel with a grey fibre cement sheet roof, whilst the office space would be a mixture of timber cladding and brickwork. The building would be used as a feed store, office, dry materials storage area, underground slurry store, food waste store and dry solids feeder. A biofilter stack would be situated on the northern extend of the building and would be 12.2m in height, extending approximately 4.6m above the extent of the building at this point.

Along the north west boundary the applicant proposes:

- Two combined heat and power (CHP) units contained in acoustically attenuated housings of approximately 2.5m by 10m with a height of 2.5m. Each has an external flue stack of 13.2m in height.
- A 6.4m high, 12m diameter gas dome with a capacity of 500 cubic metres. It would be double skinned with a green coloured polymer.
- Food waste and liquid waste buffer tank of 7.7m in height; and pasteurisation tank of 6.5m height;
- Surplus gas burner of 4m in height finished in a matt grey colour.

A Digestate storage shed is proposed on the north east boundary. It would be 18.3m by 12.2m with a height of 6.3m, and clad in green profile sheet steel panels.

Along the southern boundary a 3m high acoustic fence and 4 lighting columns are proposed, whilst on the north western boundary a further 2 lighting columns are proposed adjacent to the new AD infrastructure.

The scheme proposes 62 movements (31 in and 31 out) over a 252 day year (excluding for weekends and bank holidays). Cattle slurry and poultry manure would be transported in 11.3t slurry tankers generating 16 movements (8 in and 8 out); maize and grass would be transported in 12t tractor and trailer generating 4 movements (2 in and 2 out); food waste would be transported by 25t HGV generating 8 movements (4 in and 4 out); and exported digestate would be transported by 11.3t slurry tanker generating 14 movements (7 in and 7 out); whilst staff movements would generate 20 movements (10 in and 10 out).

The AD process undertaken in the digester tanks would be a continuous 24 hour operation. The receipt of waste and processing of waste in the reception building would be undertaken during the hours of 0800 to 1800 Monday to Saturday.

#### The anaerobic digestion process

All waste would be delivered into the reception building through fast open/close shutter doors. Inside the building the food and cattle slurry waste is stored in separate concrete tanks or sealed areas with vents to extract odour to the biofilter. The grass/maize would be stored at the applicants farm and fed directly into the dry-solids feeder.

During the process the food waste is mixed with maize and slurries, put through the macerator and fed into the liquids buffer tanks where it is stored for up to 3 days and fed into the digester tanks gradually over a 24 hour period. Inside the digester tank, the substance is mixed and heated to allow the resultant gas to be drawn off. It is retained there for approximately 80 days and then an additional 42 days in the second digester tank, after which it is separated into solid and liquid digestate. Pasteurisation of the digestate is carried out in order to kill bacteria and achieve compliance with Animal By-Product Regulations (ABPR). Once digestate is PAS110 compliant, it is no longer classified as a waste but as a fertiliser which is subject to nitrate vulnerable zone regulations. As such, the liquid digestate would be stored in the remaining steel tanks until appropriate times of year when it can be delivered off

site by slurry tanker and spread on land as a fertiliser. The solid digestate would be stored in the digestate storage building on the northern boundary of the site prior to being exported by tanker.

## **POLICIES**

The Development Plan comprises the Cheshire Replacement Waste Local Plan 2007 (CRWLP) and The Borough of

The relevant development policies are;

***Cheshire Replacement Waste Local Plan (CRWLP)***

***Congleton Borough Council Local Plan (2005)***

***National Planning Policy and Guidance***

National Planning Policy Framework  
National Planning Policy for Waste

## **Other Material Considerations**

The revised EU Waste Framework Directive 2008 (rWFD)  
Government Review of Waste Policy in England 2011 (WPR)  
Waste Management Plan for England 2013  
Cheshire East Waste Management Strategy  
Cheshire East Waste Needs Assessment 2014  
Cheshire East Local Plan Pre-Submission Core Strategy  
AD Strategy and Action Plan (AD Strategy)

## **CONSULTATIONS (External to Planning)**

### **The Strategic Highways and Transport Manager**

The Traffic Statement (TS) assesses the change in traffic generation between the existing use and the proposed use. The approach taken to the TS is considered to be both reasonable and robust.

The document clearly identifies or provides:

1. Local infrastructure issues.
2. Traffic impact in trips and categorises it by material and process for the proposed use.
3. Examines options for access with proposals for regulation and improvement in geometry.
4. Comparisons against the existing use which show betterment in traffic generation for the proposal against the likely traffic generation from the existing use which is still available.
5. Likely approach routes and allocates vehicle trips appropriately against those routes.
6. Proposals to permanently close the existing access onto Goostrey Lane in order to regulate site access and protect turning movements at the: Goostrey Ln/Twemlow Ln/A535 junction.

The Traffic Statement also offers appropriate improvements for access and provides assessment figures for approach vehicle speeds which have determined required visibility splays and those splays are demonstrated as available on a plan appended to the TS. The TS gives a very clear picture of the proposed operation and the Strategic Highways Manager accepts its findings.

It is clear that much of the proposed traffic will be of the same or similar type to the rural farming traffic that already frequents Twemlow Lane and in fact some of the trips to and from the proposed facility already exist on the local highway network. In any event the total number of additional trips is relatively low at some 30 trips per day and this as a maximum as some of the material deliveries to the facility will be seasonal.

In conclusion the Strategic Highways Manager finds that this proposal will not have a material effect on the traffic capacity and operational character of Twemlow Lane and with appropriate conditions and highway legal agreements for the access improvement will be an acceptable proposal to the highway authority. Planning conditions and informatives are recommended as follows:

**Conditions:**

1. Prior to first development the developer will provide a construction specification plan for the proposed access improvements on Twemlow Lane to the approval of the Local Planning Authority.
2. Prior to first development the developer will provide a construction specification plan for the permanent closure of the existing access proposed access on Goostrey Lane to the approval of the Local Planning Authority.
3. Prior to first use the developer will construct to completion the access improvements on Twemlow Lane. This will form part of the off-site highway works.
4. Prior to first use the developer will construct a permanent closure for the existing access off Goostrey Lane. This will form part of the off-site highway works.

**Informative:** Prior to first development the developer will enter into and sign a Section 278 agreement with Cheshire East Council Highway Authority under the Highways Act 1980 in relation to all off-site highway works and to indemnify the Authority against Part 1 Claims.

Response dated 21<sup>st</sup> March concerning objectors submission

Objections have been raised against this development and the reports provided in support of the objection raise concerns and the S.H.M. has been asked by the planning authority to consider the highway report.

The highway consultant has written the report in such a way that it finds all possible angles where concern might be raised against this development proposal however the main points are reviewed in the summary of the report and the S.H.M. response is as follows to the bullets:

- *The sight lines are not proven.* In fact the sight lines are proven and the photographs in the DTPC report actually show this.
- *The design vehicle is considered too small to fully show impacts.* The S.H.M. considers that the design vehicle is sufficient and that the access has sufficient geometry to support necessary turning movements.
- *No accident review has been undertaken for vulnerable road users.* This can be conditioned should permission be granted.
- *The catchment area has not been assessed correctly.* No standards are indicated and the proposal gives a catchment area radius which is accepted. It must be remembered that any permission would control delivery numbers to the site so traffic volumes are controllable.
- *The weight limit has been ignored even though the application is new.* The S.H.M. considers that the previous use would have had HCV access traffic and this site will not be different from that in status.
- *Over-running of the centre-line and verges would create an unsafe environment for other road users.* This situation exists already on Twemlow Lane from access traffic however the accident record on Twemlow Lane is very low and records do not demonstrate an accident record related to this causal factor.

The S.H.M has considered the highway report submitted from DTPC and finds that given the controls available through the planning process regarding related vehicle trips that there are no presented material issues which demonstrate a need to revise opinions on highway grounds for this development proposal.

#### **The Council's Environmental Protection Officer:**

The Environment Agency's odour management team has provided further evidence that raises significant doubts about the proposal's design and location when considering controlling the impact of odour pollution on the immediate locality. We consider the Environment Agency's opinions on process emission control as a high priority. Following this the Environment Agency has concluded that the submitted odour management plan for the Environment Permit (EP) fails satisfy the criteria required to obtain a permit.

Our previous responses had stressed the importance of adequate mitigation measures to avoid the adverse impact of odours on residential amenity. Given this evidence, this department can no longer be satisfied that the public health will not be adversely impacted upon by this proposal. The evidence also implies that there is not the scope for sufficient mitigation to control odours given the close proximity of residential properties to the proposed site. Whilst we recognise that it is the role of the EP to control to release of odours, the planning application should consider the acceptability of the proposed use of land on the surrounding area. **As a result we cannot support approval of this planning application and therefore recommend that this planning application is refused.**

This section has used all reasonable endeavours to recommend the most appropriate measures regarding potential contamination risks. However, this recommendation should not be taken to imply that the land is safe or otherwise suitable for this or any other development.

#### Response of 19<sup>th</sup> December 2012

##### *Noise Assessment*

There are a number of operational noise emitting sources and activities that have the potential to impact upon sensitive receptors in the area: delivery of waste, depositing of waste, movement of waste, pumps, CHP plant and vents.

The noise survey provided appears to consider most of these potential issues and provides calculations for their impacts at the nearest residential receptors on Goostrey Lane and Twemlow Lane respectively.

Reception Building - The assessment originally estimated that the internal noise level in the reception building will be 82dB(A). The updated noise assessment revises this to 92dB(A) but this includes pumps housed in this structure and also details the other predicted noise sources. It is assumed that a 5dB(A) noise attenuation will be provided by a 3 metre high acoustic barrier that is proposed along the southern site boundary.

It is considered that this amount of attenuation to a noise source that is effectively 10 metres high may not be achieved by a 3 metre high barrier. Additionally, it is likely that impact noises could be an issue from the depositing and movement of waste within the reception building and it would appear that these have not been taken into consideration.

The updated noise report states that a 41 dB(A) attenuation could be achieved if the stated cladding is incorporated into the building's design. Given the uncertainties mentioned above we would recommend that noise attenuating cladding of this standard is essential as part of any accepted planning permission for this proposal. The revised design includes an 80 mm cladding and it has since been confirmed that this should achieve the stated noise attenuation. The entrance doors should be acoustic roller shutters and also remain closed at all times except when vehicles are entering or leaving.

CHP plant – The CHP plant would be located at the boundary adjacent to the railway line. The sound power from these emissions has been confirmed since the noise report was completed following concerns about the predicted levels of night noise at residential properties given the currently low background noise levels in the area. The total sound power has now been revised to being 10dB(A) below the original assessment and this has been taken into consideration when setting noise limits in the recommended planning conditions below. It is agreed that significant noise attenuation should be given to residential properties due to the screening provided by the existing storage bunkers and the proposed buildings. The report then calculates that the noise levels will be further attenuated by ground absorption and uses the Calculation of Road Traffic Noise methodology. We do not consider that this is the best method to use and would have recommended the guidance given in BS 5228: Part 1.



Pumps – the report estimates the noise from the expected pumps required for operation. Some will not be required to operate during the night. The revised noise design and noise calculations have re-located the pumps in the reception building. The updated noise assessment and design indicates that significant noise attenuation would be provided by the enclosures around the pumps. It can also be considered as a worse case situation as all pumps would not operate simultaneously.

Transport – It is anticipated that HGVs and tractors pulling trailers or tankers will deliver the waste. The noise from these vehicles has been estimated in the report where the distance from the receptors to the vehicles is represented by the distance to the site entrance. For the receptor on Goostrey Lane this may not represent the worst case location for the noise source which may be in the turning area or weighbridge for example. The proposed acoustic screen will mitigate the impact of these noise sources as would implementing any of the transport management proposals such as back-loading. We would expect that the number of vehicles movements would be controlled by means of planning condition.

#### *Total daytime noise*

The expected daytime noise levels should not cause any adverse impacts if the proposed mitigation and design measures are put in place. This should include cladding for the reception building, the design of the building entrance, controls on the vehicle numbers and the acoustic screen.

#### *Total night time noise*

The estimated night time noise levels at the nearest residential receptors differs slightly from my assessment. The levels are likely to be below those that the WHO guidelines suggest that sleep disturbance is possible. However, the monitoring has shown that existing night time noise levels are very low at receptors near to this site. Given this a BS 4142 assessment may indicate that it is possible that night time noise levels could cause an adverse impact. However, the revised sound power levels given for the CHP plant result in much lower predicted levels at sensitive receptors than originally calculated. We would now consider that the noise mitigation measures are sufficient as to not cause an adverse impact on residential amenity. We would however recommend that noise limits and a monitoring programme to assess compliance are imposed as condition of any planning permission.

#### *Construction noise*

No assessment has been made of the expected construction noise. We would expect conditions limiting the times for construction activities and specific requirements to detail any noisier activities such as piling works or floor floating.

#### *Odour Assessment*

The odour assessment specifies practices and designs to mitigate the release of fugitive odorous emissions in the proposed operation. These will need to be implemented in the form of an odour management plan as part of their planning conditions and Environmental Permit. It is particularly important that the waste reception building is kept under negative pressure and that all air is extracted through the bio filter stack. The reception hall entrance should

remain closed at all times and details of this would need to be provided. Also further details for the transfer and storage of digestates should be stipulated.

The odour assessment uses the AERMOD computer model to estimate ground level concentrations of potentially odorous emissions. The assessment would appear to consider all potential odour sources. The level of annoyance to odours is a very subjective however the assessment uses a cautious approach in its selection of the odour benchmark to compare the modelled results against. The assessment also uses a good practice by modelling 5 years meteorological data and using the worst case odour concentrations. Despite this the modelling of odours is a particularly uncertain process and further risk is added where there are nearby structures such as the reception building and the fact that the benchmarks were set using older generation models that have been shown to predict lower ground level concentrations. This residual uncertainty makes it necessary that, as a precaution, there is a boundary odour control as part of an odour management plan and that there is included a requirement to fully address any odour issues that may arise.

We do not envisage that there will be an issue relating to odour from the silage clamp if managed correctly.

#### *Air Quality*

The assessment of the impact of nitrogen oxide emissions on local sensitive receptors indicates that, due to the small contribution of the emissions and existing low background concentrations, air quality limit values would not be exceeded. The emissions from the stacks would be controlled by the operation's Environmental Permit.

No assessment has been made of the potential impacts of dust emissions from construction or operational activities and the control of these should form part of the planning conditions of any permission.

#### *Lighting*

We would expect that details of any lighting should be submitted and approved prior to approval of any planning permission such that there is no light spillage or glare affecting any off-site location.

**Following on from the above comments and with the exception of contaminated land comments given below, this section recommends that planning permission is granted but that the following recommendations are written as condition of any such planning permission.**

Whilst other legislation exists to restrict the noise impact from construction / demolition activities, this is not adequate to control all construction noise, which may have a detrimental impact on residential amenity in the area. Therefore it is considered appropriate to control this impact at the planning application stage, and the following condition should be applied;

The hours of noise generative\* demolition / construction works taking place during the development (and associated deliveries to the site) shall be restricted to:

Monday – Friday	08:00 to 18:00 hrs
Saturday	09:00 to 14:00 hrs
Sundays and Public Holidays	Nil

*\*For information "Noise Generative" is defined as any works of a construction / demolition nature (including ancillary works such as deliveries) which are likely to generate noise beyond the boundary of the site.*

*Reason: In the interests of residential amenity*

Prior to the development commencing, an Environmental Management Plan shall be submitted and agreed by the planning authority. The plan shall address the environmental impact in respect of air quality and noise on existing residents during the demolition and construction phase. In particular the plan shall show mitigation measures in respect of;

- Noise and disturbance during the construction phase including piling techniques, vibration and noise limits, monitoring methodology, screening, a detailed specification of plant and equipment to be used and construction traffic routes;
- Waste Management: There shall be no burning of materials on site during demolition / construction
- Dust generation caused by construction activities and proposed mitigation methodology.

The Environmental Management Plan above shall be implemented and in force during the construction phase of the development.

*Reason: To reduce the environmental impacts from the site on the local environment*

Due to the potential for noise disturbance to local residents, the development should be subject to the following hours of operation restrictions;

Monday – Friday	0800 hrs	1800 hrs
Saturday	0800 hrs	1300 hrs
With no Sunday or Bank Holiday working		

*Reason: In the interests of residential amenity*

Except in the case of emergency or with the written prior consent of the Local Planning Authority, the free field noise rating level according to BS 4142:1997 from all operational activities (including vehicles) from the site shall not exceed the criteria identified below.

Location	Daytime 08:00hrs to 18:00hrs LAeq 1 hour dB	Night Time 18:00hrs to 08:00hrs LAeq 5 minutes dB
Properties on Goostrey Lane	42	25

Properties on Twemlow Lane	44	24
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*Reason: For the protection of residential amenity.*

No development shall take place until a scheme, for monitoring noise levels arising from the operation of the site, has been submitted to and approved in writing by the Local Planning Authority. The scheme shall provide for:

- (i) Frequency and location of monitoring
- (ii) Details of equipment specification to be used for monitoring.
- (iii) Monitoring during typical working hours with the main items of plant and machinery in operation;
- (iv) Comparison against noise limits detailed above
- (v) Monitoring results to be forwarded to the Local Planning Authority within 14 days of measurement
- (vi) Thereafter the noise monitoring scheme shall be implemented as approved unless otherwise agreed in writing with the Local Planning Authority
- (vii) Additional monitoring to be undertaken at the request of the Local Authority following receipt of justified complaints

*Reason: In the interests of residential amenity*

The recommended noise mitigation measures submitted with this planning application (Ref: Environmental Noise Survey July 2012) are installed and maintained throughout the use of the development. These shall include

- (i) 3 metre high acoustic barrier,
- (ii) reception building acoustic cladding (to give acoustic attenuation of at least  $R_w = 41\text{dB}$ ),
- (iii) reception building acoustic roller shutters
- (iv) the shutter doors to the reception building remaining closed at all times with the exception of allowing vehicles to enter or leave the building
- (v) the maintenance of all existing storage bunkers.

*Reason: In the interests of residential amenity*

Prior to its installation details of the location, height, design, and luminance of any proposed lighting shall be submitted to and approved in writing by the Local Planning Authority. The details shall ensure the lighting is designed to minimise the potential loss of amenity caused by light spillage onto adjoining properties. The lighting shall thereafter be installed and operated in accordance with the approved details.

*Reason: To minimise the nuisance and disturbances to neighbours (and the surrounding area)*

Prior to commencement of operation there shall be submitted to and approved in writing by the Local Planning Authority, a scheme for employing best practicable measures for the control and suppression of dust and odours during the period of operation of the development. The measures approved in the scheme shall be employed throughout the period of operation of the development unless any variation has been approved in writing by the Local Planning Authority.

*Reason: To minimise dust and pollution risk and to protect residential amenity*

The reception building area shall be kept under negative pressure to ensure that no fugitive emissions occur. All odour control equipment shall be maintained in accordance with the manufacturers' recommendations.

*Reason: In the interests of residential amenity with respect to odours*

#### Contaminated Land Comments

No objections raised with regard to contaminated land but it is noted that

- The application area has a history of fuel storage depot, electrical substation and potentially infilled pond use and therefore the land may be contaminated.
- The report submitted in support of the application indicates that there is moderate potential of contamination affecting the development.

As such, and in accordance with the NPPF, conditions are recommended in respect of securing the submission and implementation supplementary phase II investigations prior to development commencing.

#### **Nature Conservation Officer:**

##### Response of 11<sup>th</sup> March 2013

Lapwing are a Biodiversity Action Plan priority species and hence a material consideration. It is advised that the site at Twemlow is unlikely to be considered to be important for this species unless the species was breeding there.

Whilst, there is robust evidence that this species is present on site and there is a possibility that it may be breeding, there is currently no firm evidence to confirm this. Breeding could only be confirmed by means of a detailed survey undertaken throughout the breeding season.

##### Response of 5<sup>th</sup> July 2012

No evidence of great crested newts has been recorded on site during the further amphibian survey reports submitted in respect of the Twemlow site.

I advise that great crested newts are not reasonable likely to be present on site or affected by the proposed development. No further action in respect of this species is required.

#### Barn owl

There is evidence of barn owl activity on site. However the species does not appear to be breeding on site and there were no signs of very recent activity at the time of the last survey.

I advise that proposed development may however potentially result in the disturbance of this roost.

The submitted ecological assessment recommends the timing of the works to mitigate any disturbance of this species and the provision of a barn owl box to compensate for the potential loss of the roost.

I advise that this approach is broadly acceptable; however I recommend that two nest boxes are provided as two boxes would increase the chances of successful breeding occurring in the future. I also recommend that details of the design of the proposed nest boxes and details of their precise location are provided prior to the determination of the application.

#### Badgers

Evidence of this species was recorded from the Tremlow area. The proposed development is unlikely to have a significant direct impact on this species provided the submitted mitigation proposals are implemented.

If planning consent is granted I recommend that the following condition is attached:

*The proposed development to proceed in strict accordance with the recommendations of the submitted Addendum to Protected Species Survey and Site Assessment Report dated 14<sup>th</sup> July 2011.*

*Reason: to safeguard protected species in accordance with PPS9.*

#### Breeding birds

If planning consent is granted standard conditions will be required to safeguard breeding birds.

*Prior to undertaking any works between 1<sup>st</sup> March and 31<sup>st</sup> August in any year, a detailed survey is required to check for nesting birds. Where nests are found in any building, hedgerow, tree or scrub to be removed (or converted or demolished in the case of buildings), a 4m exclusion zone to be left around the nest until breeding is complete. Completion of nesting should be confirmed by a suitably qualified person and a report submitted to the Council.*

*Reason: To safeguard protected species in accordance with PPS9.*

#### Ecological enhancement

The submitted ecological assessment identifies some opportunities for the enhancement of the site's nature conservation value as part of the proposed development in accordance with PPS9. This approach is welcomed.

I recommend that if planning consent is granted these recommendations are secured by means of conditions along the lines of the following:

*Prior to the commencement of development the applicant is to submit a 10 year habitat management plan for approval by the Council. Once agreed the proposed management to be fully implemented..*

*Reason: to secure an ecological enhancement in accordance with PPS9.*

*Bat boxes are to be erected onsite in accordance with paragraph 7.2.2 of the submitted Protected Species Survey and Site assessment Report dated June 2011.*

*Reason: to secure an ecological enhancement in accordance with PPS9.*

#### **The Council's Landscape Officer:**

Consider that the LVIA assessment provides a thorough assessment of the baseline landscape character of the site and surrounding area, the zone of visual influence and an assessment of the landscape impact that the proposals would have. The lux levels, height and location of lighting columns are also considered acceptable.

#### **Heritage Officer:**

##### Impact upon the fabric of the Listed Building

Given the nature of the building, it is possible that HGV movements could, in theory, impact upon the fabric, although this would be exceptionally difficult to prove and then justify in terms of harm. In the absence of such evidence, and having regard to the Operational traffic routing information submitted with the application, it is considered that it would not be reasonable to argue adverse impact upon the fabric of the building that would warrant refusal. The issue of potential impact arising from HGV traffic is discussed below in relation to setting.

##### Impact upon setting of the listed building

The Gables is set some distance away from the site, with intervening land and landscape between. The building was also reconstructed on site in the relatively recent past, according to the owner. Therefore, its setting is not an historic one. Although industrial scale buildings are proposed on the site, the development is likely to be substantially screened or its profile softened by the existing tree belt on the southern boundary. Therefore views from the Gables and its curtilage are unlikely to be adversely affected.

Whilst setting is determined by more than just views to and from the asset, it is unlikely that the activities associated with the new use would worsen the setting compared to the uses that previously took place at the site. The traffic routing information that is provided with the application does not conclusively state that lorries will never use Goostrey Lane, but it states that it is considered **highly unlikely**. If practicable, as a safeguard, it is suggested that a condition be imposed requiring that HGVs associated with the use do not use Goostrey Lane.

With respect to lighting, the planning statement identifies that this will be kept to a minimum, inward directed and limited to 5 metre poles. The Design and Access Statement suggests a planning condition. This is required to ensure this aspect is satisfactorily controlled.

The planning statement also advises that the electricity generation at the site can be accommodated by the existing substation and transmission network without need for further transmission lines. The proposal is for combined heat and power plant. Whilst the Planning

and design and Access Statement refers to the electricity generated, there is no reference to the heat distribution.

### Design considerations

Whilst it is acknowledged that this is in essence an industrial site, it does not mean that some consideration should be given to both appearance and scale of the buildings and associated plant. Although the site is relatively well screened from the south, it will be visible from the east from Goostrey Lane and from the railway. Therefore consideration should be given to ways to minimise its height and in consideration of its materiality and colour to soften its appearance and better integrate it into its wider rural setting. For example, could the reception building have a more architectural character with perhaps a lower curved roof (or a double apex) with lower elements designed as living roofs to supplement the landscape/ecology of the site and a more sympathetic cladding (such as using recycled timber?). There are examples of utilitarian buildings, used for comparable processes (such as water treatment plants) where effort has been expended to elevate design quality. The CABI library includes a few examples.

Ideally the building should also express the green credentials of the use in its design and performance.

The infill boundary on Goostrey Lane should be hedging not as timber fence and the acoustic fencing should be set within the site and screened from the south by the existing landscaping on this boundary.

### Conclusions

It is considered that there are no justifiable grounds to oppose the application purely in respect impact upon the heritage asset, but it is suggested that specific conditions re: lighting, and if practicable, HGV restriction upon Goostrey Lane be attached as a safeguard. The tree belt on the southern boundary also needs to be secured/reinforced, ideally reducing the width of the access/hard standing to prevent impinging on the landscaping on this edge and by siting acoustic fencing on the northern side of the tree belt.

In respect to design, the mass of the building could be reduced by altering the roof form (such as a soft curved roof or double apex) and the materiality of the buildings could be improved. In terms of sustainable building design, it is an opportunity for the building to express the sustainability of the use it relates to.

### **The Environment Agency:**

#### Response dated 8<sup>th</sup> July 2014

We object to the development as submitted as it is likely that the proposed anaerobic digestion and combined heat and power plant will not receive a permit under the Environmental Permitting Regulations in this location.

#### *Reason*

The odour management plan and subsequent versions have not satisfied the Agency that this facility will be able to control odour emissions. The environmental impact of the proposed development in this location cannot be satisfactorily mitigated in this location due to its impact



on sensitive receptors. This is supported by Schedule 5 Part 1 paragraph 13 of the Environmental Permitting Regulations

Response: 15<sup>th</sup> February 2013

Further to the submission of the Odour Management Plan dated 18<sup>th</sup> June 2012, a meeting was held with Cheshire East Council and our technical specialist colleagues on 15<sup>th</sup> January 2013 to discuss these details in relation to the above planning application. In light of this submission and subsequent discussions we would like to amend our previous response dated 29<sup>th</sup> March 2012.

The Environment Agency objects to the application and recommends refusal for the following reasons:

We have reviewed the Odour Management Plan (OMP) submitted by the applicant and we conclude that the applicant has failed to demonstrate that controls at the site can be implemented to a standard which would prevent significant pollution for nearby residents.

The OMP is deficient in a number of areas as indicated in a report written by the Environment Agency's odour management team, copy attached.

Based on the information submitted to date with the Environmental Permit application we would be mindful to refuse the permit. The applicant will need to provide further evidence to demonstrate that odour can be adequately controlled in order to meet the requirements of the planning and environmental permitting regulations.

Response to concern raised by objectors regarding corrosiveness of steel tanks dated 14<sup>th</sup> May 2012.

Based on the information provided, we would expect the operator to apply for an Environmental Permit and that as part of the determination we would consider any risk posed by the use of the underground tanks and use the controls available through the permit to ensure that there is no risk to the Environment, Human Health or the local amenities.

The applicant appears to have demonstrated that the storage tanks are suitable for the storage of slurry. The waste will be stored in a steel tank, within a concrete bund which in turn is within an earth bund that runs around all the tanks at the site.

Silage, Slurry and Agricultural Fuel Oil regulations (SSAFO) says the requirements that apply to slurry stores and their system(s) must be impermeable, protected against corrosion and constructed in accordance with BS5502: Part 50 1993 and must be regularly maintained. The operator would have to demonstrate that they meet this requirement. This process is used widely by the farming community.

We feel the site at present has the capability to prevent any fugitive emissions from the site. More detail may be required from the applicant at the permitting stage.

Initial response dated 29<sup>th</sup> March 2012

The Environment Agency has no objection in principle to the proposed development but requests that any approval includes the following planning conditions.

**Condition**

Development shall not begin until a surface water drainage scheme for the site, based on sustainable drainage principles and an assessment of the hydrological and hydro geological context of the development, has been submitted to and approved in writing by the local planning authority. 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, to improve and protect water quality, improve habitat and amenity.

**Condition**

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

**Reason**

To prevent pollution of the water environment.

The application form indicates that foul drainage is to be directed to a package treatment plant, but no further details have been supplied, including where the effluent from the package treatment plant will ultimately discharge to.

Additionally the FRA indicates that soakaways may be used to dispose of surface water in addition to rainwater harvesting. If this is the case, it will need to be ensured that the water undergoes sufficient treatment prior to discharge to ground in accordance with the following guidance:

- PPS25 page 33 Annex F
- PPS25 Practice Guide
- CIRIA C522 document Sustainable Drainage Systems-design manual for England and Wales
- CIRIA C697 document SUDS manual
- the Interim Code of Practice for Sustainable Drainage Systems. The Interim Code of Practice provides advice on design, adoption and maintenance issues and a full overview of other technical guidance on SUDS.

**Health and Safety Executive**

Response dated 15<sup>th</sup> February 2013

A concern from our perspective, and one that you, in your capacity as Hazardous Substances Authority, should pursue, is whether or not the site needs to apply for Hazardous Substances

Consent. There is the possibility that a site such as this may store, or process, or produce sufficient quantities of dangerous substances as to need Consent. Consideration will also need to be given to the 'aggregation rules'.

**Jodrell Bank:**

No comments received

**Natural England:**

The protected species survey has identified that the following European protected species may be affected by this application: Bats and Great Crested Newts. For bats we note that the application is not within/close to a SSSI or SAC notified for bats. The survey report highlights that there are suitable features for roosting within the application site (eg buildings, trees or other structures) that are to be impacted by the proposal.). Detailed visual inspections (internal and external where appropriate) have not been undertaken and no evidence of a roost was found and the application does not involve a medium or high risk building as defined in our standing advice.

For great crested newts, we advise that the application is not within/close to a SSSI or SAC notified for great crested newts. There are suitable features on the application site for newts (for example ponds, hibernation sites, foraging habitat, commuting corridors following a Habitat Suitability Index (HSI) survey) and detailed newt surveys have not been carried out at the right time of year and using sufficient survey techniques and effort. We advise that the further surveys are required in accordance with the Great crested newt mitigation guidelines. If it is not provided, then the application should be refused.

Natural England is broadly satisfied that the mitigation proposals, if implemented, are sufficient to avoid adverse impacts on the local population of Bats and therefore avoid affecting favourable conservation status. It is for the local planning authority to establish whether the proposed development is likely to offend against Article 12(1) of the Habitats Directive. If this is the case then the planning authority should consider whether the proposal would be likely to be granted a licence. Natural England is unable to provide advice on individual cases until licence applications are received since these applications generally involve a much greater level of detail than is provided in planning applications. We have however produced guidance on the high-level principles we apply when considering licence applications. It should also be noted that the advice given at this stage by Natural England is not a guarantee that we will be able to issue a licence, since this will depend on the specific detail of the scheme submitted to us as part of the licence application.

**Cheshire Wildlife Trust:**

We have the following observations:

1. The application was accompanied by a Protected Species Survey and Site Assessment Report by Val Cooper MIEEM. The report is based on the results of a single day's survey of the site carried out on 31<sup>st</sup> May 2011.
2. The PS Survey and Site Assessment have been carried out by suitably-qualified persons to an acceptable methodology and level of detail (allowing for further survey work – see below).

3. CWT would have preferred to see a Phase 1 Habitat Map drawn up to accompany the Report, but the marked-up aerial photograph gives a fairly good impression of the habitats present on the site.
4. CWT agrees with the Report's Conclusions and Assessment of Potential Impacts, except with regard to Great Crested Newts (GCN) where we concur with Natural England's conclusion that further survey work is required.
5. Recommendations and Mitigation

**Site habitat.** CWT agrees with the objectives of the proposed Habitat Management Plan (HMP). In particular the HMP should concentrate on providing good foraging habitat for owls, bats and GCNs by retaining and managing the rough grassland for these species. The HMP should include a requirement for periodical monitoring of the site. The HMP should be submitted for written approval by CEC, prior to the commencement of operations on site.

**Bats.** CWT agrees with the recommendations for impact avoidance and the provision of bat boxes described in paragraph 7.2.2.

**Great Crested Newts.** Refer to Natural England's guidance.

**Barn owls.** CWT agrees with the need for a barn owl survey prior to starting work on Structure S4. In mitigation for the loss of the roosting site, and in order to encourage barn owls to breed on site, CWT recommends the installation of not one (as recommended by Val Cooper) but **two** barn owl boxes on site, in accordance with the following guidelines published on the RSPB website:

*'Exterior barn owl nest boxes can be fixed to tree, (or on poles) or to the outside of buildings. Where possible, they should face onto grassland and be reasonably conspicuous with an open flight path to them. They should not face into the prevailing wind.'*

*Although barn owl nests are usually well spaced out, placing boxes in pairs, from twenty to a few hundred metres apart, will provide a pair with roosting as well as nesting sites. The male and female roost separately, and some pairs use different boxes in those good years when they can have two broods.'*

**Nesting birds.** CWT agrees with the recommendations and with the proposed enhancement, which is the installation of at least 6 passerine nest boxes (in addition to those provided for barn owls).

**Badgers.** CWT agrees with the recommendations to avoid disturbance and impacts from construction activity and to provide fencing and gates on the western boundary (all as described in Section 6.2.1 of Addendum 2011(12)/VC/12/ADD).

6. If planning permission is granted for this development, the recommendations for mitigation and enhancement referred to above should be enshrined in a series of appropriately-worded Conditions attached to the consent.

#### **Network Rail:**

Response dated 29<sup>th</sup> March 2012

No objection but makes the following comments. There is a Network Rail bridge structure at Twemlow Lane (eastings 377860 / northings 368858). It has a 40t capacity. The applicant is to confirm that any proposed vehicles using the bridge will not have axles weights in excess

of 11.5ton. If this is the case then Network Rail is satisfied for the proposal to continue. However, should there be issues with the HGVs then Network Rail would be concerned about the potential for the HGVs to impact upon the proposal. We would therefore request that if this is the case then the applicant will be required to either provide an alternative route to the site eliminating the need to use Twemlow Lane bridge or the applicant will be required to provide, at their expense, bridge protection measures, subject to the approval of Network Rail.

Conditions concerning protection of access to the railway line, restriction of tree planting on the railway line, drainage arrangements, security, lighting, restriction on other activities by the railway line are requested; and a series of advisory notes are provided.

**Manchester Airport** the proposed development has been examined from an aerodrome safeguarding aspect and does not conflict with any safeguarding criteria. Accordingly, Manchester Airport has no safeguarding objections to the proposal.

## **VIEWS OF THE PARISH / TOWN COUNCIL**

### Cranage, Somerford and Twemlow Parish Councils

In its refusal dated 04 July 2014 of an environmental permit to Cres Biogas Ltd, the Environment Agency stated, "The odour management plan submitted with the application and subsequent versions have not satisfied the agency that this facility will be able to control odour emissions". It explained that the facility would not be able to comply with the condition on odour which any EA permit would stipulate - i.e. the site is too close to homes.

The Parish Council has therefore revisited its position in connection with the application, and, at its meeting on 22 September, unanimously resolved that "This Parish Council will not support this application until it gets support from the Environment Agency.

### Goostrey Parish Council

Goostrey Parish Council objects because despite various amendments to the application the applicant has not demonstrated to the satisfaction of the Environment Agency that the proposed plant can be operated in accordance with the required environmental permit. This is confirmed in the EA letter of the 14th July to Ms Emma Williams.

## **OTHER REPRESENTATIONS**

At the time of writing in excess of 650 letters of objection; along with a petition with 149 signatures has been received raising the following issues:

- Not an appropriate land use in a rural area in open countryside and given close proximity to sensitive receptors; should be located on industrial estate
- Significant adverse impact on amenity of local residents, schools, local businesses and users of the rural area with regards to noise and vibration, dust, air quality and traffic impacts and hours of operation
- Potential for adverse impact on Jodrell Bank not considered

- Health and safety concerns particularly risk of explosion/fire; and impacts on health arising from loss of process control especially with regards to air quality emissions and potential for spread of disease and release of toxins
- Concerns from technical consultees regarding health and air quality impacts are a significant concern
- Impacts of odour and bioaerosols from the facility, particularly due to loss of process control
- Potential for vermin and flies to sensitive receptors
- Increases noise and disturbance
- Nature and volume of traffic not acceptable on local rural roads which are narrow, unsuitable for nature of traffic and cannot accommodate large HGVs. Scheme should be supported by a Transport Assessment.
- Railway road bridge is unsuitable for HGVs proposed and the potential signals proposed would worsen the situation
- Increased highway safety to vulnerable road users from HGVs, especially given that local roads are used by local cycling clubs for training/racing, and for running, horse riding, dog walking.
- Proposed access is inadequate.
- Concerns over technical competence of operator and ability to control processes and by-products/residues, risk of process failure and subsequent pollution/harm to local environment, nature conservation assets and public health as a result
- Risk of flooding from process failure; concerns over impacts to water resources
- Note environmental/health problems of process failure from other AD facilities
- Should be a separation buffer from sensitive receptors as adopted by other countries and Environment Agency
- Risk of disease and cross contamination
- Harm to local livestock and farming businesses
- Impacts of light pollution and visual impacts
- Potential reduction to viability of local rural businesses
- Inconsistencies in the application in how digestate will be exported

- Impacts to safe operation of railway resulting from process failure
- Scope of technical assessments is considered inadequate, includes missing or incorrect information and inconsistencies; as such assessment/conclusions flawed.
- use of the site as a fuel storage depot has been abandoned. No weight can be given to the proposed fallback position in considering the planning merits of the scheme.
- Structural/engineering concerns over site infrastructure and concern over impacts on electrical supplies
- AD technology has not been fully investigated yet
- Does not accord with approach national and local plan policy, site is not a preferred site, has not been demonstrated that it is more suitable than other preferred sites and no sequential assessment has been submitted.
- movement of waste is not sustainable
- Site forms part of HS2
- No need demonstrated and scheme is not financially or economically viable
- Size of scheme not viable or sustainable, concern over ability to source feedstock; reliance on food waste not sustainable
- Will set a precedent for further similar uses, and concern over potential for intensification and expansion
- Use of pipes is unfeasible and unviable and concerns private land
- Potential for impacts on ecology including protected species, and such impacts not adequately assessed
- Will lead to reduction in village and school population
- Members should visit a similar facility prior to determination of the scheme.
- Lack of consultation on the scheme
- Mitigation and benefits do not outweigh the harm presented. Limited jobs to be created and inconsistently reported in assessments
- Security and vandalism concerns
- Inadequate landscape screening
- Concern over thermal footprint of the flares stack and the effect of radiated heat on the silos

- Concern over contamination arising from former use and extent of remediation required

The governing body of Goostrey Community Primary School have grave concerns over the proposed development following the conclusions of the Environment Agency.

In excess of 12 letters of support have been submitted raising the following issues:

- Sustainability benefits from the scheme in terms of capturing green house gas from methane and converting it into CO<sub>2</sub>, less need to burn fossil fuels, capturing CO<sub>2</sub> from atmosphere via maize crops grown specifically to feed the digester
- reduction in gaseous odours from slurry
- Food waste not having to go into landfill.
- Helps local farmers comply with NVZ regulations.
- Job creation
- Pre-existing tanks can be recycled.
- Large community building will be built and also be provided with free heating.
- Potential for domestic heating for homes via the hot water produced by the CHP
- Increased security of the derelict site.
- Green energy learning zone for children.
- More reliable electricity for local community
- Higher maintenance for surrounding hedgerows, grass verges and surrounding roads
- Increased habitats for wildlife
- Makes use of previously developed land
- Benefits outweigh minor negative impacts
- Minor increase in traffic will have no impact
- Noise impacts will be minimal
- Technology has safety features to ensure the safe storage, transportation and burning of the bio-methane gas.
- Scheme includes mitigation to control air quality impacts and necessary health and safety features



## OFFICER APPRAISAL

### Principle of development

#### Sustainable waste management principles

There is general Government support for anaerobic digestion (AD) as a means of recovering energy from waste in the 2011 Waste Policy Review (WPR) and the joint Government and Industry Anaerobic Digestion Strategy and Action Plan (AAP). This identifies that there needs to be '*a step change in the way waste is handled*', along with the timely delivery of waste management facilities in order to meet challenging legislative targets and achieve key waste planning objectives.

#### *Waste hierarchy*

One of the key principles in the NPPW (and the European Revised Waste Framework Directive 2008 (rWFD)) is to drive waste management up the waste hierarchy with priority given to prevention of waste; then in the following order of preparing for re-use; recycling; other recovery; and then disposal as a last option. The Waste (England and Wales) Regulations 2011 classifies anaerobic digestion as 'other recovery' which is low on the waste hierarchy, sitting only higher than the final option of landfilling. There are provisions in European legislation to depart from the waste hierarchy for specific waste streams in order to deliver the best environmental outcome; in such circumstances considerations would include technical feasibility and economic viability, protection of resources and the overall environmental, human health, economic and social impacts.

The green and food waste elements of the proposed feedstock could potentially be more sustainably managed higher up the waste hierarchy at a composting facility which falls under 'recycling' tier of the hierarchy. DEFRA guidance, however, identifies that for food waste anaerobic digestion (AD) could be a preferable option to composting and other recovery options because AD produces both biogas, which can be used for energy, and digestate, which can be used instead of fossil fuel-intensive fertilisers. The combination of both outputs means that anaerobic digestion is environmentally preferable to composting. In this regard it is noted that up to 50% of the proposed feedstock is food waste and the considerations of DEFRA are noted.

It is also noted that the Government AAP estimates that, of the 7 million tonnes of food waste currently sent to landfill, 5 million tonnes of food waste could be available to AD. In respect of Cheshire East, in 2012 food waste made up 33% of household waste in the authority which was deposited at landfill. The amount that could be diverted from landfill is estimated between 2,400 – 15,100 tonnes per annum. As such it is considered that the proposal in some respects, whilst not according completely with the NPPW in driving waste up the waste hierarchy, nonetheless presents other sustainability credentials to offset that conflict.

#### Proximity principle and compliance with Policy 5

The site is not identified as a 'preferred' site for waste management development in the CRWLP; however there are provisions for waste development on unallocated sites under Policy 5 of CRWLP, subject to demonstration of:

- I. The preferred sites are either no longer available or are less suitable for the proposed development; or
- II. The proposal would meet a requirement not provided for by the preferred sites; and
- III. The proposed sites are located according to the sequential approach to meeting development needs within the Regional Spatial Strategy.

Four 'Preferred sites' are identified in the CRWLP as being potentially suitable for anaerobic digestion. These are:

- WM5 – Cledford Lane, Middlewich (10km from the application site);
- WM10 – Hurdsfield Industrial Estate, Macclesfield (19km from the site);
- WM13 – Lyme Green, Macclesfield (20km from the site); and
- WM16 – Pym's Lane, Crewe (21km from the site).

The applicant has stated that preferred site WM5 (Cledford Lane, Middlewich) is not available until the by-pass is constructed and a higher end value use for the site is likely to be sought; however no assessment has been made of the suitability of the other preferred sites listed to accord with this policy. A case is made, however, that irrespective of the availability of the preferred sites, none are as suitable for the scheme as the application site; because:

- Preferred sites are not sustainably located in relation to proposed feedstock; whilst 50% (farm slurries, grass and maize) would be produced within 10km of the proposed site.
- Transporting the feedstocks over a long distance to a preferred site would be unsustainable, create highway impacts and undermine the economic viability of the proposals which would conflict with the approach of CRWLP.
- The carbon footprint of the scheme is minimised if the waste is treated as close to its source as possible.
- There are pipelines connections to the site which could be considered for slurry and digestate transportation in the future.
- The site has existing infrastructure without the need for further significant development and the site is large enough to accommodate new development on the existing footprint of the site
- The site is well screened.

These points accord with the broad approach of NPPW and CRWLP in enabling waste to be recovered in line with the principles of proximity and self sufficiency. It is also noted that NPPW and CRWLP seek to steer waste management development to previously developed land, and emphasise that a broad range of locations should be considered; with complementary land uses co-located where possible. It is also recognised that AD facilities have special locational requirements and as such require different consideration to be taken into account compared to other waste development.

### Need

CRWLP requires a demonstration that waste development would contribute to an integrated network of waste management facilities. It also states that where material planning objections outweigh the benefits, need will be considered and if there is no overriding need for the development, permission will not be granted. The Inspector's report into the CRWLP accepts the need for a reasonable scatter of sites across the county for the various means of waste management. In respect of need for waste management facilities, the NPPW states that applicants should only be expected to demonstrate the quantitative or market need for new waste management facilities where proposals are not consistent with an up to date local plan. In such cases waste planning authorities should consider the extent to which the capacity of existing operational facilities would satisfy such need.

The proposal is not located on a Preferred site identified in the CRWLP and does not fully accord with the provisions of Policy 5 of CRWLP; as such a case could be made that the proposal does not accord with the CRWLP. Equally some aspects of the development raise potential adverse impacts which could outweigh other benefits generated by the scheme and a 'need' argument should be presented. In this case no evidence has been provided to demonstrate the quantitative or market need for the scheme which conflicts with national and local plan policy.

In respect of this issue, the Waste Needs Assessment 2014 identifies that 581kt of agricultural waste was produced in 2012 and this is expected to increase to 603kt by 2030; however the vast majority (98%) is anticipated to be managed on-site. With regards to local authority collected waste including food and green waste, the assessment identifies that 41,151 tonnes of green waste was managed by composting in 2013/14, with a further 83,789 collected as residual waste. Forecasts up until 2030 identify that there will still be a requirement for 47,000t of local authority collected waste to be managed by composting/AD and land spread by 2030. Equally for commercial/industrial wastes an estimated 53,000t is expected to be managed by this means in 2030. Overall the assessment forecasts that by 2030 there will be a need to manage a maximum of 91,000tpa by composting/AD/land spread. By contrast, the capacity forecasts for composting are 48,000tpa by 2030 and no predicted capacity for anaerobic digestion in future years to 2030; leaving a potentially insufficient organic recycling capacity of 43,000 tonnes per annum by 2030. Therefore it is considered that this proposal would assist in addressing the identified gap in capacity and contribute to an integrated network of waste management facilities as required by CRWLP.

### **Climate change and renewable energy**

Government policy makes it clear that there is a need to radically increase the use of renewable energy (UK Renewable Energy Strategy 2009). The Energy Bill 2012 sets out a

target to generate 30% of Britain's electricity from renewable sources by 2020; equally the Climate Change Act 2008 requires the reduction of carbon emissions by 80% by 2050 compared to 1990 levels.

National planning policy (NPPF) provides support for moving towards a low carbon economy, with one of the core planning principles encouraging the use of renewable energy. The valuable contribution of even small-scale projects to cutting greenhouse gas emissions is recognised; and '*authorities should approve the application if its impacts are (or can be made) acceptable*' (paragraph 98). Likewise CBLP provides broad support for renewable energy proposals, subject to satisfying a range of criteria including there being no unacceptable impacts on residential amenity or other local land uses, and no unacceptable impacts on health and safety of local residents or the public.

The Government AAP recognises that AD produces both renewable energy and a biofertiliser which together is seen to do more to offset greenhouse gas emissions (GHG) than alternatives such as composting. Equally AD allows methane to be captured avoiding manures and slurries being stored for extended periods during nitrate vulnerable zone restrictions, which would otherwise result in methane emissions. Government AAP estimates that of the 90 million tonnes of manure and slurry produced, 60 million could be diverted to AD which equates to a saving of 386000 tonnes of CO<sub>2</sub> equivalent in GHG emissions.

Whilst the development is in essence a waste management operation, it would nonetheless contribute towards renewable and low carbon energy targets by allowing the exploitation of CHP to offset reliance of fossil fuels and reduce the carbon dioxide that would otherwise be emitted to generate energy. The biogas created through the AD process would be used to generate electricity in a CHP engine which is utilised on the facility and the majority fed into the national grid. Although a relatively small amount of electricity would be generated, in the region of 1.15MW, the applicant estimates that the electricity output from the plant would be sufficient to power approximately 1000 dwellings. It also estimates that when the energy requirements of the plant are taken into account, the net saving of carbon dioxide emissions is around 2400 tonnes of carbon dioxide per year. In view of the benefits derived from the scheme in terms of contributing towards renewable energy targets and reducing climate change impacts, the principle of energy from waste scheme is considered to accord with national and local planning policy, and Government policy on renewable energy.

### **Sustainability.**

The proposed development should be considered against the NPPF. The NPPF identifies that in assessing and determining development proposals, local planning authorities should apply the presumption in favour of sustainable development. The NPPF defines sustainable development and states that there are three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:

***an environmental role*** – *contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy*

***an economic role*** – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;

***a social role*** – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and

*These roles should not be undertaken in isolation, because they are mutually dependent. To achieve sustainable development, economic, social and environmental gains should be sought jointly and simultaneously through the planning system.*

### **Economic sustainability**

The NPPF includes a strong presumption in favour of economic growth. Paragraph 19 states that: *'The Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth. Planning should operate to encourage and not act as an impediment to sustainable growth'*. Likewise the NPPW states that waste planning authorities should (amongst other things) ensure that waste management is considered alongside other spatial planning concerns, such as housing and transport, recognising the positive contribution that waste management can make to the development of sustainable communities.

Any economic benefits of the development need to be balanced against the impacts of continued landfilling on residential amenity and the Environment. In terms of economic benefits the scheme would support the rural economy and generates 12 full time local jobs. The proposal would in principle promote the development and diversification of agricultural business in a way that supports the rural economy (NPPF s28).

### **Environmental and Social Sustainability**

#### **Environmental, Health and Amenity Issues**

##### **Need for a buffer from sensitive receptors**

Objectors consider that a defined exclusionary buffer should be imposed between the development and sensitive receptors over concerns regarding local health, safety and environmental pollution impacts; and a 400m figure is quoted by some objectors. Reference is made to this practice being adopted for some anaerobic digestion schemes in other European countries.

Neither the NPPW nor CRWLP advocate the need for imposing an exclusionary buffer around sensitive receptors. A 250m exclusionary buffer around urban/village settlements is identified as an exclusionary criteria for the identification of potential new landfill/landraise allocations in the CRWLP; but no corresponding exclusionary buffer is stipulated for new built waste management facilities. In addition, the Inspectors Report into the CRWLP states *'the proximity of residential development to sites for built waste management facilities should not be used as an exclusion criterion for identifying new sites given the advances in operational*

*practices and mitigation techniques.*’, and considers that the ‘250m’ figure was ‘*an arbitrary figure with no justification*’ and little weight is given to this.

In addition the Environment Agency (EA), who are responsible for regulating waste management facilities to protect against impacts to the environment and human health, do not impose exclusionary buffers; but instead uses 250m and 400m distance thresholds from waste facilities to determine the correct permitting procedure and requirement for further risk assessment.

Given the approach of planning policy, the individual merits of the scheme should be weighted up against any potential harm generated by its close location to sensitive receptors; in particular whether the scheme can be developed without endangering human health and amenity or harming the environment.

### Odour

CRWLP policy 26 does not permit development where odour from within the site would have an unacceptable impact on the amenity of nearby residents or occupiers or users of nearby buildings or land. Odour considerations include the proximity of sensitive receptors and the extent to which adverse odours can be controlled through the use of appropriate and well-maintained and managed equipment (NPPW). NPPW does emphasise that waste planning authorities should not concern themselves with the control of processes which are a matter for the pollution control authority; and should work on the assumption that the relevant pollution control regime will be properly applied and enforced. The planning and permitting regime are designed to be complimentary and inform each other; and as such regard has been given to the views of the Environment Agency expressed on the corresponding environmental permit application for this development.

A significant level of concern has been expressed by objectors regarding the potential for odour impacts on amenity, particularly given that the AD process involves the decomposition of putrescible waste. Concern is also raised over the ability of the operator to adequately control on-site activities and implement effective pollution management arrangements; and the consequences to the local health and amenity arising from a potential failure of the process operations. Reference is made to incidents at other AD facilities where technical plant failures have led to odour impacts on sensitive receptors.

As waste decomposes biologically through the AD process, odour naturally occurs; however this is normally captured within the sealed anaerobic environment created. The potential for odour impacts to occur is greater during the initial receipt and handling of waste prior to it entering the AD process; storage and handling of digestate and biogas; and following a breakdown in the odour management system.

Local objectors regard these issues as a particular concern given that 51% of the overall waste throughput would be putrescible waste. Equally in view of the close proximity of the reception building to properties there is concern that fugitive emissions could be detrimental to the living conditions of local residents and present unacceptable impacts on amenity. The closest residential receptors would be located approximately 65m from the site boundary with a number of other properties in close proximity including those on Goostrey Lane and Twemlow Lane.

EA guidance states that *'New developments within 250m of an anaerobic digestion activity could mean people being exposed to odours. The severity of this will depend on a number of factors, including the size of the facility, the way it is operated and managed, the nature of the waste it takes and weather conditions'*.

An odour assessment was initially submitted with the application which uses detailed dispersion modelling to predict the potential odour impacts at surrounding receptors, which have been compared to EA benchmark levels for odour annoyance in order to establish any potential for statutory nuisance. The model uses estimations of odour emissions based on odour monitoring data from similar AD plants and technical biofilter design data from its provider. The modelling results identify that no odour concentrations are likely to be significantly below the EA odour benchmark criteria at all sensitive receptor locations identified in the assessment. As such, no significant odour impacts are predicted in the assessment.

It also highlights a number of odour abatement measures that would be incorporated into the scheme to mitigate the release of fugitive odorous emissions; including:

- A two stage digestion process with a lengthy 114 day retention time ensuring minimal residual gas content and complete stabilisation of the digestate.
- Careful gas flow to ensure biogas is not directly released into the atmosphere;
- Delivery and storage of waste into enclosed reception building, and building fitted with negative pressure and biofiltration system;
- Enclosed cattle slurry tank;
- Dewatering and storage of solid digestate undertaken within an enclosed building.

Initial comments of the Environmental Health Officer noted that, whilst the broad methodology adopted was considered acceptable, the modelling of odours is a particularly uncertain process. Further risk is also added where there are nearby structures such as the proposed reception building, and where the benchmarks were set using older generation models that have been shown to predict lower ground level concentrations. Due to this residual uncertainty, the Officer considered that boundary odour control was necessary along with a requirement to fully address any odour issues that may arise. It was also recommended that the identified odour abatement measures were secured by planning condition in the form of an odour management plan; and the waste reception building is kept under negative pressure and all air extracted through the bio filter stack.

Following the initial submission of the odour assessment, planning permission was then granted for residential development on land directly to the south of the site, thereby introducing additional sensitive receptors within close proximity of the site which the initial odour assessment had not taken account of.

In addition, the Environment Agency reviewed the odour management plan submitted as part

of Environmental Permit application and highlighted a number of significant concerns. They noted that:

- Fugitive odour sources were not part of the modelled impact assessment; and both the stack and fugitive releases will depend heavily on the effectiveness of process control.
- AD sites handle and process highly odorous material and any short term fugitive releases can have devastating amenity impacts on nearby receptors.
- Poor levels of process control are responsible for adverse odour impacts and are extremely common; and without sufficient dispersal distances to receptors, intense foul odours arising from process failures can cause significant distress and discomfort. In the case of this site, the potential for dispersal of emissions is minimal given the close proximity of sensitive receptors;
- Good management practices can mitigate this underlying odour potential to a degree, however the mitigation opportunities for high risk materials such as some foods are limited;
- Concern is raised that the tank design may not provide a suitable environment for establishing anaerobic digestion conditions; in particular provide for effective mixing and without this, effective monitoring of the anaerobic process and biogas process is difficult;
- The suggested emission figure from the proposed biofilter appears extremely optimistic and is unlikely to be met in practice;

Overall they conclude that due to the close proximity of receptors, even if the containment features on the building operate effectively, there is still likely to be significant odour pollution at the nearest sensitive receptor due to transient emissions; and measures to consistently mitigate these impacts at this distance are unlikely. This is influenced by the combination of immediate proximity of residents and significant limitations in site infrastructure. Doubts remain about whether the emissions values used in the dispersion model are consistently achievable; and there are assumptions made that fugitive emissions can be consistently controlled to a high standard and that the process itself will always be under control. If either are not true, then the proximity of receptors magnifies the consequences of any failure.

Despite several revisions to the odour assessments by the applicant the Environment Agency remain concerned that odour emissions cannot be controlled and consequently have now refused the environmental permit. They have also raised an objection to this planning application on the basis that the environmental impact of the proposed development in this location cannot be satisfactorily mitigated due to its impact on sensitive receptors.

In view of the evidence provided by the Environment Agency's odour management team, the Environmental Health Officer is no longer satisfied that public health will not be adversely impacted by the development. They consider that the evidence implies that there is not the scope for sufficient mitigation to control odour given the close proximity of residential properties to the proposed site and therefore recommend that permission is refused.



Whilst the provisions of NPPW are noted in that the control of processes fall under the remit of the environmental permit; in this case the regulatory body advise that even with the controls of the permit in place, odour emissions are unlikely to be adequately mitigated to an acceptable level. As such, the permitting regime cannot be relied upon to prevent undue amenity through offensive odour affecting the living conditions of nearby residents.

Planning policy works on the assumption that an appropriate location is chosen for a particular activity, not that pollution control will make any activity acceptable in any given situation. A decision has to be made as to whether the location of this site is appropriate, taking into account its proximity to other users; and the effect of the proposed use on them. In this case, having regard to the views of the consultees, the proposed site layout, waste composition, and close proximity of sensitive receptors, the evidence presented does not demonstrate odour emissions will be adequately controlled to prevent significant loss of amenity to neighbouring sensitive land uses. As such, it is not considered that this represents a suitable land use for this site, having regard to the approach of NPPW and CRWLP; and would conflict with the approach of the NPPW and CRWLP, in particular Policy 26 as the odour from within the site is likely to have an unacceptable impact on the amenity of nearby sensitive receptors.

#### Air emissions

Concern has been expressed over the release of air emissions, particularly from the CHP and release of bioaerosols as waste decomposes, and its impact on amenity and human health. The CRWLP does not permit development which would have an unacceptable impact on the amenity of nearby residents or the occupiers or users of other nearby buildings or land. Equally the NPPW identifies that considerations should include the proximity of sensitive receptors, including ecological as well as human, and the extent to which adverse emissions can be controlled through the use of appropriate and well-maintained and managed equipment and vehicles.

The CHP emissions assessment submitted predicts the air quality impacts associated with the operation of the proposed CHP engines. The potential emissions of carbon monoxide, nitrogen oxides, sulphur dioxide and non methane volatile organic compounds have been modelled and compared to the relevant air quality limits. No exceedence of these limits have been predicted at any sensitive receptor locations, with the value for nitrogen dioxide predicted as insignificant.

The Environmental Health Officer identifies that, due to the small contribution of the emissions and existing low background concentrations, air quality limit values for nitrogen oxide would not be exceeded. It is also noted that the emissions from the stacks would be controlled by the operation's Environmental Permit which is regulated by the Environment Agency.

No assessment has been made of the construction or operational dust impacts; however it is considered that this can be adequately controlled through the imposition of a planning condition requiring a dust mitigation scheme prior to commencement of development.

On this basis the scheme is considered to accord with policy 24 of CRWLP and the approach of the NPPW.

### Noise

Noise concerns are raised by objectors, especially given the 24 hour nature of some activities proposed. Policy 23 of CRWLP identifies that development will not be permitted where it would give rise to unacceptable levels of noise pollution; whilst the NPPW identifies that in respect of noise impacts, considerations will include proximity of sensitive receptors, potential for intermittent and sustained operating noise, particularly for night time working.

In respect of noise associated with the reception building, the Environmental Health Officer was concerned over the ability of the proposed acoustic barrier to achieve sufficient attenuation, and 'impact' noises associated with the depositing and movement of waste. As such the scheme proposes 80mm noise attenuation cladding which can be secured by planning condition; along with the use of acoustic roller shutter doors and doors to remain closed except when in use by vehicles.

Given the low background noise levels in the area, there were initial concerns that there was significant potential for adverse impact upon residential amenity due to night time noise associated with the CHP units. Further design specification details have been provided which the Environmental Health Officer considers acceptable, and it is noted that significant noise attenuation should be provided to sensitive receptors by the existing storage bunkers and the proposed buildings. The proposed pumps have also been relocated inside the reception building and the updated noise assessment identifies that significant noise attenuation would be provided by the enclosures around the pumps. With regard to vehicle movements, it is considered that the proposed acoustic screen will mitigate the impact of these noise sources as would the implementation of transport management proposals.

Overall the Environmental Health Officer considers that the daytime noise levels would not cause any adverse impacts on sensitive receptors; subject to securing design and operational mitigation by planning condition. This includes cladding for the reception building, the design of the building entrance, controls on the vehicle numbers and the erection of an acoustic screen.

With respect to night time noise levels, despite noise monitoring demonstrating that existing night time noise levels are very low at nearby receptors, the revised sound power levels for the CHP plant demonstrate much lower predicted levels at sensitive receptors than originally calculated; and the Environmental Health Officer considers that the noise mitigation measures are sufficient as to not cause an adverse impact on residential amenity. The imposition of noise limits and a monitoring programme are recommended which can be secured by planning condition. Subject to securing the identified mitigation the scheme is considered to accord with the approach of the NPPF and Policy 23 of CRWLP

### **Impact on human health and safety**

Concern has been raised that a number of aspects of the scheme, particularly in relation to the waste composition and any loss of process control, could be harmful to human health and poses a safety risk.

CRWLP policy 12 requires there to be an assessment of the direct, indirect and cumulative impacts of a scheme on a number of considerations including human health. Where there are unacceptable impacts that cannot be mitigated, permission should not be granted. In determining planning applications, the NPPW advises that waste planning authorities should

consider the locational implications of any advice on health from the relevant health bodies; and should avoid carrying out their own detailed assessment of epidemiological and other health studies.

A fear about the impact on the health of local people is often an emotive argument when considering applications such as this. Health and the perception of fear can be material to a decision on the location of proposed waste development, but the detailed consideration of a waste management process and the implications, if any, for human health is the responsibility of the pollution control authorities. Without proof of a causal link or compelling epidemiological research, the degree of weight that can be attributed to this as a material planning consideration is less.

In response to concerns raised by objectors, advice has been sought from the Health Protection Agency Centre for Radiation, Chemical and Environment and Cheshire and Merseyside Health Protection Unit (HPA). They considered the proposals in relation to matters including point source emissions to air, fugitive emissions to air, nuisance issues and local health issues.

The initial views expressed were that overall, provided the site and installations are well managed and maintained and the relevant environmental legislation and regulatory regimes are complied with, there should be no cause for public health concern in the running of the operation. It was advised however that there should be consideration that the proposal may sterilise the vacant land to the south with regard to future use, particularly any housing development. It was also recommended that further consideration be given to the siting of the proposed transfer station given its proximity to sensitive receptors and potential for air pollution and noise impacts.

The HPA subsequently considered the odour technical assessment from the EA, at which point permission had also been granted for housing to the south of the site, thereby introducing further sensitive receptors in close proximity to the scheme. Their updated comments raise concerns over the scope of the air quality assessment in considering emissions from the stacks on CHP engines and biofilter, the auxiliary flare and the pressure release valves; and control of bioaerosols. They also note that the EA have concerns over:

- Whether there are procedures to ensure emissions of bioaerosols to air will not be of concern;
- Whether emission values used in the dispersion model are achievable;
- The close proximity of local receptors to the installation;
- Whether there are appropriate procedures in place to identify failure of the abatement system and whether there are appropriate procedures in place in the case of failure of the biofilter/scrubber system

Consequently HPA remain concerned by these comments and the possibilities of adverse effects on human health from the plant. Equally with regards to fugitive emissions to air, they note that little detail has been provided on the means of mitigating potential fugitive bioaerosols emissions to ensure they are not a public health concern; and therefore express

their concern that there is potential for public health concerns associated with fugitive emissions from the installation. Due to the close proximity of receptors and the comments of the EA they also express their concern over whether there will be appropriate procedures in place to ensure odour nuisance is not an issue. Overall, based on the technical assessment from the EA, the HPA advise that they cannot now conclude that the installation does not present a cause for public health concern.

National planning policy is clear in that the detailed consideration of a waste management process and the implications, if any, for human health is the responsibility of the pollution control authorities. This would be addressed as part of the environmental permit regime, to which HPA would be a consultee. However, the planning authority should also consider whether this is an acceptable use of the land in this location and the NPPW does require regard to be given to the locational implications of any advice on health from the relevant health bodies. Equally regard is given to the requirements of policy 12 in seeking an assessment of the direct, indirect and cumulative impacts of a scheme on human health. No information has been provided by the applicant in respect of the perceived risk to human health by the local community, nor has a health impact assessment or other technical information been undertaken. As such, given all of these factors, it is considered that there is insufficient information to demonstrate that the proposal would not present adverse impacts on human health which conflicts with policy 12 of CRWLP and the approach of the NPPW.

### Safety

There is concern expressed by local residents over health and safety considerations with AD facilities, especially given the location of this facility adjacent to the railway line and sensitive receptors. Concern has been raised over potential for explosions and fire risk due to the nature of process and by-products generated.

The EA have expressed their concerns over loss of process control resulting in a sudden release of biogas which is highly flammable and asphyxiating, and pressure release valves on digesters venting gas to atmosphere. They note that with a site boarded by properties and electrified main railway line, the potential for harmful or fatal accidents may extend beyond the site boundaries. Health and safety considerations are regulated by separate legislation and controlled by other regulatory bodies including the Health and Safety Executive (HSE) who have not raised any objection to the scheme. The HSE note that there is the possibility that the site may store, process, or produce sufficient quantities of dangerous substances and such matters would be assessed and controlled separately under a Hazardous Substance consent. It is also noted that Cheshire Fire and Rescue service have not raised any comments.

With regards to risks to the railway line Network Rail have advised that the council should ensure that the site be controlled by the relevant Codes of Practice, in particular there is a statutory requirement to comply with legislation such as Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) which puts duties on employers and the self-employed to protect people from risks to their safety from fires, explosions and similar events in the workplace, this includes members of the public who may be put at risk by work activity. There is also the Control of Substance Hazardous to Health (COSHH) which imposes strict conditions for the type of environment created by this type of plant.

On the basis of the above, it is considered that such matters would be controlled by other legislation.

#### Other aspects

The potential risk of bacteria and other diseases associated with the process and handling of food waste and digestate is raised as an issue. The consideration of this issue would fall to the Environment Agency under the Environmental Permit, and other regulatory bodies as appropriate including Health and Safety Executive. In regard to the digestate produced, the applicant has advised that this is pasteurised and until satisfied, a veterinary practitioner shall be required to test every load for harmful substances such as salmonella, ecoli etc. Only once achieving a successful test shall the digestate be allowed to be spread on the land.

In respect of concerns raised over the corrosiveness of the slurry in the steel tanks, the applicant has advised that the tanks would be lined with a polyurea in order to protect the steel from corrosion, which are in turn located within a concrete bund, with all tanks enclosed by an earth bund. The EA have confirmed that under the Silage, Slurry and Agricultural Fuel Oil regulations (SSAFO), slurry stores and their system(s) must be impermeable, protected against corrosion and constructed in accordance with BS5502: Part 50 1993 and must be regularly maintained. The operator would have to demonstrate that they meet this requirement as part of the environmental permit.

#### Impact on water resources and land contamination

Policy 18 of CRWLP does not permit development which would have an unacceptable impact on groundwater quality, resources or supply and/or surface water quality or flow; and does not permit an unacceptable risk from flooding.

A flood risk assessment has been submitted which identifies that the site is classified as flood zone 1 being land assessed as having a less than 1 in 1000 annual probability of river or sea flooding. The scheme would increase the size of the impermeable area on the site. However it also includes a sustainable urban drainage system and storage for rainwater harvesting which will ensure the site is capable of dealing with surface water generated from all impermeable areas on site without increasing the risk of surface water flow off site. The flood risk assessment considers the proposal adequate to deal with surface water generated on the site. United Utilities have not raised any objections to the scheme and the Environment Agency consider the scheme acceptable.

In respect of drainage and any potential for pollution to groundwater or nearby watercourses, the external hard surfaced areas of the site drain to an existing treatment facility and then to soak away. The individual tanks which would be used for the AD process comprise an inner steel casing surrounded with a concrete outer casing, which are surrounded by a containment bund. No objections are raised with respect to drainage by the Environment Agency subject to planning conditions securing a surface water drainage scheme and a scheme for foul and surface water disposal.

Equally the contaminated land officer notes that the site has a history of fuel storage depot, electrical substation and potentially infilled pond use and therefore the land may be contaminated; and the report submitted in support of the application indicates that there is moderate potential of contamination affecting the development. As such, and in accordance

with the NPPF, conditions are recommended in respect of securing the submission and implementation supplementary phase II investigations prior to development commencing. As such, subject to securing these measures the scheme would accord with policies 12 and 18 of CRWLP.

### Landscape and Visual Impact

The site lies within the open countryside albeit on a previously developed site and lying adjacent to the infill boundary line of Twemlow Green. The NPPF states that the quality and character of the countryside should be protected. Similarly CNBLP policy PS8 seeks to protect the open countryside from inappropriate development and states that development will only be permitted where it is for specific purposes which include (amongst others) the re-use of existing rural buildings, re-use or redevelopment of existing employment sites, facilities for outdoor sport, recreation and tourism, cemeteries and for other uses of land which preserve the openness of the countryside and maintain or enhance its local character.

The surrounding landscape is rural in character and falls within the Cheshire Landscape Assessment area LFW1: Lower farms and woodland whose characteristic features include low lying gently rolling topography; horsiculture, a mix of dispersed farms and nucleated hamlets/villages and high density woodland.

In terms of visual impacts, the applicants Landscape and Visual Assessment identifies that the short term impacts of the scheme would be of low significance due to the tanks being retrofitted from inside out and the absence of infrastructure such as cranes proposed.

In the longer term, it concludes that there would be a moderate change in view from Twemlow Lane as the reception building would be visible through the site entrance, albeit viewed against the refurbished existing buildings on the site; whilst from the west views remain largely unchanged apart from where there is a gap in the hedgerow which would create a slightly significant impact. The site would be visible from Goostrey Lane past the railway station, albeit intermittently disturbed by vegetation and topography of the road. The assessment identifies that there would be clear views of the site across grassland when travelling south from Goostrey Station. From this viewpoint the roof apex of the proposed digestate storage building will be visible above the existing earth bund wall, albeit viewed against the backdrop of the infrastructure from the fuel storage depot and railway line. The Goostrey Lane entrance to the site is clearly visible from the road in both directions. The impact of the scheme at this point is assessed as moderately beneficial subject to implementation of mitigation screen planting.

The assessment identifies that very few properties would have views of the site, and these would be restricted to upper floor windows which are classed as medium sensitivity. Likewise properties in the Twemlow area are assessed as having very limited views due to screening on the southern boundary of the site and therefore the significance of impact is slight. Due to the proximity to the site, properties along Goostrey Lane are considered slightly more susceptible to views from upper floor windows however views would remain essentially unchanged due to trees along the southern site boundary. The visual impact on the surrounding character of the grade II listed building is also assessed as of slight significance given the existing vegetation.

The Landscape Officer considers that the LVIA assessment provides a thorough assessment of the baseline landscape character of the site and surrounding area, the zone of visual influence and an assessment of the landscape impact that the proposals would have; and the lux levels, height and location of lighting columns are also considered acceptable. Subject to securing conditions in respect of landscape mitigation planting it is considered that the scheme is acceptable and accords with the approach of NPPW and CRWLP.

#### Nature Conservation

Policy 17 of CRWLP does not permit development which would have an unacceptable direct or indirect impact on any nature conservation assets. There are no statutory or non-statutory nature conservation designations on or immediately surrounding the site.

The ecological assessment identified 5 ponds within a 500m radius of the site and there are records of Great Crested Newts within a ditch 220m to the north of the site beyond the railway line. However the presence of the railway line is considered a strong deterrent to newt movement and there are considered to be ponds to the west which are better connected to the ditch. Following the advice of Natural England further protected species surveys were undertaken which do not show any evidence of Great Crested Newts recorded on the site however the ecological assessment concludes there is small potential for the species to be present on site as the site has good foraging habitat. It identifies there to be short term potential for impact which can be addressed through the adoption of reasonable avoidance measures for matters such as site clearance, construction activities and timing of works, which can be secured by planning condition. The Nature Conservation officer advises that this species are not reasonably likely to be affected by the scheme and require no further mitigation.

Otters have been recorded approximately 1.5km south of the site but no signs of water vole or otters on the site and little potential for dispersal to the site as such no potential detrimental impacts on these species are anticipated. None of the buildings were considered suitable for bats and no evidence found of any roosting opportunities on the site. However the surrounding environment, especially vegetation to the south and east is identified as attractive to bats, and recommended for retention. Planning conditions are also recommended in respect of the provision of bat boxes, as per the recommendations of the ecological assessment.

Evidence of barn owls was found in one building on site, however the species does not appear to be breeding and there were no signs of very recent activity on the site. It is considered that the scheme may have the potential to result in the disturbance of the roost. The scheme proposes mitigation in respect of undertaking a barn owl survey prior to undertaking work on the building and provision of a barn owl box to compensate for the potential loss of roost. Whilst this is broadly acceptable, the Nature Conservation Officer recommends two nest boxes are secured by planning condition as additional mitigation, with their design and location to be agreed. Some of the vegetation on site is considered suitable for nesting birds and is proposed to be retained as part of the scheme. Planning conditions are recommended in respect of breeding bird surveys.

Evidence of badgers was recorded in the Twemlow area. The Nature Conservation Officer considers the scheme unlikely to have a significant direct impacts on this species subject to

implementation of the identified mitigation in the ecological assessment which can be secured by planning condition.

Given that the habitat on site is largely to be retained, the ecological assessment identifies the habitat loss as minimal with no anticipated long-term impact. However a long term habitat management plan has been submitted to identify potential for habitat enhancement and provide the sympathetic management of the site for potential Great Crested Newts and breeding birds in the future. Measures include sympathetic management of grassland, marshy areas and ditches, control of invasive species and maintenance of hedgerows. The plan also includes for the development of a wildlife area in the south west corner of the site, to be planted and managed in order to attract wildlife to the site. The habitat management plan covers a period of ten years and would therefore be secured by means of s106 legal agreement for its continued implementation over this period.

An objector has provided evidence of Lapwings on the site which are a Biodiversity Action Plan priority species and hence a material consideration. The Nature Conservation Officer advises that there is a possibility that the species may be breeding there, however there is currently no firm evidence to confirm this and as such a detailed breeding bird survey is required to make an informed assessment of the potential impacts of the proposed development on lapwings and to understand how important the site is for the species. In the absence of any such survey being submitted, it is considered that there is insufficient information to determine whether the development would have an unacceptable direct or indirect impact on any nature conservation assets; which is contrary to policy 17 of CRWLP and the approach of the NPPW.

### **Highways Traffic and Access**

Significant concerns have been expressed by local residents regarding the impact of the scheme on the local highway network, highway safety and amenity. A Traffic Statement (TS) has been submitted which the Highways Officer considers to be both reasonable and robust.

The average weekday traffic levels proposed are 62 movements (31 in and 31 out) over a 252 day year. The TS shows an overall betterment in traffic generation for the proposal against the likely traffic generation from the existing use. The TS identifies likely approach routes and allocates vehicle trips appropriately against those routes. It also makes recommendations for the permanent closure of the existing access onto Goostrey Lane in order to regulate site access and protect turning movements at the Goostrey Ln/Twemlow Ln/A535 junction. It is considered that much of the proposed traffic will be of the same or similar type to the rural farming traffic that already frequents Twemlow Lane and in fact some of the trips to and from the proposed facility already exist on the local highway network. The total number of additional trips is relatively low at some 30 trips per day and this as a maximum as some of the material deliveries to the facility will be seasonal.

Overall the Highways Officer considers that this proposal will not have a material effect on the traffic capacity and operational character of Twemlow Lane and subject to appropriate conditions and highway legal agreements for the access improvement the scheme will be an acceptable. The conditions recommended cover details for the access improvements on Twemlow Lane, details of works to the access on Goostrey Lane and its subsequent implementation.



Specifically in relation to the highway report submitted by objectors, the Highways Officer makes the following points:

- *The sight lines are not proven.* In fact the sight lines are proven and the photographs in the DTPC report actually show this.
- *The design vehicle is considered too small to fully show impacts.* The S.H.M. considers that the design vehicle is sufficient and that the access has sufficient geometry to support necessary turning movements.
- *No accident review has been undertaken for vulnerable road users.* This can be conditioned should permission be granted.
- *The catchment area has not been assessed correctly.* No standards are indicated and the proposal gives a catchment area radius which is accepted. It must be remembered that any permission would control delivery numbers to the site so traffic volumes are controllable.
- *The weight limit has been ignored even though the application is new.* The S.H.M. considers that the previous use would have had HCV access traffic and this site will not be different from that in status.
- *Over-running of the centre-line and verges would create an unsafe environment for other road users.* This situation exists already on Twemlow Lane from access traffic however the accident record on Twemlow Lane is very low and records do not demonstrate an accident record related to this causal factor.

The Highways Officer considers that given the controls available through the planning process regarding related vehicle trips that there are no presented material issues which demonstrate a need to revise opinions on highway grounds for this development proposal.

On the basis of the findings of the TS and the views of the Highways Officer it is considered that the proposal would not generate an unacceptable level of traffic or change in the nature of traffic which would adversely impact on the local highway network or pose an unacceptable impact on road safety or amenity. Equally, as this is a previously developed site, access arrangements are acceptable for the nature volume and movement of traffic proposed. As such the scheme is considered to accord with Policies 12 and 28 of CRWLP.

## **Heritage and Design**

Policy 16 of CRWLP states that there should be no unacceptable impact on listed buildings or their settings. There is a Grade II listed building (The Gables) located approximately 200m to the south of the site on Goostrey Lane. The Conservation Officer advises that whilst there could be potential impacts on the fabric of the listed building associated with the HGV movements, there is no evidence to support this view, and as such it would be difficult to sustain a reason for refusal on the grounds of adverse impact upon the fabric of the building.

In respect of the impact of the setting of the listed building, the building is some distance from the site with intervening land and landscape between. It is also noted that the building has been recently reconstructed and as such its setting is not an historic one. In addition the industrial buildings proposed would be screened or its profile softened by the existing tree belt on the southern boundary. Therefore views from the Gables and its curtilage are unlikely to be adversely affected. The Conservation Officer advises that the activities proposed are unlikely to it worsen the setting when compared to the uses that previously took place at the site. It is noted that the traffic routing information suggests that the HGVs are highly unlikely to use Goostrey Lane and the Conservation Officer suggests HGV routing restriction upon Goostrey Lane be imposed by condition if practicable, however it is considered that this would be difficult to achieve as the deliveries would not be totally under the control of the applicant.

The Conservation Officer recommends that consideration should be given to ways to minimise the appearance and scale of the buildings, plant and lighting. These elements are constrained to a certain degree by the operational requirements of the facility, the infrastructure required and the need for vehicles to be able to enter the building. Planning conditions could be used to secure detailed material samples and lighting specification to be agreed in conjunction with the Conservation Officer to soften its appearance and better integrate it into its wider rural setting. Recommendations are also provided in respect of boundary treatment and use of renewable energy technologies which could also be a requirement by condition on any planning permission. Subject to securing these provisions it is considered that the proposal would confirm with policy 16 of CRWLP and the approach of the NPPF.

## **Conclusions**

Taking account of Paragraph 14 of the NPPF and paragraph 1 of the NPPW there is a presumption in favour of the sustainable development unless there are any adverse impacts that *significantly and demonstrably* outweigh the benefits.

The proposal presents a number of benefits in terms of sustainable waste management, driving waste up the waste hierarchy and contributing to renewable energy aspirations as set out in Government and European policy and legislation and in this respect accords with the approach of national planning policy and the Local Plan. The proposal also brings back into use a previously developed site and provides economic benefits in terms of job creation and supporting diversification of rural farming business, with indirect benefits to other local businesses.

However the benefits of the scheme should be balanced against any potential adverse harm created to the local environment and local community. The scheme has the potential to create adverse impacts on respect of air emissions, particularly odour. Given the close proximity of sensitive receptors, it has not been demonstrated that such harm could be controlled and mitigated to an acceptable level. As such the scheme there is potential for significant harm to the amenity of local residents which would conflict with the provisions of both the Local Plan, particularly policy 26 and the NPPW.

Similarly, insufficient information has been provided to demonstrate that the proposal would not present adverse impacts on human health which conflicts with policy 12 of Cheshire Replacement Waste Local Plan and the provisions of NPPW.

The Nature Conservation Officer also advises that there is a possibility that the site may be used by Lapwings for breeding, and as such a detailed breeding bird survey is required to make an informed assessment of the potential impacts of the proposed development on lapwings and to understand how important the site is for the species. As such there is insufficient information to determine whether the development would have an unacceptable direct or indirect impact on any nature conservation assets; which is contrary to policy 17 of Cheshire Replacement Waste Local Plan and the approach of the NPPW.

## **RECOMMENDATION**

**That the application be REFUSED on the basis of:**

The development does not represent an acceptable land use for this site, having regard to the approach of National Planning Policy for Waste and Cheshire Replacement Waste Local Plan as the odour from within the site is likely to have an unacceptable impact on the amenity of nearby sensitive receptors. As such the proposals conflict with policy 26 of Cheshire Replacement Waste Local Plan, and paragraphs 1 and 5 and 7 of National Planning Policy for Waste.

Insufficient information has been provided to demonstrate that the proposal would not present adverse impacts on human health which conflicts with policy 12 of Cheshire Replacement Waste Local Plan and paragraphs 1 and 5 and 7 of National Planning Policy for Waste

Insufficient information has been provided to demonstrate that the proposal will not have an unacceptable direct or indirect impact on any nature conservation assets; which is contrary to policy 17 of Cheshire Replacement Waste Local Plan and the approach of the National Planning Policy for Waste.

**In the event of any changes being needed to the wording of the Committee's decision (such as to delete, vary or add conditions/informatives/planning obligations or reasons for approval/refusal) prior to the decision being issued, authority be delegated to the Head of Planning (Regulation) to do so in consultation with the Chairman of the Strategic Planning Board, provided that the changes do not exceed the substantive nature of the Committee's decision.**

**Should this application be the subject of an appeal, authority be delegated to the Head of Planning (Regulation) in consultation with the Chairman of the Strategic Planning Board to enter into a planning agreement in accordance with the S106 Town and Country Planning Act to secure the Heads of Terms for a S106 Agreement.**

