



EVENLEY
PARISH COUNCIL

www.evenleypc.org.uk

Acorn Anaerobic Digestion Facility **Astwick Ancient Site, Evenley**

Acorn Bioenergy Ltd has applied to West Northamptonshire Council (WNC) for planning permission to construct and operate an anaerobic digestion (AD) plant on land to the west of the A43, within the parish of Evenley.

Evenley Parish Council has prepared this fact sheet for residents to help inform and to encourage you to put forward your views about this development. Comments should be uploaded on <https://snc.planning-register.co.uk/> reference: WNS/2022/1557/EIA before 20th September.

Acorn would import to the site and treat 97,600 tonnes of animal feedstock (silage, rye maize and grass), poultry litter and dairy slurry per annum. This would undergo anaerobic digestion which produces biogas, which is upgraded on site to biomethane. This would be removed by lorry to a facility in Banbury. It is expected to produce 9,000,000 cubic metres of biogas per annum. As a by-product, it will also produce a soil conditioner and liquid fertiliser (digestate) which can be used on farmland. Liquid CO₂ will also be produced (approx 13,000 tonnes) and transported by lorry to end users.

Where is this plant?

Please view this on our website <http://www.evenleypc.org.uk/home.html>. It is important to see the size and scale of this proposal.

What is anaerobic digestion, how does it work and what is biogas?

Anaerobic digestion is the natural process in which microorganisms break down organic matter in the absence of air. It creates usable products such as biogas and digested material. Anaerobic digesters are industrial built systems (lagoons or tanks) where materials are mixed together to encourage anaerobic digestion. It is a 24 hour operation.

Biogas is the gas produced when bacteria breaks down organic matter in the absence of oxygen. it is made up of mainly methane and carbon dioxide with small amounts of water vapour and hydrogen sulphide.

What is the scale of this plant?

Most plants in the UK process about 35,000 tonnes of material per annum. The UK's biggest is in Staffordshire, on a pre-existing landfill site and processes 120,000 tonnes of food waste. Acorn's plant in Evenley will process 97,600 tonnes on a 15 acre site (that's five times the size of the village green). The digestate tanks would be up to 17.5m high (over 57ft). A double decker bus is 4m (14ft) high. The gas flare stack would be 8.7m high. The straw building would be 67.1m long, 155.1m wide and 7.16m to the ridge. This would make it one of the largest in the UK. To produce enough maize for example to fuel this would require nearly 7,000 acres of farmland, that's the

equivalent of 4840 football pitches and that's 7000 acres taken out of food production. 1,250m³/h of biogas will be removed each day delivered by road tanker to Banbury.

Why so big?

The government no longer wants to incentivise small-scale, private power generation because it has enough renewable energy from solar, wind and existing AD plants. So small and medium-scale digesters are no longer money-making propositions. The government's Green Gas Support Scheme (GGSS) will financially support biomethane to gas production. Biomethane is as pure as natural gas and can be injected straight into the grid or used for transport and the government is keen to encourage its production. This means the GGSS has led to an upturn in development of larger plants capable of producing biomethane for the grid. (Source: Farmers Weekly July 2021)

Will there be more traffic?

Yes. In its application Acorn estimates the following: 'there will be approximately 4090 incoming HGV and tractor trips and 4293 outgoing trips so a total of 9326 HGV/tractor movements' every year. It breaks this down as thus: '54-62 HGV/Tractor movements a day. Peaking at 134 HGV/Tractor movements in peak periods for two weeks in June and July and September and October.'

Acorn undertook a traffic survey for a week in March when it measured traffic levels. It found that currently there were approximately 85 HGV movements along the B4031 a day. So there would be an annual increase in traffic of approximately 68 per cent and much of this would be slow moving tractors and trailers and HGVs on and around the already congested A43.

What will the operating hours of the plant be?

The plant will be operational 24 hours, seven days a week. It will be staffed 07.00-19.00 Monday to Sunday. 'Except during peak harvest periods when working hours would be extended as necessary. Vehicle movements Monday to Friday 07.00 - 18.00 and Saturday 07.00 - 13.00. 'CO₂ subject to one offtake a day including Sundays.'

'Construction 70 weeks, with 100 onsite workers 7am to 7pm Monday to Friday with reduced hours on Saturday.' (*Acorn Design & Access Statement*)

Will it smell?

Although the anaerobic digester is a closed and controlled process, there is a potential to release highly odoriferous compounds if odour solutions aren't designed in the facility or followed correctly. Acorn has not stated however how it will ensure materials delivered and moved around the site are covered at all times and thereby not cause odour problems (see media examples below).

This is what Acorn states in its application. 'Potential impacts relating to ammonia emissions for the site could not be screened out, therefore detailed assessment has been undertaken. This says: 'A precautionary assessment approach has been adopted assuming that.... This modelling approach is cautionary as it is proposed that the lagoons would be covered, providing a level of containment, which would likely resulting in a reduction in ammonia emissions.'

Media Coverage of Odour Issues from AD Plants

* The UK's largest AD plant is at Cannock Chase, Staffordshire and treats 120,000 tonnes of waste from nearby food producers. In January 2020, a petition of over 1000 signatures called for the plant to be closed because of odour issues. (*Source Express & Star*)

* Warminster Town Council is to contact the Environment Agency after residents living near Bore Hill Farm complained about the 'unpleasant smells' coming from the Malaby Biogas biodigester

plant. Concerned local residents reported that the “unpleasant smell” from the AD biodigester was impacting on their lives during the current hot weather.

Several councillors confirmed their own experience that the smell was unpleasant and could be smelt over a long distance. (Source: *Wiltshire Times*).

* A company in Middlesbrough specialising in anaerobic digestion has been ordered to pay £19,670 for odour pollution. BioConstruct NewEnergy, operating in Imperial Avenue, pleaded guilty at Teesside Magistrates Court to offences which occurred in July 2018. (Source: *Energy Live News*).

* Residents in a Somerset village have said more needs to be done to tackle a "sewage-like smell" coming from a waste plant. Cannington Bio Energy's anaerobic digestion plant was built to process farm waste but, since 2011, has dealt with food from outside the county.

Rene Taylor, who runs Currypool Mill campsite near the plant, said an increase in traffic from the plant had also made life very difficult for her guests. "They are huge tractors with tankers on the back, and the lane is tiny," she added. "When they are moving the digestate into this area every few minutes they are up and down, all day long, from early morning to late at night - just constant. "And the odours can be very, very bad, especially if the wind's in this direction. Even inside the house, you get this sickly odour which is almost like a combination of dog's muck and burnt plastic." (Source: BBC)

How close is it to Evenley residents?

As stated in Acorn's Design and Access Statement Site and Surroundings, point 2...'The effect of the proposed development... would be concentrated within 2km of the site. The village of Evenley population 571 is 1.45km away. RAF Croughton and Astwick Farm Properties are 1.5km away. Residents at Slade Farm are 700m away.' Residents at Barley Mow* are approximately 250m away (Figure 1 Location plan). (*Not mentioned in Acorn's planning application or contacted by Acorn about this proposal).

Will there be a problem with pests?

'The site manager is responsible..... for ensuring that nuisances and hazards arising from the facilities due to pests are minimised'.

How many people will the plant employ?

Up to five people. During the 70 weeks of construction of the plant there are expected to be 100 workers onsite.

How does this fit in with WNC's waste and mineral local plan?

The following statements highlight where Acorn's application does not meet WNC's Waste and Mineral Local Plan. For more clarity see the full document on www.evenleypc.org.uk

Evenley is not an industrial location.

Evenley is a rural community. The AD would be separating out facilities not integrating it with other waste management activities.

Evenley is not in WNC's designated area of growth.

Evenley is not in North Northamptonshire, the area suggested for this type of waste development.

This AD plant would destroy open countryside as well as an ancient archaeological site.

Evenley is not within the 'Northamptonshire central spine' as proposed in WNC Mineral and Waste Local Plan.

The site at Evenley is not a 'general industrial area'. It is in fact productive arable land.

There is no 'existing employment use' at the greenfield site at Evenley.

Acorn has not demonstrated a need for this facility. Indeed the bio methane produced by this AD plant leaves the county of Northamptonshire for use in Oxfordshire.

The site at Evenley is a greenfield food producing site of archaeological interest. There is currently no demonstrable need for an AD facility at this location.

Evenley is not on the list of locations in Northamptonshire's Waste and Mineral Local Plan Adopted July 2017.

Acorn's facility will be fed with agricultural waste from other counties whilst the energy it creates will be used outside Northamptonshire. This does not fit in with WNC's sustainable waste management plan.

Acorn has not produced a sustainable transport statement.

The site at Evenley is that of the ancient village of Eastwick, which is a huge quilt of stone mounds and banks and foundations. It shows evidence of replanning in medieval times perhaps when the Viking threat from the north faced a communal redesign of villages into nucleated ones.' source Encyclopedia of Evenley, P Scaysbrook.

Whilst Acorn has undertaken a Desk Based Assessment, there is no provision for post-permission works.

Acorn states that the site has a 25 year life. There is no provision for restoration and after-use at all.

There is no provision in Acorn's Design and Access Statement for monitoring.

There is no provision in Acorn's Design and Access Statement for the creation of Local Liaison Groups.

There is no provision in Acorn's Design and Access Statement for the promotion of Sustainable Development.

The site of Evenley does not feature in the 'Key Diagram' in WNC's Mineral and Waste Local Plan.