PLANNING COMMITTEE – 17 January 2017 APPLICATION NO DC/16/4467/FUL

LOCATION

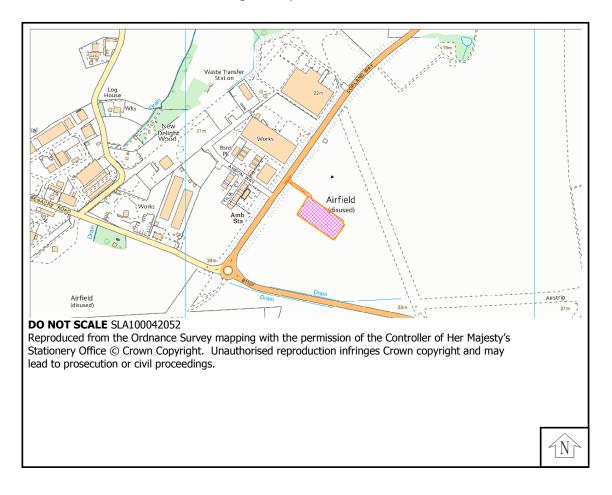
Biocow AD Plant Office Anaerobic Digestion Plant Copland Way Worlingham Suffolk

EXPIRY DATE 3 January 2017 **APPLICATION TYPE** Full Application

APPLICANT Ellough AD Plant Ltd

PARISH Worlingham

PROPOSAL Erection of storage clamps



SUMMARY

1.1 This scheme adds on site storage for the mixing of crops before the gas producing digestion process begins and arises from yield improvements noticed in particular preparation methods. It does not increase the quantity of feedstock stored or the number of vehicle movements outside the site. As such it gives rise to no additional off site impact

in terms of traffic, noise or smell and will have no additional landscape impact once bunds are in place.

1.2 It is brought to Committee because previous applications establishing the digester and lagoon were referred to Committee and while there are no direct immediate residential neighbours and four surrounding parish councils were consulted there is a wider public interest requiring debate.

SITE DESCRIPTION

- 2.1 The location of the proposed clamps stands on previously unused land within the area redlined for the site of the digester. This land was shown as access for lorries to the sealed lagoon storage of the end product of the process. This access is not needed as the material can be pumped within the site to waiting lorries without direct access being needed.
- 2.2 The site stands opposite the established Ellough Industrial Estate on Copland Way. It is opposite the Tobar building, a very large industrial shed and between the already operational digester to the north, the storage lagoon to the east and the site for the approved grain store to the south. The landscape here is characterised as clay upland plateaux, and is farmland originally with the remains of the wartime Ellough airfield, part of which, still operates, but in the main the old airfield runways and taxiways litter the surrounding fields.

PROPOSAL

3.1 To construct two storage clamps 120 x 30 metres each. These are made from standard precast concrete modules and match the existing three clamps of modules on the site.

CONSULTATIONS/COMMENTS

4.1 **Neighbour consultation/representations:** An objection has been received, from an adjacent owner, that site boundary bunding and landscaping is needed. There is objection regarding smell.

Consultees

- 4.2 **Worlingham Parish Council:** The parish council would ask Waveney District Council to consider parishioners concerns about smell and traffic volumes when assessing this planning application.
- 4.3 **Ellough Parish Council:** The Council has no objection to this application.
- 4.4 **WDC Environmental Health Air Pollution** were consulted on the 10 November 2016.
- 4.5 **WDC Environmental Health Contaminated Land:** I have no concerns or comments to make in relation to this application and contaminated land.

- 4.6 **Environment Agency HMIP Pollution Environment Agency Response:** No objection to the proposal, providing the following measures are implemented and secured by way of the planning conditions set out below on any planning permission.
- 4.7 Condition 1: The development 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 should determine how foul water from the silage clamps will be separated from surface water. No discharge of surface water run off shall be made into the surface water drainage system without our prior approval. The scheme shall be implemented as approved.
- 4.8 Reason: To protect and prevent the pollution of the surface water environment off site.
- 4.9 Pollution incidents have arisen at this site in 2015 and April 2016, caused by digestate and/or silage effluent entering the surface water on site and subsequently contaminating the surface water off site. A drainage review of foul and surface water has been undertaken by the applicant and several failures identified. We are awaiting proposed remedial measures and surface water must be contained on site until these onsite drainage issues have been resolved.
- 4.10 Condition 2: If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority. The remediation strategy shall be implemented as approved.
- 4.11 Reason: To protect and prevent the pollution of the groundwater environment.
- 4.12 The geology beneath the application area is Lowestoft Formation diamicton, a Secondary undifferentiated aquifer, which overlies the sands and gravels of the Lowestoft Formation designated as a Secondary A aquifer. The bedrock beneath the site is the Crag Formation, a Principal aquifer. The site is not within a Source Protection Zone and is considered to be in an area of lower environmental sensitivity.
- 4.13 The former land use of the site as an airfield does suggest that there is potential for contamination to be present. However, given the development proposal and the geological/hydrogeological setting the risk to controlled waters is low.
- 4.14 **Suffolk County Archaeological Unit:** This application is located within an area of archaeological potential, recorded in the Suffolk Historic Environment Record. Archaeological evaluation immediately to the north-east and south-east of the proposed development has revealed evidence of activity of probable prehistoric date (WGM 014 and 018). As a result, there is high potential for encountering further archaeological remains at this location. The proposed works would cause significant ground disturbance that has potential to damage any archaeological deposit that exists.
- 4.15 There are no grounds to consider refusal of permission in order to achieve preservation *in situ* of any important heritage assets. In accordance with Paragraph 141 of the National Planning Policy Framework any permission granted should be the subject of a planning

condition to record and advance understanding of the significance of the heritage asset before it is damaged or destroyed.

- 4.16 The following two standard archaeology conditions, used together, are recommended.
- 4.17 1. No development shall take place within the area indicated [the whole site] until the implementation of a programme of archaeological work has been secured, in accordance with a Written Scheme of Investigation which has been submitted to and approved in writing by the Local Planning Authority.

The scheme of investigation shall include an assessment of significance and research questions; and:

- a. The programme and methodology of site investigation and recording
- b. The programme for post investigation assessment
- c. Provision to be made for analysis of the site investigation and recording
- d. Provision to be made for publication and dissemination of the analysis and records of the site investigation
- e. Provision to be made for archive deposition of the analysis and records of the site investigation
- f. Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.
- g. The site investigation shall be completed prior to development, or in such other phased arrangement, as agreed and approved in writing by the Local Planning Authority.
- 4.18 2. No building shall be occupied until the site investigation and post investigation assessment has been completed, submitted to and approved in writing by the Local Planning Authority, in accordance with the programme set out in the Written Scheme of Investigation approved under Condition 1 and the provision made for analysis, publication and dissemination of results and archive deposition.
- 4.19 REASON: To safeguard archaeological assets within the approved development boundary from impacts relating to any groundworks associated with the development scheme and to ensure the proper and timely investigation, recording, reporting and presentation of archaeological assets affected by this development, in accordance with Policy CS 17 of Waveney District Council Core Strategy Development Plan Document (2009) and the National Planning Policy Framework (2012).
- 4.20 INFORMATIVE: The submitted scheme of archaeological investigation shall be in accordance with a brief procured beforehand by the developer from Suffolk County Council Archaeological Service, Conservation Team.
- 4.21 I would be pleased to offer guidance on the archaeological work required and, in our role as advisor to Waveney District Council, the Conservation Team of SCC Archaeological Service will, on request of the applicant, provide a specification for the archaeological investigation. In this case, an archaeological evaluation will be required to establish the potential of the site and decisions on the need for any further investigation (excavation before any groundworks commence and/or monitoring during groundworks) will be made on the basis of the results of the evaluation.

SITE NOTICES

4.22 The following site notices have been displayed:

General Site Notice Reason for site notice: General Site Notice, Date posted

10.11.2016 Expiry date 30.11.2016

RELATED APPLICATIONS

Reference No	Proposal	Decision	Date
DC/14/2634/FUL	digestate storage lagoon.	approved	12.11.2014
DC/11/0670/FUL	anaerobic digestion plant	approved	26.09.2011

PLANNING POLICY

5.1 Relevant planning policies include Development management policies DM02 'Design Principles', DM03 'Low Carbon and Renewable Energy' and DM27 'Protection of Landscape Character'.

PLANNING CONSIDERATIONS

- 6.1 Starting with planning policy, Development Management policy DM03 supports proposals for stand alone energy generation. The District Council is seeking new renewable energy generation capacity to deliver an appropriate contribution towards the UK Government's binding renewable energy target. Therefore targets for Waveney District include: Approximately 30% electricity from renewable sources by 2021. Renewable energy schemes will be permitted where: There are no significant adverse effects or cumulative adverse effects upon the landscape... There are no significant adverse effects on the amenities of nearby residents by way of noise, dust, odour or increases in traffic; and the wider environmental, economic, social and community benefits directly related to the scheme outweigh any potentially significant adverse effects.
- 6.2 The proposal accords with this policy in that it increases the gas yield of the crop by providing space for the undertaking of preparation within the site. Currently the space being used in the existing clamps for this process is limiting on site storage of the feed stock and this has led to some off site storage and trans-shipment creating double handling, which is intrinsically less carbon efficient.
- 6.3 The Area Planning Officer had visited the site for the commissioning open day for the plant on 19th October. At this event visitors were able to appreciate the stages in the operation and judge for themselves regarding odour release, which was minimal. The "feedstock" storage process is almost entirely odour free. The most pungent odour was to be found in the "odourification" process where the pure methane product has the strong smelling additive mixed in, in order that gas leaks should be detectable. This is done in a sealed container, so even this stronger smell is not noticeable in the external environment.
- 6.4 It was explained that a mix of crop including rape plant stems is now being used as feed. These benefit from storage in chopped form with the main crop grown for biogas production. To this end the extra clamps are now being requested, so that the raw unmixed crop can be stored and then stored again in the prepared chopped and mixed

form, requiring the additional clamp space. It seems that the production of bio gas from energy crops is an evolving technology where gas yields are being increased by some experimentation.

- 6.5 The road into the lagoon is removed by the building of the new clamps. The need to extract the spent crop as a fertiliser will remain possible because this can be pumped within the site to a point where lorry access is available.
- 6.6 An email received 24th November 2016 from the applicant further explains the reason for the application:
- 6.7 "Whole sugar beet is brought to the site and stored in the 3 storage clamps (2 of which will be the new ones) and then carted by loading shovel to the processing clamps regularly and daily where it will be chopped up using a root chopper mounted on the rear of a tractor. The existing tractor is the main noise source. The beet chopper is a piece of equipment attached to and driven by the tractor itself and would not generate any noise not already existing at the site or capable of being generated in any of the agricultural fields roundabout the Ellough site.
- 6.8 The chopped beet is then mixed with amounts of the other energy crop feedstocks such as maize (which is chopped on-field as part of the harvest process) and these pre-mixtures are fed into the digesters on demand. Whilst the stored mixed piles are relatively small in comparison to the overall clamp areas, the extra space is required for access in and around the area by vehicles. This process is akin to properly chewing your food before you eat it.
- 6.9 What are the odour implications? The main source of odour would be from the freshly chopped sugar beet. This would be a localised smell akin to chopping fresh root vegetables.
- 6.10 Small piles of chopped sugar beet will be sat in the open air for a maximum of 12 to 24 hours. The site operators are keen that oxidation of the chopped beet does not advance too far as this represents a loss of feedstock potential to them. Also being uncovered if it rains it will leach sugars again vital to the success of the digestion process.
- 6.11 What if any mitigation is employed / needed? The stockpiles of freshly chopped beet are uncovered because of the frequency with which they need to be accessed it would not be practical to keep them sheeted in the same way the storage clamps re-covered. However as stated above there is an economic imperative not to leave the stockpiles sitting for too long therefore keeping the risk of leaching/oxidation of the chopped sugar beet to a minimum and thereby reducing the potential for odour.
- 6.12 As a matter of course the site operators have produced a site odour management plan and through their own Environmental Monitoring System they have mechanisms in place to respond to complaints if they arise. The odour management plan is set out like any risk assessment process with potential odour sources identified, pathways and receptors identified and monitoring regimes put in place to monitor performance regularly and/or if a complaint is received."
- 6.13 An objection has been received, from an adjacent owner, that site boundary bunding and landscaping is needed, and that some of this has not been provided under the aegis of

earlier application, though in fairness the request to revise the layout provides an opportunity to carry out the landscaping to the revised design. There was also comment about smell. Given the explanation, it is clear that decomposition outside the digester is not desirable as it represents a loss of useful gas rather defeating the object of the plant.

- 6.14 Environmental health have been called out frequently since the plant started operation, but then on site, have observed that there is no odour emission and that smells appear to have other sources such as muckspreading.
- 6.15 Worlingham Parish have asked that WDC consider parishioners concerns about smell and traffic volumes when assessing this planning application. The proposal is cited as not increasing traffic outside the site as relating to introducing a preparation stage for the feedstock within the site, to that extent, traffic has been considered and does not alter such as to create a reason to refuse the proposal.
- 6.16 From observation taken by Environmental Health on 51 occasions in 2015 and 2016 and from the open day observations, smells in the locality are not considered to emanate from the bio-digester closed process. There is no reasonable reason to refuse this application. Controls under the Environmental Protection Act continue to exist following planning permission should smell arise as a result of some future failure to operate the plant as intended.
- 6.17 Application DC/15/1875/DRC discharged Archaeological conditions for the lagoon site. Further conditions are however required and the County response recognises that this investigation involved trenches only in the lagoon area and not the land where the clamps will go, (although covered by the red-line on the site plan) and as such archaeology conditions are still required for the specific area where the proposed clamps will be sited.
- 6.18 Drawing 2800/001 of DC/11/0670/FUL for the original plant showed a bund to the clamps constructed as part of that application and condition 3 required a scheme of planting to be agreed and implemented. There has been complaint that this has not been done and the record appears to show this condition is not discharged, however the planting to the south west boundary cannot be enacted if this is approved and an alternative planting to the new south-west clamp boundary needs to be agreed.
- 6.19 Paragraphs 4.8 and 4.9 of the supporting statement for this application, show a bund and planting schedule for this location so no pre-commencement condition is required, but measures are needed to get the earlier condition discharged in regard to the remaining landscaped bunds, as an enforcement item. A discharge of conditions application for condition 3, the landscaping of the original digester has now been received.

CONCLUSION

7.1 This proposal enables a more efficient higher yield operation of the approved digester plant and meets the objectives of the policies cited and the recommendation is for approval with archaeological and ground water protection conditions

RECOMMENDATION

That permission be granted, subject to the following conditions:

 The development hereby permitted shall be begun within a period of three years beginning with the date of this permission.

Reason: In accordance with Section 91 of the Town and Country Planning Act 1990 as amended.

 The development hereby permitted shall be constructed in all respects strictly in accordance with drawings reference 2400/01 received 21st October 2016, for which permission is hereby granted or which are subsequently submitted to and approved in writing by the Local Planning Authority and in compliance with any conditions imposed by the Local Planning Authority.

Reason: To secure a properly planned development.

3. The development 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 should determine how foul water from the silage clamps will be separated from surface water. No discharge of surface water run off shall be made into the surface water drainage system without our prior approval. The scheme shall be implemented as approved.

Reason: To protect and prevent the pollution of the surface water environment off site.

4. If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority. The remediation strategy shall be implemented as approved.

Reason: To protect and prevent the pollution of the groundwater environment.

5. No development shall take place within the area indicated [the whole site] until the implementation of a programme of archaeological work has been secured, in accordance with a Written Scheme of Investigation which has been submitted to and approved in writing by the Local Planning Authority.

The scheme of investigation shall include an assessment of significance and research questions; and:

- a. The programme and methodology of site investigation and recording
- b. The programme for post investigation assessment
- c. Provision to be made for analysis of the site investigation and recording
- d. Provision to be made for publication and dissemination of the analysis and records of the site investigation
- e. Provision to be made for archive deposition of the analysis and records of the site investigation
- f. Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.
- g. The site investigation shall be completed prior to development, or in such other phased arrangement, as agreed and approved in writing by the Local Planning Authority.

- 6. No building shall be occupied until the site investigation and post investigation assessment has been completed, submitted to and approved in writing by the Local Planning Authority, in accordance with the programme set out in the Written Scheme of Investigation approved under Condition 1 and the provision made for analysis, publication and dissemination of results and archive deposition.
- 7. Reason for conditions 5 and 6: To safeguard archaeological assets within the approved development boundary from impacts relating to any groundworks associated with the development scheme and to ensure the proper and timely investigation, recording, reporting and presentation of archaeological assets affected by this development, in accordance with Policy CS 17 of Waveney District Council Core Strategy Development Plan Document (2009) and the National Planning Policy Framework (2012).

BACKGROUND INFORMATION: See application ref: DC/16/4467/FUL at

www.waveney.gov.uk/publicaccess

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