5a 3/10/1598/FP – Farm based Anaerobic Digester at Buttermilk Hall Farm, Baldock Road, Buntingford, SG9 9RH for Hallwick Ltd

<u>Date of Receipt:</u> 03.09.2010 <u>Type:</u> Full - Major

Parish: ASPENDEN, COTTERED

Ward: MUNDENS AND COTTERED

RECOMMENDATION

That planning permission be **GRANTED** subject to the conditions that are set out in the report submitted to the 15 December 2010 meeting of this Committee, which is included as an Appendix to this report.

	(159810FP.KS)
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1.0 Background

- 1.1 Members will recall that this application was considered at the meeting of the committee of 15 December 2010. At that meeting it was decided that a decision on the application be deferred to enable:
 - apparent discrepancies in the dimensions of the proposed buildings and structures as set out in the previous report to be checked;
 - alternative locations for the siting of the proposal to be assessed with a view to ensuring that the visual impact is minimized; and,
 - the technical points raised by the Cottered Parish Council and as set out at para 4.4 of the previous report to be addressed.
- 1.2 The report that was submitted to the 15 December meeting is attached to this as an appendix.
- 1.3 Because Officers were requested specifically to address the matters set out above, only those are dealt with here. Where matters are not addressed here they are covered in the report previously submitted. If Members feel that any issue remains unaddressed or insufficient information is provided in relation to any issue, they are urged to contact Officers prior to the meeting so that information can be provided and further deferral avoided.

2.0 Representations

2.1 No further consultation has been undertaken subsequent to the presentation of this matter to the 15 December meeting of the committee. A representation has been received from a local resident which reminds

Members that a petition against the location of the site which has 239 signatories has been submitted. The resident asks that the issue of the location of the site is debated at the meeting.

3.0 Issues to be addressed

Building Dimensions

3.1 The previously quoted dimensions were:

Digester Tank: Diameter 24m, height 6m Residue Tank: Diameter 30m, height 6m

Technical Building: Footprint 7m x 12m, height 3.5m

Silage Clamp: Area 55m x 111m

3.2 These have been checked against the submitted drawings and the correct dimensions of the buildings are confirmed as:

Digester tank: Diameter 30.4m, height 12.7m Residue Tank: Diameter 33.4m, height 13m

Technical Building: Footprint 22.3m x 17.2m, height 6.4m

Silage Clamp: Area 55m x 111m

Siting

- 3.3 The proposed structures are located at the southern end of the existing operational farm yard area with the silage clamp placed to the east of a hedge boundary adjacent to this area of the farm. The very southern end of this area of the farm contains a small group of trees. North of the tree group, the land within the farm yard is currently generally put to ad hoc storage use mainly for farm equipment.
- 3.4 The applicant points out that the land slopes down from north to south such that this area is approximately 4m below the height of the land at the main road frontage. This difference in height leads to a situation where the highest part of the main structures the tanks and the technical building are no higher than the main barn structures which already exist on the site.
- 3.5 I share the applicants view that the location proposed ensures that the structures are grouped along with the others that are present on the farm. A location to the west would be considerably more prominent, taking the structures outside of the current farm yard envelope and extending the east to west spread of development at the farm and is more likely to be perceived as a harmful visual impact.

3.6 A location to the east is potentially acceptable – this would site the structures behind (to the south) of the residential properties fronting the main road. Indeed, the silage clamp is located in this way. I feel however that the further formalizing a growth in the area of operational activity and the potential for further development to then be proposed in the current location, weigh against this possibility. I take the view that, aside from locations wholly distant from the current site, the current proposals represent the least harmful arrangement of the structures in the landscape. The decision that has to be made now is whether the impact they have in their proposed location is an acceptable one – comparison with more remote locations would not be appropriate.

Technical Issues

- 3.7 The issues raised by the Cottered Parish Council as of concern and summarized in the previous report were as follows:
 - potential for noise to be caused by the operation;
 - odour created
 - safe operation of the plant
 - efficiency
 - sustainability

A commentary on these matters is set out in the following parts of the report

- 3.8 Noise this issue was considered in some detail in the previous report and Members are directed to paras 7.38 onwards of that report.
- 3.9 Noise assessments submitted with the application considered the impact of the proposals on the nearest residential property, Buttermilk Grange, to the north east of the application site. The assessment sets out that, where there is a change in noise levels of 10dB or more, then this is likely to result in complaints.
- 3.10 The findings of the assessment are that two elements of the proposal have the potential to result in such a change in noise levels the cooling system and the exhaust stack. The location of the cooling system is such that the Technical Building and other buildings are located between it and the nearest residential property. This has an impact on the noise that is perceived at the residential property and therefore its impact should not be such that it leads to complaints.
- 3.11 The exhaust stack however projects above the Technical Building such that the building cannot perform this screening function. In this case, the sound advisors recommend that attenuators be fitted within the stack and that a terminal cowl be fitted to direct the noise away from the direction of the

nearest property. With such mitigation it is considered that the noise impact would fall outside one where complaints are likely to be generated. In addition, the advisors point out that, despite the exhaust stack potentially creating an increase in noise of +18dB the resulting level is still one where internal noise levels within a building would be considered good to reasonable and unlikely to cause sleep disturbance.

- 3.12 Odour this matter was also considered at some length in the previous report, at para 7.45 onward and the potential for odours to occur at the various stages of the process was set out. Given the use of plant material in this case, the location away from residential uses and the potential for agricultural uses to create odour, I cannot conclude that the proposals have any unacceptable impact in this respect.
- 3.13 Safety The main concern of the Parish Council in this respect was the potential for the build up of levels of methane produced by fermentation and digestion process and prior to its use in the generation of power. One of the main characteristics of the operation proposed is that it operates continuously with small amounts of the plant material being introduced at regular intervals. The process is one that, as a result, does not give rise to significant product generation and at levels where designated storage is required. The methane produced is used continuously by the generation system.
- 3.14 In any event, the safety of plant and work places where hazardous materials are present is not a matter that the Local Planning Authority is required to regulate. In this respect, providing the operation of the plant complies with safety regulation requirements which are enforced by other organisations, this cannot be advanced as an issue on which a refusal of planning permission could be based.
- 3.15 Efficiency and sustainability the concern in relation to efficiency is that more heat than electricity is produced and that, whilst some of this is used in the digestion process, some of it is lost. This is acknowledged by the applicant and further uses of heat are being investigated possibly in relation to fertilizer mixing operations.
- 3.16 Whilst this deficiency is recognised it is still considered that the sustainability credentials of the proposals remain. Concern has also been raised with regard to the potential of the plant to produce carbon dioxide. However, this is the result of a narrow focus on this issue and does not take into account the impact of the whole cycle of operation of the facility as proposed.

- 3.17 The growth of the plant used in the digester fixes carbon dioxide from the atmosphere. When the plant material is broken down carbon dioxide is released. However, the digestate can be used to replace inorganic fertilisers assisting in the reduction of carbon dioxide that is otherwise produced in fertilizer manufacture. Once spread on the land, the growth of further crops are supported which again fix carbon dioxide from the atmosphere. At worst then, the process is carbon neutral. However, this also neglects to take into account the electricity that is produced by the process and the carbon that would be produced by other electricity generation methods which are not required as a result.
- 3.18 Overall, whilst there may be some potential to further enhance the efficiency of the plant proposed here, it seems that very limited weight can be assigned to claims that it is unacceptable on the basis of either inefficiency of unsustainability.

4.0 Conclusion

- 4.1 Further consideration has been given to issues that Members raised as being of concern at the previous meeting. In relation to the technical issues, it is not considered that the position in relation to any of them is such that the proposals cannot be supported.
- 4.2 With regard to siting, in this case it is necessary for the committee to consider whether the proposed site is acceptable or not. Officer's view is that the location chosen is an appropriate one and enables the proposed structures to be most easily assimilated into the local landscape. It is not appropriate for the Planning Authority to identify alternative locations, but, having considered moving the structures within the local environment, the conclusion is that such alternatives would be more harmful in visual terms.
- 4.3 With regard to the dimensions of the buildings and structures, these are correctly set out above. The considerations in this report have been set out on the basis of that understanding of the size of the structures.