

<b>Application</b> 10/01852/CM	<b>No:</b>	<b>Ward:</b> Gosford Eaton	<b>Yarnton, and Water</b>	<b>Date Valid: 14/12/10</b>
<b>Applicant:</b>	Agrivert Ltd			
<b>Site Address:</b>	Land at Worton Farm, Yarnton			

**Proposal:** Construction and use of a digestate slurry lagoon (OCC ref. MW.0170/10)

## 1. Site Description and Proposal

- 1.1 The site is an area of land approximately 1.44Ha in area, located at Worton Farm, Yarnton to the south of the Cassington Road. The site is situated to the north of an access track, which leads to an existing anaerobic digestion facility and recycling facility, which has access to the A40. The existing anaerobic digestion facility contains 5 large tanks which are used for the digestion process and storage of digestate. The anaerobic digestion facility forms part of a larger temporary waste management operation which includes, construction and demolition waste recycling, skip waste recycling (M&M Skip Hire Company) and an inert landfill. Much of the surrounding area to the south has been worked for sand and gravel and now comprises lakes. There is also planning permission in place for an in-vessel composting (IVC) facility. The site itself is on land that was previously a site for the extraction of sand and gravel, which is due to be restored on or before the 31<sup>st</sup> December 2012 and the bund to the north and the ditches which surround the application site are to be removed. Surrounding land is also used for the extraction of sand and gravel with it being at various stages of being restored. The site is within the Oxford Green Belt and a public footpath runs through the site. The site is within 2km of the Pixey and Yarnton Mead SSSI site, it may be potentially contaminated and it is within a zone 2 flood zone.
- 1.2 This application seeks the view of Cherwell District Council to the proposed construction and use of a digestate slurry lagoon. The lagoon will measure approximately 172m in length and 60m in width at its widest edge. The development would involve extraction of silty sand materials to a depth of 0.45m below existing ground levels producing approximately 4000m<sup>3</sup> of material. Excavated materials would be stored in bunds which would surround the lagoon and would be constructed to 4.05m above existing ground levels (additional material (13,000m<sup>3</sup>) would need to be imported to complete the construction of the lagoon banks). Security fencing would be installed around the perimeter of the slurry lagoon to a height of 2.4m. A swale is proposed to the south of the lagoon measuring 30m by 2m.
- 1.3 The slurry to be pumped into the lagoon is produced from an existing Anaerobic Digestion (AD) facility at Worton Farm, which has been operational and receiving waste since September 2010. The AD facility recycles food waste by mixing it with energy crop silage to produce a fertiliser. The plant is now producing the digestate product which can be used for agricultural purposes and processes the waste to a point where it is free from odour and biosecure. The applicant intends to market the

product to farms across Oxfordshire. The applicant states that whilst the AD facility was under construction, it became apparent that land to the north of the plant was available where digestate marketing could take place. To reduce carbon and vehicle miles, the applicant secured this land for marketing of the product. The slurry would be pumped 200m to the south east of the lagoon via a sealed pipe. The lagoon itself would be lined with a 2.5mm high density polyethylene (HDPE) liner which will prevent leakage to the ground. The AD process produces approximately 60,000 tonnes of digestate per year that could be stored in the slurry lagoon prior to agricultural spreading. The slurry lagoon would have an approximate total volume of 26,800m<sup>3</sup> with an anticipated digestate volume of 22,000m<sup>3</sup>.

1.4 PAS110 is the standard which regulates the output specification for digestate. PAS110 seeks to monitor the entire visibility of the product and ensure an audit trail is available in the production of digestate by monitoring the input wastes, the process under which the waste is treated and the output specification of the digestate. The output specification must show that the digestate is free of contaminants such as plastic and glass shards and also invisible contaminants such as heavy metals. The digestate also has to prove its nutrient value and therefore its benefit to agriculture and must demonstrate its stability, which is more often associated with its potential to emit odour. Once the digestate is certified as PAS110 it can be marketed under the digestate protocol and is classified as a product rather than a waste and the product from the AD facility to be pumped into the slurry lagoon would be PAS110 certified.

1.5 **Planning History**

08/01781/CM (Objection) - Erection and use of anaerobic digestion facility (the slurry lagoon is connected to this facility)

## 2. Application Publicity

2.1 As this matter is a County Matter, all publicity has been undertaken by Oxfordshire County Council.

## 3. Consultations

3.1 As this matter is a County Matter, all formal consultations have been undertaken by Oxfordshire County Council. However, internal consultations have been undertaken:

- CDC (Anti Social Behaviour Manager) – provides some background to the PAS110 requirement and goes on to state that as the material is intended for use as an agricultural fertiliser it has to be assumed that it has some nutrient value. This observation is reflected by PAS 110 at paragraph 7.1.5 where the standard recommends the closed storage of digestible materials until fully processed where after they can be retained in open stores if intended for use on the producers own holding. A note following this paragraph suggests that covered storage is designed to prevent recontamination of the digested material with pathogens and to reduce the production of methane and ammonia gases. Two points for clarification arise from this paragraph and note.

The first being is the liquor for use solely for application to the producers own

land and secondly why does he standard differentiate between the storage regime for material to spread on the producers own land and that for material to be marketed to third parties. Further comment has been received, as I advised that it appears the digestate is to be marketed and this is developed at paragraph 5.8.

- CDC (Environmental Protection Officer) – No comments received to date
- CDC (Ecology) – Given the proximity to two SSSIs (Pixey and Yarnton Meads and Cassington Meadows) and a LWS (Cassington gravel pits) and the nature of the application I believe it would be advisable to consult Natural England and BBOWT if not already done. I have some concerns about the possible impacts on the adjacent water bodies given their wildlife value but I do not feel qualified to assess the adequacy of the hydrological report in this respect. Potential ecological effects outside this are not mentioned and there will be some loss of habitat on site for which the suggestions for planting will go some way to mitigate. Planting should be carried out using native species. There is a possibility that reptiles or amphibians may be on site so precautions should be taken to ensure they are not harmed during any works. I could advise on this further.
- CDC (Landscape) – No comments received to date
- CDC (Footpaths) – Unlikely to be any impact to the nearby public right of way

## 4. Relevant Planning Policies

- 4.1 PPS1: Delivering Sustainable Development  
PPG2: Green Belts  
PPS10: Sustainable Waste Management  
PPS25: Development and Flood Risk
- 4.2 The South East Plan: Policies CO4, waste policies
- 4.3 Adopted Cherwell Local Plan: Policies GB1, C7

## 5. Appraisal

- 5.1 Green Belt and Waste Management  
Firstly, in terms of the principle of the development, the site is situated within the Oxford Green Belt and therefore PPG2: Green Belts is relevant. This National guidance is reflected within regional and local level policy. PPG2 advises that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the most important attribute of Green Belts being their openness.
- 5.2 PPG2 advises that there is a presumption against inappropriate development within the Green Belt, which should not be approved, except in very special circumstances. Very special circumstances to justify inappropriate development will not exist unless the harm by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. Development which is appropriate

within the Green Belt is identified within PPG2.

- 5.3 PPG2 also provides advice on mining operations within the Green Belt stating that minerals can be worked only where they are found. Their extraction is a temporary activity. Mineral extraction need not be inappropriate development: it need not conflict with the purposes of including land in Green Belts, provided that high environmental standards are maintained and that the site is well restored. It goes on to state the statutory definition of development includes engineering and other operations, and the making of any material change in the use of land. The carrying out of such operations and the making of material changes in the use of land are inappropriate development unless they maintain openness and do not conflict with the purposes of including land in the Green Belt.
- 5.4 Visual amenity is also addressed within PPG2, with the following advice: the visual amenities of the Green Belt should not be injured by proposals for development within or conspicuous from the Green Belt which, although they would not prejudice the purposes of including land in Green Belts, might be visually detrimental by reason of their siting, materials or design.
- 5.5 Secondly, it is important to set out the relevant principles with PPS10: Sustainable Waste Management. PPS10 states that “the overall objective of Government policy on waste, as set out in the strategy for sustainable development, is to protect human health and the environment by producing less waste and by using it as a resource wherever possible. Through more sustainable waste management, moving the management of waste up the ‘waste hierarchy’ of reduction, reuse, recycling and composting, using waste as a source of energy, and only disposing as a last resort the Government aims to break the link between economic growth and the environmental impact of waste. This means a step-change in the way waste is handled and significant new investment in waste management facilities”. PPS10 also provides key principles relating to waste management, one of which is of particular importance to the Green Belt. This states that planning strategies should “protect green belts but recognise the particular locational needs of some types of waste management facilities when defining detailed green belt boundaries and, in determining planning applications, that these locational needs, together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission”.
- 5.6 As set out within paragraph 1.4, the slurry to be stored in the lagoon is not considered to be a ‘waste’ but is rather classified as a ‘product’ due to the processing meaning that it is suitable for use in agriculture. However, the processing at the AD facility helps to facilitate the sustainable management of waste and helps to promote food waste as a resource by facilitating movement up the waste hierarchy and producing a higher specification waste product.
- 5.7 Having now set out the background to Green Belt policy, the current proposal must be considered in light of this policy. Firstly, it is considered that as the development does not fall within any of the identified criteria within PPG2, it constitutes inappropriate development within the Green Belt. Any very special circumstances must therefore be considered.
- 5.8 Before considering any special circumstances however, it is worth noting the

comments of PPG2 in terms of mineral operations and the history of the site. As can be seen, there is a history of mineral operations at Worton Farm, which includes bunds. The mineral operations on the site can be considered appropriate (as described within PPG2), providing high environmental standards are maintained and the site is well restored. In this case, the site is due to be restored including the removal of the bund and ditches before 31 December 2012 therefore the use of this site on this basis has been a temporary activity. It is considered that the proposed lagoon, including its 4.05m bunds surrounding it will have a significant and detrimental impact on the openness of the Green Belt and given that this will be a permanent feature does not comply with the advice of PPG2 in terms of mineral operations.

- 5.9 It is also important to add that this lagoon is required due to the existing operations on the site resulting from the anaerobic digestion facility, which was granted planning permission by the County. This Council objected to this facility due to the impact on the Green Belt; however the County considered the very special circumstances put forward outweighed the harm to the Green Belt and approved the application. It is the opinion of the SDPHE that the proposed slurry lagoon will only exacerbate and add to the harm to the Green Belt having a permanent impact on the openness of the Green Belt.
- 5.10 The supporting documentation submitted with this application tries to justify the very special circumstances which exist, which should outweigh the harm to the green belt. The applicant's have submitted a landscape and visual impact assessment, which concludes that the site is well screened from the wider landscape and that providing landscaping is introduced along the western, northern and eastern boundaries of the lagoon the impact would be further minimised. Although the landscaping is appropriate and will help to mitigate some impact, the SDPHE considers that landscaping should not be used to screen development which is inappropriate and this does not mean that harm is not caused to the openness of the Green Belt. It is appreciated that there are currently bunds in this location, however given the site is due to be restored to agriculture, where these bunds will be removed, the proposed bunds even with landscaping installed will have a significant and permanent impact on the openness of the Green Belt.
- 5.11 It is appreciated that the positioning of the slurry lagoon is in proximity to the existing AD facility and that this is a benefit to the company because it means the product does not need to be transported before it is sold to farms and the site is located in a position close to the market for the digester, however these circumstances are not considered to be such a very special circumstance, which should result in Green Belt policy being set aside.
- 5.12 A further justification for this scheme is that OCC Planning Officers considered the position of the AD plant to be in line with PPS10: Sustainable Waste Management considering that the site is 'centrally located to the main source of waste in Oxfordshire and well located to the main road network'. This proposal is considered as ancillary to the main AD plant and so should be considered as meeting the locational requirements of PPS10. The proposed slurry lagoon is some distance from the plant and given its significant size, it is not considered to be wholly ancillary. Furthermore, it is considered that this argument still does not overcome the impact the lagoon will have on the openness of the Green Belt and does not constitute such a special circumstance that sets aside the harm caused to the

Green Belt.

5.13 Flood risk

A flood risk assessment has been carried out as advised within PPS25, due to part of the site being within zone 2 of the flood zone and the size of the development. The assessment concludes that the development would not be adversely at risk of flooding. Furthermore, the sequential test indicates the development is appropriate for the location in terms of flood risk, being classified as the lowest risk. However, it does recommend that the lagoon should be able to accommodate 0.4m of rainfall storage. Additionally and to compensate for the minor reduction in flood plain storage, a swale has been incorporated into the design adjacent to the southern boundary of the lagoon. The County will make a full assessment in relation to this matter, however it is not considered that this be a reason for the District Council to object to the scheme.

5.14 Environmental Impacts

Odour

The applicant states that due to the processes which the product goes through, before being stored in the slurry lagoon, the product is largely inert and low in odour. Furthermore, the PAS110 criteria as explained in paragraph 1.4 means that the product is periodically tested, which seeks to ensure the product has a low respiration potential and is therefore stabilized and by definition is a low odour product. The applicant has also stated that the design of the lagoon means that the reservoir will sit a minimum of 750mm below the top of the bund, which will reduce wind strip and odour emissions from the reservoir. The nearest properties are over 500m from the site of the lagoon and as such limited impact upon residential amenity by odour. The Council's Anti Social Behaviour Manager has questioned the conclusions that the applicant has come to in terms of the PAS110 data as it would appear that within PAS110, open storage of liquor can only be recommended where it is intended that the material be spread on the producers own land. It is therefore questioned why there is a differentiation within the standard between producer usage and marketable product. There appears to be a departure from the standard and therefore there is concern that this may result in odour generation. This has therefore been raised as a comment to the County.

5.15 Noise

The applicant states that the potential impacts arising from noise would be negligible.

5.16 Dust

The applicant states that there is unlikely to be a risk of dust from this particular proposal.

5.17 This information has been provided for Members advice and the County will carry out their own assessment of these matters taking into account technical advice. These matters are not considered to be a reason for the District Council to object to the scheme.

5.18 Conclusion

As has been assessed, it is considered that the proposed development is inappropriate in this Green Belt location and there are no very special

circumstances which overcome the harm caused to the Green Belt by reason of its inappropriateness. The proposal is considered to have a permanent and significant impact on the openness of the Green Belt and the SDPHE considers an objection should be made to the scheme. Some additional comments are recommended taking into account some of the consultation responses received to this application.

## **6. Recommendation**

**That Oxfordshire County Council be advised that Cherwell District Council object to the proposal on the following grounds:**

The proposal is considered to be inappropriate development in the Oxford Green Belt, which will harm the visual amenities and the openness of the Green Belt and therefore conflict with the purposes of including the land within the Green Belt. The proposal is contrary to PPG2: Green Belts, Policy CO4 of The South East Plan and policy GB1 of the adopted Cherwell Local Plan.

Cherwell District Council leave it up to the County however to make a full assessment as to whether the very special circumstances put forward are sufficient to outweigh the harm by reason of inappropriateness.

Cherwell District Council also make the following comments on the scheme:

1. The Council's Ecologist has commented that given the proximity to two SSSIs (Pixey and Yarnton Meads and Cassington Meadows) and a LWS (Cassington gravel pits) and the nature of the application it is considered that it would be advisable to consult Natural England and BBOWT if not already done. Some concerns have been raised about the possible impacts on the adjacent waterbodies given their wildlife value. Potential ecological effects outside this are not mentioned and there will be some loss of habitat on site for which the suggestions for planting will go some way to mitigate. Planting should be carried out using native species. There is a possibility that reptiles or amphibians may be on site so precautions should be taken to ensure they are not harmed during any works.
2. The Council's Anti Social Behaviour Manager has questioned the conclusions that the applicant has come to in terms of the PAS110 data as it would appear that within PAS110, open storage of liquor can only be recommended where it is intended that the material be spread on the producers own land. It is therefore questioned why there is a differentiation within the standard between producer usage and marketable product. There appears to be a departure from the standard and therefore there is concern that this may result in odour generation.

Cherwell District Council would ask that they be advised of the decision once it is made.

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