

<b>APPLICATION NO.</b>	<a href="#">P12/V1807/FUL</a>
<b>APPLICATION TYPE</b>	FULL APPLICATION
<b>REGISTERED</b>	18 August 2012
<b>PARISH</b>	SUTTON COURTENAY
<b>WARD MEMBER(S)</b>	Gervase Duffield
<b>APPLICANT</b>	FCC Environment Ltd
<b>SITE</b>	Sutton Courtenay Landfill Site Corridor Road Didcot OX14 4PW
<b>PROPOSAL</b>	Proposed development and operation of an anaerobic digestion facility on land at Sutton Courtenay landfill site (re-submission of withdrawn application P12/V0174)
<b>AMENDMENTS</b>	None
<b>GRID REFERENCE</b>	451694/192959
<b>OFFICER</b>	David Rorthery

---

## 1.0 INTRODUCTION

- 1.1 The site lies within the central location of the landfill site at Sutton Courtenay, to the south of Portway and with access from the east from an un-named haul road. The application site covers 1ha within the overall landfill area of 264ha.
- 1.2 Within the immediate area are other mineral extraction related activities and plant. There is a landfill gas engine facility to the north of the application site and south of Portway. This holds 12 gas powered engines that convert landfill gas into electricity for use on the landfill site. North of Portway is a railway head site with associated infrastructure that is used to export material and import landfill. Alongside this are various storage areas of won materials and materials for processing in the area, such as for the roadstone coating plant. There is also a green waste composting pad for drying out the waste in open windrows. To the south of the site is an earth bund 2m – 4m high, formed as part of the landfill re-contouring works. The nearest dwellings to the site are in Sutton Courtenay village (over 1km to the west) and Appleford village (about 0.85km to the north-east). The site lies within the Lowland Vale.
- 1.3 A location plan is **attached** at appendix 1.
- 1.4 The application comes to committee because this development raises contentious issues relating to policy that require planning committee determination.

## 2.0 PROPOSAL

### *Physical appearance*

- 2.1 The proposed development is for the construction of buildings to house an anaerobic digestion facility together with associated buildings and access road. The purpose of the facility is to produce electricity from an anaerobic digestion process, as explained below.
- 2.2 The proposal comprises the following main features:
- a feedstock clamp, an open air storage compound with 75m long by 30.2m wide and 5m high walls, that has a capacity of 10,000 tonnes
  - a primary digestion tank, a circular building with a domed roof - 25.4m diameter

and 12.2m high (as measured from the plans, although the supporting statement states 14m high)

- a digestate storage tank, a circular building with a cone roof which has a capacity of 6,000 cubic metres - 35.15m diameter and 14m high
- a 10m tall gas flare stack (as measured from the plans, although the supporting statement states 8m high)
- a 6m tall flue linked to the combined heat and power container

2.3 There would also be various other smaller structures comprising the control unit, a dosing unit, and a pre-storage tank. The site would be set into the sloping re-profiled ground and enclosed by a 2.4m high steel paladin security fence with matching lockable security gates set in a concrete base.

2.4 The feedstock clamp would hold the incoming pre-chopped and pre-shredded vegetable fuel materials to be used in the process. This would be transferred to the primary digester and then on to the main digester for the production of methane gas to power the electricity generators.

*Processing operation*

2.5 Anaerobic digestion is the process of generating electricity from the breakdown of (in this case) vegetable matter. The vegetable matter in this proposal would be a pre-shredded maize crop, primarily grown on other parts of the landfill site which have been restored. The crop is chopped and pulped into a substrate which is fed into the sealed vessels where a variety of bacterial organisms feed on the material, further breaking it down and producing a biogas of methane as a by-product. This gas is then used to generate electricity, whilst the undigested material (the digestate) is removed from the system and is used as a bio-fertiliser on agricultural land. The feed input and the by-product and digestate operate in a continual stream through the anaerobic digester facility.

2.6 The expected capacity and through-put of material to generate power is stated as up to 10,000 tonnes of material per year, which will generate 0.5MW of electricity. It is expected that initially 5,000 tonnes of material would be sourced from the agricultural land of the former landfill site and that this would rise to 7,650 tonnes. The shortfall would be imported onto the site from external grown crops. At any one time it is considered that the digester could hold 4,000 cubic metres of feed-stuff.

2.7 The employment requirement for this automated process would be the equivalent of one full-time position. The facility has a design life of 25 years. The land is indicated as being restored on removal of the facility as part of the restoration master plan for the landfill site as agreed with Oxfordshire County Council as the minerals and waste planning authority one year after the currently authorised permission for the land fill site expires.

2.8 The following have been submitted in support of the application:

- design and access statement (August 2012 – Stratus Environmental);
- supporting statement (August 2012 – Stratus Environmental);
- landscape and visual assessment (August 2012 – fpcr)
- geotechnical report (July 2011 – egniol)
- atmospheric dispersion modelling report (July 2012 – GFE)
- statement of community involvement (August 2012 – Proteus)
- geological contamination report (January 2011 – RPS / Landmark)
- phase 1 habitat survey (2010 – RPS) carried out for the previous Mechanical Biological Treatment (MBT) proposal, which encompassed the current application

- site within the report survey area
  - protected species reports (2010 – RPS) carried out for the previous Mechanical Biological Treatment (MBT) proposal, which encompassed the current application site within the report survey area
  - a heritage appraisal (RPS – August 2010) carried out for the previous Mechanical Biological Treatment (MBT) proposal, which encompassed the current application site within the report survey area
- 2.9 In addition, a written response (7 Feb 2013) has been received to issues raised during a site meeting, providing additional information and confirming the capacity of the digestate holding tank as capable of taking 26 weeks of material. The silage clamp capacity was clarified as being supplemented (when necessary) with temporary storage ‘ag bags’ or a field clamp system to operate. This would allow maize storage for temporary periods on parts of the site where it is harvested with the long term plan to negotiate storage capacity within surrounding farmland and restored landfill areas, which would help to spread the vehicle movements rather than funnel all movements from the surrounding fields direct to the site at the same time of year.
- 2.10 The proposed scheme of soft landscaping around the facility is confirmed to be outside the red line of the application site. However, the landscaping is shown on surrounding land abutting the site of which the applicants are the sole owner and they are agreeable to control of the provision and long term maintenance of the landscaping by condition or through entering into a planning obligation to ensure the landscaping scheme is implemented as proposed under the details provided in this application.
- 2.11 Extracts from the application plans and supporting documents are **attached** at appendix 2.
- 3.0 **SUMMARY OF CONSULTATIONS & REPRESENTATIONS**
- 3.1 Sutton Courtenay Parish Council objects. The full comments of the parish council are **attached** at appendix 3.
- 3.2 Appleford Parish Council objects. The full comments of the parish council are **attached** at appendix 4.
- 3.3 Neighbour representations – At the time of preparing this report, 66 letters of objection from local residents had been received. In addition the ward member, Cllr Gervase Duffield, has objected. The objections raised can be summarised as follows:
- contrary to local plan policies NE9, NE10 and NE11, and the site lies within a landscape gap
  - contrary to the restoration of this area to agricultural use
  - the buildings would be disproportionately large and visually prominent within this open countryside location
  - building on a green field site previously used as farm land
  - the scale of the scheme is in excess of the processing capacity of the surrounding land
  - there has been no consideration of alternative and potentially more suitable sites
  - cumulative commercial industrialisation of the area by stealth
  - disturbance from odour and noise
  - additional heavy traffic to service the facility
  - land drainage issues and flood risk have not been adequately addressed

Vale of White Horse District Council – Committee Report – 12 March 2013

- harmful impact on wildlife and the ecology of the area
  - no benefit to the local community
  - no EIA has been provided which is necessary for the proper consideration of the proposal
- 3.4 Campaign for the Protection of Rural England (CPRE) – The application should be refused. Their views are **attached** at appendix 5.
- 3.5 Landscape Architect – The relatively low height of the proposed building means that the existing land form in association with the existing mature blocks of vegetation will screen the proposal from much of the surrounding area. Where longer views are available, these will only be of the top sections of the building and generally these views do not form a prominent part of the horizon.
- 3.6 Environmental Protection Team – No evidence that there would be odour impacts on local residents.
- 3.7 Land Contamination – Intrusive investigations are proposed to confirm the nature and distribution of any contamination within the soils and groundwater beneath the site and to identify the presence or otherwise of any ground gases. To ensure this is undertaken and the proposed development is suitable for use, a contaminated land condition is recommended.
- 3.8 Drainage Engineer – No objection subject to drainage details to be supplied.
- 3.9 Ecologist – *“Having looked through the various ecological reports which have been submitted the site is currently laid to species poor grassland and there are very few ecological constraints. I have no objections to this application although I would advise that an informative is used as there is the potential for the construction activities to disturb ground nesting birds such as skylark which are known to use habitats across the site.”*
- 3.10 County Highways Engineer – No objection subject to a contribution via a legal agreement towards the Science Vale UK strategic transport schemes.
- 3.11 Environment Agency – No objection subject to conditions controlling foundations to protect groundwater contamination, identification of any contamination not previously found, and providing a construction and pollution prevention method statement as the proposal involves cutting into landfill levels.
- 3.12 Thames Water – No objection on surface water drainage subject to suitable monitoring and action and restriction of combined drainage; no objection on foul water drainage; no objection on water supply.
- 3.13 Natural England – No objection
- 3.14 Waste Management – No comment.
- 3.15 OCC Minerals and Waste – General support subject to conditions to secure removal of the facility after 25 years, restoration infilling specification for the site, maintain roads in good order and prevent soil transfer, safeguarding a bridleway route near Portway, and provision of a routing agreement via the southern accessed roads during the construction and operation of the facility.

4.0 **RELEVANT PLANNING HISTORY**

4.1 The site and surrounding land has been subject of applications over time for mineral extraction, waste disposal and ancillary developments. Extraction of sand and gravel is considered to have taken place since the 1930's with the infilling of the worked land with waste since the 1970's.

4.2 [P12/V0174](#) –

Erection of an anaerobic digestion facility

- Withdrawn on 22 May 2012 to avoid a refusal as recommended on the grounds that the development had not demonstrated an overriding need to be located in the open countryside and that on this basis it would harm the landscape and countryside in the immediate area and conflict with countryside and landscape policies GS2, NE9, NE10 and NE11 of the adopted local plan.

4.3 11/00067/PREAPP –

EIA screening opinion for an anaerobic digestion facility to generate up to 1.5MW of energy from up to 30,000 tonnes per year of fuel crops, 5,000 tonnes of which would be grown on the landholding associated with the site

- The screening opinion issued on 26 May 2011 was that an environmental statement covering the requirements of an EIA was not required

4.4 11/01333/CM –

A mechanical biological treatment (MBT) facility, with an operating capacity of 220,000 tonnes of waste per annum plus ancillary development. The proposed facility included auxiliary systems such as air treatment (biofilters), leachate / condensates treatment, electrical and automation systems. The development also included extending the use of rail sidings for the export of solid recovered fuel (SRF) from the site.

This was an amendment to previous application 10/01731/CM.

- Refused on 20 September 2011 by the county council on grounds that the development would represent a large building in the open countryside that would harm the landscape and countryside in the immediate area, the need for a waste management facility in this location had not been demonstrated to justify overriding countryside and landscape policies GS2, NE9, NE10 and NE11 of the adopted local plan

4.5 10/01731/CM –

A Mechanical biological treatment (MBT) facility, with an operating capacity of 220,000 tonnes of waste per annum plus ancillary development. The facility will include auxiliary systems such as air treatment (Biofilters), leachate/condensates treatment, electrical and automation systems. The development will also extend the use of rail sidings for the export of solid recovered fuel (SRF) from the site.

- Refused on 20 September 2011 by the county council on grounds that the development would represent a large building in the open countryside that would harm the landscape and countryside in the immediate area, the need for a waste management facility in this location had not been demonstrated to justify overriding countryside and landscape policies GS2, NE9, NE10 and NE11 of the adopted local plan

4.6 09/01507/CM – Energy from waste incinerator (EFW) infrastructure, combined heat and power (CHP) plant, incinerator bottom ash (IBA) processing plant with outside storage area, and air pollution control residue (APCR) treatment and disposal facilities, visitor and office accommodation and landscaping.

- Refused on 26 October 2009 by the county council on grounds that the development would represent a large permanent building in the open countryside which was contrary to policies NE9, NE11 and GS2 of the adopted local plan, and

because the case was not made that the need for such a facility outweighed the effects of the proposal on the countryside in this location

## 5.0 POLICY & GUIDANCE

### Vale of White Horse Local Plan

- 5.1 The local plan was adopted in July 2006. The following relevant policies have been considered to be saved by the Secretary of State's decision of 1 July 2009 whilst the new local plan is being produced, and are considered consistent with the National Planning Policy Framework.
- 5.2 Policy relates to development outside settlements and seeks to protect such land from development unless allocated by other policies of the local plan.
- 5.3 Policy NE9 says that development in the Lowland Vale will not be permitted if it would have an adverse effect on the landscape, particularly on the long and open views within or across the area.
- 5.4 Policy NE10 says that development which would harm the essentially open or rural character of areas on the urban fringes and in the important open gaps between settlements will not be permitted.
- 5.5 Policy NE11 seeks to enhance the landscape character of areas which have been damaged or compromised.

### National Planning Policy Framework (NPPF) – March 2012

- 5.6 Paragraph 14 - presumption in favour of sustainable development
- Paragraph 109 - contribute to and enhance the natural and local environment
- Paragraph 111 - encourage the effective use of land by re-using land that has previously been developed (brownfield land)
- Paragraph 112 - consideration of economic and other benefits of developing lower grade agricultural land
- Paragraph 118 – enhancement of biodiversity

## 6.0 PLANNING CONSIDERATIONS

- 6.1 The proposed development is for an industrial process converting vegetable matter in the form of chopped and pulped maize into electricity through the gas released in the anaerobic digestion process which can itself be used to generate electricity. The 'waste' product is usable on farm land and can be spread at specific times of the year (prior to sowing and after harvesting crops) and would be stored on site at other times.

### *Local policy*

- 6.2 The site is subject to policies which seek to protect the countryside from harmful developments. Local plan policy GS2 directs new development to the existing settlements and allocated sites. The current proposal has no specific or essential requirement to be located on this site.
- 6.3 The justification made by the applicants for the proposal to be located on this site is that the proposal would provide electricity direct to the other commercial operations on the surrounding land within the landfill area, the supply of fuel (chopped and pulped maize) is grown on the landfill reclaimed areas (as well as being imported from outside areas), and the 'waste' product (digestate slurry) can be reused on the reclaimed agricultural fields within the landfill area and beyond. The operation, therefore, would be

sustainable in transport terms and in the recycling energy production system that would operate on the site.

- 6.4 Whilst this may be considered a reasonable case to make, it does not provide an essential case to justify the location of the proposal in this area. A facility of this type, which is claimed not to produce odour or unacceptable noise levels, could be located on a suitable industrial estate with good access links for the import and export of materials, such as land to the south of this site in the vicinity of the Didcot A power station complex, which is currently undergoing decommissioning and the land will become available for alternative employment generating uses. The need for the proposal to be sited within this open countryside area contrary to local plan policies, therefore, has not been proven.

*National policy*

- 6.5 At the heart of the new National Planning Policy Framework (NPPF) is a presumption in favour of sustainable development. Within the context of the NPPF, planning permission should be granted where the development plan is absent, silent or relevant policies are out of date, unless any adverse impacts would so significantly and demonstrably outweigh the benefits of the proposed development when assessed against the policies in the NPPF taken as a whole (paragraph 14).
- 6.6 Paragraph 109 of the NPPF says that “the planning system should contribute to and enhance the natural and local environment”.
- 6.7 Paragraph 111 of the NPPF says that planning decisions “should encourage the effective use of land by re-using land that has previously been developed (brownfield land).” This relates to such nearby land as Didcot A power station or other existing or allocated employment sites. Under the provisions of the NPPF, therefore, there are clear and preferred alternative sites that could accommodate the proposed development rather than developing this site in the open countryside (albeit a site that is part of the restoration of a mineral workings).

*Visual and landscape impact*

- 6.8 Local plan policies NE9, NE10 and NE11 seek to retain, maintain and improve the open setting and landscape character of rural areas. The sustainable credentials of the proposed development are acknowledged and the presumption in favour of sustainable development is recognised, however these aspects have to be considered and balanced against the potential harm arising from building non-essential buildings in the open countryside which are not required as part of the agricultural use of the reclaimed land. There does not appear to be any overriding need for the proposal to overcome the harmful impact that these structures would have on the rural character and appearance of the area and so the proposal is contrary to the aims and purposes of these local plan policies.
- 6.9 The anaerobic digestion facility itself has an impact on the openness of the area and on the rural character and appearance of this open countryside setting. The proposed structures are significantly higher and larger than what could be expected within a typical farm yard setting. Whilst the impact would be reduced by the boundary landscaping proposed, albeit outside the application red-line site but within land in the control of the applicants, this will take time to mature and is not considered to be adequate to mitigate the harmful landscape impact of the proposed development.
- 6.10 It is further considered that the introduction of another group of buildings in this central area of the landfill site would add to the spread of buildings and structures without being directly required as part of the winning and working of minerals or the permanent

storage and disposal of waste as landfill. This sporadic outcropping of buildings, structures, silos, plant, machinery and storage compounds has a cumulatively harmful impact on the character and openness of the rural environment.

- 6.11 The location within the centre of the landfill operation has also been identified by the applicants as being sustainable given the transportation of the fuel material and the distribution of the resultant digestate ‘waste’ product on the restored agricultural landfill areas. Whilst this merits serious consideration as to the benefits for the operation as described, the operation is an addition to the existing landfill and restoration use of the land and is not an agricultural operation in its own right, but is more a fuel reprocessing activity to create energy. The justification for the development, even in this central part of the landfill operation, must be considered in the context of whether it needs to be located within an open countryside location (albeit one that is being reclaimed following excavation and landfill operations). As said in paragraph 6.4 above, a facility of this type, which is claimed not to produce odour or unacceptable noise levels, could be located on a suitable industrial estate with good access links for the import and export of materials.

*Transportation*

- 6.12 The traffic impacts from the operation of the proposal have been assessed. Many traffic movements would be contained within the landfill site environment – i.e. harvesting the fuel crop and disposing of the residual digestate product. However, there would be a level of traffic movements off the landfill site and on to the local highway network. This, in itself, would require the need to control traffic through a routing agreement so as to avoid local villages, given the expected size of the vehicles and the numbers of vehicle movements.
- 6.13 Maintenance of the existing roads used by the development should also be secured so as to ensure adequate drainage and a clear road surface. As surrounding roads (Portway and Corridor Road) are open to the public, but by reason of the heavy traffic using them and their condition (often being covered by mud or mud-slurry from run-off of adjacent fields) the provision of alternative routes for horse riders within a separate bridleway should also be considered. This issue is being discussed with the county council as part of the landfill site’s restoration landscape proposals.

*Environmental issues*

- 6.14 There are no identified concerns regarding ecology or the possible contamination of land. Measures to ensure the safeguarding of groundwater and the control of any pollutants could be secured by condition.
- 6.15 The chopped and pulped maize crop fuel would be initially sourced from the local area, and mainly from within the landfill site. This concentration of the cultivation of a fuel crop, however, would lead to a mono-culture, with a widespread single (or limited variation) in crop growth across the landfill site which would not be ideal in both visual appearance or in biodiversity and environmental terms.

*Economic aspects*

- 6.16 The economic benefits arising from this development are fairly minor. There would only be one full-time equivalent job associated with the operation of the digester. The power generated would be small at 0.5MW, and all of this would be utilised by the applicant’s business interests on the landfill site. There would be no wider benefit to the local economy.

**7.0 CONCLUSION**

- 7.1 The environmentally friendly recycling process to generate electricity through the use of



the anaerobic digestion facility is welcomed and the 'green' sustainability credentials are acknowledged. However, the protection of the rural environment is also an important matter. The balance, where there is a conflict between these two issues, has to be made on the justification for the facility, and the need for it to be located where it is proposed. Where alternative land is currently available or will be released in the short term for developments such as this, with good transport links and without intrusion into the open countryside, the acceptability of the current proposal has to be questioned.

7.2 On this basis, the proposal would result in the industrialisation and cumulative build up of non-essential buildings, structures, storage, plant and machinery within an open countryside setting where there is no genuine need or wider environmental benefit other than the short-term benefit to the landfill operator business.

#### 8.0 **RECOMMENDATION**

**It is recommended that planning permission is refused for the following reason:**

**The proposal for an anaerobic digestion facility, which is not linked to an existing agricultural farming use of the land, has failed to show any proven overriding need for the facility to be located in this open countryside location and so would result in the introduction of an industrial operation that is not justified within this rural setting and which is considered to have a harmful impact on the general open character and appearance of the designated Lowland Vale. The proposal is therefore contrary to saved policies GS2, NE9, NE10 and NE11 of the Vale of White Horse Local Plan.**

Author / Officer: David Rothery – Major Applications Officer  
Contact number: 01235 540349  
Email address: david.rothery@southandvale.gov.uk