Soil Association
healthy soil, healthy people, healthy planet

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Planning Department
Derbyshire County Council

By email only

21st November 2014

Dear Sirs,

Soil Association response to Planning Application CW9/0311/174: Midland Pig Producers. Land at Foston

The Soil Association objects to this revised planning application. We have previously objected to the original proposal, and the recent amendments have not resolved our concerns. Below is a summary of our position, with references to the supporting evidence.

1. Inappropriate use of agricultural land

The application notes the site is classified as Grade 2 land on the Agricultural Land Classification system, describing this as 'medium grade' land[1]. However, the official assessment of ALC grades[2], describes Grade 2 land as 'very good quality agricultural land', where 'the level of yield is generally high'. This is the sort of land that needs to be maintained in sustainable agricultural production to ensure continuity of food supplies in the future. As the application goes on to note, 'The site will incorporate a number of large buildings on a previously undeveloped site'. This development would entail the loss of that valuable resource of high quality productive agricultural land.

In relation to the construction of 'a number of large buildings' the application states that 'planning policies do not restrict such agricultural development on agricultural land.' We would contend that the proposal has more in common with industrial processes than agriculture and hence the reference to looser planning restrictions for agricultural 'developments' are not appropriate in this context.

2. Antibiotic resistance

Our main evidence on this issue was set out in our previous submissions. Therefore please refer back to our first comment dated August 2010, a copy of which is stored online[3], as well as our reply to the letter from Carter-Ruck Solicitors (which was written in response to our

[1] Planning Statement v3, page 45
[2] http://archive.defra.gov.uk/foodfarm/landmanage/land-use/documents/alc-guidelines-1988.pdf
[3] Please see the following address https://www.soilassociation.org/LinkClick.aspx?fileticket=09aXOi0j6VE%3D&tabid=1272

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initial comment) representing Midland Pig Producers and also found online[4]. Here we give a summary, with new information shown in **bold**.

- In intensive livestock production animals are kept together indoors, in confined spaces, where disease outbreaks are inevitable - in such units antibiotics are therefore frequently used routinely, regardless of whether disease is actually present. Agriculture accounts for almost half (42%) of total antibiotic use in the UK annually, and a very large majority of UK farm antibiotic use is in pigs and poultry[5], with pigs believed to be the largest users of all animal species.
- **In April this year (2014) the World Health Organisation (WHO) published a report[6] about rising antibiotic resistance around the globe. The WHO warns that resistance is becoming a problem so serious that it threatens the achievements of modern medicine.**
- Over the last decade, evidence has emerged to show that resistance to antibiotics can transfer between both animals and humans and that this occurs more frequently, and with far greater ease, than was previously believed. A number of very serious new types of antibiotic resistance have developed in recent years and several of these are increasing in farm animals
- **In Denmark where there is more awareness and testing of livestock associated antibiotic resistance, swine-related 'methicillin-resistant staphylococcus aureus' (MRSA) is nearing epidemic levels, after being recently found in 70% of pig farms[7].**
- The European Food Safety Authority published a review of the science which shows that for certain bacteria, such as salmonella and campylobacter, most of the antibiotic resistance in human infections comes from farm-animal antibiotic use[8].
- **A very recently published review of the scientific literature has found that for multi-resistant E. coli, vancomycin-resistant enterococci, livestock-associated MRSA and clostridium difficile, farm animals have become significant reservoirs of these antibiotic-resistant pathogens due to the overuse of antibiotics[9]. The scientists found that there is a significant amount of evidence, in some cases strong evidence, that these bacteria are being transmitted to humans and causing infections. In addition to**

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[4] Please see the following address http://www.soilassociation.org/LinkClick.aspx?fileticket=jc2NofEPKwc%3D&tabid=1272

[5] Veterinary Medicines Directorate, UK Sales data annual report 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/375625/VARSS2013.pdf

[6] WHO, 2014. Antimicrobial resistance – Global report on surveillance, http://apps.who.int/iris/bitstream/10665/112642/1/9789241564748_eng.pdf

[7] For information on this, please see http://www.globalmeatnews.com/Industry-Markets/Danish-pig-farmers-start-testing-their-own-herds-as-MRSA-risk-grows

[8] Please see our previous evidence for references (footnotes 1&2)

[9] Dahms et al. 2014, GMS Hygiene and Infection Control, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4184042/pdf/HIC-09-21.pdf

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foodborne transmission, environmental transmission, through manure or air is suspected for all of these pathogens. Former and current Chief Medical Officers have expressed significant concern about the 'catastrophic threat' to medicine caused by increasing levels of bacterial resistance to antibiotics, linked to their use in very large quantities in the agricultural industry[10].

- **Newly published research into the human cases of the MRSA strain CC398 in Scotland has shown that there has been frequent transmission from livestock to humans. Genetic fingerprinting shows it originated from livestock but is now able to spread from human to human in hospitals**[11]. **In Scotland, MRSA CC398 has been found in hospitals and neonatal wards. MRSA CC398 is a strain of MRSA which originated in pigs but has now caused several deaths in Denmark[12].**

- **Midland Pig Producers state on their website that 'the design of the new farm will reduce the reliance on antibiotics to maintain health in pigs' – however there is no indication given in the revised planning proposal of the likely scale of this reduction.** There is evidence however that larger herd size is linked to higher levels of many diseases in pigs[13], including some that can cause illness in people. Such infections include swine flu and salmonella. **Scientists have found that genotype hepatitis E, a known zoonosis (a disease which can be transferred from animals to humans), is significantly more prevalent in pig farms with over 1000 sows than on smaller farms and large herd size is suspected of contributing to the incidence of swine dysentery[14].** A British survey of antibiotic use on pig farms found that there was a significant association between the use of antimicrobials added routinely to the feed of animals, and the size of the farms: small farms were less likely to use them than either medium or large farms, and large farms were also more likely to medicate individual growing pigs than either small or medium farms. **A study in Germany found that larger units were significantly more likely to harbour MRSA than smaller units)[15]**

Therefore we remain seriously concerned that this proposal, if allowed to proceed, would exacerbate the risks to human and animal health by increasing levels of antibiotic resistance.

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[10] Professor Sir Liam Donaldson and Professor Dame Sally Davies, both quoted in Alliance to Save Our Antibiotics (2014) 'Antimicrobial resistance – why the irresponsible use of antibiotics in agriculture must stop'. http://www.soilassociation.org/LinkClick.aspx?fileticket=G9q4uEb5deI%3d&tabid=1841

[11] Published in the journal of Applied & Environment Microbiology - For details of the study, and who to contact, please see http://www.roslin.ed.ac.uk/news/2014/11/03/mrsa-bugs-linked-to-livestock-are-found-in-hospitals-study-finds/

[12] MRSA CC398 epidemiology in Denmark, http://www.ssi.dk/English/News/EPI-NEWS/2014/No%2024a%20-%202014.aspx

[13] See our first, full objection for further details and references

[14] Dahms et al. 2014, GMS Hygiene and Infection Control, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4184042/pdf/HIC-09-21.pdf

[15] http://www.biomedcentral.com/content/pdf/1746-6148-7-69.pdf

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3. Rights of local residents

Our main evidence on this issue can be found in our letters to you dated 10th February 2012 and 27th March 2013[16]. Again, we do not believe the revised application fully addresses these concerns, in particular in relation to the farmworkers and others who would be living in close proximity to the development, including the inmates and employees at the adjacent HMP Foston Hall. Please refer to the original letters listed for full details.

There is a particular concern about a significant potential risk to the health of local residents. As indicated in our earlier submissions, research in Holland[17] has found livestock-associated MRSA in the air in a radius of 1km around intensive pig and poultry units. **More recent work in Germany[18] has reinforced this, finding livestock-associated MRSA on surfaces 500 metres away from livestock units.** The planning application indicates several residential properties within these distances of the proposed development, whose residents would therefore be exposed to this new risk.

4. Anaerobic digestion

We have previously expressed concerns on the sustainability of the proposed AD unit in our letter to you dated 16 December 2011 – these concerns remain.

Please therefore refer once more to the evidence presented in the report[19] on Anaerobic Digestion units linked to large-scale livestock developments. This research was undertaken by a renewable energy consultant, commissioned by the Soil Association and the World Society for the Protection of Animals. For convenience, a summary of this evidence is documented below – we hope the findings of this report will help you judge the merits of the points made in support of the application by Midland Pig Producers.

Summary of report findings

There are too many uncertainties in respect of AD units linked to large-scale dairies or pig units, for anyone to say for sure that they will lead to an overall reduction in the greenhouse gas emissions from the cows or pigs.

- There is a huge variability in the performance and reliability of installed AD units – as such the environmental impacts of AD are far from clear.
- For example, in the UK, overall, installed AD units only reach 8% of their rated performance.
- The AD plant forms a third of the total cost of the proposed development. However, by

[16] Please see our letter of objection found here: http://www.soilassociation.org/LinkClick.aspx?fileticket=ldSZ0FqqFe8%3D&tabid=313
[17] http://www.nivel.nl/sites/default/files/bestanden/Rapport-Intensieve-Veehouderij.pdf
[18] Friese, A., Schulz, J., Hartung, J., Rösler, U. (2012) Airborne MRSA in livestock buildings and their surroundings. Berlin University
[19] Enclosed with our letter of 16/12/2011

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the developer's own calculations it will only reduce the total greenhouse gas emissions from the pig unit by 14% – with the uncertainties identified in this report, in practice this figure could be far lower.

- The digestate produced by AD units, although more uniform, has no greater value as a fertiliser compared with slurry.
- Pig slurry is one of the worst (most uneconomic) fuels for AD, second only to slurry from dairy cows.
- Over time the economics of AD drive operators away from using animal waste to use more or only crops as fuel. This has happened in Germany. In the future therefore, Foston's AD unit will likely have to switch to maize as the main or even sole fuel.
- When this occurs, the greenhouse gas emissions from land-use changes (caused by displacement of food production) could result in a net increase in greenhouse gas emissions, not a reduction.

5. Contingency Planning

The Crisis Recovery Plan appears weak and does not appear to have undergone any quality assurance process. Hence, we are not convinced it can be relied upon to ensure that claimed environmental safeguards can be maintained at all times and are concerned that the health and environmental risks have not been properly mitigated. For example: Section 2.6 addressing flood risk states:

> *'There is a small risk of slurry with a high Biological Oxygen Demand (BOD) contaminating these water courses as a result of a flood event…., or as a result of some unforeseen event. Contamination as a result of a flood would not impact on the watercourse significantly, because the increased BOD would be compensated by the increased flow of water'.*

This is an overly simplistic assessment of the risk here, lacking evidence of how slurry may be transported and deposited via differing flooding events. There is no assessment given of the impact of any 'unforeseen event'. The Planning Milestones here focus on identification and monitoring (the latter by the Environment Agency), but there is no indication of clean up and restoration work.

6. Animal Welfare Standards

We note also that the applicant claims they will 'maintain the highest animal welfare standards[20]'. This is of course a good aim to strive for. However the Summary of Animal Welfare Standards, published by Compassion in World Farming[21], identifies the Soil

[20] Planning Statement v3, section 8.8
[21] http://www.ciwf.org.uk/media/5231246/standards_analysis_exec_summary.pdf

Association and the Scottish Organic Producers Association standards as the highest available, neither of which the proposed development would be eligible for. Hence we do not believe that the development can possibly achieve the 'highest' standards.

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For these reasons we object to the proposed development.

Yours faithfully,

Trevor Mansfield
Head of Policy (Farming & Land Use)
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