Planning Control  
Environmental Services  
Derbyshire County Council  
Shand House  
Dale Road South  
Matlock  
Derbyshire  
DE4 3RY  

27 March 2013  

Dear Sir / Madam,  

We are writing to you with new information regarding the potential health risks of the proposal made by Midland Pig Producers for a 25,000 sow farm near Foston (Planning Application Code CW9/0311/174).  

Research carried out in the Netherlands, Germany and the US highlights new concerns about the potential health effects of intensive livestock farms for neighbouring residents. These findings raise serious public-health questions regarding the proposal for such a large pig farm near Foston. We feel these issues should be considered as part of the planning application process.  

Scientists already knew that people working on intensive farms were exposed to potentially serious health risks such as reduced lung function, chronic coughs, wheezing, eye irritation and exposure to the livestock-associated MRSA strain, ST398, but they are now finding evidence that people living near these farms could be affected too [1].  

Dutch scientists have found that the DNA of MRSA ST398 is found more frequently, and in higher concentrations, in the air in a radius of 1 km around intensive pig and poultry farms. The scientists said that they had only tested for MRSA, but that other types of resistant bacteria might also be emitted from intensive livestock farms and that there was a need for research into the public-health risks of these emissions [2][3]. Other bacteria, often resistant to multiple antibiotics, which earlier studies have found emitted in the air from intensive livestock farms include campylobacter, enterococci and streptococci [4][5][6].  

Another, more recent, Dutch study has confirmed that these emissions of MRSA may be a risk to neighbouring residents. Transmission of MRSA ST398 to humans is known to occur most frequently for people in direct contact with farm animals, but the study found that in the Netherlands even people living in livestock-dense areas who do not have direct contact with farm animals are also at increased risk of being carriers of MRSA ST398 [7].  

This finding is consistent with an earlier European study of MRSA ST398 prevalence in 17 countries which had found that proximity to, without direct contact with, pigs and veal calves may be a risk factor for acquiring the bacteria [8]. The Dutch scientists said that
their own findings ‘provide a warning that where one lives may play a critical role in one’s risk of disease’[7].

Intensive livestock farms can also emit other air pollutants of local importance such as odour, hydrogen sulphide, endotoxins and ammonia[1]. While there is still a limited amount of data on the health impacts of these emissions[3], malodour has a clear impact on quality of life, reducing residents ability to engage in gardening, family gatherings, cooking outside, visiting neighbours and drying laundry[1]. More recent studies are now also finding clear evidence of significant health impacts.

A large German study examined 7,000 people and found that those living within 500m of intensive livestock farms had a significantly reduced lung function (their forced expiratory volume in 1 second was reduced by 8%) [9]. An American study in North Carolina similarly found reduced lung function in residents sitting outside their homes for 10 minutes twice a day. Increased concentrations of endotoxins (bacterial toxins which are found in greater concentrations near intensive farms) were also associated with more sore throats, chest tightness and nausea[1][10].

A second study carried out in North Carolina, and published in January of this year, involved an analysis of air pollution and the blood pressure and stress levels of neighbours of intensive pig farms. They found that higher levels of malodours and of hydrogen sulphide were associated with increases in blood pressure which could not be entirely explained by the increases in stress which occurred. The scientists concluded that ‘if swine CAFO air pollution contributes to high blood pressure in this region, the associated cardiovascular morbidity and mortality would be among the consequences of environmental injustice’[11]. Nb. A CAFO (Concentrated Animal Feeding Operation) is a large scale industrial farm in which the animals are confined for at least 45 days in a 12-month period, and there is no grass or other vegetation in the confinement area during the normal growing season. This type of system is most commonly found in the US.

While much research on the impacts on the health of local residents of large intensive livestock farms remains to be undertaken, the evidence emerging is already strong enough for the likelihood of damage to be recognised. The greater the density and number of animals being kept, the greater the health risks are likely to be. Our view is that these issues need to be given serious consideration before a decision is taken on the proposed large pig farm at Foston.

We strongly urge you to take these issues into account when taking your decision regarding the planning application.

Yours sincerely,

Peter Melchett,
Policy Director, Soil Association

Tracy Worcester
Director, Farms Not Factories
REFERENCES


[10] Endotoxins are components of the cell wall of certain bacteria. Inhalation of endotoxins can lead to inflammation of the airways. Increased concentrations of endotoxins are found near intensive pig and poultry farms.
