Farm Waste Management Plan – E Falkingham and Sons

The applicants operate an established agricultural business located at Denby House. The farming business extends to 210 hectares of owner occupied land.

The applicants are proposing to expand their existing piggery enterprise up to 4000 places.

All of the manure produced by the livestock enterprise will be retained on the farm for use as a sustainable fertiliser on arable land. In terms of spreading area, 4000 pig finishing places requires approximately 168 hectares to dispose of the manure.

PIGS			
Туре	Number of pigs	Land area/pig 250 Kg/ha	Total area required
Maiden Gilts		0.052	
Breeding Sows & Boards		0.080	
Weaners 4-8 weeks		0.013	
Growers 8-12 weeks		0.025	
Finishers over 12 weeks	4000	0.042	168.00
		Total Area	168.00

The holding has 210 hectares available for manure spreading, as shown on the plan enclosed.

The total spreading area required for the existing and proposed livestock enterprises amounts to 168.00 hectares.

Application Techniques

Pig slurry will be applied using a closed slot shallow injection system, dribble bar or trailing shoe applicator, depending on the time of year of the application. This is classed as Best Available Techniques for the mitigation of impacts from the spreading of slurry and a requirement of the DEFRA Air Quality Strategy 2019.

Assessing the magnitude of odour impacts from the spreading of pig slurry to land as a fertiliser provides a significant technical difficulty. There is no available research, methodology, or benchmarking. The spreading of slurry is obviously an odorous process, and the DEFRA Code of Good Agricultural Practice – Protecting our Water, Soil and Air recognises this issue and offers measures on how the process can be mitigated which are detailed below.

Slurry spreading will be undertaken in the spring onto growing crops, and in the late summer onto stubbles.

The regulatory requirements include, primarily, The Nitrate Pollution Prevention Regulations

2015 (NVZ Regulations) which provide the legislative framework for the disposal of farmyard manure within an NVZ location

The legislative requirements for farmers within an NVZ location are shown below.

Requirements of the NVZ rules

If your farm is in an NVZ you must:

- Plan your use of livestock manure and manufactured nitrogen fertilisers to ensure that you don't apply more nitrogen than your crops require
- Produce a risk map of any land where you intend to spread organic manure.
- Comply with the field limit, the Max (crop nitrogen requirement) limit, closed periods and spreading controls for spreading manufactured nitrogen fertilisers and organic manures.
- Comply with the livestock manure N (nitrogen) farm limit
- Provide adequate storage capacity for livestock manures
- Keep records of the nitrogen applied to your fields and some records and calculations for your farm as a whole.

The NVZ Regulations require the farm to have at least 26 weeks storage for slurry. The development will have at least 26 weeks storage requirement below the slats and in the separate slurry store.

The proposed slurry tanks beneath the building are also required to be constructed in accordance with Silage, Slurry and Agricultural Fuel Oil Regulations (SSAFO 2010).

Farm Waste Management and Amenity Impacts

The spreading of slurry is a practice that is controlled through strict regulation in terms of the quantities of nutrients that can be spread, the locations where slurry can be spread and time of year when spreading can take place. The regulations are focussed on the protection of the water environment, rather than specifically focussed on protecting amenity during the process.

It is impossible to accurately predict any impacts on amenity arising from the physical process of spreading slurry as there are no benchmarks, research or methodology. The process must be carried out as quickly as possible using Best Available Techniques.

Farm manures have the potential to generate odour when they are spread and all applications should be made in accordance with DEFRA's 'Protecting our Water, Soil and Air' A Code of Practice (2009). A site-specific risk assessment of soil and weather conditions is recommended at the time of application.

The precise timing of slurry application will depend on prevailing weather, in particular wind and atmospheric conditions, soil moisture and crop growth stage. The applicants should

make use of long term weather forecasts when planning his manure applications and avoid periods when the wind is blowing in the direction of neighbours. The best conditions for spreading are when air mixes to a great height above the ground, which occurs typically on sunny, windy days, followed by cloudy, windy nights. These conditions cause odours to be diluted quickly. Spreading at weekends, bank holidays, or in the evening is not recommended wherever possible to avoid potential nuisance to residential properties.

