Non-Technical Summary

EPR/PP3734YY/V001

S J Savile and Sons, Raven Hill Farm

Raven Hill Farm is situated approximately eight kilometres north of the market town of Driffield, East Yorkshire. The installation is approximately centred on National Grid Reference TA 03790 66806. The installation is operated by S. J. Savile and Sons and the current permitted site comprises two pig houses, numbered GF1 and GF2. The two houses are permitted for a combined capacity for 4,456 fattening pig places.

The proposal is to expand the site by doubling the size of the existing sheds, together with 8 feed bins and a water tank. Please refer to Appendix 4 for the proposed site plans. This would expand the capacity to 8912 >30kg pig places. The proposal requires a substantial variation to the existing permit.

The doubling of the size of the sheds involves addition of the extra area and does not involve demolition or changes to the existing sheds.

The installation boundary change is an extension to the North. Located in the extended area will be the extension of the buildings, additional feed bins, soakaway and hardstanding. The soil bund to the West is also being extended Northwards.

Regarding Site Drainage – apart from linking to revised new sheds – the drainage description is as per original permit EPR/PP3734YY in table S3.2.

Regarding the three receptors within 400 metres from boundary, as defined in the Odour and Noise Management Plans, there are no changes to distances to receptors with boundary changes. All changes are to the North of the original site and not towards any of the nearest receptors.

The situation continues where slurry is not stored above ground within the installation. Please see description of slurry management in the section below.

Site and Management

The proposed extension measures 58.04m x 55.56m with an eaves height of 3.32m and a ridge height of 6.427m. This will be purpose-built pig finishing accommodation and will be constructed from an internal timber frame. The wall cladding will be concrete blockwork, with GRP flextone sheeting above. The roof material will be fibre cement sheeting in natural grey. The materials will match the existing building which is being extended.

Pigs are brought onto the farm weighing approximately 40 kilograms and are depopulated at 110 kilograms, spending an average of 11 weeks on site. The percentage occupancy per annum is 82%.

The sheds will be roof ventilated using a computer-controlled ridge extraction system. Air enters the sheds through side inlets and exits via variable speed fans operating at up to 12.5m/s, with an emission point higher than 5.5 metres, to ensure minimal deposition of particulate material. Under the new proposal there will be a total of 64 roof fan emission points. Sheds are naturally heated by ambient heat.

The existing and new housing will have fully slatted floors with a temporary slurry storage beneath them, which is managed within the 800mm threshold for 'shallow pit'; with a vacuum system for frequent slurry removal at least every 10 weeks. The operators have an agreement with J & M Burdass to export slurry into existing steel stores at Pear Tree Farm at Thwing. This storage is used when within Nitrate Vulnerable Zone closed periods for spreading; and when weather and land conditions do not allow for application of slurry to land directly following removal from the under-slat pits.

Pig slurry will be applied to land 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. Slurry removal will be undertaken with a tractor and tanker for exported slurry, and with an umbilical system for slurry spread at Raven Hill Farm. Please refer to the Manure Management Plan in Appendix 10 (supporting document to the Environmental Statement).

Pens are washed and disinfected in between each fill. Wash water falls to the under-slat pits beneath.

Looking at the Environment Agency flood map, the site is not at risk of flooding. There are no surface water features, including springs, shown on the 1:50 000 Scale Ordnance Survey mapping within 1km of site. The farm is located within Surface Water and Groundwater Nitrate Vulnerable Zones (NVZ). Please refer to the Hydrogeological Risk Assessment in Appendix 10.

Roof water from the houses and clean yard water drains to soakaways and surrounding grassland. The geology of the site is chalk, with a rapid infiltration rate. The surface on all sides of the buildings is hardstanding and there is a soil bund on the West boundary. All contaminated water (e.g. loading ramp wash water and footbath contents) is directed to the under-slat slurry storage.

The land around the site is predominantly agricultural. The surrounding topography is relatively flat and low lying.

Associated food is stored on the installation in sealed food bins. Feed is manufactured at the JSR mill and mix site (not on the installation) with diets formulated to match the growth stage of the pigs and fed ad lib as dry meal through automated systems. Water will be from borehole (with mains supply available as backup) and will be supplied in nipple drinkers.

Carcasses are stored in a secure container on site for removal by a licenced waste contractor. There is no incinerator.

Chemicals and medicine will be kept in the locked biosecurity room/office, which is part of the building (see Appendix 4). There will be no agrochemicals stored on site, but there will be

approx. 10kg of rodenticide on site at any time. There is no fuel store on the installation or linked primarily to the pig enterprise.

There is an alarm system in case of power cuts, with emergency release of windows and doors to compensate immediately for forced ventilation failure. A back-up generator will be available from local plant hire to run the ventilation system in case of an electrical failure issue that isn't easily and quickly resolved. There is no permanently stationed generator.

Electricity is from mains, but there is solar and wind energy produced on the farm (not within installation boundary) with excess generation sold into the grid.

The building will only have one entrance via a door which will be locked. The loading ramp will have a roller shutter door operated from inside the building.

The above activities are managed in accordance with the Environmental Management Plan (summary in Appendix 3), which describes control measures and management procedures for all above operations at the site and provides Action Plans to address potential accident and emergency situations, and other non-operational occurrences.

There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA) or Ramsars within 10km of the installation; nor are there any Sites of Special Scientific Interest (SSSI) within 5km of the installation. Within 2km of the installation there is one Local Wildlife Site (LWS); there are no ancient woodlands. When the original application was submitted we were advised that it did not need ammonia screening (unique).

There are three residential sensitive receptors which are all over 100m but within 400m of the installation boundary to the South of the site. There is no history of complaints. The nearest receptor is the farmhouse for "Raven Hill Farm" lived in by Pat Savile. The second receptor is The Stables – Raven Hill Cottage next the farmhouse, which is lived in by Neil and Clare Savile. Finally, there is "Pasteve" on Sheep Rake Lane (currently under refurbishment) which will be lived in by John and Lucy Savile in the longer term.

The proposed development will include mitigating measures including native tree and hedgerow planting to the site boundaries. There is already a mature hedgerow down the east boundary and woodland shelter belt to the South, in between the installation and nearest receptors. There is also an earth bank/soil bund, which will be extended alongside the west side of the installation.

The Environmental Statement (Appendix 10) prepared by Ian Pick Associates Ltd, summarises as follows:

> "In conclusion, the proposed pig unit extension at Raven Hill Farm will not produce any significant Environmental Impacts. From the information appraised through the Environmental Impact Assessment process, it is clear that the proposed redevelopment will have low impact on the environment taking into account the migration measures proposed".

BAT Compliance

Referring to the IRPP BAT Conclusions document, published on the 21st February 2017, we can confirm that we will be able comply with all relevant BAT conclusions, including the revised BAT Associated Emission Levels (BAT-AEL).

BAT conclusions 3 and 4:

We adopt a nutritional strategy to reduce the levels of nitrogen (N) and phosphorus (P) excretion and can demonstrate we are meeting the BAT associated excretion levels given in table 1.1 and table 1.2. Feed dockets and a current generic statement can be provided to demonstrate a reducing protein (N) and phosphorus (P or total P) diet over the whole life cycle.

BAT conclusion 24:

We will use manure analysis to estimate total N and P content in manure and will report this to you annually.

BAT conclusion 25:

We will monitor ammonia emissions and demonstrate emission levels through use of emission factors.

BAT conclusion 27:

We will monitor and demonstrate dust emissions from each animal house, by use of emission factors.

BAT conclusion 30:

- BAT 30 (a –e) Techniques used:

Fully slatted system over pit (managed within 800mm depth), operating frequent slurry removal (a minimum of every 10 weeks), exporting to third party. All slurry and contaminated water (wash water) is collected in the under-slat storage pits and there is no separate storage within the installation. Collection of slurry is by sealed system into tanker. These measures reduce the ammonia emitting surface and risks of bioaerosol creation.

- BAT AEL(s)

The standard emission factor for pigs for our proposed kind of housing is 3.11 and, to meet the new requirements, the emission per pig must not exceed 2.6kg NH3/animal place /year.

Taking 3.11 as the starting point then -

- this emission factor is based on an assumption that the building is continuously at capacity. 82% occupancy.
- 3.11 x 0.82 = 2.55

Alternatively:

1. Planned Crude Protein % of rations is as follows:
   - JSR Grower 2 (35-50kg) = 15.402%
   - JSR Finisher = 13.914%

= 14.66% average

Comparing to rations in the same supply chain, 2017 Crude Protein levels were at:

- Grower (30-70kg) = 17.053%
- Finisher (70-120kg) = 15.583%

= 16.32% average

This equates to a -1.66 reduction in crude protein percentage from 2017 to 2020.

1% reduction in protein content is equivalent to 10% reduction in ammonia emission.

3.11 x 0.166 = 0.52

3.11 – 0.52 = 2.59

Both calculations are independently below the current threshold of 2.6 for BAT.

Much larger reductions in protein can be demonstrated when compared to industry averages over a longer period.

Therefore, the proposal complies with the revised BAT Associated Emission Levels (BAT-AEL).