

Permitting decisions

Bespoke permit

We have decided to grant the permit for Church Hill Farm operated by T Soanes & Son (Poultry) Ltd.

The permit number is [EPR/WP3831VY/A001](#).

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken in to account.

This decision document provides a record of the decision making process. It:

- highlights [key issues](#) in the determination
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account
- shows how we have considered the [consultation responses](#).

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

About this application

This applicant T Soanes & Son (Poultry) Ltd have been operating this Installation since the 1940's. The Installation was identified as requiring an Environmental Permit, and since submission of a duly made application (for such permit) have been operating in accordance with a regulatory position issued by the Environment Agency's local regulatory team. As such, this installation is not being considered as a "new site" which sets our position for compliance timescales in achieving BAT (Best Available Techniques) – essentially allowing the operator to make changes on site by improvement condition beyond the date of permit issue.

Church Hill Farm is an abattoir slaughtering and processing a maximum of 150,000 poultry each week (daily capacity 50-90 tonnes per day). The finished product is whole and portioned chickens. All process effluent is currently collected and treated by a dissolved air floatation unit (DAF) situated adjacent to the lairage. This treated effluent is then discharged to a surface impoundment (a series of lagoons) located to the east of the production facility where it soaks into the ground or evaporates. An improvement programme is proposed which includes the installation of a new effluent treatment plant (ETP) the effluent will then be discharged via an unlined infiltration pond.

The activities undertaken at the installation are

- **Section 6.8 Part A (1)(b)** – Slaughtering of animals at a plant with a carcass production capacity of more than 50 tonnes per day. And
- **Section 5.4 Part A (1)(a)(ii)** – Disposal of non-hazardous waste in a facility with a capacity of more than 50 tonnes per day by physico-chemical treatment.

In addition there is also a **groundwater (point source) activity**, whereby treated process effluent will be discharged via an unlined pond.

Directly associated activities will include:

- Storage and handling of raw materials.
- Storage and handling of animal by-product and waste.
- Boiler/burners for the production of hot water for cleaning equipment, scalding and heating.
- Refrigeration.

The activities comprise of single installation because the directly associated activities and groundwater discharge are technically connected to the listed activities and have the potential to effect emissions.

Live poultry is delivered to the site and placed in a covered reception area (Lairage). The birds are stunned before slaughter, then scalded and plucked before entering the evisceration room where unwanted parts and by-products are removed and the carcass is graded by weight. The product is then chilled, graded and packed before loading onto refrigerant trailers for delivery to customers.

Emissions to air include combustion gases from a liquefied petroleum gas fired boiler and burners associated with the site heating, scald tank and cleaning system buffer vessel. The combined thermal input capacity of the boilers/burners is less than 5 MW.

There are no discharges to surface water and segregated uncontaminated surface/roof water is discharged to soakaways by a series of drains and treated process effluent will be discharged to groundwater via an unlined pond. Most waste arising from the site is animal by-product waste, this is sent off site for recovery/recycling or landfill.

T Soanes & Son (Poultry) Ltd have an Environmental policy and will have an in-house environmental management system (EMS).

There are no sites of Special Areas of Conservation (SACs); Special Protection Areas (SPAs) or Ramsars within 10 km of the installation boundary, there are no Sites of Special Scientific Interest (SSSI) within 2 km of the installation boundary. There is one Local Wildlife Site within 2 km of the installation.

The site is located to the east of Middleton-on-the-Wolds the nearest sensitive receptors (residential properties) are on the western boundary of the site. There are also residential properties within 100 metres of the northern boundary of the site. The land adjacent to the eastern and southern boundary is predominately rural.

Key issues of the decision

Emissions to Groundwater

Currently the process effluent from the installation is collected and treated in-house by a dissolved air floatation unit (DAF) situated adjacent to the lairage. This treated process effluent is then discharged to a surface impoundment (a series of lagoons) located to the east of the production facility where it soaks into the ground or evaporates. *We do not consider that current operations are in line with Best Available Techniques (BAT) for this existing installation, and as part of our consideration for this application (to support the continued discharge of process effluent to groundwater) the operator was required to provide an appraisal against BAT methods together with proposals for implementing any improvements in order to meet BAT within a short timescale.*

To support such continued discharge of process effluent to groundwater the applicant has provided the following:-

1. information to confirm that other options / alternatives to such discharge have been considered by the applicant . The application has provided this along with evidence to show that other such options are not viable, including communication from the sewerage undertaker (email dated 24 July 14) confirming that an application to connect to local sewer would be rejected. This is because the local waste water treatment works at Middleton-on-the-Wolds does not have sufficient capacity to receive or treat industrial effluent. The closest treatment works with sufficient capacity is Driffield but this does not have the infrastructure to accept effluent via tanker discharge and the distance between the installation and Driffield is too far for pipeline construction. In addition it is not possible for the site to discharge treated process effluent to surface water as there, are no surface water bodies in the vicinity of the site.
2. identification of a programme of improvements in order to meet BAT in the near future. The applicant has identified that the installation of a new effluent treatment plant (ETP) to treat process waste water will meet BAT, and has proposed improvements to achieve this. The new plant will be built on land to the east of the production buildings. The new plant will include a rotary drum screen, a new balancing lagoon, a DAF unit, a solids handling system and an oxidation ditch, the final discharge will be via an unlined pond acting as a soakaway. The implementation of this technology is consider to offer a significant improvement in quality of effluent resulting from the operation of this new ETP.
3. a groundwater risk assessment by GW Science Ltd dated 2014(included in the application as supplementary information) that included an intrusive investigation to obtain site specific data (including geological conditions, groundwater elevations and groundwater quality) was undertaken. The data collected from this investigation was used to develop a localised groundwater model using a groundwater flow modelling package called MODFLOW which assessed the potential risk to off-site receptors from the historical lagoon area

The modelling concludes that whilst under the current position there is evidence of seepage of the effluent from the current impoundment (historical lagoons to groundwater beneath the site, the contamination is not predicted to migrate more than 1000 metres down-gradient of the source. The nearest down-gradient off-site groundwater receptor is a groundwater abstraction 2 km from the boundary of the site. Therefore, it is concluded there is no immediate risk to off-site receptors,

Groundwater levels within the aquifer are typically 20 metres or more below ground levels. Natural attenuation within the unsaturated zone is expected to occur due to dilution, sorption and degradation effects. The model indicates that even with worst case scenario attenuation parameters, the plume is not expected to reach the nearest sensitive groundwater receptor, the abstraction 2 kilometres to the east. Also no failures of water quality standard have been recorded in regular testing of abstracted groundwater. Therefore, there are no immediate risks to receptors.

The area Groundwater and Contaminated Land team have reviewed the groundwater risk assessment and modelling. The applicant's model is intended to estimate and help visualise the spatial extent of underground migration and attenuation of any effluent from the site. The parameters set in the model are consistent with EA's hydrogeological knowledge of the area and fall within the range of parameter values used for our groundwater modelling of the aquifer in the area. We agree with the methodology and the conclusions of the groundwater modelling carried out by the applicant in order to estimate the extent of the plume and the predominant flow direction. In addition, the modelling has been used to derive site specific compliance limits.

4. a monitored natural attenuation plan (MNA) dated April 2017 was submitted. This proposed an on-going groundwater monitoring programme as a suitable risk management measure for the historical contamination associated with the lagoon area. The monitored natural attenuation plan has been prepared using EA 2000, Guidance on the Assessment and Monitoring of Natural Attenuation of Contaminants in Groundwater R&D Publication 95. It has been reviewed by our Geoscience Operations Team, the model uses the data and information from the intrusive investigations and modelling to propose monitoring, evaluate attenuation, set compliance objectives and provide for contingencies. The aim of the MNA is to monitor how groundwater systems respond following the installation of the new ETP and the remediation of the surface impoundments. The applicant has proposed emission limit values for BOD and ammoniacal nitrogen for treated effluent (following installation of the new effluent treatment plant) which have been included in the permit table S3.2.

The MNA plan details the groundwater monitoring that is proposed and the location of the groundwater monitoring boreholes which are shown on Figure 3-1 of the MNA plan.

The proposed network satisfies the minimum requirements of the MNA guidelines summarised below:

- One up-hydraulic gradient borehole (BH-1);
- BH-3 and BH2 will serve as the down-gradient compliance monitoring points.
- BH-6 will be installed adjacent to the proposed soak-away location it will be used to assess the changes to the groundwater condition over time.
- BH5 will to act as a sentinel or early warning borehole (BH-5)

It is noted that Boreholes BH-1, BH-2, and BH-3 have already been installed BH-5 and BH-6 will be installed in compliance with Improvement condition IC 7 within 3 months of permit issue.

Groundwater emission limits and monitoring requirements have been included in the permit table S3.3 and S3.4.

An improvement condition (IC8) has been included to require the operator to carry out a review of the groundwater monitoring two years after the installation of the effluent treatment plant to assess whether groundwater compliance has been achieved at the groundwater monitoring points. However in the event that they are not achieved, the applicant will be required to submit a contingency plan detailing remediation measure with timescales. The criteria for compliance is provided in section 4.4.3 of the MNA plan.

Energy Efficiency

The Operator is a member of the British Poultry Council, Climate Change Agreement for the poultry processing sector.

The Operator has commissioned a survey of energy usage at the facilities and the opportunities to reduce consumption and recover energy from process operations.

One of the principal energy consuming process operations at the site is refrigeration. As assessed in the survey the heat rejected from some of these refrigeration systems could be recovered and used to provide hot water. Cooling the product after evisceration process and before the product enters the main chillers is a particular bottleneck limiting the speed of production. Reducing the temperature of the cold water serving the evisceration process may result in productivity improvements and an initiative to achieve this is provided in the report.

The energy efficiency and recovery measures highlighted in the survey report will be considered for implementation as part of the EMS for the plant in accordance with commercial priorities.

An improvement condition (IC2) has been included to require details of what energy efficiency initiatives will be completed, justification for those that will not be completed and dates for implementation.

Standard Permit condition 1.2 has been included in the permit which will ensure that appropriate measures for energy efficiency are implemented (including requirement for a review to be conducted every 4 years).

Raw material

The Operator has provided a list of raw materials used on site. Principally they are :-

- Cleaning chemicals which are designed to satisfy food hygiene standards and best practice.

Specialist external suppliers are employed to provide appropriate food grade chemical training in safe use to appropriate staff.

The cleaning regime is reviewed to ensure it provides the optimum combination of chemicals to give a satisfactory level of hygiene.

- There are six main refrigeration systems being utilised on site :-
 - Dispatch chill
 - Blast freezer
 - Game chill
 - Cold store
 - Bird chiller
 - Loading bay

The systems use a variety of refrigerants notably R22 and R404a, R22 and ozone depleting substance is currently being phased out to be replaced by RS44 which is not an ozone depleting substance.

- Water treatment chemicals
- Diesel used for refuelling
- Lubricants, various lubrication oils are used throughout the site for motors, gearboxes etc.

Standard Permit condition 1.3 has been included in the permit which will ensure the efficient use of raw materials (including requirement for a review to be conducted every 4 years).

Water

Water is supplied from a borehole on site with a licence to abstract 900 m³. Water is used extensively throughout the site. The estimated typical water consumption efficiency at this plant is 9 litres/bird, compared with the BAT range of 8-15 litres/bird, indicating a high degree of efficiency in water consumption.

Recycling of water has not been widely employed to date. Any water that is recycled would need to be of suitable quality before reuse (in order to meet food hygiene standards). It is possible that some less sensitive applications would be suitable, e.g. vehicle washing, and the feasibility of implementing water re-cycling will be evaluated further as part of business planning and prioritization.

Basic measures have been put in place to avoid un-necessary wastage of water. For example dry cleaning techniques are used before any hosing down, all cleaning hoses in the production area are fitted with hand-held trigger nozzles, and water sprays and rinses are controlled by solenoid valves and timer switches so they only operate when the line is running. Hand wash stations are manually controlled. The scald tank is fitted with level controls to prevent overflow and the tank is designed for easy removal of solids.

Waste

Animal By products constitute the majority of waste arisings. Most ABP are category 3 (fit for human consumption) materials with some category 2 (high risk)

ABP from the slaughter process, blood and feathers are transferred to specific dedicated compartments within the Cat 3 trailer which is located behind the lairage in a contained area. Solid waste removed from process waste water by screening are transferred to a 'gut trailer'. Category 2 ABP are stored separately. The Cat 3 trailer is sheeted and ABP material removed from site for rendering at the end of each day. It is then replaced by a clean empty trailer.

Improvement conditions have been included in the permit to require the operator to review the storage of ABP (IC4) including blood (IC3) to ensure that appropriate measures and containment are in place to prevent fugitive emissions/odour.

Standard Permit condition 1.4 has been included in the permit which will ensure the avoidance, recovery and disposal of wastes in accordance with Article 4 of the Waste Framework Directive (including requirement for a review to be conducted every 4 years).

Noise

The main sources of noise are confirmed as :

- Refrigeration plant compressors
- Boilers
- Cutting equipment
- Vehicle movements
- Animal noises
- Effluent treatment - Dissolved air flotation unit – aeration pumps

The applicant has confirmed that the operation is not subjectively noisy. Noisy equipment, refrigeration plant compressors, boilers and cutting equipment are contained within buildings which provides attenuation. The effluent plant will be re-located to the car park area of the site which is located away from the nearest residential receptors. Good operation and management practices are intended to prevent annoyance to the nearest receptors e.g. regular and routine maintenance of equipment. The site has a complaints procedure.

We have consulted with the local authority who confirmed no significant history of noise issues from the site.

The operator has provided a noise management plan which has been approved by the Environment Agency. This is incorporated into table S1.2 the permit (as an operating technique).

Odour

The applicant has provided an odour risk assessment and odour management plan (version 3 – emailed 10/06/17). It identifies the following main odour sources:-

- Animal by-product waste storage.
- DAF unit and effluent treatment process
- Effluent disposal lagoon (surface impoundment)

We have reviewed the odour risk assessment and management plan, and consider that improvement measures are required in order to meet BAT.

The animal by-product and blood storage is subject to improvement conditions IC3 & IC4 which will require the operator to review the collection and storage of ABP.

The installation of the ETP and remediation of the current effluent surface impoundment will significantly reduce odours from the current DAF unit/effluent treatment and disposal process, and is considered to meet BAT.

The new ETP will have an enclosed DAF unit, effluent sludge will be stored in a new sludge tank fitted (the vents will be fitted with carbon filters). The effluent storage/balance lagoon will be managed to minimise odours (has two days holding capacity during which period the effluent will be kept mixed and aerated to prevent settlement occurring).

In addition an improvement condition (IC9) will require the operator to review and update the OMP following installation of the ETP and remediation of the current lagoons/surface impoundment area. This improvement condition will require approval from the Environment Agency prior to completion being granted for this condition.

Compliance with technical guidance note 6.11

Indicative BAT	Site Compliance with BAT
<p>1.1 Accident Management</p> <p>You should ensure the following:</p> <ol style="list-style-type: none"> 1) Your effluent plant does not get overloaded. 2) That fat, oil and grease (FOG) does not block drains. 3) Adequate containment of blood storage tanks. 	<p>Blood Storage on concrete surfacing – all surface run-off from the area flows to a below ground effluent collection tank and then to ETP.</p> <p>The cleaning regime used throughout the factory is designed to satisfy food hygiene standards and best practice. Specialist external suppliers are employed to provide appropriate food grade chemicals, and training in safe usage to Soanes staff. The cleaning schedules cover room surfaces (floors and walls) and equipment, with some items requiring daily cleaning and others being cleaned at monthly intervals or longer.</p> <p>A typical surface clean involves initial removal of gross debris from the area, water rinse, application of alkaline detergent foam using a high pressure lance followed by another rinse, and finally spraying surfaces with a disinfectant and leaving to air dry.</p> <p>As part of site improvements a new effluent treatment plant will be installed in order to address BAT</p>
<p>1.2 Energy Efficiency</p> <p>You should consider the following techniques to reduce energy consumption:</p> <ol style="list-style-type: none"> 1. Minimisation of water use. Typically about half of the total water usage at an abattoir is heated to between 40°C and 60°C. Heating this water requires substantial energy consumption, and adds a significant cost. 2. Efficient operation of the refrigeration system – consider heat recovery from refrigeration systems, reducing heat load, efficient operation on part load and fast closing doors/alarms on chilled storage areas. 	<p>Basic measures have been put in place to avoid unnecessary wastage of water. For example dry cleaning techniques are used before any hosing down, all cleaning hoses in the production area are fitted with hand-held trigger nozzles, and water sprays and rinses are controlled by solenoid valves and timer switches so they only operate when the line is running. Hand wash stations are manually controlled. The scald tank is fitted with level controls to prevent overflow and the tank is designed for easy removal of solids. There are a number of major cooling systems serving the various factory processes. As assessed by Deltamech, the heat rejected from some of these refrigeration systems could be recovered and used to provide hot water. Cooling the product after EV and before the product enters the main chiller is a particular bottleneck limiting the speed of production. Reducing the temperature of the cold water serving the EV process may result in productivity improvements and an initiative to achieve this is included within the Deltamech report. The energy efficiency and recovery measures highlighted in the Deltamech report will be considered for implementation as part of the EMS for the plant in accordance with commercial priorities.</p> <p>The energy efficiency and recovery measures highlighted in the Deltamech report will be considered for implementation as part of the EMS for the plant in accordance with commercial priorities.</p> <p>An improvement condition has been included (IC2) requiring the operator to identify improvements that can be made from from the Deltamech report. This will confirm BAT is being achieved, or will be met by improvement conditions.</p>
<p>1. 3 Efficient use of raw materials and water</p>	<p>Section 4.1 of the Application Report. The estimated typical water consumption efficiency at this plant is 9 litres/bird,</p>

<p>You should where appropriate:</p> <ol style="list-style-type: none"> 1. Use recirculating systems to recycle water. E.g. use of scald tank water for wet feather flume. 2. Use of nozzles instead of irrigation pipes during defeathering stage 3. Use of water efficient shower heads to wash poultry during evisceration 4. Interlock chemical dosing pumps with cleaning operations so that dosing does not continue after cleaning is complete. 5. Meet water consumption benchmarks of 8 to 15 litres per bird. 	<p>compared with the BAT range of 8-15 litres/bird, indicating a high degree of efficiency in water consumption.</p> <p>Recycling of water has not been widely employed to date. Any water that is recycled would need to be of suitable quality before reuse (due to food hygiene standards). It is possible that some less sensitive applications would be suitable, e.g. vehicle washing, and the feasibility of implementing water recycling will be evaluated further as part of business planning and prioritization.</p> <p>Basic measures have been put in place to avoid unnecessary wastage of water. For example dry cleaning techniques are used before any hosing down, all cleaning hoses in the production area are fitted with hand-held trigger nozzles, and water sprays and rinses are controlled by solenoid valves and timer switches so they only operate when the line is running. Hand wash stations are manually controlled. The scald tank is fitted with level controls to prevent overflow and the tank is designed for easy removal of solids.</p> <p>Table 4-1 of the EP application report summarises further water use reduction measures that have been recently implemented or are programmed for implementation in the coming year.</p> <p>In consideration of this we are satisfied that BAT will be achieved upon implementation of such measures as planned.</p>
<p>1.4 Avoidance , recovery and disposal of waste.</p> <p>You should where appropriate</p> <ol style="list-style-type: none"> 1. Demonstrate that the chosen routes for recovery or disposal represent the best environmental option considering, but not limited to , the following <ul style="list-style-type: none"> • All avenues for recycling back into the process or reworking for another process • Composting • Animal feed • Other commercial uses • Landspreading under the following conditions <ul style="list-style-type: none"> - You can demonstrates it represents a genuine agricultural benefit or ecological improvement - You have identified all the pollutants likely to be present - You have identified the ultimate fate of the substances in the soil. 	<p>Animal By-Products (ABP) constitute the majority of waste arisings. Most ABP are category 3 (unfit for human consumption) materials, with some category 2 (high risk). The waste is stored in trailers designed to be coupled up for immediate transport. The category 3 trailer which includes feathers, blood and other by-products is removed daily . The Category 2 trailer is removed on a weekly basis, the trailer is covered at night when production has finished. DAF sludges are exported for Anaerobic Digestion; Cardboard is sent for recycling</p> <p>Standard Permit condition 1.4 has been included in the permit which will ensure the avoidance, recovery and disposal of wastes in accordance with Article 4 of the Waste Framework Directive (including requirement for a review to be conducted every 4 years).</p>
<p>2.1 Operations Delivery</p> <p>Use automated crate washing equipment to minimise volume of effluent produced.</p>	<p>This system is in place. Currently in compliance with BAT.</p>
<p>2.2 Operations – Stunning and Bleeding</p> <p>After Stunning, bleed the bird for up to 2 minutes before dressing</p> <p>Use of double drain in bleeding area to optimise blood collection and reduce effluent volume produced during</p>	<p>Bleeding extended to 3 minutes so complies with BAT. There is a double-drain system, whereby blood is sent to a holding tank, rinsed once and then the drain is switched to send rinse water and the remaining traces of blood to the effluent system. Section 2.1 .2 of the supporting document provided with the permit application supports this position.</p>

cleaning.	We are satisfied that this is compliant with BAT.
<p>2.10 Operations – Cleaning</p> <p>Stop staff from removing floor-drain grates and flushing meat scraps directly down the drain during cleaning.</p> <p>2. Keep meat wastes out of the wastewater stream to reduce effluent loading.</p> <p>3. Review your management practices for clean-up operations taking into account the following techniques:</p> <ul style="list-style-type: none"> • install trays to collect waste as it falls to the floor • check drains regularly to ensure that catch pots are in place • empty catch pots into a waste bin and replace the catch pot in the drains before beginning to clean an area <ul style="list-style-type: none"> • dry pre-clean process areas before wet cleaning • avoid unnecessary hosing of blood and meat scraps into the drains (be aware that animal by product restrictions apply) • catch pots should be in place during cleaning (for example by installing lockable catch 	<p>Site procedures are compliant with BAT Section 2.1.8 of the supporting document provided with the permit application. Table 4-1 of the EP application report summarises further improvement measures that have been implemented recently or are programmed for implementation in the coming year.</p> <p>Stringent cleaning requirements are followed for all process surface areas, equipment and containers. Cleaning is done by Soanes employees who have been trained in the make-up and use of the cleaning products. Cleaning schedules are set to minimise the number of clean downs.</p> <p>A detailed cleaning regime is followed in each area of the plant in line with written procedures. Dry cleaning techniques to remove solids always precede wet cleaning and disinfection. Cleaning hoses are fitted with trigger guns to automatically shut off water when not in use. High pressure/low volume systems are used throughout the plant. Wash-down water is <60°C so protein denaturation should not occur. Meat hooks and conveyors are cleaned manually at the end of each day.</p> <p>We are satisfied that this is compliant with BAT.</p>
<p>3.1 Point source emissions</p> <p>You should where appropriate:</p> <ol style="list-style-type: none"> 1. Keep raw materials and product out of the wastewater system whenever possible. You should use the following techniques: <ol style="list-style-type: none"> a. Dry clean up b. Installation of drain catch pots and screens c. Where gross FOG is found, drainage systems should have grease traps and gratings to prevent blockages. These must be frequently inspected emptied and maintained 2. Use a balance tank or pond with a hydraulic retention time of 6-12 hours. 3. Provide contingency measures to prevent accidental discharges from overloading or damaging the treatment plant 4. If you operate an activated sludge plant you must manage the following:- <ol style="list-style-type: none"> a. The development of bulking sludges b. The carrying of excessive biomass inventories c. The formation of biological stable foam d. The inhibition of microbial activity by biocidal substances from cleaning/sterilising agents 5. At sites with biological treatment plant, ensure the surface water drains are not routed to the treatment plant. 	<p>As part of the site improvements additional effluent treatment measures will be implemented including flow and load balancing, physico-chemical treatment (DAF plant) with an element of biological treatment (oxidation), sediment removal and discharge to a soak-away. The new balance lagoon will have a hydraulic retention time of at least 48 hours (2 days) however during normal operation no process effluent will be stored for more than 24 hours.</p> <p>Clean surface and roof water drains directly to soakaways and will not enter ETP. Dirty water from surfaces in the vicinity of the ABP/blood storage area is channelled to the ETP.</p> <p>Will be complaint with BAT following the implementation of effluent treatment and ABP/blood storage improvements.</p>
<p>3.2 Fugitive emissions</p> <p>Regularly inspect pipe joints, shaft seals and gaskets in the</p>	<p>The systems and procedures are in place and the installation is fully compliant with BAT</p>

<p>refrigeration plant using proprietary leak detection equipment.</p> <p>Ensure that a system log book is kept which records:</p> <ul style="list-style-type: none"> - Quantity of refrigerant and oil added to or removed from the system (s) - Leakage testing results - Location and details of specific leakage accidents 	
<p>3.3 Odour</p> <p>You should as appropriate:</p> <p>Minimise chicken slurry production by controlling the feed rate prior to transportation of live birds to the site</p> <p>Store putrescible waste in sealed containers</p> <p>Frequent clean down of waste containers</p> <p>Frequent clean e.g. daily removal off site of blood/byproducts</p> <p>Refrigeration of blood/animal by-products/putrescible material if extended on site storage.</p> <p>Install abatement (activated carbon) on blood storage tank vents</p> <p>Back venting road tankers through the abatement unit during blood collection.</p> <p>Use of screens/catch pots to prevent meat scraps/fats from entering drainage system.</p> <p>Enclosure of effluent treatment plant /sludge handling system.</p>	<p>There are no abatement systems installed on the blood storage tanks. This is subject to improvement condition IC3 requiring the operator to review the collection and storage of blood.</p> <p>The introduction of the new effluent treatment plant will bring the site into compliance with BAT for control of odour.</p>
<p>3.4 Monitoring</p> <p>The following process variables should be monitored</p> <ul style="list-style-type: none"> - Refrigerants – Quality of refrigerant and oil added to or removed from the system – each charge or drain. - Detergent and disinfectant – consumption of detergent and disinfectant – weekly - Bleeding times - Energy consumption – continuous and recorded - Water use – continuous and recorded - Levels in the blood collection tank, the risk of accidents can be reduced by installing a high level alarm on the blood tanks linked to an automatic cut off for the blood trough pumps-continuous - Levels in the effluent treatment plant tanks – they should be fitted with high level alarms to prevent overfilling – continuous - Effluent quality – continuous and recorded 	<p>The installation is BAT compliant with the exception of :-</p> <p>Recording energy and water use, they are monitored and recorded on a site wide basis but not sub metered.</p> <p>These may be considered in the future.</p> <p>See table 4-1 of the application supporting information document for improvement to recording water usage efficiency.</p> <p>This is subject to improvement condition IC3 requiring the operator to review the collection and storage of blood.</p> <p>The new tanks planned for the effluent treatment plant will be designed to include alarms and continuous monitoring devices.</p>

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.
Consultation	
Consultation	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <ul style="list-style-type: none"> • Health and Safety Executive • Local Authority Environmental Protection Department <p>The comments and our responses are summarised in the consultation section.</p>
Operator	
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.
The facility	
The regulated facility	<p>We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits.</p> <p>The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.</p>
The site	
Extent of the site of the facility	The operator has provided a plans which we consider are satisfactory, showing the extent of the site of the facility including the discharge points the plans are included in the permit.
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.
Biodiversity, heritage,	The application is within the relevant distance criteria of a local wildlife site –

Aspect considered	Decision
landscape and nature conservation	<p>Pricketts Hollow and Woods.</p> <p>We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.</p> <p>This installation is not considered '<i>relevant</i>' for assessment under the Agency's procedures. This was determined by referring to the Agency's guidance 'AQTAG014: Guidance on identifying '<i>relevance</i>' for assessment under the Habitats Regulations for installations with combustion processes.'</p> <p>We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.</p>
Environmental risk assessment	
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>Our Air Quality Modelling and Assessment Unit carried out check screening using dispersion factors in H1 Annex F of our guidance and information supplied by the applicant. These dispersion factors are highly conservative, also the applicant's thermal capacities and flow data for the boiler is very small and as a result the mass emission of nitrogen oxides is very small. The site is also located in a rural area where the background of nitrogen oxides and in particular nitrogen dioxide will be low with significant headroom before any exceedance of environmental standards. Our checks show that under most cases the long-term and short term emissions of nitrogen dioxide will screen out. Under one scenario, hourly impacts of nitrogen dioxide using an effective height dispersion factor of 0 metres, the emission do not screen out. However due to the low background the predicted environmental concentration is still well below the short term standards.</p> <p>Therefore emission to air from the site are considered to be insignificant.</p> <p>See key issues section for emissions to groundwater.</p> <p>The operator's risk assessment is satisfactory.</p>
Operating techniques	
General operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.</p> <p>The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.</p>
Odour management	<p>We have reviewed the odour management plan in accordance with our guidance on odour management.</p> <p>We consider that the odour management plan is satisfactory.</p>

Aspect considered	Decision				
	See key issues section.				
Permit conditions					
Pre-operational conditions	<p>Based on the information in the application, we consider that we need to impose pre-operational conditions.</p> <p>Pre-operational condition 1 requires the operator to provide a Construction quality assurance report for the installation of the new lagoons and pond prior to operation of the effluent treatment plant. This is to ensure it is built to the standard specified in the application and it has been leak tested before operation.</p>				
Improvement programme	<p>Based on the information on the application, we consider that we need to impose an improvement programme.</p> <p>See key issues section.</p>				
Emission limits	<p>ELVs have been set for emissions to groundwater, these have been set on a site specific approach based on a groundwater risk assessment - there are no BAT-AELs / associated ELVs for emissions to groundwater.</p> <p>We have set ELVs for emissions exiting the new effluent treatment plant – prior to reaching the infiltration pond (groundwater emission). These are :-</p> <table border="1" data-bbox="553 953 1409 1079"> <tbody> <tr> <td data-bbox="553 953 980 1016">Ammoniacal nitrogen</td> <td data-bbox="980 953 1409 1016">5 mg/l</td> </tr> <tr> <td data-bbox="553 1016 980 1079">BOD</td> <td data-bbox="980 1016 1409 1079">20 mg/l</td> </tr> </tbody> </table> <p>However these will only apply following commissioning of the new effluent treatment plant.</p> <p>The limits have been derived based on a groundwater risk assessment (groundwater modelling) which predicted that post remediation of the current impoundment lagoons and following a reduction of contaminant loading for ammoniacal nitrogen to 5 mg/l following the installation of the new effluent treatment plant, the modelled plume is expected to be less than the groundwater drinking standards within 50 metres of the source.</p>	Ammoniacal nitrogen	5 mg/l	BOD	20 mg/l
Ammoniacal nitrogen	5 mg/l				
BOD	20 mg/l				
Monitoring	<p>We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.</p> <p>The current historical impoundment lagoons are unlined and have impacted the underlying groundwater within the Chalk aquifer (principal). The groundwater risk assessment has not predicted any immediate impact to the nearest off-site groundwater receptor (an abstraction). However, groundwater beneath the site is required to be monitored to ensure the upgrades to the Effluent Treatment system improves the overall groundwater quality and that there is no further deterioration in groundwater quality (as detailed by the Water Framework Directive).</p>				
Reporting	<p>We have specified reporting in the permit.</p> <p>The reporting frequency for groundwater parameters were proposed by the Operator and agreed by the Environment Agency.</p>				

Aspect considered	Decision
Considerations of foul sewer	<p>We agree with the operator's justification for not connecting to foul sewer.</p> <p>The facility is in a location where it is not feasible to connect to the foul sewer.</p>
Operator competence	
Management system	<p>There is no known reason to consider that the operator will not have the management system in place to enable it to comply with the permit conditions.</p> <p>The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.</p>
Relevant convictions	<p>The Case Management System has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.</p>
Financial competence	<p>There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.</p>
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	<p>We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”</p> <p>We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.</p> <p>We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.</p>

Consultation

The following summarises the responses to consultation with other organisations and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section

Response received from
Environmental Control Officer – East Riding Council
Brief summary of issues raised
<p>With regard to the application for an environmental permit for T Soanes & Son (Poultry) Limited, Church Hill Farm, Middleton on the Wolds, Driffield, East Riding of Yorkshire, YO25 9UG, I would like to confirm that in the past ten years, we have received complaints from residents in Middleton on the Wolds alleging that odours from the farm were causing a nuisance. The most recent complaint was dated 12th November 2014, although our records show that officers from this department have not witnessed odours from the farm since 2007.</p> <p>I would ask you to consider a robust odour management plan to be included in the environmental permit, to help ensure that sufficient odour controls are in place at the farm.</p>
Summary of actions taken or show how this has been covered
<p>Odour will be controlled under condition 3.1 of the permit. The applicant has produced a comprehensive odour management plan which includes current odour control measures ; control measures during the interim period while the ETP is built and during the remediation of the lagoon area and also control measures for the future (with the new ETP operational). The installation of the new effluent treatment plant at the site with associated remediation of the surface impoundment lagoons is anticipated to reduce odours significantly.</p> <p>In addition to this the permit will require the operator to review blood and ABP storage (a further potential source of odour) at the site to ensure they meet best available techniques.</p> <p>These measures (together with improvements required) will ensure that sufficient odour controls are in place.</p>

No other responses were received from other organisations or following the web publication.