Permitting Decisions - Variation

We have decided to grant the variation for Dovecote Park Skellingthorpe operated by Dovecote Park Limited.

The variation number is EPR/FP3830BX/V002.

The permit variation was issued on 05/06/2025.

The variation is for the addition of the following listed activity under Schedule 1 Part 1 of the EPR 2016:

Section 5.4 Part A(1)(a)(ii) – Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment.

The proposed Effluent Treatment Plant (ETP) has a total influent capacity of 200m^3/day and proposes to discharge to the Skellingthorpe Main Drain at NGR SK 93742 72602. The addition of the ETP removes the current disposal method of the wastewater (previously landspreading).

This variation also updates the permit to reflect the current activities on site accurately and consolidates it to modern conditions.

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

- highlights key issues in the determination
- summarises the decision making process in the decision considerations section to show how the main 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 and the variation notice.

Key issues of the decision

Dovecote Park Skelllingthorpe is an existing permitted facility for the slaughtering of animals and carcass production. The slaughter wastewater comes from the pre-slaughter washing water, the post-slaughtered meat and viscera cleaning water, and the slaughter equipment and workshop floor flushing water. The wastewater therefore has high organic content and suspended solids content.

Variation Application

The operator's substantial variation application is for the addition of an ETP for treating the process effluent generated by the abattoir. The treatment process consists of a balance tank, dissolved air floatation, biological treatment and lamella settling tank. The sludge from the treatment process is disposed off-site.

Currently the site disposes of the effluent to an outside contractor for use in land spreading activities. The local sewerage undertaker has refused connection into the public sewer due to lack of biological capacity to treat the proposed flow effectively.

Emissions to surface water

The permitting of a discharge into a water body can cause localised deterioration. The deterioration from one status class to a lower one is not permitted. The no deterioration rules only apply to the environmental standards for the determinands Biochemical Oxygen Demand (BOD), Ammonia and Orthophosphate, often referred to as sanitary determinands.

The applicant has submitted a risk assessment using the Environment Agency's Monte Carlo RQPv6c (River Quality Planning) software. The Monte Carlo modelling has been used for calculating the maximum concentrations of Ammonia, BOD and Orthophosphate in the discharge, which would not cause deterioration of the receiving water environmental quality standards (EQS). Based on the modelling results, the applicant has proposed the following ceiling limits for the sanitary determinands:

Parameter	Proposed limit (mg/l)
Ammonia	3.5
BOD	15
Orthophosphate	0.77

The treated effluent is likely to have some additional parameters resulting from the use of dosing chemicals. Therefore, the applicant has also proposed a ceiling limit value for these parameters which are given in the table below:

Parameter	Proposed limit
Chemical Oxygen Demand	100 mg/l
Total Nitrogen	25 mg/l
Total Suspended Solids	30 mg/l
Copper	0.2 mg/l
Zinc	0.5 mg/l
Adsorbable Organically bound halogens (AOX)	0.3 mg/l

In response to the Schedule 5 notice (dated 24/10/2024), the applicant also provided information on the percentage concentration of chemical additives in the effluent. The substances associated with these chemical additives include Sodium hypochlorite, Sodium-aryl-sulphonate and Alkyl-dimethyl-amine-oxide. We have calculated this to mass concentration (µg/l) and assessed these values against the relevant EQS and have found the impact to be insignificant. The usage of these chemical additives has been included within the operating techniques table S1.2.

The ETP is subject to final design based on permit emission limits, therefore the above limits proposed are based on raw and treated effluent data for a similar effluent from a sister site. Although we have audited the applicant's Monte Carlo modelling and are happy with the proposed limits, we have included an improvement condition (IC9) for a H1 risk assessment following commissioning of the ETP. Meanwhile, the proposed limit values/ceiling limits are included within the operating techniques as interim emission limit values. This operating technique will be subject to a permit review after the Slaughterhouses, Animal by-products and/or Edible Co-products Industries UK BAT Conclusions are published.

We are happy that the above ceiling limit values and completion of the IC9 will ensure that there is no deterioration of the receiving surface water body.

Secondary containment

The applicant has demonstrated there will be sufficient bunding to prevent leaks or accidental release of effluent from the ETP tanks. The bunding will be 45m x 16m x 1.3m surrounding the whole ETP. It will be waterproof and resistant to the effluent.

The bunding will have a capacity of 513.5m^3 which is larger than both:

- 110% of the largest tank the bund is protecting which is 508m^3. The largest tank is the biological treatment tank with a volume of 462m^3.
- 25% of combined volume of all the tanks the bund is protecting which is 239m^3. The combined volume of the tanks is 956m^3.

The applicant also confirmed that the tanks will be fitted with high level alarms and pump inhibitors to avoid the risk of overtopping the tanks. In the event of a leak or accidental release, the effluent will be contained within the bund and drain to a blind collection point. There will be a tanker connection point within the bund to remove the effluent and reprocess back into the ETP. There is no underground pipework within the effluent

treatment plant area. The applicant will implement a maintenance and inspection schedule to ensure integrity of the bund.

In addition, the cleaning products are kept in a locked store with a spillage kit. Acids are stored in a bunded area and alkalis are stored elsewhere in the room. Management system will be updated with methods to carry out checks, equipment used, maintenance and frequency.

We are satisfied with the applicant's secondary containment measures.

Flood risk assessment (FRA)

The applicant has provided a detailed flood risk assessment including the site descriptions, hydrological setting and flood risk and mitigation measures. In addition the applicant has also submitted a flooding contingency plan.

We are satisfied with the applicant's FRA.

Odour Emissions

The operator has assessed the risks associated with odour emissions in accordance with Common Waste Water and Waste gas Treatment/Management systems in the chemical sector (CWW) BAT. As the treatment process is an aerobic process, the only gas produced is CO_2. The area of treatment plant most like to generate odour is the sludge tank which will be covered. Other techniques to minimise odour include reducing residence time of wastewater and sludge, use of chemicals to destroy or reduce the formation of odorous compounds and following regular maintenance schedule according to EMS. Moreover, the receptor sensitivity is low as prevailing wind direction is south-westerly and therefore odour emissions would be predominantly blown away from nearby sensitive receptors.

Odour Management Plan

The operator has submitted an updated Odour Management Plan (OMP) in support of their variation application. We have reviewed the information submitted in respect of our guidance 'H4 Odour Management, How to comply with your environmental permit'. The OMP is referenced within Table S1.2 of the permit as it forms part of the operating techniques. The OMP details the methods employed at the site, including actions to reduce potential odour problems, monitoring and emergencies.

We are satisfied with the measures provided by the operator and believe that odour should not cause a nuisance at the site. However, the standard odour condition has been included in the permit which means a revised odour management plan can be requested if concerns regarding odour are raised.

BAT Assessment

The applicant has provided a BAT assessment against the relevant indicative BAT requirements of The Red Meat Processing (Cattle, Sheep and Pigs) Sector (EPR 6.12) technical guidance.

We have compared the operation of the Effluent Treatment Plant (ETP) against the indicative BAT requirements for the emissions to water as listed in the Red Meat Processing (Cattle sheep and pigs) (EPR 6.12) Guidance Note. The table below compares Emissions to water indicative BAT requirements from EPR 6.12 with the measures proposed in the application.

Indicative BAT	Key Measures Proposed
1. Keep raw materials and product out of the wastewater system wherever possible. Waste water from process areas at abattoirs is normally screened to remove hairs, meat scraps and gross solids to reduce BOD and prevent drains becoming blocked.	The use of dry cleaning the area before wet cleaning and use of mesh catch-pots in the drains. Further screening is achieved through an Aqua-rake in the drainage system.
2. Use a balancing tank or pond (equalisation or balancing) with a hydraulic retention time of 6-12 hours, which can improve treatment in the following ways: • by allowing waste streams to be combined e.g. acid and alkali streams from the regeneration of deionisers; or high BOD and low BOD waste streams. This can reduce consumption of reagents • by making the flow rate less variable. This can reduce the size of the treatment plant needed, as it only has to handle the average flow and not the peak flow.	A double skinned flow balance tank with a capacity for 1 day's storage is provided. Pre-treatment is not required as the effluent stream has high biodegradability which will be treated adequately in the wastewater treatment system. The rate of discharge is 2.3litres/second and the maximum volume of non-rainfall dependent effluent discharged in a day will be up to 200m^3/day.

3. Provide contingency measures to prevent accidental discharges from overloading or damaging the treatment plant. These will often include providing a diversion tank into which potentially damaging wastewater can be diverted. This should typically have a capacity of 2 – 3 hours at peak flow rate. The wastewater should be monitored upstream of the treatment plant to allow automatic diversion to the tank. The contents of the diversion tank may be gradually re-introduced into the wastewater stream or removed for off-site disposal. If you do not provide a diversion tank, you must tell us what equivalent measures you use to protect your treatment plant.	Other Than Normal Operating Conditions (OTNOC) - An emergency buffer double skinned tank will be provided to ensure there is adequate storage capacity in the event of other than normal operating conditions. This factors in wet weather as well. The daily maximum volume of discharge will be up to 200m^3/day. The installation will process a throughput of 350 cattle per day. The site has reduced its water consumption per head from 677litres to 450litres. Therefore, the actual effluent generated would be 157.5m^3/day based on 450litres/head. This ensures adequate storage capacity in the flow balance tank and emergency buffer tank. Remote monitoring system measures daily flow. High level alarms and pump inhibitors prevent the risk of overtopping the tanks. The applicant's Flood Contingency and Accident Management Plan also identifies alternative mitigation measures in the event of flooding and ETP malfunction. This includes shutting down the ETP and diverting the untreated wastewater to third-party contractors for emergency off-site storage and disposal.
4. If you operate an activated sludge plant, you must manage the following issues carefully: • the development of bulking sludges • the carrying of excessive biomass inventories • the formation of biologically stable foam • the inhibition of microbial activity by biocidal substances from cleaning/sterilising agents.	There is a sludge screw dewaterer and sludge tank in the ETP.

5. At sites with biological treatment plant ensure the surface water drains are not routed to the treatment plant.	The surface water goes into a soakaway.

We are satisfied with the applicant's BAT assessment.

Decision considerations

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.

The decision was taken in accordance with our guidance on confidentiality.

Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

- Director of PH/UKHSA
- Health and Safety Executive
- Local Authority – Environmental Protection Department
- Food Standards Agency
- Upper Witham Internal Drainage Board

The comments and our responses are summarised in the consultation responses section.

The regulated facility

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 RGN2 'Defining the scope of the installation' and Appendix 1 of RGN2 'Interpretation of Schedule 1'.

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.

The site

The operator has provided plans which we consider to be satisfactory. We have updated the site plan by colouring the pipeline from ETP up to the discharge point in red, to indicate that the installation boundary includes the pipeline as well. Further, the soakaway has also been indicated as S1 on the site plan.

The plans are included in the permit.

Nature conservation, landscape, heritage and protected species and habitat designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have not consulted Natural England

The decision was taken in accordance with our guidance.

Environmental risk

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator’s risk assessment is satisfactory.

The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment all emissions may be screened out as environmentally insignificant.

Operating techniques

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

General operating techniques

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.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

Operating techniques for emissions that do not screen out as insignificant

Emissions of Ammonia, Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Orthophosphate, Total Nitrogen, Total Suspended Solids, Copper, Zinc, Adsorbable Organic Halogen cannot be screened out as insignificant. We have assessed whether the proposed techniques are Best Available Techniques (BAT).

The proposed techniques/ emission levels for emissions that do not screen out as insignificant are in line with the techniques and benchmark levels contained in the technical guidance and we consider them to represent appropriate techniques for the facility. The permit conditions enable compliance with relevant BAT reference documents (BREFs).

Kindly refer emissions to surface water under key issues section above.

Odour management

We have reviewed the odour management plan in accordance with our guidance on odour management.

We consider that the odour management plan is satisfactory, and we approve this plan.

We have approved the odour management plan as we consider it to be appropriate measures based on information available to us at the current time. The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

The applicant should keep the plans under constant review and revise them annually or if necessary, sooner if there have been complaints arising from operations on site or if circumstances change. This is in accordance with our guidance ‘Control and monitor emissions for your environmental permit’.

The plan has been incorporated into the operating techniques S1.2.

Updating permit conditions during consolidation

We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.

Improvement programme

Based on the information on the application, we consider that we need to include an improvement programme.

We have included an improvement programme to ensure that the operating techniques proposed by the applicant with respect to emissions to surface water is BAT and the emissions can be screened out as not significant.

IC9: The improvement condition requires the operator to submit a written report to the Environment Agency for technical assessment and approval. The report will include results from 12 months of sampling and monitoring of the effluent, a risk assessment and comparison of the monitored values against the values proposed within the operating techniques for emissions to water. Where the results of the risk assessment show that the emissions to water are likely to cause significant impact on the receiving waters, the operator shall provide proposals and timescales on how to manage the effluent to ensure discharges have insignificant impact on receiving waters. This shall be implemented in line with the timescales agreed in writing with the Environment Agency.

IC1 to IC8 have been marked as completed.

Emission limits

Emission Limit Values (ELVs) based on Best Available Techniques (BAT) have been added for the following substances:

Emissions to water: It is considered that the numeric limits described below will prevent significant deterioration of receiving waters. We have imposed these limits because either a relevant environmental quality or operational standard requires this

Parameter	**Limit**
pH	6 – 9
Flow	200m^3/day
Fats Oil and Grease (FOG)	No visible fats, oils and grease

Monitoring

We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified:

- pH
- Flow
- FOG

These monitoring requirements have been included in order to ensure that the plant operates within the emission limits specified in the permit.

The Operator will carry out monitoring in accordance with the relevant methods specified in our guidance M18 – Monitoring of discharges to water and sewer.

Based on the information in the application we are satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.

Reporting

We have added quarterly reporting in the permit for the following:

- Point source emissions to water (other than sewer) – emission point W1

Management system

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

Growth duty

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 variation.

Paragraph 1.3 of the guidance says:

"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."

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.

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.

Consultation Responses

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section

Response received from UKHSA

Brief summary of issues raised: The UKHSA has pointed out that the applicant has considered an emergency buffer tank with the capacity to hold a day's effluent in case of abnormal operations of the effluent treatment plant (ETP) but not in the event of a plant downtime for more than a day. In addition, the lack of an accident management plan gas also been raised. The consultee recommends the Environment Agency to be confident with the applicant's contingency plans. Apart from these, UKHSA has no significant concerns regarding the risk to the health of the local population from the installation.

Summary of actions taken: The applicant has provided us a Contingency Plan in response to a Schedule 5 notice which states that in the event of ETP malfunction, it will be shut down to prevent untreated discharge to the Skellingthorpe Main Drain. In addition, the untreated wastewater will be redirected to third party contractors for emergency offsite storage and disposal. The third part contractors' details have also been included in their contingency plan. They have also provided an alternative mitigation solution of reducing the operational days at the site in order to reduce the quantity of effluent generated. We consider their Flood Contingency and Accident Management Plan sufficient to handle any abnormal conditions that could affect the smooth functioning of the ETP.

Response received from Director of PH/UKHSA

Brief summary of issues raised: The Director of Public Health highlighted the concerns surrounding some of the effluent parameters and odour emissions from the site and expressed that the effluent treatment plant (ETP) being a closed system along with an odour management plan provided assurance that addition of an ETP would reduce any potential offsite odour emissions compared to current conditions at site.

The consultee also does not have any major concerns regarding risks to health of the local population from this installation and supports the implementation of an accident management plan.

Summary of actions taken: As provided above.

Response received from Upper Witham Internal Drainage Board

Brief summary of issues raised: The Upper Witham IDB has highlighted that the applicant will require Land Drainage Consent from the Board in order to discharge their site effluent into the Board's maintained watercourse Skellingthorpe Main Drain.

Summary of actions taken: The applicant has been informed of this by the Environment Agency.

North Kesteven District Council – Environmental Health Officer

The consultee has confirmed that they have no complaints in relation to noise or other amenity issues at this site.

Health and Safety Executive – No response received

Food Standards Agency – No response received