Permitting Decisions- Bespoke Permit

We have decided to grant the permit for Alec Jarrett Limited operated by Alec Jarrett Limited.

The permit number is EPR/LP3600MV.

The application is for a single species, bovine (cattle) abattoir operating under a Part A environmental permit in line with the Environmental Permitting Regulations as follows;

Section 6.8 A(1)(b) Slaughtering animals at a plant with a carcass production capacity of more than 50 tonnes per day.

The site comprises a single purpose-built abattoir which is located to the east of Oldland Common, east Bristol approximately 2.5km east of the A4174 and 4.2km northeast of the town of Keynsham. The site consists of one large processing building where the main activity is undertaken along with the boning hall and some food manufacturing, both of which operate under the permitting thresholds. The outside areas are used for the lairage and the storage of waste and raw materials. The installation is centred on National Grid Reference ST 68092 72162.

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 considerations section to show how the main relevant factors have been taken into account
- highlights key issues in the determination
- 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.

Key issues of the decision

Sewer discharge

The site has a discharge to the combined sewer (S2) under a trade effluent consent from Wessex Water. The composition of the effluent is screened process effluent (<6mm), diluted industry standard cleaning and boiler chemicals and mains water. The receiving waters from the treatment works have been identified as the Severn Estuary. To support the application the Operator undertook an impact assessment of the discharge to the sewer. The Operator identified the key substances which could conceivably be discharged to the trade effluent sewer under normal operating conditions and have an established saline EQS. The substances which were identified are Ammonia, Cobalt ad EDTA, substances which are able to be reduced or removed by the waste treatment works (BOD, suspended solids and pH) weren't included in the assessment as they form part of the standard discharge consent.

Following the Environment Agency guidance 'surface water pollution risk assessment' the Operator modelled the dispersion of the effluent stream in the receiving water and compare the dispersed concentrations of the effluent components to significance criteria. The guidance specifies a hierarchy of tests of increasing complexity, if the standard is met for any test, then the substance can be deemed to have met the necessary criteria to be deemed insignificant and there is no need to apply the subsequent tests. The first test looks at the release concentration against the environmental quality standard (EQS), the threshold for the test is 10%. Each of the substances failed this test, due to an exceedance of the 10% threshold. The second test compares the process contribution against the EQS, the threshold for the second test is 4%. Each of the substances passed this test.

As each of the identified substances met the criteria of the second test no further assessment of the discharge is required.

During the determination the Operator mentioned that the site is considering upgrading the onsite effluent screening system. The design and potential changes to the effluent treatment system have yet to be decided upon. Improvement Condition (IC3) has been included for the Operator to submit a written report to the Environment Agency for technical assessment and approval detailing any changes made to the effluent screening system.

On site containment

The yard and road areas within the site boundary are covered with an impermeable surface and laid to fall to dedicated gullies which discharge direct to the surface water sewer (S1) along with roof water. Surface water originating from the car park area is discharged direct to the foul sewer (S2) via a control valve which can isolate the area if required. Surface water originating from yard areas and road areas where ABP are handled are discharged to the foul sewer via the effluent scree. Improvement Condition 2 (IC2) has been included in the permit for the Operator to submit an assessment to demonstrate that appropriate pollution prevention measures are in place prior to the discharges to sewer to prevent uncontrolled releases.

The site has a number of external tanks the majority of which have integral bunds with a capacity of 110% of the tank storage capacity. The fuel storage and boiler fuel storage tanks have prevention measures which include level gauges and high-level alarms. The onsite diesel tank is bunded with a concrete wall, the Operator has stated that the specification of the wall is unknown. The Operator has committed to investigating the status of the wall through testing or the undertaking of provision of other suitable secondary containment. In addition, the blood tank is currently unbunded, the Operator has committed to providing suitable secondary containment, in line with CIRIA 736 guidelines. Improvement condition (IC1) has been included in the permit for the Operator to provide a technical assessment of a survey for the containment provisions of the two mentioned tanks, the improvements proposed and the time scale for implementation.

Emissions to Air

There is a single point source emissions to air, A1 – diesel boiler. The boiler is small at ~ 900 kW thermal input, fired on low sulphur diesel. The thermal input of the boiler is below the threshold (<1MW) of the Medium Combustion Directive (MCPD) as such no emission limit values are required to be added.

The applicant's assessment of the impact to air quality is set out in the submitted report (Report Ref P193-R04-F1 Dated October 2021) which was submitted with the application. The objectives of the study were to assess the impact of emissions from the diesel boiler on ambient air quality and determine whether the emissions will result in significant changes in pollutant concentrations within the study area. The modelling considered the potential impacts associated with the emissions to air from site looking at oxides of nitrogen (expressed as NO2), sulphur dioxide and particulate matter.

We agree with the Operator's conclusions that the results of the dispersion modelling indicate the impacts of the pollutant concentrations are not predicted to be significant at any of the sensitive human receptor locations.

The impacts were assessed on a conservative approach including the assumption that the boiler will be operating at full capacity and emit the maximum concentration of each pollutant throughout an entire year. As such the predicted pollutant concentrations are likely to be an overestimate of actual emissions.

Odour management plan

An odour management plan (OMP) has been submitted as part of the application (Report Ref P193-R08-F2 Dated September 2022). The OMP outlines the possible sources of odour, the prevention and mitigation controls in place to prevent odours from the site and the monitoring in place to limit the impact on receptors. The site employs a number of measures to minimise odour emissions from the site, including the following:

- Cleaning
  The cleaning of the lairage, yard areas and Animal By-Product (ABP) storage area all form part of the work instruction for the site. Lairage pens are not overstocked and absorbent materials, such as straw, are used to make cleaning more effective. Yard areas and ABP storage areas are cleaned regularly throughout the shift and at least once a day. Wash waters from the lairage drain to the site's effluent system prior to discharge to the foul sewer.

- Animal By-Product (ABP)
  The quantity of Category 2 (gut and belly content) ABP stored on site is limited to a single 26 tonne trailer and stored for a maximum of 72 hours. The quantity of bones and Category 3 ABP stored on site is limited to 2 x 26 tonne trailers which is stored for a maximum of 14 hours. The quality of Category 3 (fat) ABP stored on site is limited to 2 x 26 tonne trailers for a maximum of 14 hours. Hides are stored in a covered trailer and collected daily. All by-product trailers are covered at the end of each shift prior to removal. Alternative licensed collection companies are available in the event of missed collections. Spill kits are situated near the storage areas to clean any spills to prevent odours.

- Blood
  Blood from the process is stored in a 22,000 litre tank, the tank is large enough to ensure that there is always sufficient capacity. Blood is collected from the site at least 3 times a week with alternative licensed collection

companies available in the case of non-collection. Displaced gases from the blood tank are passed through a de-odourising solution, the tank is also fitted with an internal wash facility to prevent coating/stagnation of blood and associated degradation/odour. Preservatives are added to the blood to slow the rate of degradation minimising the potential for odour under normal conditions. No blood is stored on site over the weekend.

We have reviewed the revised OMP for compliance 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 onsite monitoring and contingencies to prevent, control and minimise odour pollution and procedures for recording and investigating odour complaints should they arise.

We consider that the conditions in the permit are sufficient to ensure that the risk of odour pollution beyond the site boundary is low. In the event that odour emissions cause pollution beyond the site boundary, the permit conditions require the Operator to comply with the measures specified in the site's operating techniques and odour management plan.

BAT Assessment

We have compared the operation of the installation 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 applicant provided a BAT assessment in line with this document. We consider the techniques as described represent BAT for the facility.

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

The application was publicised on the GOV.UK website. We consulted the following organisations:

- Food Standards Agency
- Local Authority – Environmental Health (South Gloucestershire Council)
- Director of Public Health & UKHSA (formerly PHE)
- Sewerage Authorities (Wessex Water)
- Health and Safety Executive

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

Operator

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 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 RGN 2 ‘Interpretation of Schedule 1’.

The site

The operator has provided a plan which we consider to be satisfactory.
The plan is 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.

A site condition report (SCR) was submitted with the application. The SCR states that all operational areas are surfaced with an impermeable hardstanding which provides an impervious barrier to potential contaminants to soil or groundwater. Operational areas including the process and yard areas which handle ABP are connected to a sealed drainage system which discharges to the foul sewer (S2) via the effluent screen. The car park area also drains direct to the foul sewer (S2) via a shut off valve. Yard run off and runoff from roofs, factory and roads is discharged to the combine sewer via emission point S1. The site doesn’t lie within any source protection zones, four groundwater abstraction licences have been identified, the closest being 764m northeast of the site.

No baseline samples have been taken. We therefore assume that the existing level of contamination at the site is zero and the operator will be responsible for any necessary remediation when the ground is surrendered.

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.

There are no Special Protection Areas, Special Areas of Conservation or Ramsar sites within 10km of the installation and no Sites of Special Scientific Interest within 2km of the installation. There are 22 Local Wildlife sites and a Local Nature Reserve within 2km of the installation.

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.

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 screen out as insignificant

Emissions of NOx (oxides of nitrogen) from the onsite boiler have been screened out as insignificant, and so we agree that the applicant’s proposed techniques are BAT for the installation.

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 plan under constant review and revise it 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 Table S1.2.

Improvement programme

Based on the information on the application, we consider that we need to include an improvement programme. We have included the following improvement conditions (IC):

IC1 has been included in the permit for the Operator to assess the containment provisions for the diesel and blood storage tank. Following the assessment of the current containment provisions the operator is to provide a written report outlining any deficiencies identified, the improvements proposed and the time scale for implementation.

IC2 has been included in the permit for the Operator to undertake an assessment to demonstrate that appropriate pollution prevention measures are in place to detect uncontrolled releases and prevent their discharge off site. Following the assessment of the current pollution prevent measures the operator is to provide a written report outlining any deficiencies identified, the improvements proposed and the time scale for implementation.

See key issues section.

Emission Limits

We have not specified Emission Limit Values (ELVs) in the permit. See 'Key Issues' section for further information on emissions to air.

Reporting

We have not specified any reporting requirements in the permit other than the reporting of the water and energy use at the site

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.

We only review a summary of the management system during determination. The applicant submitted their full management system. We have therefore only reviewed the summary points.

A full review of the management system is undertaken during compliance checks.

Previous performance

We have assessed operator competence. There is no known reason to consider the applicant will not comply with the permit conditions.

We have checked our systems to ensure that all relevant convictions have been declared.

No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.

Financial competence

There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.

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.

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 UK Health Security Agency (formally known as Public Health England)

Brief summary of issues raised:
No direct issues with the application were noted in the consultation response dated 8th September 2022. However, the following recommendations were noted in the response

- The reducing of public exposure to non-threshold pollutants such as particulate matter and nitrogen dioxide
- The consideration of risk posed by fugitive dust and bioaerosol emissions from the site.
- The addressing of an assessment of products of combustion/smoke impacts on nearby residences.

Summary of actions taken:
The only emissions of nitrogen dioxide are from the small boiler on site (<1MWth), given the size of the boiler the limits within the Medium Combustion Plant Directive do not apply. Furthermore, the applicant undertook air dispersion modelling which concluded the boiler is unlikely to have a significant impact in obtaining the air quality standards for NO_2 at the discrete receptor locations in the area.

There are no significant sources of dust at the site. Dust could potentially arise from bedding used within the lairage areas. The majority of animals are kept within internal or covered external lairage areas. The floor of the lairage areas (both internal and external) is constructed of concrete to aid cleaning. Bedding and manure are removed throughout the day and the lairage washed at the end of each day once empty. The regular cleaning and daily washing down of areas will reduce the risk of fugitive dust and bioaerosol emissions from the site.

The site doesn't accept any waste or combustible materials other than small quantities of animal bedding. As such the site isn't required to have a fire prevention plan (FPP). The permitting process doesn't extend to cover general fire safety as this falls within HSE guidelines.

No responses were received from the following organisations

- Food Standards Agency
- Local Authority – Environmental Health (South Gloucestershire Council)
- Sewerage Authorities (Wessex Water)
- Health and Safety Executive