

Permitting decisions

Bespoke permit

We have decided to grant the permit for JG Pears Newark Animal Rendering operated by JG Pears (Newark) Ltd.

The permit number is EPR/AP3436DG.

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 <u>key issues</u> in the determination
- summarises the decision making process in the <u>decision checklist</u> 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.

Key issues of the decision

1. Requirement for regulation under Part A(1)

The installation previously held a Part A(2) permit, originally issued by Bassetlaw District Council in 2006 for the rendering process as prescribed in Section 6.8A(2)(a), of Schedule 1. The site also undertakes blood drying and feather processing activities. Our interpretation of these activities against the permitting regulations is set out in Regulatory Guidance Note No. 2 (RGN 2) which states that "Heat treatment activities such as "blood boiling" and hydrolysis of feathers with steam are not considered to be rendering, and will fall under Section 6.8 A(1)(c) if above the threshold". On that basis, the installation falls to be regulated under Part A (1) of the regulations. It is also noted that the onsite effluent treatment plant serving the rendering facility is also a listed activity under Section 5.4 Part A(1)(a)(i) "Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC concerning urban waste-water treatment- (i) biological treatment and has been included as such.

EPR/AP3436DG/A001 Date issued: 22/08/17

2. Operation of the Installation - Administration

This is a multi-operator Installation. Energy, heat and steam is to be provided by a combined heat and power plant, co waste incinerator plant being constructed by J G Pears Power (O&M) Ltd which will burn meat and bone meal, permit application EPR/MP3235CC/A001. High intensity odours arising from the cooking lines are treated in a regenerative thermal oxidiser (RTO) until such time that the combined heat and power plant being installed and operated by J G Pears Power (O&M) Ltd has been commissioned. The RTO is to be retained and will be used as a backup in the event of failure or during routine maintenance of the CHP.

3. Biodiversity, heritage, landscape and nature conservation

A search on Easimap has shown that there are no Natura 2000 European nature conservation sites within 10km and no Sites of Specific Scientific Interest (SSSI). There are however the following statutory nature conservation sites, local wildlife sites within 2km of the installation.

- Old Trent, Marnham
- Marnham Railway Yard
- South Clifton Grassland
- Old Trent Oxbow, Spalford
- Low Marnham Grassland
- Meadow Lane Grasslands, Normanton on Trent
- Fledborough to Harby Dismantled Railway
- Grassthorpe Corner
- Skegby Road Triangle

For SACs, SPAs, Ramsars and SSSIs we consider the process contribution (PC) and the background levels in making an assessment of impact. In assessing these other sites under the Environment Act we look at the impact from the Installation alone in order to determine whether it would cause significant pollution. This is a proportionate approach, in line with the levels of protection offered by the conservation legislation to protect these other sites (which are generally more numerous than Natura 2000 or SSSIs) whilst ensuring that we do not restrict development.

Critical levels and loads are set to protect the most vulnerable habitat types. Thresholds change in accordance with the levels of protection afforded by the legislation. Therefore the thresholds for SAC, SPA and SSSI features are more stringent than those for other nature conservation sites. Therefore we would generally conclude that the Installation is not causing significant pollution at these other sites if the PC is less than the relevant critical level or critical load, provided that the Applicant is using BAT to control emissions.

Excluding odour emissions from the two biofilters, there are 5 point sources of emissions to air, 3 Boiler Plants, a thermal oxidiser (RTO) and CHP plant (which is operated by J G Pears Power (O&M) Ltd.

The impact on ecologically sensitive sites was considered as part of the CHP application, Appendix 6 - J G Pears Newark 42MWth CHP Air Quality Assessment of the Supporting Information for the CHP application We have audited this assessment and agree with the results as presented in Table 9.4: Impact of Emissions at Non-Statutory Designated Sensitive Ecological Receptors that the PCs are below 100% of the critical levels or loads. We are satisfied that the Installation will not cause significant pollution at the above listed nature conservation sites.

The Applicant is required to prevent, minimise and control emissions using BAT, this is considered further in Section 6 and 7.

4. H1 Assessment, emission limits and monitoring requirements – Point Source Emissions to Water Priority Hazardous Substances

As described in section 1 above the site previously held an A(2) permit which included discharge consent limits for the rendering facility ETP to the River Trent. This A(1) application requested that these limits be retained but for the discharge volume to be increased to accommodate additional rainwater capture from buildings and yards surfaces to the CHP scheme. The H1 assessment detailed in appendix 12 of the application used an old version our H1 Screening tool and only considered emissions of BOD and un-ionised ammonia. It was also was based on the currently permitted limits set in the A(2) permit issued by Bassetlaw DC. Assessments should be undertaken in line with our technical guidance document H1 annex D2: assessment of sanitary and other pollutants in surface water discharges. The assessment of the impact of sanitary pollutants such as BOD, Ammonia, suspended solids should be undertaken to work out the allowable discharge concentration for each substance or determinand to achieve no deterioration of the receiving watercourse. We therefore undertook the no deterioration assessment for the applicant.

Sanitary determinands

Treated effluent consisting of process condensate, wash waters, yard wash and sewage from the on-site facilities. The existing effluent treatment plant (ETP) is designed to treat to 20mg/l BOD, 30mg/l Suspended Solids, 10 mg/l Ammonia (maximum) discharging to the River Trent at SK 81617 68236. The proposed discharge volume is based on a maximum pump rate of 90m3/hr and is 2160 cubic metres per day.

We carried out a Monte Carlo assessment (based on the Mass Balance equation which can be found in EA guidance H1 Annex D2) of the current and proposed impact to River Trent of Sanitary Determinands from the Effluent Treatment Plant (ETP) discharge and have set ELVs based upon the 'no deterioration' and

Effluent data

Statistic	Volume m³/day	BOD mg/l	Ammoniacal Nitrogen mg/l	Phosphorus mg/l
Maximum	2160	20	10	n/a

Catchment description

The receiving water course is the River Trent and flows all year round. It is WFD designated (WB ID GB104028058480 Trent from Carlton-on-Trent to Laughton Drain) with an overall status of moderate and a physico-chemical status of moderate.

There are two physicochemical sample points – sample point numbers 36698778 and 36701570 - used to classify the waterbody. These are located approximately 20km downstream on the discharge point. Therefore the most relevant sample point is 36731820 located approximately 10km upstream of the discharge point on the River Trent. This is on a separate WB (ID GB104028053110 – River Trent from River Soar to Carlton-on-Trent). The overall classifications for both waterbodies are moderate and also moderate for physic-chemical parameters.

The sample point is:

High status for ammonia, and Good status for BOD and the freshwater fish class at the monitoring site is Salmonid (so type 1 BOD standards apply).

Sampling point	Sampling point data – R. Trent from R. Soar to Carlton-on-Trent						
Determinand	Mean	Stdev	Year	Current Class	Current class boundary	Good status boundary	Comments
Ammonia mg/l	0.11	0.09	2013 to 2015	High	0.3	0.6	Data from CPS
BOD mg/l	1.9	1.2	2013 to 2014	Good	4	4	Data from CPS

Hydrology flow data

Flow data was requested for the following locations to enable the potential impact of the discharge to be assessed in accordance with guidance given in OI 50_12:

River Trent at the point of discharge (Flow request point)

Flow point map



The following flow estimates have been used:

Q95 m³/day	Mean m³/day
1303000	7071800

Monte Carol Modelling

Monte Carol modelling was used to determine the potential impact of the discharge on downstream BOD and ammonia. A number of scenarios were modelled. Monitoring data from the WFD sample point was used to describe upstream quality in all scenarios.

Forward calculation - Discharge Quality

To determine the current quality of the discharge entering River Trent, the mean, standard deviation and 90th percentile of monitoring data (supplied by the applicant) from the last three years at the sites final effluent sampling point (W1) has been used. This data includes concentrations of Ammonia, BOD and Phosphate.

The forward calculation in Monte Carlo was run to assess the impact of the discharge at the proposed effluent load. Results show the percentage deterioration on upstream quality caused by the discharge. The percentage of class utilised by the discharge is also recorded.

The results of the current discharge impact assessment are as follows:

Determinand	" "	Upstream quality data	Impact of discharge			
		used	deterioration of mean	deterioration of 90%ile	Deterioration as percentage of current class boundary	
BOD	20 mg/l	Sample site 36731820	1%	0%	0%	
Ammonia	10 mg/l	Sample site 36731820	0%	0%	0%	

The results of the proposed discharge (of 90 m³/hour) impact assessment are as follows:

Backward calculation

The backward calculation in Monte Carlo was run to assess the required effluent quality to meet target objectives. Results show the discharge concentration required. The calculated 95%ile quality is imposed as a maximum allowable concentration in the discharge.

Determinand in mg/l	Upstream quality data	95%ile effluent quality to achieve:				
	used	10% deterioration of mean	10% deterioratio n of 90%ile	Current class boundary	Good status boundary	
BOD	Sample site 36731820	611	921	1414	N/A	
Ammonia	Sample site 36731820	15	30	100	N/A	

In conclusion OI 50_12 provides advice on setting emission limits for sanitary parameters. Where it is feasible emission limits are set to achieve no more than a 10% deterioration of upstream water quality. Limits must not allow for a deterioration of current class. The receiving water course offers 603 times dilution at Q95 and 3273 times dilution at mean flow at the point of discharge.

Modelling indicates that a BOD limit of 1414mg/l would ensure the current good status class is maintained at the point of discharge. A BOD limit of 611mg/l is needed to meet the 10% deterioration target in the River Trent. The current limit in the A(2) permit is 20mg/l maximum and we have retained and set this in Table S3.2 of the permit.

Modelling indicates that an ammonia limit of 186mg/l would ensure the current high status class is maintained at the point of discharge. An ammonia limit of 28mg/l is needed to meet 10% deterioration target in the River Trent. The current limit in the A(2) permit is 10mg/l maximum. We have retained and set this limit in Table S3.2 of the permit.

Suspended Solids cannot be modelled using Monte Carlo. Following our guidance for suspended solids limits, we would set a permit limit of 1.5 times that of the BOD limit, 30 mg/l which is in line with current limit in the A(2) permit. We have set this limit in Table S3.2 of the permit.

5. Odour

The site is a significant source of odour from point source and fugitive emissions by the nature of the activities undertaken at the installation. The site is in close proximity to sensitive receptors and is a known source of odour complaints. BAT requirements embed the hierarchy of preventing, minimising, and capturing and treating odours to ensure the operator takes all reasonable steps to minimise the risk of odour pollution. The application of BAT and the implementation of a robust management system and Odour Management Plan (OMP) ensures that the risks are minimised as far as reasonably practicable.

We have reviewed the odour management plan in accordance with our guidance on odour management. The OMP included with the application was deemed to be insufficient and therefore a revised odour management plan was requested. The revised odour management plan, submitted on 13/04/2017 was also deemed to be insufficient and a revised odour management plan was requested. The revised odour management plan, submitted on 10/07/2017 and two supporting documents submitted on 13/06/2017 are deemed to be in-line with H4 guidance and has been incorporated into the permit in table S1.2.

6. Operating techniques and BAT

Use of energy within the Installation

Energy use - This is a multi-operator site which receives electrical energy and low pressure steam for the cooking processes from the adjacent CHP plant operated by J G Pears Power (O&M) Ltd. The rendering facility will consume approximately 2 MW of electrical energy and 32 tonnes of steam per hour.

Having considered the information submitted in the Application, section 9 of Supporting Information, we are satisfied that appropriate measures will be in place to ensure that energy is used efficiently within the Installation. The Application details the following measures that will be implemented at the Installation in order to increase its energy efficiency,

- A computerised maintenance management system is employed that monitors the plant condition such as that motors are operating efficiently, insulation and cladding are not damaged and that there are no significant leaks, high friction surfaces are lubricated
- Good maintenance and housekeeping techniques and regimes for the whole of the plant using a computerised maintenance management system.
- Plant condition monitoring will be carried out on a regular basis, to ensure, amongst other things that
 motors are operating efficiently, insulation and cladding are not damaged and that there are no
 significant leaks.
- Lubrication to avoid high friction surfaces
- Insulation steam pipework, hot water vessels, boilers
- Operators will be trained in energy awareness and encouraged to identify opportunities for energy efficiency improvements
- Motors with variable speed drives will be fitted to all major equipment, incl. combustion air/ID fan and boiler feed water pumps as well as to many of the smaller motors
- Use of VSDs on all major motors and large proportion of smaller motors
- Use of IE3 efficiency class motors (as defined by IEC60034-30:2008)

 Combustion system based on low excess air ratio resulting in high boiler efficiency and low parasitic load on combustion air and ID fans.

7. Best Available Techniques (BAT) Assessment of effluent treatment

A BAT assessment of the changes to the ETP to accommodate the proposed additional flow, as described in the Section 4 of supporting information and Appendix 9 of the application, has been carried out. Based upon this information in the application we are satisfied that all aspects of the ETP have been designed to ensure waste waters requiring treatment is being minimised, that the ETP has sufficient capacity for the increased flow rate and that appropriate measures will be in place to prevent and /or minimise emission to water.

8. Noise and vibration

The application contained a noise impact assessment which was prepared as part of the application for planning permission in 2009 for day time impacts based on the now withdrawn standard BS4142:1997 Method for rating industrial noise affecting mixed residential industrial areas and for night time impacts with reference to the WHO sleep disturbance criteria. We did not agree with this approach and we asked the Applicant in our notice dated 09/03/17 to provide a revised noise risk assessment in accordance with BS4142:2014 and with reference to the Environment Agency's Horizontal Guidance for Noise IPPC H3 (Part 2) Noise Assessment and Control provide a noise management plan of the options available to reduce noise emissions from the site.

A revised Environmental Noise Assessment JG Pears Low Marnham was submitted on the 31/03/2017 was carried out in accordance with BS4142:2014 to compare the predicted plant rating noise levels with the established background levels. Measurements were taken of the prevailing ambient noise levels to produce a baseline noise survey and the impact from both current operations and the proposed CHP plant were modelled using SoundPLAN 7.4. The assessment predicted, a worst case impact of +7dB at Church Farm during the night time and the applicant concluded, on the basis of a numerical noise impact prediction, that there are no indications of 'significant adverse' impacts associated with the facility.

In accordance with BS4142:2014 a difference of greater than +5dB above background can indicate an adverse impact depending on context. We have audited the assessment and made observations conducting check modelling with sensitivity testing. We identified that the dominant noise source at receptors is HGV movements on site and that the consultant has used a sound power level of 106.2 dB for their HGV operations. This value is overly conservative. We also noted a number of inconsistencies in the submitted reports regarding the height of the biofilter noise barrier being sometimes 3m and at other times 6m.

The Applicant had additionally provided a Noise Management Plan (NMP) which we considered to be unsatisfactory for although it proposed a number of additional mitigation measures which were including in the noise model (Noise Risk Assessment) no time scales were provided to implement the identified mitigation measures and it was not clear which operator would be responsible for their implementation.

A revised Noise Management Plan V0.4 covering both operations - Animal Rendering Plant and CHP Plant operated by JG Pears (O & M) Ltd was submitted on the 12/07/2017. This confirms that the bio-filter fans will be screened by a purpose built 6m acoustic barrier which is expected to be completed by April 2018. The applicant has also confirmed that Holly Farm, a property owned by the company will not be occupied following completion of the CHP plant. We consider that the revised noise management plan is satisfactory.

Using conservative power levels for HGV's, assuming a biofilter is screened by acoustic barrier height of 6m we predict a similar numerical noise impact and from our sensitivity modelling and reading of the context we expect that the impact of noise will be acceptable.

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise noise and vibration and to prevent pollution from noise and vibration outside the site. We have included an improvement condition in the Permit IC1 which requires the Operator to validate the predicted emissions once the CHP is operational and all the noise prevention and minimisation measures specified in the two tables ENMP2 and ENMP3 of the NMP V0.4 dated July 2017 have been completed and to demonstrate that noise attenuation is at least as effective as that predicted in the Noise Assessment report.

9. Environmental Management

The Applicant has stated in the Application that they will implement an Environmental Management System (EMS) that will be certified under ISO14001. An improvement condition (IC2) is included requiring the Operator to report progress towards gaining accreditation of its EMS.

We are satisfied that appropriate management systems and management structures will be in place for this Installation, and that sufficient resources are available to the Operator to ensure compliance with all the Permit conditions.

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	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.	
	The application was publicised on the GOV.UK website from the 07/12/16 to 07/01/17.	
	We consulted the following organisations:	
	 Director of Public Health Health and Safety Executive Foods Standards Agency Local Authority Public Health England Severn Trent Water 	
	The comments and our responses are summarised in the <u>consultation</u> <u>section</u> .	
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 part 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	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.	
	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.	
	This permit applies to only one part of the installation namely the rendering of Category 3 mammalian and poultry animal by-products, which involves the removal of water and sterilisation of the by-products to produce protein meal and fat. The plant is currently an approved process under the Animal By-Products (Enforcement) (England) Regulations 2011.	

Aspect considered	Decision
	The current plant approvals issued by DEFRA are 32/071/9002/ABP/REN and 32/071/8001/ABP/REN. High intensity odours arising from the cooking lines are treated in a regenerative thermal oxidiser (RTO) until such time that the combined heat and power plant being installed and operated by J G Pears Power (O&M) Ltd has been commissioned. The RTO is to be retained and will be used as a backup in the event of failure or during routine maintenance of the CHP. The names and permit numbers of the operators of other parts of the installation are detailed in the permit's introductory note.
The site	
Extent of the site of the facility	The operator has provided plans which we consider are satisfactory, showing the extent of the site of the facility including the discharge points and the location of the part of the installation to which this permit applies on that site. The plan is included in the permit.
	As referred to above this is a multi-operator site
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, landscape and nature	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.
conservation	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.
	We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.
	We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.
Environmental risk assessi	nent
Environmental impact assessment	In determining the application we have considered the Environmental Statement.
	We have also considered the decision of the Secretary of States of 21 October 2014 to grant in accordance with conditions attached in Annex B (of the decisions letter) for a biomass fuelled combined heat and power plant, auxiliary boilers, product silos, new offices, revised trailer and car parking, associated facilities, landscaping and internal circulation roads at Marnham Road, Low Marnham, Newark, Nottinghamshire, NG23 6SL.
	From consideration of all the documents above, the Environment Agency considers that no additional or different conditions are necessary.
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility.

Aspect considered	Decision
	The operator's risk assessment is unsatisfactory and required additional Environment Agency assessment.
	H1 assessment detailed in appendix 12 of the application used an old version our H1 Screening tool and only considered emissions of BOD and un-ionised ammonia. It was also was based on the currently permitted limits set in the A (2) permit issued by Bassetlaw DC. Assessments should be undertaken in line with our technical guidance document H1 annex D2: assessment of sanitary and other pollutants in surface water discharges. The assessment of the impact of sanitary pollutants such as BOD, Ammonia, suspended solids should be undertaken to work out the allowable discharge concentration for each substance or determinand to achieve no deterioration of the receiving watercourse. We therefore undertook the no deterioration assessment for the applicant. See key issues.
	The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment emissions may be categorised as environmentally insignificant with the exception of Ammoniacal Nitrogen, Suspended solids and Biochemical Oxygen Demand (BOD) to surface waters.
Operating techniques	
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 Ammoniacal Nitrogen, Suspended solids and Biochemical Oxygen Demand (BOD) to surface waters cannot be screened out as insignificant. We have assessed whether the proposed techniques are BAT. See keys issues section
	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 ensure compliance with relevant BREFs and BAT Conclusions, and ELVs deliver compliance with BAT-AELs.
	The proposed techniques and emission levels for priorities for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions:
	Treating and Processing Poultry (EPR 6.11)
	Sector Guidance Note IPPC SG8 Secretary of State's Guidance for the A2 Rendering Sector and ELVs deliver compliance with BAT-AELs.

Decision
Emissions of Particulates, oxides of sulphur as SO2 and oxides of Nitrogen from the use 3 x auxiliary boilers which will use LPG/LNG have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation.
We consider that the emission limits included in the installation permit reflect the BAT for the sector.
We have reviewed the odour management plan in accordance with our guidance on odour management. See Key issues section
While we consider that the applicant's proposals represent the appropriate measures to prevent/ minimise odour from the permitted activities, we also consider that it is appropriate to impose a specific ELV in respect of odour emissions to provide additional environmental protection.
We have reviewed the noise management plan in accordance with our guidance on noise assessment and control. See Key Issues – section 8.
We consider that the revised noise management plan is satisfactory and has been incorporated into the permit in table S1.2.
Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.
We have specified limits and controls on the use of raw materials and fuels in Table S2.1 in Schedule 2 of the permit
We have specified that the Animal By Products may be processed as a raw material. We made this decision with respect to Article 2(2) (b) of WFD has the following exclusion:-
"The following shall be excluded from the scope of this Directive to the extent that they are covered by other Community legislationanimal by-products including processed products covered by Regulation (EC) No 1774/2002[1], except those which are destined for incineration, landfilling or use in a biogas or composting plant" and the approvals issued by DEFRA under the Animal By-Products (Enforcement) (England) Regulations 2011 for the processing of Category 3 mammalian and poultry animal by-products Approvals - 32/071/9002/ABP/REN and 32/071/8001/ABP/REN.
We have specified that the caustic soda (sodium hydroxide) used in the ETP must adhere to the following limits for contaminants:
· · · · · · · · · · · · · · · · · · ·
• <0.3ppm Mercury

Aspect considered	Decision			
Improvement programme	Based on the information on the application, we consider that we need to impose an improvement programme. These conditions are set out in table S1.3, in schedule 1 of the permit - justifications for these is provided at the relevant section of the decision document.			
Emission limits	ELVs and technical measures based on BAT have been set for the following substances emitted to water: • Ammoniacal Nitrogen – 10 mg/l • Suspended Solids – 30 mg/l • Biochemical Oxygen Demand – 20 mg/l			
	 Flow rate of 2160 cubic metres per day Temperature 28°C 			
	As discussed in the key issues section the discharge from the ETP, Installation into the River Trent was previously controlled under an A(2) Permit issued by Bassetlaw District Council. The ELVs, are tighter than Table 4: Emission to Water associated with BAT in SG8 and our assessment as detailed in the key issues section demonstrate that the ELV's remain appropriate and have therefore been retained and included in the Table S3.2 of the Permit.			
	It is considered that the numeric limits described above prevent significant deterioration of receiving waters. We have imposed these limits because either a relevant environmental quality or operational standard requires this.			
Monitoring	We have decided that monitoring should be carried out for the parameters listed in the permit (Schedule3), using the methods detailed and to the frequencies specified.			
	These monitoring requirements have been imposed in order to demonstrate compliance with emission limit values which have been set to prevent significant deterioration of receiving waters.			
	We made these decisions in accordance with Technical Guidance Note - 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 specified reporting in the permit.			
	Reporting of this data will allow the Environment Agency to review the emissions performance of the Installation. Parameters have been set in Tables which allow the longer term performance of the Installation to be assessed against key Environmental Performance Indicators. These include reporting data for production/treatment, energy usage, water usage and waste disposal/recovery.			
	Standard reporting forms have been developed to provide a basis for a consistent reporting format. We made these decisions in accordance with reference the SG8 technical guidance			

Aspect considered	Decision
Operator competence	
Management system	There is no known 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.
Relevant convictions	The Case Management System has been checked 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	
Section 108 Deregulation Act 2015 – 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.

Aspect considered	Decision
	Any unique condition, that is a condition distinct from a site specific condition needed to deliver the legislative standards need to be justified
	Provide additional text if needed, for example where specific comment on the growth duty is made by the applicant in their application.

Consultation

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.

1) Consultation Responses from Statutory and Non-Statutory Bodies

Response Received from

Bassetlaw DC - Environmental Health by email on 12/06/2017

Brief summary of issues raised

Site has an A(2) Permit and has made a number of improvement to address odour and noise complaints as listed below, complaints have reduced.

<u>Odour</u>

- 2010 the addition of two new biofilters
- 2011 the removal of the under-performing chemical scrubber
- 2011/2012 the erection of fully-enclosed hoods over the biofilters and erection of a 15m chimneys on each
- 2013 Biofilter chimneys extended to 20m
- 2013 complete removal of the bio-filter medium and replacement with improved substrate (clay)
- 2014 Construction of a large trailer shed to house incoming raw-meat trailers prior to transfer to the factory
- 2015 Installation of a new tank farm to ensure fats and solids can be stored properly
- 2014/2015 installation of the thermal oxidiser for high-intensity odours

Noise:

- Alternation of the site layout to situate noise-generating plant away from the nearest residents
- New fans installed and improvement in the noise power output of key equipment
- Better noise insulation in boiler rooms
- Noise attenuator fitted to the boiler chimneys
- Noise bunds installed on perimeter fence line (temporary)
- Fully site perimeter acoustic fencing to replace temporary arrangements
- New planting schemes proposed (still to commence)

Other improvements:

- Site management processes and procedures updated, to ensure operated in accordance with permit.
- Better cleaning regimes
- Better record keeping
- · Improved training records for new staff
- Improvements to the proactive maintenance of key plant and equipment
- Rapid response to breakdowns of key equipment
- Improved communication with the public around expansion and/or issues at the site

Summary of actions taken or show how this has been covered

No further action required. Odour Management is discussed in section 5; Noise Control is discussed in section 8 and Management of the site is discussed in section 9 of this document.

2) Representations from individual members of the public.

Brief summary of issues raised

They were disappointed that the consultation was not well advertised being only web based and only running for a month, would have liked to have contacted directly.

They found the figures presented in the Human Health Risk assessment confusing and did not agree with the conclusion that the effect will be 'not very significant' to our children, given that dioxins appear to be at 90% of the WHO limits, they regard this present a slim margin.

Clarification on the following was also sought on the regulation of the site when a permit is granted and in particular

- whether the data from the CEMs would be made available
- · whether dust and soil monitoring for sensitive receptor areas would be ongoing
- · the opra scoring
- · whether the permit had been issued and if so where it may be viewed

Summary of actions taken or show how this has been covered

We carried out consultation on the Application in accordance with the EPR and our statutory Public Participation Statement.

The Human Health Risk Assessment relates to permit application EPR/MP3235CC/A001 and not this application. See permit application. EPR/MP3235CC/A001.

Once a permit is issued we will regulate the performance of plants by carrying out a continued assessment of plant operations and its environmental performance in a number of ways;

- operators must monitor emissions at given times and report the results to us;
- we regularly inspect installations, review monitoring techniques and assess monitoring results to measure the performance of the plant;
- we carry out independent routine monitoring of emissions (including making spot checks);
- operators must inform us within 24 hours of any breach of the emissions limits, followed by a fuller report of the size of the release, its impact and how they propose to avoid this happening in the future;
- operators' monitoring results are placed on the public registers;
- depending on the seriousness of any breach, we will take appropriate enforcement action and/or prosecute.

Condition 3.1.5 of the permit requires periodic soil and groundwater monitoring to be undertaken.

OPRA is a risk assessment tool that provides an objective and consistent assessment of the environmental risk of operating a regulated facility. The Opra scheme is based around the following attributes:

- Complexity;
- Emissions;
- Location;
- Operator Performance;
- Compliance Rating.

Each attribute is allocated one or more lettered bands, from which a score is derived from the weighting tables that can be found in the respective charging regime sections of Environmental Permitting Charging Scheme & Guidance Version 5 (valid from 4 January 2017)

An electronic copy of the permit is available here <u>industrial emissions directive-ied-environmental-permits-issued</u> or a copy can be viewed on the public register at The Environment Agency, Trentside Office, Scarrington Road, Nottingham, NG2 5BR.