

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Moy Park Limited in Anwick operated by Moy Park Limited.

The permit number is [EPR/NP3832ZA](#).

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:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Structure of this document

- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation, web publicising and newspaper advertising responses

Key issues of the decision

Moy Park Limited submitted an application for an environmental permit in January 2013. The poultry processing factory manufactures chilled and frozen poultry products for human consumption. The factory houses two slaughter lines, various poultry processing, packing and storage areas for raw materials and finished products. The site also operates a dissolved air flotation (DAF) effluent treatment plant, which is situated within a building to the rear of the site.

The installation was originally developed on a green field location in the 1950's and since that time has grown steadily into a sizeable poultry processing operation located on the outskirts of Anwick village. The site is in close proximity to local residents on its northern and eastern boundaries and has been the subject of odour and noise complaints. Anglian Water Services Ltd's sewage treatment works is located along the southern boundary of the site.

Odour

In order to demonstrate the operator has identified all odour emission risks and has taken all appropriate measures to manage odour they have submitted an odour management plan and odour risk assessment as a part of their application. We have reviewed these documents and consider the odour mitigation and monitoring proposed by the operator to represent the best available techniques to prevent significant odour emissions from the site.

Odour Mitigation

The operator's odour management plan identifies the site operations that are considered to be a significant odour source, like hanging and bleed area, scalding, defeathering and evisceration or effluent treatment. The plan then outlines the various mitigation techniques the operator has implemented in order to manage odour emissions from each of these processes.

Odour mitigation techniques employed by the operator include the following:

- enclosure of all process areas;
- in hanging and bleed area and scald, defeathering and evisceration areas there shall be no opening windows or doors with direct access to the outside of the building;
- highly efficient ventilation systems installed in areas considered to present a high odour risk;
- daily cleaning and sanitising of the process areas to prevent build up of malodorous material;
- frequent clean down of waste containers to prevent build-up of malodorous material;
- installation of activated carbon filter on blood storage tank breather vent to remove odorous volatile blood components as air vents from the tank;

- the contents of the blood tank being removed on a daily basis only during night time hours. The road tanker collecting the blood is back vented through the activated carbon to treat potential emissions;
- use of catch pots to prevent meat scraps/fats from the process entering the drainage system;
- enclosure of effluent treatment plant.

Following odour complaints from neighbouring residents the operator has implemented several additional improvements to site mitigation in order to further reduce odour emissions from site. These include:

- revision of the blood tank emptying procedure to specify that the activity will take place only between hours 00:00 and 6:00am to minimize the impact on residents;
- the installation of an activated carbon filter on the blood tank;
- carrying out more frequent olfactory tests at monitoring points on the site and at nearby sensitive receptors outside the site boundary;
- introduction of enclosed rotor sieve bins at effluent treatment plant.

In addition to active mitigation the operator has outlined how they intend to work with the local community to address issues arising from the site. Representatives of the company attend Parish Council meetings to inform interest parties of current developments and discuss any issues or concerns. The operator has recently organised a site visit for local residents to allow them to demonstrate what the company does and how odour issues are being addressed.

Odour monitoring

The operator has outlined in their odour management plan the monitoring procedures they have implemented at the site. The monitoring results are regularly reviewed and used to evaluate the effectiveness of the site's odour control measures in order to continuously improve the efficiency of odour mitigation measures.

Olfactory monitoring checks will be undertaken inside and outside the site boundary in order to identify odour concentrations in ambient air. This monitoring will be carried out four times a day at predetermined times and locations around the site boundary and in the event of an odour related complaint. The olfactory monitoring will be carried out by trained, competent Moy Park personnel.

Site staff will record time, date, odour type, location and intensity during their routine monitoring. If a complaint is received the circumstances, time and date will be recorded and the operator will undertake an investigation to determine the source of the odour and ascertain the appropriate mitigation.

Noise and vibration

The operator has submitted a noise management plan and a noise and vibration risk assessment as a part of their application. We have reviewed these documents and consider the noise and vibration mitigation proposed by

the operator to represent the best available techniques to prevent significant noise and vibration emissions from the site.

Noise and vibration mitigation

The operator has undertaken a noise survey and assessment and identified the main source of noise pollution as vehicle/lorry movements on site. In order to mitigate the noise and vibration impacts from lorry movements the operator has implemented measures including but not limited to the following:

- introduction of speed limits on site;
- restricting access to the north-eastern side of the site that is closest to the residential properties between hours of 10pm and 8am;
- positioning lairage areas, effluent treatment plant and offal collection bay which will incur regular vehicle movements to the south and west parts of the site away from residential properties;
- provision of electrical supply points as a source of power for vehicle refrigeration systems minimising reliance on the vehicle's own diesel-powered refrigeration motors/generators.

To manage general noise and vibration emissions from the operation the operator has proposed a series of measures which include:

- where appropriate site plant will be fitted with silencers;
- all machinery will be maintained in line with the manufacturer's instructions to ensure they operate efficiently and emit minimal noise;
- the site's roads will be appropriately maintained and speed limits will be imposed to reduce the noise and vibration from vehicle movements around the site;
- the site operations will also only take place within the specified operating times outlined in the site planning permission;
- installation of the best available condenser technology, which includes a large fan with low speed.

Following noise complaints from neighbouring residents the operator has implemented several additional improvements to further reduce noise and vibration emissions from site. These include but are not limited to the following:

- installation of invertors on several condensers to reduce the fan speed;
- removal of speed bumps at the front of the site;
- switching off the ventilation fans on the old factory building;
- moving glycol chiller inside the building and fitting the timer to power it off between 11pm and 5am;
- placing a gate in the northern-east area of the site to restrict the vehicle access to that part of the site between 10pm and 8am as closest to residential properties.

The operator is actively working with the local community to address issues arising from the site. Representatives of the company attend Parish Council

meetings to inform interested parties about current developments and discuss any issues. The operator has recently organised a site visit for local residents to demonstrate what the company does and how noise and vibration issues are being addressed.

Noise monitoring

The operator's noise management plan outlines the monitoring procedures which have been implemented at the site. The monitoring results are regularly reviewed and used to evaluate the effectiveness of the noise control measures used on site and will be used to continuously improve the efficiency of noise mitigation measures.

Daily noise monitoring is undertaken at predetermined times and locations around the site boundary. In the event of a noise related complaint from neighbours additional monitoring will be undertaken. The monitoring will be carried out by trained, competent Moy Park personnel.

On receiving a complaint the circumstances, time and date will be recorded and the operator will undertake an investigation to determine the source of the noise and ascertain the appropriate mitigation.

Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application and supporting information and permit/ notice.

Aspect considered	Justification / Detail	Criteria met
		Yes
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.	✓
Responses to consultation and web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
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 EPR RGN 1 Understanding the meaning of operator.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓
Site condition report	The operator has provided a description of the condition of the site. We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED–guidance and templates (H5).	✓
Biodiversity, Heritage, Landscape and Nature Conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat . - five Local Wildlife Sites and one Ancient Woodland within 2km of the site A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. We consider that the application will	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>not affect the features of the site.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p>	
Environmental Risk Assessment and operating techniques		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p> <p>The applicant carried out a risk assessment of emissions to air from the three boilers on site using the H1 risk assessment tool. The risk assessment considered emissions of carbon monoxide (CO), nitrogen dioxide (NO₂), sulphur dioxide (SO₂) and particulate matter; both short-term and long-term effects were assessed. The operator assumed the worst case scenario basing the assessment on three boilers operating continuously throughout the year. The H1 risk assessment showed that short-term emissions of NO₂, SO₂ and particulate matter and long-term emissions of NO₂ cannot be screened out as insignificant and further screening is required to determine the impact. To further assess the environmental impact of emissions the operator carried out plume dispersion modelling using ADMS-Screen 3. The screening considered emissions of combustion gases only from two of the boilers, as they are considered the main contributors to combustion gases emissions to air from the site. These boilers are fuelled by medium fuel oil, venting through common stack, marked as A1 on the site plan. The screening results showed that emissions from boilers will not exceed Environmental Quality Standards (EQS).</p> <p>Taking into account the above and the following:</p> <ul style="list-style-type: none"> - small size of boilers - the total aggregated thermal input of boilers is less than 20 MW; - two medium fuel oil boilers are operated as duty and standby and normally one boiler is in operation at any time; - as the facility has been operational for 7 years, background air concentrations will contain process contributions from the site. Background concentrations from the last three years were taken from Defra website and do not show any exceedence in EQS and show a decreasing trend; - there are no Air Quality Management Areas declared nearby 	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>we are satisfied that process contributions of combustion gases from the site will not cause an EQS exceedence and further detailed modelling is not required.</p> <p>We have made our decision in accordance with Horizontal Guidance Note H1 – Annex (f) – Air Emissions. The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment all emissions may be categorised as environmentally insignificant .</p>	
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant technical guidance notes.</p> <ul style="list-style-type: none"> - How to Comply with your Environmental Permit. Additional guidance for: Treating and Processing Poultry (EPR 6.11) - How to Comply with your Environmental Permit. Additional guidance for: Combustion Activities (EPR 1.01) - Horizontal Guidance Note H1 – Annex (f) – Air Emissions - Reference Document on Best Available (BREF) Techniques in the Slaughterhouses and Animal By-products industries <p>The proposed techniques/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.</p>	✓
The permit conditions		
Raw materials	We have specified limits and controls on the use of raw materials and fuels.	✓
Improvement conditions	<p>Based on the information on the application, we consider that we need to impose improvement conditions.</p> <p>We have imposed the following improvement conditions:</p> <ul style="list-style-type: none"> - IC1 requires the operator to review their odour mitigation infrastructure and propose additional odour abatement and improvements to the infrastructure to be implemented on site to effectively mitigate odour emissions from the site. The improvement condition needs to be completed by 30/06/2014. - IC2 requires the operator to review their odour management plan and demonstrate whether 	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	current management techniques are effectively managing odour emissions from the site. The review shall include proposals of improvements to the management techniques to be implemented on site. The improvement condition needs to be completed by 31/07/2014.	
Incorporating the application	We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process. These descriptions are specified in the Operating Techniques table at Table S1.2 in the permit.	✓
Operator Competence		
Environment management system	There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓
Relevant convictions	The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. Relevant convictions were found. The conviction referred to intensive farming operation where post conviction plans were not required. The operator satisfies the criteria in RGN 5 on Operator Competence.	✓
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓

Annex 2: Consultation and web publicising responses

Summary of responses to consultation and web publication and the way in which we have taken these into account in the determination process.

Response received from
Health and Safety Executive
Brief summary of issues raised
No concerns raised
Summary of actions taken or show how this has been covered
n/a

Response received from
Public Health England
Brief summary of issues raised
No concerns raised
Summary of actions taken or show how this has been covered
n/a

Response received from
Lincolnshire County Council – Public Health Directorate
Brief summary of issues raised
<ol style="list-style-type: none"> 1. Noise and odour complaints received. 2. Ensure that odour and noise management plans are effective in addressing the number of complaints. 3. Concerns that noise monitoring procedure utilises subjective judgement rather than noise meter measurements.
Summary of actions taken or show how this has been covered
<p>The operator has produced odour and noise management plans that have been assessed by the Environment Agency. The operator has outlined in these documents appropriate controls to mitigate the impact of odour and noise. The scope of the odour and noise management plans is described in the odour and noise emissions sections in the Key Issues part of this document.</p> <p>As a result of odour and noise complaints the operator has implemented several additional mitigation measures to further reduce odour and noise. The operator regularly participate in Parish Council meetings and recently organised a site visit for local residents to show and explain what they are doing to mitigate odour and noise emissions.</p> <p>In addition to daily noise monitoring, in order to effectively measure noise the operator recently commissioned a noise survey and assessment which was carried out by Bureau Veritas in order to establish noise levels at noise sensitive properties north of Moy Park Facility. The report with monitoring results has been submitted to support the permit application.</p> <p>To ensure the operator continues to demonstrate effective odour and noise</p>

management conditions 3.3 and 3.4 have been inserted into the permit which require the operation to be free of odour and noise and vibration and requires the operator to appropriately manage odour and noise and vibration emissions from the site.

Response received from

North Kesteven District Council – Environmental Health

Brief summary of issues raised

1. 31 complaints regarding odour and noise received in the last 3 years
2. Complaints relating to noise from fans at the front of the site, believed to be associated with the plant room behind the goods reception. The company have carried out works to improve the insulation to the plant room and have fitted inverters to the fans to reduce their speed and hence noise levels. It is reported by the council that the noise is not always at a level which causes a problem.
3. Vibration complaints – humming noise. Monitoring by competent authority was undertaken which indicates that World Health Organisation night-time noise levels were not exceeded within the claimant’s property, and comparison with the low-frequency criterion curve did not reveal noise to be at an actionable level.
4. Leaks from tanks on site.

Summary of actions taken or show how this has been covered

The operator produced odour and noise management plans that outlined appropriate controls to mitigate the impact of odour and noise which we have assessed and consider to demonstrate the site will operate within the requirements of Best Available Techniques. The scope of odour and noise management plans is described in the odour and noise emissions sections in the Key Issues part of this document.

In addition we have inserted conditions 3.3 and 3.4 into the permit which require that the operation to be free of odour and noise and vibration and requires the operator to appropriately manage odour and noise and vibration emissions from the site.

The operator has confirmed in their application supporting documents that they have appropriate bunding for fuel storage tanks – 110% of the largest tank and 25% of the combined capacity. Fuel oil tanks supplying boilers are also fitted with level indication and high and low level alarms.

Site surface water drains incorporate a number of three-chamber oil interceptors to prevent oil/fuel entering the drains.

Response received from

North Kesteven District Council – Development Management

Brief summary of issues raised

No concerns raised.

Summary of actions taken or show how this has been covered

n/a

Web publicising responses

Response received from
Public Response
Brief summary of issues raised
Concerns regarding odour
Summary of actions taken or show how this has been covered
<p>Odour management plan has been produced by the operator which demonstrates that they have taken all the necessary measures to reduce the impact of odour emissions. We have assessed the plan and consider it to be in line with the requirements for best available techniques in our guidance. The scope of odour management plan is described in the odour emissions section in the Key Issues part of this document.</p> <p>Condition 3.3 has been inserted in the permit that requires the operation to be free of odour and requires the operator to appropriately manage odour emissions from the site.</p>

Response received from
Public response
Brief summary of issues raised
<ol style="list-style-type: none"> Concerns regarding noise and vibration, especially from refrigeration and extraction units. Concerns regarding noise due to extended working hours – additional night shift.
Summary of actions taken or show how this has been covered
<ol style="list-style-type: none"> The operator has produced a noise management plan which demonstrates they have taken all the necessary measures to reduce the impact of noise emissions. We have assessed this plan and consider the measures to be in line with the requirements for best available techniques in our guidance. The scope of noise management plan is described in the noise emissions section in the Key Issues part of this document. <p>In addition we have inserted Condition 3.4 of the permit which requires that the operation is free of noise and vibration and requires the operator to appropriately manage noise and vibration emissions from the site.</p> <ol style="list-style-type: none"> Operational hours are within the remit of the Local Planning Authority and outside the scope of the Environmental Permitting Regulations.

Response received from
Public Responses
Brief summary of issues raised
Concerns regarding competency of staff carrying out daily odour and noise monitoring.
Summary of actions taken or show how this has been covered
The operator in their odour and noise management plans confirmed that both odour and noise monitoring will be carried out by trained and competent Moy

Park personnel. The operator has a fixed odour and noise monitoring procedure for the personnel to follow. This includes predetermined monitoring locations, frequency and method of determining odour and noise intensity. Monitoring results are regularly reviewed therefore unrealistic or non trending results can be highlighted.

Advertising and Consultation on the Draft Decision

This section reports on the outcome of the consultation on our draft decision carried out between 26/11/2013 and 24/12/2013.

Response received from
North Kesteven District Council – Environmental Health
Brief summary of issues raised
<p>Outdoor noise monitoring report has been carried out at Princess Square in Anwick in close proximity of the Installation operated by Moy Park Limited. The report showed that the overnight noise level was below the relevant night-time external noise guideline value. No shorter-term measurement at times when the subject noise was reported to be occurring exceeded this level. Noise levels overnight on 17 December were below those at which British Standard BS4142 can be used. The BS4142 assessment for the highest 5min LAeq on the 3 December monitoring period gives an exceedance over background of 4dB. This is at a level below ‘marginal significance’.</p> <p>Based on the above, noise levels monitored are not at levels which would amount to a statutory nuisance.</p>
Summary of actions taken or show how this has been covered
n/a

Response received from
Public Response
Brief summary of issues raised
<ul style="list-style-type: none"> - Concerns about continuous smell and noise coming from the installation. - Constant extractor/condenser noise. - Noise from forklift trucks and reversing signal at night. - Loud bangs with lorries being emptied at night despite movement order between 10.00 pm and 6.00 am. - Daily smell from the factory.
Summary of actions taken or show how this has been covered
<p><u>Odour mitigation</u></p> <p>The operator has demonstrated that they are using measures considered Best Available Techniques to mitigate odour from the installation referenced in our guidance ‘How to comply with your environmental permit, Additional guidance for: treating and Processing Poultry EPR 6.11’. These include daily removal of blood off site, installation of activated carbon filter on blood storage tank vents, back venting of road tankers through the activated carbon filter during blood collection, usage of screens/catchpots to prevent meat</p>

scraps/fats from entering drainage system, enclosure of effluent treatment plant and good housekeeping.

Noise mitigation

The Operator has confirmed in their Noise Management Plan that to prevent noise emissions during unsocial hours the access to the north-eastern area of the site is restricted between the hours of 10.00 pm and 8.00 am and that site practice is to ensure that refrigerated trailers are powered by site supplied electricity whilst parked and that engines are turned off.

The operator has provided an Odour and Noise Management Plans with their application demonstrating that appropriate measures will be taken to minimise odour and noise emissions from the site. Both plans are incorporated in the permit in Table S1.2 'Operating techniques' requiring the operator to manage their operations according to those plans in order to mitigate odour and noise emissions from the site operations. Both plans outline clear procedures for managing and monitoring odour and noise emissions at the site. We have reviewed both plans and are satisfied that procedures in these plans represent the best available techniques to prevent significant odour and noise emissions from the site.

In addition Conditions 3.3 and 3.4 have been inserted in the permit that require the operation to be free of odour and noise and require the operator to appropriately manage odour and noise emissions from the site.

We have also decided to insert an improvement condition in the permit that requires the operator to review their odour management plan and investigate whether any additional odour abatement is appropriate and identify any improvements to the management techniques. The improvement condition needs to be completed with six months from the permit issue date.

Response received from
Public Response
Brief summary of issues raised
<ol style="list-style-type: none"> 1. No action from Moy Park on calls from residents, concerns about complaints handling procedure – investigation of complaints and a call back to complainant rarely occurs. 2. No action from Moy Park in regards to complaints. 3. Concerns in regards to the increased productivity at the factory and filtration system not being able to control this increase, as it hasn't been upgraded to deal with larger production capacity.
Summary of actions taken or show how this has been covered
<p>1 & 2. The operator has provided evidence that a list of actions and measures were undertaken as a result of complaints they have received. The list of measures implemented can be found in Key Issues section of this document.</p> <p>The operator has produced a complaints procedure which is incorporated into both their odour and noise management plans.</p>

According to the procedure the operator will ensure the complainant is informed of the result of the investigation into the cause of the odour or noise and of any remedial action taken to reduce the odour or noise to an acceptable level as soon as possible. The date and time at which this feedback was provided to the complainant is recorded on the incident form.

The operator has confirmed that they will carry out further actions in order to address odour and noise emissions. These include:

- increased frequency of extract duct work from annually to 6 monthly,
- surveillance of all drains on site with CCTV throughout 2014,
- reviewing the revising bleepers on the shunter trucks to reduce the noise to a lower decibel,
- decommissioning some of the condensers on the roofs towards the front of the site during 2014.

3. The operator has confirmed that the production capacity has not increased as a result of this application. The application supporting documents provide details on the ventilation systems used in the parts of the plant that can potentially cause odour emissions. These include regular high air exchange rates in the areas considered to be potentially odorous. There are no opening windows and no doors that allow direct access to the outside of the building in hanging and bleed areas, scalding, defeathering and evisceration parts of the installation. The air extracted from various process locations is discharged to the atmosphere above the building on the western site of the building to achieve the maximum distance from sensitive receptors through vertical roof vent that is not impacted by cowls or any other fixture above the stack in order to achieve the maximum dispersion. However, due to continuous odour complaints from neighbouring sensitive receptors we have decided to insert two improvement conditions in the permit that require the operator to review their odour management plan and odour mitigation infrastructure. The review shall demonstrate whether current management techniques and infrastructure are effectively managing odour emissions from the site. The review report shall include proposals of improvements to management techniques and infrastructure and any additional odour abatement to be implemented on site.