

## Permitting Decisions- Variation

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We have decided to grant the variation for Dunbia Carnaby operated by Dunbia (UK).

The variation number is EPR/LP3830BC/V004.

The variation is for the following changes:

- The incorporation of the onsite Effluent Treatment Plant (ETP) and proposed upgrades under activity AR2.
- Addition of a skins and hides processing facility as a directly associated activity (DAA).
- The installation of carbon filter odour abatement for the upgraded ETP.
- Addition of a 1.9 MWth natural gas fired boiler (emission point A4).
- Addition of an LPG tank.
- Addition of an underground SuDs tank for the surface water discharge.
- Addition of carbon filter as odour abatement for the ETP (emission point A5).

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

### Purpose of this document

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

- highlights [key issues](#) in the determination
- summarises the decision making process in the [decision considerations](#) section to show how the main relevant factors have been taken into account

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

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

# Key issues of the decision

## Effluent treatment plant (ETP) upgrades

The operator will be making upgrades to the onsite ETP. The upgrades include the installation of a new screen, a balance tank, a dissolved air floatation (DAF) unit and a sludge tank. It is confirmed within the application that the discharge from the ETP will remain to sewer and there will be no change to effluent volume. Once the upgrades are in place, the operator has confirmed that all existing controls regarding effluent will continue to be followed.

A new physical screen will be installed to remove solids, this will be sited on a gantry above a trailer. The balance tank will be sized 800m<sup>3</sup> and will be a glass-lined steel tank, to protect against slow corrosion. The sludge tank will also be a glass-lined steel tank and will be sized 40m<sup>3</sup>. Both tanks will be constructed on concrete slabs and there will be a retaining wall of 400mm around the compound.

The balance tank has been designed to have capacity for two days' worth of effluent, whilst under normal operating conditions there would be one days' worth of effluent in the tank. This allows for sufficient time for contingency measures to be undertaken in instances where repairs are required or alternative disposal routes, such as tankering off-site. The sludge tank has been designed to have a retention capacity for one production day.

Monitoring and management procedures of the ETP system will ensure capacity in the balance tank for incoming effluent tank, and similarly for the sludge tank. It will also have an automation feature that will stop incoming effluent if the tanks are at a high level to prevent any overflow. The tanks will also have high level alarms fitted.

The operator has a planned maintenance schedule which will inspect the tanks at least annually. There will also be 5-yearly inspections undertaken by an external company.

We consider the design and control measures to be in line with BAT for Waste Treatment.

The operator has confirmed that there will be a small increase in waste production as a result of the ETP upgrades. This includes solid screenings and sludge from the DAF unit.

The Odour Management Plan (OMP) has been updated by the operator to incorporate the upgrades to the ETP. Both the balance and sludge tank will have a roof to reduce odour risk, and sludge will be removed from site at least twice a week. Carbon filter abatement will also be installed, which is covered in later in the decision document. The DAF unit will include a lid on the treatment bed and the effluent will be flowing through to prevent stagnation, with regular discharge.

## Effluent treatment plant discharge

The addition of the DAF unit will require the use of new chemicals within the ETP system:

- Ferric chloride to act as a coagulant. A maximum of 13 tonnes will be stored on site, with an annual usage of 364 tonnes.
- Caustic for pH adjustment to allow the coagulant to act in its optimal range. A maximum of 13 tonnes will be stored on site, with an annual usage of 146 tonnes.
- Polymer (Aquatreat N223) to act as a flocculant. A maximum of 2 tonnes will be stored on site, with an annual usage of 1.5 tonnes.

The chemicals for the ETP will be stored within a purpose-built, secure steel IBC banded storage unit.

There will be measures in place to ensure effluent quality prior to discharge, in the form of a recirculation valve. Should it be identified at the monitoring point (via the submersed probes) that the effluent has not been treated to a satisfactory standard, then it will trigger the recirculation valve to change the direction of the effluent, so it does not discharge and goes back through the treatment process again. This will be an automated process.

The operator provided a H1 assessment for the new chemicals associated with the DAF unit, which concluded that they would not have any significant environmental impact. We reviewed the assessment and find that despite any differences in numerical predictions, we agree with the overall conclusion.

The original permit included monitoring and reporting for the discharge to sewer for COD settled and total suspended solids settled. These parameters are included within the trade effluent consent for the site with the sewerage undertaker and the operator will need to ensure to meet the limits as part of their agreement with them. Therefore, we have removed them from the permit to prevent double regulation.

## Scheduled activity AR2 – Operation of the ETP

The ETP has been incorporated into the permit under scheduled activity AR2 – S5.4 Part A(1) (a) (ii) – Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment.

The existing ETP was originally listed on the permit as a DAA, and the addition of the DAF unit would have required the addition of a new scheduled activity (S5.4 Part A(1) (a) (ii)).

However, the existing ETP was already considered a scheduled activity for non-hazardous waste disposal via physico-chemical treatment when it was originally permitted in 2005. It was covered under Section 5.3 A(1)(c)(ii) of the Pollution Prevention and Controls (PPC) Regulations:

PPC Regs 2000 – Section 5.3—Disposal of Waste Other Than by Incineration or Landfill

**Part A(1)**

(c) Disposal of non-hazardous waste in a facility with a capacity of more than 50 tonnes per day by—

(ii) physico-chemical treatment.

This activity is now covered under the Environmental Permitting Regulations (EPR) under Section 5.4 Part A(1)(a)(ii) – Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment.

Although the activity was listed as a DAA in the original permit rather than a scheduled activity, it was documented in our decision records as a scheduled activity. Scheduled activity AR2 has therefore been included within the permit.

Carbon filter odour abatement

The operator will be installing carbon filter odour abatement as part of the ETP upgrades. The carbon filter will work passively and have a capacity of 280m<sup>3</sup>/hr. It will be located by the ETP (emission point A5) and will filter the air displaced by effluent entering the balance tank and sludge entering the sludge tank.

The operator has confirmed that that the carbon media in the filter will be refreshed at a minimum interval of 6 months, as experience from other sites has shown this to be appropriate. As recommended by the supplier the carbon pellets will be visually inspected monthly, and a planned maintenance check will be put in place to facilitate this. If the monthly inspection identifies any damp or saturation of the carbon pellets, the carbon media will be replaced immediately. In addition, a monthly inspection of pipework and housing to identify and address any damage or corrosion is also undertaken. The operator has incorporated the additional carbon filter abatement system into the OMP. The monthly visual inspection, and subsequent reporting, of the carbon media will be included within the permit.

The operator has not carried out an assessment to characterise the odorous components from the abated processes. Whilst we would usually require this to be carried out prior to implementation of the abatement systems. However, as the operator has chosen to add additional abatement, we do not require any further assessment at this time. Should the odour from any of these sources become an issue we would recommend reconsidering our position.

The incorporation of the carbon filter in the permit, management systems, and plans will ensure the abatement is managed appropriately.

#### Skins and hides processing facility

The addition of the skins and hides processing facility will be a DAA to existing Scheduled Activity AR1. The operator will be installing a building to accommodate the trimming, salting and icing of hides and skins according to customer requirements.

It is proposed that the rainwater from the facility's roof will be captured in a storage tank and used for washing activities. Other surface water drainage will connect into the existing surface water drainage system.

The only generation of process effluent will arise from washdown activities, which comprise the occasional washdown of the floor and dolavs. The effluent will be contained internally and directed to an above ground storage tank. All drains in and around the facility will direct to the foul drainage system. The foul drainage system will be separate from the surface water drainage system, as both systems will have their own inlets, piping and storage to prevent any contamination.

The integrally bunded storage tank will be constructed from stainless steel with a capacity of 60m<sup>3</sup>, and the integral bund will have a capacity of 110% of the tank. The effluent storage tank will be fitted with a high-level alarm and there will be a method of level reading. There will also be a pre-cast concrete pump sump located below ground located adjacent to this tank. The effluent storage tank will be emptied at least every two weeks, and the effluent will be removed offsite to a Wastewater Treatment Plant by a suitably qualified waste contractor.

The OMP has been updated by the operator to incorporate the addition of the skins and hides processing facility. The processing will take place within a fully enclosed building, in conditions to limit microbial activity and storage times minimised.

#### Addition of 1.9 MWth natural gas fired boiler

The site has three existing boilers (emission points A1 to A3: 1 natural gas and 2 kerosene), with an aggregated thermal input of 1.67 MWth. The operator will be installing a new containerised natural gas boiler (emission point A4) with a thermal input of 1.9 MWth. Whilst the existing boilers (A1-A3) will remain in place, they will not be operated at the same time as the new boiler (A4) and will only be used as a back-up contingency.

The combustion process at the installation is not considered 'relevant' for assessment under the Agency's procedures which cover the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations) and/or the Wildlife

and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act (CRoW) 2000). This was determined by referring to the Agency's guidance 'AQTAG014: Guidance on identifying 'relevance' for assessment under the Habitats Regulations for installations with combustion processes.' Thus, no detailed assessment of the effect of the releases from the installation's combustion processes on SACs, SPAs and Ramsar sites is required.

The operator provided a H1 assessment of the emissions from the new boiler. Emissions of Nitrogen Dioxide have been screened out as not significant, and so we agree that the applicant's proposed techniques are Best Available Techniques (BAT) for the installation.

### Sustainable drainage system (SuDS) tank

The operator will be installing an underground SuDS tank to facilitate additional control of the surface water discharge flow. A lined attenuation tank with a capacity of 210m<sup>3</sup> will be installed, as well as a new flow restriction and filter drain prior to discharge. The filter drain will be for fine sediments, metals, hydrocarbons and other pollutants. The existing surface water discharge location will not be changing.

The report from the consultants included the prescribed maintenance requirements, which included the following:

- Ensuring the filter drain remains clear of debris/silt, and inspections to identify and rectify any blockages or defects.
- Regular inspection of the attenuation tank inlets and overflow pipework to ensure correct operation. As well as checking for silt accumulation and establishing an appropriate frequency for silt removal.

The operator has provided an updated site drainage plan, and the SuDS tank has been included within the permit.

### Improvement conditions:

The original permit was issued with 12 improvement conditions. These had completion deadlines for 2005/2006 and, with the agreement of the Regulatory Officer, have been considered completed and removed from the permit. The improvement conditions are listed below:

<b>Table S1.3 Improvement programme requirements</b>		
Reference	Requirement	Date
IC1	The Operator shall carry out a competence and training needs analysis and implement further training where required to ensure all employees have the skills and knowledge necessary to carry out their tasks according to the requirements of the Permit and therefore ensure compliance of the company with the Permit.	30/12/05
IC2	The Operator shall specifically identify the environmental issues and legal requirements relevant to the installation and develop, implement and maintain operational control procedures having regard to Section 2.3 Management of S6.11 July 2003 Guidance for the Red Meat Processing (Cattle, Sheep and Pigs) Sector.	30/12/05
IC3	The operator shall develop and implement a maintenance programme with regard to S6.11, July 2003 Guidance for the Red Meat Processing (Cattle, Sheep and Pigs) Sector, Section 2.3 Management. The Operator shall confirm in writing to the Agency when this programme is in place.	30/12/05
IC4	The Operator shall assess the storage and handling measures in place for all fuel, raw materials, wastes and products with the purposes of achieving appropriate segregation, secondary containment and preventing fugitive releases and/or losses to ground and surface water. The assessment shall take into account the requirements given in sections 2.2.5 and 2.5 of Sector Guidance Note IPPC S6.11, Issue 1, July 2003. A written report shall be submitted to the Agency that shall include a timetable for implementation of any necessary improvements. The report shall be agreed with the Agency.	28/02/06
IC5	The Operator shall develop proposals for the extension of the existing paved area and/or kerbing to provide secure and adequate containment for any spillages or wash down liquors arising in the working areas with the purpose of preventing fugitive releases to ground or surface water, having regard for the Agency's Sector Guidance Note S6.11, Issue 1, July 2003, Section 2.2.5. These proposals shall be agreed in writing with the Agency and shall include a timetable for implementation.	30/04/06
IC6	The Operator shall develop a written procedure to regularly review fugitive releases from the installation, demonstrating the application of an appropriate, effective and structured LDAR (leak detection and repair) system and develop an action plan to implement any improvements identified, as described in sections 2.2.4 and 2.2.5 of Technical Guidance Notes IPPC S6.11, Issue 1, July 2003. The Operator shall periodically update this review and action plan in accordance with Condition 4.1.4 of this Permit with the purpose of minimising fugitive releases. A copy of the written procedure and a written report describing the outcome of the first review, including details of any proposed improvements and the timetable for their implementation, shall be submitted to the Agency.	28/02/06

IC7	The Operator shall develop and implement an Emissions Monitoring Programme based on the requirements of Table 2.10.1 in this Permit. The Programme shall have regard for the Agency's Sector Guidance Note IPPC S6.11, Issue1, July 2003 and Technical Guidance Note M18, version 1, July 2004. The Programme shall have due regard for the Agency's requirement for MCERTS accreditation for the monitoring equipment, personnel and organisations employed and for the conformance of all monitoring methods and procedures with appropriate monitoring Standards such as CEN, BSI, ISO, etc. The Emissions Monitoring Programme shall be submitted for the consideration of the Agency.	30/06/06
IC8	The Operator shall develop and implement a written Odour Management Plan for the Installation, having regard for techniques described in the Agency's Sector Guidance Note IPPC S6.11 July 2003, Section 2.2.6 and Technical Guidance Note IPPC H4, Horizontal Guidance for Odour Part 1 (Regulation and Permitting) and Part 2 (Assessment and Control). A copy of the Odour Management Plan shall be submitted to the Agency. The Plan shall be agreed in writing with the Agency.	30/12/05
IC9	The Operator shall conduct a review of the systems for the waste recovery and disposal at the Installation, having regard for techniques described in the Agency Sector Guidance for the Food & Drink Sector [IPPC S6.11, July 2003, Section 2.6]. A report on the findings and proposed actions, with timescales for implementation, shall be supplied to the Agency.	30/06/06
IC10	The Operator shall produce an Energy Efficiency Plan having regard for Section 2.7.2 of the Agency Guidance Note IPPC S6.11 Issue1, July 2003. A copy of the Energy Efficiency Plan shall be submitted to the Agency.	30/04/06
IC11	The Operator shall develop and implement a detailed and formalised Accident Management Plan, to include appropriate operational procedures, with the purpose of preventing or minimising releases to the environment in accident scenarios, having regard for the Agency Sector Guidance for the Red Meat Processing (Cattle, Sheep and Pigs) Sector IPPC S6.11, July 2003, Section 2.8. The accident management plan shall include an appropriate methodology for identifying hazards posed by the Installation, for assessing the risks of those hazards identified and for identifying techniques necessary to reduce those risks. A copy of the accident management plan shall be submitted to the Agency.	30/04/06
IC12	The Operator shall develop a written Site Closure Plan having regard for the Agency Sector Guidance Note IPPC S6.11 Issue1, July 2003, Section 2.11 and shall submit a copy to the Agency for approval.	30/06/06



## **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.

### **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', Appendix 1 of RGN 2 'Interpretation of Schedule 1'.

The operator has provided the grid reference for the emission point from the medium combustion plant.

### **The site**

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

These show the extent of the site of the facility.

The plan is included in the permit.

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

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

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

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

We have not consulted Natural England.

The decision was taken in accordance with our guidance.

## **Environmental risk**

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

The operator's risk assessment is satisfactory.

## **Operating techniques**

We have reviewed the techniques proposed by the operator and compared these with the relevant technical guidance 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.

## **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.

## **National Air Pollution Control Programme**

We have considered the National Air Pollution Control Programme as required by the National Emissions Ceilings Regulations 2018. By setting emission limit values in line with technical guidance we are minimising emissions to air. This will aid the delivery of national air quality targets. We do not consider that we need to include any additional conditions in this permit.

## **Odour management**

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

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

We have approved the odour management plan as we consider it to be appropriate measures based on information available to us at the current time.

The applicant should not take our approval of this plan to mean that the measures in the plan are considered to cover every circumstance throughout the life of the permit.

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

## **Updating permit conditions during consolidation**

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

## **Emission limits**

Emission Limit Values (ELVs) have been added for the following substances:

Emission point A4 – Oxides of Nitrogen (NO and NO<sub>2</sub> expressed as NO<sub>x</sub>). Whilst no limit has been included for Carbon Monoxide, monitoring will still be required.

We made this decision in accordance with the Medium Combustion Plant Directive.

## **Monitoring**

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

Emission point A4 – Every 3 years. We made this decision in accordance with the Medium Combustion Plant Directive.

Emission point A5 – Monthly – Visual inspections of carbon pellets. These monitoring requirements have been included in order to ensure the carbon filter abatement system is operating efficiently.

## **Reporting**

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

- Air emission point A4 – in line with the Medium Combustion Plant Directive.
- Air emission point A5 – To reflect the carbon filter monitoring is reported.

## **Management system**

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

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

## **Growth duty**

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit variation.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.