

## Compliance Assessment Report CAR\_NRW0045529

**Permit being assessed:** BV9683IH.

**For:** Teifi Park Abattoir EPR/BV9683IH, **held by:** Dunbia UK

**At:** Teify Park , LLANYBYDDER, Carmarthenshire, SA40 9QE.

**Type of assessment:** Site Inspection,

**Reason:** Routine.

**On:** 03/10/2024 between 10:00 and 14:00.

**Parts of permit assessed:** Site Management, Operations, Emissions and Monitoring, Information..

**NRW Lead Officer:** Alex Bowder.

**Report sent to:** Luke Healy, Victoria Kerr, Environmental Coordinator, Environmental Manager, on 02/12/2024.

### 1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR1A - Installations - Management - General Management	Assessed (A)	
IR2A - Installations - Operations - Permitted activities	Assessed (A)	
IR2B - Installations - Operations - The site	Assessed (A)	
IR2C - Installations - Operations - Operating techniques	Assessed (A)	
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	Assessed (A)	
IR3C - Installations - Emissions and monitoring - Odour	Assessed (A)	
IR3D - Installations - Emissions and monitoring - Noise and vibration	Assessed (A)	
IR3F - Installations - Emissions and monitoring - Pests	Assessed (A)	
IR4A - Installations - Information - Records	Assessed (A)	
IR4C - Installations - Information -	Assessed (A)	

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
Notification		

Result types are explained in more detail in the 'Important Information' section below.

Total non-compliances recorded	Total non-compliance score
0	0

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

## 2. What action is required?

No action required.

## 3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

**At this time, we do not intend to take any further action.**

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

## 4. Details of our assessment

*\*This CAR was reissued on 2 December 2024 to amend technical wording within the report commentary.\**

This Compliance Assessment Report (CAR) details the comments of Natural Resources Wales (NRW) Officers for the site inspection conducted on 3 October 2024 at Teify Park Abattoir and Meat Processing Plant, Teify Park, Lampeter Road, Llanybydder, Carmarthenshire SA40 9QE for activities held by Dunbia (UK) (the operator) under environmental permit EPR-BV9683IH.

### Introduction

The visit purpose was to conduct a general inspection of site activities listed on the operator's environmental permit by NRW Officer Alex BOWDER. A focus was set on the site's effluent treatment process looking at the measures implemented to achieve compliance with permitted emission limits to the discharge points. A further emphasis was on the operator's odour management and the measures implemented to effectively reduce and control potential emissions from sources.

There were no non-compliances recorded against the operator's permit conditions on this inspection.

### Attendees

- Alex Bowder - Senior Regulation Officer, NRW
- Environmental Coordinator, Dunbia
- Environmental Manager, Dunbia
- Environmental Graduate, Dunbia

Permit Overview - EPR-BV9683IH

The installation is located half a mile north of Llanybydder near the Afon Teifi, which is a designated Special Area of Conservation (SAC), and other Sites of Special Scientific Interest (SSSIs); namely, the Lyn Pencarreg and Corsydd a Rwyth Cillybaldd.

The operator is permitted to slaughter bovine animals, sheep, goats and calves with the capacity to process up to 30,000 lambs and 1,000 cattle per week. The site also processes carcasses and skins and refrigerates carcasses and finished products. It operates an effluent treatment plant which involves a biological treatment stage and treatment of process water using a Dissolved Air Flotation (DAF) Unit, which discharges to the Afon Teifi. The site is currently permitted to burn oil in a combustion plant (boiler) rated at 1.4 and 1.2 MW thermal input. Permitted activities and directly associated activities are listed as A1- A7 within *schedule 1 - Operations*.

The operator has various bespoke operational management documents including a noise management plan, odour management plan, and an environmental management system (EMS) covering all activity areas. The permit requires the operator to manage and operate its activities in accordance with its EMS, as per condition 1.1.1.

#### Permit Variations

- In 2020, a substantial variation was issued including the addition of bovine animals to the slaughtering activities and other changes.
- In 2021, a further variation was issued to change the installation boundary and discharge point W2 due to the eroding riverbank.
- In 2023, the operator applied for a variation which looks to replace the existing gas-oil boilers on site with an air source heat pump - this involves use of a new hot water steam boiler. Also applied for the addition of a 5000L white diesel fuel tank.

This application is currently being determined by the NRW Permitting department - EPR-BV9683IH/V007.

#### Water Abstraction - WA/062/0002/0010

The operator has a water abstraction licence issued in 2020, which permits 523 m<sup>3</sup> and 605 m<sup>3</sup> per day to be taken from two borehole sources (A and B) respectively. The site also has a public water supply which is utilised for around and 2% of site activities such as indoor taps and amenities.

#### Point Source Emissions and Monitoring

- Emissions to air: **A1** and **A2** oil fired boiler x 2 (*applied to change to A3 via variation*)
- Emissions to water: **W1** uncontaminated surface water discharge to River Teif, **W2** effluent treatment plant discharge to River Teifi
- Emissions to sewer: **S1** from ETP

The permit requires the operator to conduct various parameter monitoring and reporting of the emissions data. These are assessed by NRW independently of site inspections.

The main environmental risks from permitted activities are:

- Emissions to land and water
- Effluent discharge to sensitive receptors
- Odour and noise emissions from activities impacting amenities.

#### **Inspection Commentary**

At 10:00am Officer BOWDER arrived at the site office and signed in where he was met by Dunbia staff. In the office an overview of the visit purpose was relayed with discussions regarding the site's historic and current permit variation applications, changes and improvements to site, and procedural management documents.

#### Variation EPR-BV9683IH/V007

The operator wishes to use a new heat pump system to be more efficient at producing hot water

than the existing boiler system. This aims to provide a 58% reduction in the energy associated with the generation of hot water. Discussions were had around the changes to emissions and monitoring criteria for the boilers as appropriate to Medium Combustion Plant Directive (MCPD) requirements. The operator confirmed the decommissioning of the two gas oil boilers in use currently and the addition of the 5000L white diesel fuel tank.

This application will be determined by the NRW permitting department in due course.

#### Management Documentation

During the inspection Officer BOWDER requested to see procedural and maintenance documents that covered the environment management systems for the effluent treatment plant, drainage network, accidents management, and odour management. The following documents were submitted by the operator:

- Effluent treatment process flow
- Environmental Risk Assessment and Response Plan
- Spill Response Instructions
- Site Drainage Plan
- Odour Management Plan

#### Lairage cleaning and maintenance

On 13 September 2024, the operator conducted its routine lairage cleaning activity and notified NRW prior to the activity. The holding of animals in lairage prior to slaughter can create a build-up of slurry and manure below and in lairage, and cleaning this area has the potential to generate odour beyond daily routine site activities. The waste is collected via third party contractor and transported away for specific appliance offsite.

No issues were identified or recorded onsite at the time of this recent event. The operator agreed to continue notifying NRW ahead of this planned activity.

#### Tour of Process

Following the discussion in the office, a site tour was conducted looking at the various process activities. This included the: (i) effluent treatment plant, (ii) sludge removal, (iii) blood tanks, (iv) steam and hot water boilers / heat recovery systems and refrigeration, (v) new crate wash area, and (vi) rear of site.

#### Effluent Treatment Plant (ETP)

The site introduced a new ETP in 2009 which discharges to the Afon Teifi. During inspection the operator produced its effluent treatment process flow diagram illustrating the primary and secondary treatment stages.

The Officer queried how each control point is managed; this is done via trained ETP operative. This led to checking how the operator ensures its staff are appropriately trained to manage the work area. This is done using a training matrix that was shown and briefly reviewed in the office. Operative staff are listed with corresponding training modules completed and accompanied renewal dates.

The various tanks situated outside (such as aeration and balance) are afforded with secondary containment and were visually inspected. There were no signs of leakage or damage in the surrounding areas. All the ETP is located on an impermeable surface within a sealed system.

The plant possesses the ability to recirculate effluent if a fault or compliance issued is detected. The biological bug population within the effluent is determined by the sludge volumes present and the effluent loading will determine the next stage of treatment.

#### Sampling and Monitoring

The operator conducts in-house composite sampling of the effluent where a portion is bottled and tested prior to discharge. An external composite sample is also collected and tested by an accredited UCAS laboratory weekly. The ETP operative conducts daily checks measuring sludge volumes and incoming effluent loading along with weekly sampling of the discharge tank. This done using a testing kit housed within the building, which is then sent to the Food Safety Office lab to pre-empt any adjustments required to ensure effective running of the plant.

If any solids or abnormal discharge is observed at this stage (such as excessive emission limit value exceedance detected), the operative will switch the effluent plant to recirculation to prevent any further effluent being discharged. This allows for investigation into the source of the potential issue and time to inform any corrective action.

The operator detailed how all testing for permit compliance purposes is done via a competent contractor. This tests the raw effluent to the ETP pre and post biological treatment zones. The effluent is monitored to ensure it meets the correct specification and pre-set values listed in the permit.

The ETP has a dissolved air flotation (DAF) phase which is housed within an enclosed building, as seen in Image 1.



Image 1 – showing DAF within the enclosed building, taken on 3 October 2024

The ETP is identified as an odour source within the site's OMP and the operator has identified and implemented appropriate control measures to reduce potential odour emissions from this location as far as reasonably practical.

Once solids have been separated and scraped off, dried material is collected in the sludge cake trailer in the building annex. This room has fan ventilation in the walls vented through an air filter. This part of the process previously used to utilise a centrifuge for the dewatering of the sludge, which was replaced with a screw press; this has reduced odour and noise due to less turbulence of material.

The Officer questioned the shutter door to the unit being partially open. It was stated that allowing a slight gap is conducive for aeration and prevents build-up of odour particles and eventual release when having to open the shutter door for vehicle manoeuvring. Material is collected in a trailer until full and taken away approximately 3 times a week.

The Officer asked about the cleaning regime for the parts of the ETP. This is done routinely as part of planned maintenance and cleaning schedules, which should prevent the build-up of malodorous material.

#### Chemical Storage

Chemicals used in the effluent process are stored within IBCs placed on top of plastic secondary bunding on hardstanding. Chemicals are used for pH control with caustic soda/ sodium hydroxide, coagulant, and polymer. Tanks are fitted with an inline continuous pH probe which is linked to the SCADA system and an emergency alarm for high or low pH to determine corrective dosing. The officer queried about how chemical delivery takes and asked how the transfer procedures in place are upheld by contractors.

#### Drainage Network System

The operator provided a comprehensive drainage plan showing the various lines and valve points across the site. The Officer discussed the site's interceptor / sump maintenance schedules and questioned how drainage lines and openings are maintained to ensure there is minimised build-up of material.

The site has an MCERTS certified effluent discharge meter for flow monitoring. This was last inspected by an external accreditor on 13 September 2023. There were no issues noted with the drainage system at the time of inspection.

#### **Odour Management**

The operator has an odour management plan that identifies all the potential odour sources within the boundary and the offsite sensitive receptors. The document lists the abatement measures implemented for each respective odour source to reduce and control emissions as far as reasonably practical for each work area, and details the monitoring and control measures the operator enacts when odour is detected. There are appendices 1 - 9 including maps and diagrams, risk assessments, and odour assessments forms.

There are potential odour sources off-site listed as neighbouring farms and agricultural activities, Llanybydder Wastewater Treatment Plant and the Dwr Cymru Welsh Water Pumping Station.

#### Odour assessments

The operator uses an Olfactory Monitoring procedure to inform its odour assessments. Staff conduct weekly onsite odour assessments at six locations (AS 1 - 6) assessed on a scale of 0-7. Offsite assessments are conducted on a monthly basis at ten locations (AR 1- 10).

If any odour stronger than a grade 3 'distinct odour' is noted, then the local area assessment point will be documented, and further investigation will follow. During the audit of the odour management documents the operator produced an odour assessment template and the officer inspected a recent onsite and offsite assessment completed - no odour was detected on either report.

It is also noted that there was no odour detected offsite outside of the permit boundary by the officer at the time of inspection, only localised to the ETP areas.

#### **Advisory Note**

The operator increases the frequency of its offsite odour assessments to ensure further data is collected for potential emission impacts to offsite sensitive receptors.

#### Blood storage (beef and lamb)

Blood tanks have also been identified as potential odour source within the permitted area. Tanks are located within the main unit with a shutter door that remains largely open during operational

hours due to vehicles access. The operator commented that it's impractical to open and shut the door as required given the constant movement of materials from the room.

Blood is removed from the site tank on a frequent basis approximately three times a week. Odour abatement is installed on the blood storage tank vents - during blood collection the tanker connects to a carbon filter on site and any exhaust air expelled from the tanker passes through the carbon trap.

The beef blood collection tank is refrigerated, and no animal by-products or materials are left in open storage vessels overnight. The area is inspected by staff and ensure shutter doors and closed during the night. When emptying the tanks, connecting pipes are attached using a closed pipe mechanism as to minimise any residual material from escaping.



Image 2 – showing blood tanks and refrigeration systems, taken on 3 October 2024

### Carbon Filters

During inspection the operator agreed with the importance of using the carbon filters as an odour abatement measure. A filter for the blood storage area is located within close proximity to the unit, as seen in image 3. A carbon filter is also used on the tanker to capture any gas emissions displaced by the tank vessel in order to create the vacuum required to withdraw the blood from the tank. This is considered good practice to which the operator agreed and confirmed that this abatement measure would be continued going forward.

The Officer queried how frequently the carbon filters are replaced as to ensure their effectiveness in molecular filtration and minimising odour emissions - these are done biannually. This is sooner than the manufacturer recommendations, however, again demonstrates good practice to ensure the filters are functioning and effectively capturing fugitive odour from the transfer activity.



Image 3 – showing carbon filter outside the blood storage unit, taken on 3 October 2024

#### Boilers and Refrigeration

Boilers are used to provide warm water for the process washdown. There are water tanks outside heated to 65 °C and 85°C respectively with various contingency measures in place to ensure a hot water supply if an issue were to occur as this is vital to the production. The Officer visited the newly constructed compressors house and witnessed new hot water boiler. Spoke about noise mitigation and how the area is shielded by the adjacent building.

#### Crate Washing

This work area location was at the rear of the site separate to the primary building. This workstation has now been moved from the rear part of the site and bolted on to the main building, which was visited.

The rear of the site was visited where the 5000L white diesel fuel tank was viewed. This area will be managed by the haulage, however a Dunbia engineer will oversee the general management of the area.

The Officer returned to the office for an inspection summary to list any action requirements and NRW's regulatory expectations going forward.

Officer left site at 14:00.

#### **Alex Bowder**

Senior Officer - Southwest Wales Industry Regulation

[Alex.Bowder@cyfoethnaturiolcymru.gov.uk](mailto:Alex.Bowder@cyfoethnaturiolcymru.gov.uk)

**END OF REPORT**

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

## Important information

### Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

### Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

### How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

### **If your assessment result in Section 1 is suspended, what does this mean?**

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

### **Full list of Industry compliance criteria (used in section 1 and 2):**

#### **1. Management**

- IR1A – General management
- IR1B – Finance (only applicable to Landfill)
- IR1C – Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

#### **2. Operations**

- IR2A – Permitted activities
- IR2B – The site
- IR2C – Operating techniques
- IR2D – Technical requirements
- IR2E – Improvement programme
- IR2F – Pre-operational conditions
- IR2G – Landfill engineering (only applicable to Landfill)
- IR2H – Waste acceptance (only applicable to Landfill)
- IR2I – Leachate levels (only applicable to Landfill)
- IR2J – Closure and aftercare (only applicable to Landfill)
- IR2K – Landfill gas management (only applicable to Landfill)

#### **3. Emission and Monitoring**

- IR3A – Emissions to water, air or land
- IR3B – Emissions of substances not controlled by emission limits
- IR3C – Odour
- IR3D – Noise and vibration
- IR3E – Monitoring
- IR3F – Pests
- IR3G – Air quality management plans
- IR3H – Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I – Fire

#### **4. Information**

- IR4A – Records
- IR4B – Reporting
- IR4C – Notification

### **Enforcement response**

Any non-compliance with a permit condition is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or

suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

### **Data protection notice**

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law
- assessing customer service satisfaction and improving our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

### **Disclosure of information – this report will be available to view on-line**

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within twenty working days to let you know if we agree to your request.

### **What do I do if I disagree with the report or have a complaint?**

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 to 18:00), or email [enquiries@naturalresourceswales.gov.uk](mailto:enquiries@naturalresourceswales.gov.uk) for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at [ask@ombudsman.wales](mailto:ask@ombudsman.wales)

### **Welsh Language Standards**

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.