

Compliance Assessment Report CAR_NRW0051581

Permit being assessed: WP3231NB.

For: The Creamery , **held by:** Dairy Partners (Cymru Wales) Limited

At: Aberarad, Newcastle Emlyn, Carmarthenshire, SA38 9DQ.

Type of assessment: Audit,

Reason: Routine.

On: 13/04/2026 between 10:00 and 15:45.

Parts of permit assessed: 1. Management, 2 - Operations, 3 Monitoring.

NRW Lead Officer: Kirsty Thomas, accompanied by Alex Bowder.

Report sent to: Dairy Partners (Cymru Wales) Limited, HSE Manager, on 01/05/2026.

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	Action only (X)	
IR2C - Installations - Operations - Operating techniques	Action only (X)	
IR2C - Installations - Operations - Operating techniques	Action only (X)	
IR1A - Installations - Management - General Management	Action only (X)	
IR2C - Installations - Operations - Operating techniques	Action only (X)	
IR1A - Installations - Management - General Management	Action only (X)	
IR2C - Installations - Operations - Operating techniques	Action only (X)	
IR2C - Installations - Operations - Operating techniques	Action only (X)	
IR3E - Installations - Emissions and monitoring - Monitoring	C3 Minor	3.5.1
IR3E - Installations - Emissions and monitoring - Monitoring	C3 Minor	3.5.1

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3E - Installations - Emissions and monitoring - Monitoring	C3 Minor	3.5.1
IR3E - Installations - Emissions and monitoring - Monitoring	C3 Minor	3.5.1
IR1A - Installations - Management - General Management	C3 Minor	1.1.1
IR1A - Installations - Management - General Management	C3 Minor	1.1.1

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

Total non-compliances recorded	Total non-compliance score
6	24

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?

Criteria	Action needed	Complete by
IR1A	Action Ref CAR_NRW0051581.1 - Update the ETP process control schematic in the control room to represent the current ETP operation. Submit the updated schematic to NRW.	31/05/2026
IR2C	Action Ref CAR_NRW0051581.2 – The Operator shall confirm whether any filtering or screening of raw effluent is in place upstream of the crude pit. Where such measures are installed, confirm its intended purpose and provide details of the arrangements for inspection, cleaning, and maintenance.	24/05/2026
IR2C	Action Ref CAR_NRW0051581.3 – The Operator shall review and demonstrate the effectiveness of fats, oils, and grease (FOG) removal within the pre-liminary treatment system upstream of the biological treatment stage. This shall include evidence confirming that existing measures adequately control FOG loading to the biological system.	24/05/2026
IR1A	Action Ref CAR_NRW0051581.4 - The Operator shall provide evidence of Colubris' requirements and expectations for the desludging and cleaning of the balance tanks. The Operator shall also provide evidence of the most recent balance tank inspection and cleaning activities undertaken.	24/05/2026
IR2C	Action Ref CAR_NRW0051581.5 - The Operator shall provide evidence to demonstrate that the nitrogen and phosphorus loads entering the biological treatment process are within the design parameters specified for the ETP. This shall include appropriate influent monitoring data and a comparison against the biological treatment design criteria.	31/05/2026
IR1A	Action Ref CAR_NRW0051581.6 - The Operator shall	31/05/2026

Criteria	Action needed	Complete by
	<p>develop, implement, and maintain a documented procedure for aeration tank process control monitoring (following discussions with the ETP manufacturer). The procedure shall:</p> <ul style="list-style-type: none"> • define the routine monitoring arrangements necessary to demonstrate effective control of the activated sludge process; • identify the process control parameters to be monitored, including the frequency of monitoring for each parameter, with frequencies justified based on process risk and operational needs; and • define target operating ranges and performance trigger values, including thresholds that require investigation and, where necessary, corrective action. 	
IR2C	Action Ref CAR_NRW0051581.7 – The Operator shall confirm and document the sludge age at which the plant is intended to operate, to demonstrate effective control/support optimal performance. This shall include confirmation of the routine sludge wastage rate used to maintain the target sludge age. Such details should also be captured in procedure documentation.	31/05/2026
IR2C	Action Ref CAR_NRW0051581.8 – The Operator shall confirm and evidence that adequate buffer storage capacity remains available within the ETP in accordance with BAT 11 of the food, drink and milk industries BREF, following removal of the divert tank. This shall include confirmation that buffer storage equivalent to at least two days' full production waste, as previously stated by the Operator, is still provided.	24/05/2026
IR3E	Action Ref CAR_NRW0051581.9 – The Operator is to ensure monitoring for emissions to water is undertaken as per the requirements of the permit. Investigation to the root cause of monitoring failure is to be undertaken and findings shared with NRW.	31/05/2026
IR3E	As above	31/05/2026
IR3E	As above	31/05/2026
IR3E	As above	31/05/2026
IR1A	Action Ref CAR_NRW0051581.10 – The Operator is to provide a complete results spreadsheet for WWTP Results for 1st January to 31st March 2026. Any missing data must be explain and a root cause investigation undertaken as to why.	24/05/2026
IR1A	Action Ref CAR_NRW0051581.11 – The Operator must develop and maintain appropriate documentation for the primary containment of ETP infrastructure, including tanks, pipework, and associated assets. This shall include, as a minimum, an up to date asset register and supporting management systems to demonstrate that effective measures	07/06/2026

Criteria	Action needed	Complete by
	are in place to maintain primary containment integrity and minimise the risk of pollution.	

Compliance criteria codes are listed in the 'Important information' section below.

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.

You are non-compliant with your permit.

We are currently considering taking enforcement action against you for the non-compliance recorded above. We will contact you in due course.

4. Details of our assessment

This Compliance Assessment Report (CAR) documents Natural Resources Wales's (NRW) assessment and findings following a detailed audit of the Effluent Treatment Plant (ETP) serving Dairy Partners, The Creamery.

NRW Officers carried out a two-day ETP audit on 13/04/2026 and 15/04/2026.

Introduction

The site's ETP is permitted under the environmental permit EPR/WP3231NB as a 5.4 Part A1(a)(i) activity (as per the Environmental Permitting (England and Wales) Regulations 2016 (as amended)) – Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving one or more of the following activities (i) biological treatment.

The purpose of the audit was to assess the Operator's understanding and management of the ETP and to determine whether it is operating effectively and as intended. This included evaluating compliance with the ETP design specification and relevant permit conditions. The audit also provided an opportunity to identify any weaknesses and areas for improvement.

The audit involved detailed discussions with the Operator, particularly with staff responsible for the operation and management of the ETP, alongside document reviews and on-site inspections. The following key areas were assessed during the audit:

- ETP overview – Operators understanding of the ETP process (influent, sludge pit, crude pit, balance tank, DAF plants, aeration tank, sludge tanks and associated equipment).
- ETP procedures and control.
- Training and records / operator competency.
- Contingency plans/safety and environmental considerations.
- Monitoring.
- Infrastructure - Primary containment.

- Continuous improvements

(Assessment of secondary and tertiary containment was outside the scope of this audit)

The relevant personnel from Dairy Partners were available and present during the audit. A summary of the audit findings are presented in this report.

ETP overview

The site's new ETP was installed in late 2020 with no substantial changes made to date. The operator provided an overview of the site's ETP which consists of several treatment stages including:

- Pre-liminary and primary treatment (e.g. equalisation, or balancing, neutralising, physical separation) – crude pit, balance tank, DAF Plant.
- Secondary treatment – Aerobic treatment via an activated sludge process in the aeration tank (also referred to as Flotation Bio Reactor (FBR)).

Chemical dosing also forms part of the effluent treatment process and is used at various stages of the system.

The primary wastewater input consists of dairy effluent generated from washdown activities associated with cheese production operations. Some of the key principal pollutants within the effluent include organic matter (e.g. fats), solids, nutrients and cleaning agents/chemicals. Such effluent results in temperature and pH variations.

The Operator is ultimately responsible for the ETP, however support and assistance is provided by the ETP manufacturer Colubris, who undertake periodic inspections and service maintenance (as well as regular remote effluent monitoring). Additionally, Aquatreat (a water and effluent treatment specialist) attend site on a monthly basis and deliver dosing chemicals that are used in the system. Aquatreat also assist with operational support and checks (e.g. undertaking jar tests).

ETP manuals were available on site (hard copies and electronic). A process diagram of the ETP is available in the ETP control room. The document is largely up to date but requires some alterations e.g. removal of the divert tank that is no longer present and odour abatement implements at the sludge tanks.

Action Ref CAR_NRW0051581.1 - Update the ETP process control schematic in the control room to represent the current ETP operation. Submit the updated schematic to NRW.

ETP design specification documents were provided prior to the visit which included key information regarding the site's design data for the aerobic treatment (Flotation Bio Reactor/activated sludge process). Further commentary on plant actual load vs plant design is provided in the relevant sections below.

The Operator has considered the need for additional treatment stages for the ETP such as phosphorus removal but deemed unnecessary at this time (final effluent has been

compliant with permit limits).

Following biological treatment, the treated effluent is permitted to discharge via emission point W1 which eventually discharges to the Afon Teifi.

Annex 1 of this CAR provides a visual of the ETP and assets inspected during this audit.

Influent

Influent to the ETP consists of dairy waste from the factory and drained to the crude pit as part of the pre-liminary treatment stage.

The crude pit has a minimal retention time (considered more as a transfer pit) and the incoming effluent is pumped to the balance tank where influent monitoring is carried out such as pH and Chemical Oxygen Demand (COD). Flow is also measured via a flow meter between the crude pit and balance tank.

Concentrated dairy waste can be channelled to the sludge pit if deemed unsuitable for processing via the ETP. The Operator also has the ability to have the effluent tankered off site if necessary.

Measuring of nutrients such as nitrogen and phosphorus does not appear to be undertaken at the influent and is done at final effluent only. The biological treatment design data includes nitrogen and phosphorus criteria. See the biological treatment (aeration tank) section of this report for further comments.

Influent/effluent flow is measured throughout the system using the SCADA/Colubris system as well as the effluent levels in the tanks.

The operator is aware of factors that may affect the incoming wastewater characterisation e.g. spills, loss of product. Communications from the main factory to the ETP operative will be made if issues are identified. There is also a CCTV system in place and visual within the ETP control room showing the crude pit inlet which the ETP operative can monitor. The engineering department monitors the ETP outside of normal working hours. Such personnel must be adequately trained and be capable of dealing with any issues that arise with the ETP during these times.

Additionally, some surface water is also channelled to the ETP. Uncontaminated surface water is permitted to discharge via emission points W2 (from the surface water/storm lagoon) to the Afon Arad and W3 (from a French drain/soakaway system) that ultimately discharges to the Afon Arad.

W2 is set to a default closed position, to be opened during times of heavy rainfall only (avoid overloading of the ETP). The Operator confirmed and explained during the audit that that the surface water/storm lagoon is only fed site surface water runoff/rainwater (no effluent/contaminated surface water is to be direct to directed to the surface water lagoon). Surface water from the W3 is currently blocked off, however some surface water may escape from an opening in the pipework. Any emissions from these discharge points must

be uncontaminated surface water as per the permit.

Emissions from W2 are checked for any visible oil and grease (or any other visible contaminants) prior to discharge. The Operator must undertake additional checks of the surface water discharge e.g. pH, or other suitable parameters prior to opening of the emission point outlet.

Sludge and crude pits

As above, dairy waste from the factory is pumped to the crude pit as part of the pre-liminary treatment stage. Concentrated dairy waste can be channelled to the sludge pit if deemed unsuitable for processing via the ETP and the Operator has the ability to have the effluent tankered off site.

The purpose of the sludge pit is to provide buffer storage for unsuitable incoming effluent. The crude pit is seen as a transfer tank that receives the incoming wastewater. As part of the pre-liminary treatment stage, a fat busting additive is added to the crude pit routinely to aid the breakdown of fats which will help prevent pipe/pump blockages.

The addition of the fat buster is done manually when needed (approximately every few days). It is recommended that the addition of the fat buster is included onto the ETP operations and housekeeping checklist.

Fats, oils, and grease (FOG) can have a detrimental effect on effluent treatment systems and should be removed as far as practicable prior to entering the ETP. Physical separation techniques for the removal of FOG are considered Best Available Techniques (BAT).

The use of a fat buster additive may be considered a pre-conditioning or support measure, as it does not physically remove FOG but instead modifies its characteristics. Further pre-liminary treatment prior to the biological stage includes the use of DAF 1, which provides physical separation and may supports the removal of FOG before effluent enters the biological treatment system.

It is unclear whether the incoming raw crude effluent is filtered/screened before entering the crude pit as previously submitted documentation suggests.

Action Ref CAR_NRW0051581.2 – The Operator shall confirm whether any filtering or screening of raw effluent is in place upstream of the crude pit. Where such measures are installed, confirm its intended purpose and provide details of the arrangements for inspection, cleaning, and maintenance.

Action Ref CAR_NRW0051581.3 – The Operator shall review and demonstrate the effectiveness of fats, oils, and grease (FOG) removal within the pre-liminary treatment system upstream of the biological treatment stage. This shall include evidence confirming that existing measures adequately control FOG loading to the biological system.

Both the crude pit and sludge pit cleaning activities are captured in the operators ETP operations and housekeeping tasks. Pits are regularly cleaned and kept at low levels. Re-

adjusted pipes set up in the crude pit have resulted in clean down of the pit walls on one side.

It is understood the crude pit has recently been subject to an integrity inspection and the findings report is pending. NRW will not comment on the crude pit condition or containment suitability as part of this report and is subject to separate and ongoing regulatory work.

Balance tank

The Operator provided an overview of the balance tank. The tank includes 2 mixers at the base of the tank to provide a homogenous feed to the downstream ETP components to help cope with variability in flow and pollutant load.

The retention time of the balance tank is on average around 31 hours and is being continuously fed with incoming effluent. A sample point is available at the base of the balance tank to allow checks of pH and COD. Desludging/cleaning of the tank was discussed. The Operator confirmed they had not undertaken any desludging of the balance tank since its installation. The tank is periodically drained down and visual inspected but no removal of material from the tanks has taken place to date. NRW requested the Operator seek advice from their ETP supplier, Colubris to confirm the desludging requirements and frequency for the balance tanks.

Action Ref CAR_NRW0051581.4 - The Operator shall provide evidence of Colubris' requirements and expectations for the desludging and cleaning of the balance tanks. The Operator shall also provide evidence of the most recent balance tank inspection and cleaning activities undertaken.

Treatment is provided further downstream to improve COD concentrations prior to input into the biological part of the ETP (activated sludge/aeration treatment).

The Operator confirmed that chemicals are not routinely added to the balance tank as the process diagram indicates. This would only be added during an abnormal situation to help adjust pH. The target pH of the balance tank has been determined at pH 5.5 -6.2.

According to the Operator, Colubris and Aquatreat agreed the chemicals used within the effluent treatment plant (ETP) and considered them suitable (NRW has not seen evidence of these discussions but is aware of Aquatreat and Colubris's ongoing support with regards to the ETP). The Operator reports the plant to be working as it should be.

After the balance tank, process waste is channelled to the serpentine unit to dose chemicals into the effluent stream. The Serpentine unit includes a Smartdose system which allows for the automatic dosing of chemicals into the effluent stream at the appropriate concentrations. Flocculant (caustic and/or coagulant) is added to control pH levels. Polymer is also added to help the flocculant to clump.

As previously mentioned, Aquatreat assists with operational support and recently undertook jar testing of the effluent. Such a test is used to assess the chemical dosing regime for the effluent leaving the balance tank and going into the DAF plants.

DAF plant (DAF 1 and DAF 2)

Dissolved Air Flotation (DAF) plants 1 and 2 are used to help remove solid waste. Effluent is channelled to DAF 1 from the balance tank with DAF 2 being utilised after the aeration tank process.

The DAF allows for the continual scrapping of solids from the system into a weir which is then automatically pumped to the ETP's sludge tanks. The DAFs also utilise Odour Control Units (OCU) in the form of carbon filters to help mitigate odours. OCU appeared in good condition and limited odours were detected within the DAF area. However, an offensive odour was detected when the DAF lids were lifted, particularly at DAF 1. Odour generation at this upstream stage may indicate that effluent from the balance tank has become anoxic or septic prior to treatment, potentially due to prolonged retention or insufficient mixing. Please refer to **Action Ref CAR_NRW0051581.4** above.

Diffusers within the DAFs provide the air for the process. Air pressure is set to a certain air pressure level (with input from Colubris – assumed to provide appropriate air to solid (A:S) ratio) and is checked by site engineers. If an issue with air pressure is encountered, e.g. insufficient air being provided, the DAF will automatically be switched off and an alert on the Colubris system sent.

The DAFs are cleaned down during site shut down periods (twice a year). NRW recommends that the Operator notifies NRW when DAF clean downs are taking place as this activity may generate an intermittent odour.

Aeration Tank (Flotation Bio Reactor- Activated Sludge)

Following treatment in DAF 1, liquified waste is channelled to the aeration tank to allow bacteria to clean the effluent (channelled via a transfer tank). The activated sludge process is a biological wastewater treatment method that uses aerobic micro-organisms to break down organic pollutants. This is considered the secondary treatment process.

Urea and or phosphoric acid can be added at this stage to add nutrients for the micro-organisms to thrive. Urea is added automatically at a set time e.g. every 20 minutes. The dosing times can be adjusted manually depending on the level of nutrients required.

During the audit, the Operator collected a sample from the aeration tank and demonstrated the daily microscopic examinations undertaken as part of routine process monitoring. These checks are used to identify filamentous micro-organisms that may adversely affect the floc-forming bacteria required for effective operation of the activated sludge process.

The Operator was unable to provide documented procedures for these microscopic checks or for other key activated sludge process controls monitoring, including routine monitoring of the Mixed Liquor Suspended Solids (MLSS) or Sludge Volume Index (SVI). Although the Operator confirmed that Sludge Volume Index (SVI) measurements have been undertaken on an ad hoc basis, no consistent or documented monitoring regime was evidenced during the audit. Routine SVI monitoring should be undertaken using appropriate equipment and

at a suitable frequency.

SVI is a key parameter for assessing the settling characteristics and health of the activated sludge and provides early indication of issues such as poor settleability, bulking, or filamentous growth. Without consistent and documented SVI monitoring, emerging issues within the activated sludge process may not be identified in a timely manner, potentially impacting biological treatment performance and final effluent quality.

Total Suspended Solids (TSS) monitoring is currently undertaken on the final effluent. While TSS monitoring had previously been carried out in the aeration tank, this practice had ceased. The Operator confirmed that routine TSS monitoring within the aeration tank will be reinstated.

MLSS represents the concentration of biomass present within the aeration tank, which reflects the quantity of micro-organisms available to degrade organic pollutants. The ETP design specification states that the plant is intended to operate at an MLSS concentration of 6.2 kg/m³.

The Operator demonstrated limited familiarity with the Food to Microorganism (F:M) ratio, which is used to assess the balance between the organic load entering the system and the available biomass. The ETP design specification indicates that the plant is designed to operate at an F:M ratio of 0.2 kg COD/kg MLSS·d.

Data provided during the audit confirmed that COD load entering the aeration tank was within the design specification of 2,000 mg/L.

Monitoring of nutrients, including nitrogen and phosphorus, does not appear to be undertaken at the influent or any other point in the process until the final effluent. It is important to note, the biological treatment process design data includes nitrogen and phosphorus performance design criteria that should be compared against.

Action Ref CAR_NRW0051581.5 - The Operator shall provide evidence to demonstrate that the nitrogen and phosphorus loads entering the biological treatment process are within the design parameters specified for the ETP. This shall include appropriate influent monitoring data and a comparison against the biological treatment design criteria.

Routine monitoring and control of activated sludge process parameters are essential to ensure the effective and stable operation of the ETP and continued compliance with permit conditions. Parameters such as microscopic sludge condition, TSS/MLSS, SVI, F:M ratio, COD loading, and nutrient balance provide critical information such as biomass health. Without regular, documented monitoring of these factors, there is an increased risk that process imbalance or deterioration may go undetected, potentially leading to reduced treatment efficiency, poor solids settlement, or impacts on final effluent quality.

Action Ref CAR_NRW0051581.6 - The Operator shall develop, implement, and maintain a documented procedure for aeration tank process control monitoring

(following discussions with the ETP manufacturer). The procedure shall:

- define the routine monitoring arrangements necessary to demonstrate effective control of the activated sludge process;
- identify the process control parameters to be monitored, including the frequency of monitoring for each parameter, with frequencies justified based on process risk and operational needs; and
- define target operating ranges and performance trigger values, including thresholds that require investigation and, where necessary, corrective action.

Process monitoring frequency may vary by parameter and risk.

The Operator was familiar with sludge wasting and was currently in the process of wasting during the audit. Regular wasting is undertaken to maintain a younger sludge age. The Operator explained the wasting process had been discussed with their specialists Aquatreat and were advised to waste more regularly.

Action Ref CAR_NRW0051581.7 – The Operator shall confirm and document the sludge age at which the plant is intended to operate, to demonstrate effective control/support optimal performance. This shall include confirmation of the routine sludge wastage rate used to maintain the target sludge age. Such details should also be captured in procedure documentation.

The majority of sludge sent to the sludge tanks is from the DAF 1, with small proportions coming from DAF 2 and the aeration tank. Waste from the aeration tank is sent to DAF 2 for further separation. Where suitable, micro-organisms are fed back into the aeration tank from DAF 2.

Blowers are installed at the base of the aeration tank to provide oxygen into the system. Dissolved Oxygen (DO) levels are monitored in the aeration tank via a probe and result recorded on the ETP results spreadsheet each day. The monitoring of the DO levels is monitored automatically via the SCADA/Colubris system and is adjusted automatically as needed. This will help manage foam levels in the aeration tank.

The Operator demonstrated an appropriate level of understanding of the aeration tank operation. However, improvements to routine process monitoring have been identified. Enhanced monitoring would support earlier identification of potential issues affecting activated sludge performance or effluent quality, enabling more proactive management of the waste stream.

Sludge tanks

There are 2 sludge tank on site. The sludge tanks receive sludge primarily from DAF 1 with some originating from DAF 2 and the aeration tank. The sludge tanks are fitted with Odour Control Units (OCU) and sludge is tankered away by a third party.

No sludge processing takes place (e.g. dewatering, thickening). The operator has identified improvements that could be made to the sludge tanks, particularly for the primary

containment, odour and noise associated with the tanks and pumping activities. A permit variation is to be submitted by the Operator for the proposed changes to the sludge tanks (the Operator confirmed such submissions is likely to be made in May 2026).

A small amount of sludge residue was identified on the roof of one of the sludge tanks. The Operator must ensure such material is cleaned away promptly.

As previously mentioned, offensive odours on site at DAF 1 (when lid lifted) was detected. Sludge from DAF 1 is therefore considered relatively odorous before it reaches the sludge tanks. This combined with long storage times could exacerbate the odour concentrations. Along with **Action Ref CAR_NRW0051581.4**, it is recommended that sludge tank retention times are reviewed.

Other

It was confirmed that the divert tank no longer forms part of the ETP configuration and that the process flow diagram requires updating to reflect this change. It is NRW's understanding that buffer storage for the system is provided via the sludge pit.

Out-of-specification product can also be retained within the on-site silos at the main factory area and, where necessary, transferred directly from these silos without being routed via the sludge pit.

Action Ref CAR_NRW0051581.8 – The Operator shall confirm and evidence that adequate buffer storage capacity remains available within the ETP in accordance with BAT 11 of the food, drink and milk industries BREF, following removal of the divert tank. This shall include confirmation that buffer storage equivalent to at least two days' full production waste, as previously stated by the Operator, is still provided.

From site observations made, there was no evidence of spills in the ETP area. Some localised on-site odour was detected at the DAF, only when lids were lifted and areas around the sludge tanks. No formal offsite odour assessment was undertaken on this occasion. NRW Officers did not detect any odours offsite when outside the site boundary on either of the audit days.

Construction work had commenced on the Secondary Containment Lagoon (SCL). No inspection of this work was undertaken, nor was any inspection done of the newly installed noise mitigation measures. These will form part of future inspection work.

ETP procedures and control

The Operator demonstrated a good level of control over the ETP activities. The day to day running of the plant is carried out by a site operative and engineers in their absence. There are a number of Standard Operating Procedure (SOP) documents in place for the ETP operations, including its Odour Control Units (OCU). **Please note, a detailed audit of each document has not been carried out at this time.** These documents must be regularly reviewed and updated by the Operator and ensure they are fit for purpose.

SOP's and other key environmental management system documentations e.g. Accident Management Plan (AMP) are accessible to all staff on the site's centralised computer system. Abnormal operations and other non-conformity scenarios are covered within these documents. Any non-conformities are escalated by staff. As above, a detailed audit of each document has not been carried out.

There are also several associated checklist/spreadsheets for the ETP operations including the ETP operations & housekeeping checks, final effluent sample results and ETP process/operational monitoring results (e.g. monitoring at balance tanks, DAF, aeration tank, sludge tanks). A variety of parameters are monitored at inlet, final effluent and throughout the process.

Copies of the most recent Waste Transfer Notes (WTN) were inspected on site (for sludge transfer activities). No issues were identified in the notes examined.

The site's Environmental Management System (EMS) is not accredited to ISO14001 but the operator claims they have developed their EMS in line with ISO14001. The Operator explained that external audits are undertaken for a Food and Drink standards perspective. The site's Health & Safety and Environmental Manager is responsible for the environmental audit. A detailed audit of the site's Environmental Management System (EMS) did not form part of this ETP audit. The Operator must ensure their EMS follows the requirements of BAT 1 of the food, drink and milk industries BREF.

Replacement of environmentally critical equipment, such as the carbon filters in the OCU's are built into the Workmate system – notifying and recording maintenance tasks.

Training and records / Operator competency.

It was confirmed verbally that the ETP site operative present during the audit was provided on the job training by the ETP supplier (Colubris) at the time of the ETP installation. Colubris still maintain a presence with the ETP from the periodic inspections/services and live access to the Colubris system which monitors the ETP, including the quality of effluent. A copy of the last Colubris inspection service was shared with NRW Officers (dated 2022). Some improvements were identified. The Operator has confirmed they are to book in Colubris' s next visit to take place before the end of the year.

Training certificates and competency check paperwork (register of training) was shown to NRW Officers during the audit for the main site operative.

Aquatreat also provide ETP operational support for the running of the ETP and have even provided training to the site operative (evidence provided in the form of a certificate - completion of jar testing and ETP operation training from Aquatreat was issued in November 2025).

It is recommended that the Operator considers and reviews its staff roles and responsibilities in regard to ETP operating and monitoring. In particular, ensure that suitable contingency measures are in place for staff absences (particular for any long term

staff absence).

Contingency plans/ Safety and environmental considerations.

Contingency plans are documented in the site's SOP's and AMP e.g. external contractor tankering of effluent if required. Plans consider other scenarios such as power failures etc.

A recently improved contingency measure has been implemented at the crude pit inlet, where shut off valves will activate in the event of a power failure and would help prevent effluent being channelled to the crude pit and potentially overflowing.

The Operator must regularly review and update contingency plans. The site must also look at adapting for climate change scenarios.

A Climate Change Risk Assessment (CCRA) has recently been submitted by the Operator and will be reviewed by NRW in due course.

There are safety protocols in place for handling hazardous chemicals and have been considered in the site's risk assessments. Such risk assessments also covered the exposure to hazardous substance etc. Chemical handling posters were also present in the ETP control room.

Bulk chemicals are delivered directly by Aquatreat and pumped directly to the dedicated chemical storage tanks, therefore limiting any staff involvement with chemicals.

A spill response plan is in place and spill kits present across the site.

Monitoring.

A high level audit of the monitoring associated with the ETP was undertaken. **Please note, no inspection and verification of monitoring methods and standards was covered as part of this audit. A further Operator Monitoring Assessment (OMA) exercise will be undertaken as part of future inspections.**

There are SOP's for sampling and monitoring. A detailed review of this document was not undertaken.

As previously mentioned, the Operator demonstrated the sampling procedure, taking a sample from the aeration tank and carrying out microscopic checks in the ETP control room.

Within the control room, there were several pieces of kit used for monitoring effluent such as the "HACH" kit (DR3900 – spectrophotometer with RFID), pH probes and others. Internal testing of samples is undertaken regularly (daily). Kit was seen to have calibration certificates and a copy of the "HACH" calibration report was provided. The "HACH" system which tests multiple parameters is calibrated every 12 months by an external contractor.

The Operator must ensure the test kits are suitable for the effluent being analysed and traceability of results needs to be achieved. Robust QA and QC procedures for the sampling and monitoring of the effluent is required (will form part of future OMA work).

Monitoring must be in line with the frequency standards and methods as per the permit. NRW has not assessed the reliance of the in-house methods at this time.

Sampling at the final effluent point is taken from the composite sample collection pot (at final effluent sump). As well as the site's own internal in-house checks, a monthly composite sample is taken by an external contractor and tested at a UKAS accredited laboratory. The Operator provided a copy of the most recent laboratory certificate. Comparisons between the site's own internal sampling and external laboratory results is undertaken and claimed to indicate the same/similar results.

Working instructions of the monitoring equipment is available in the control room. Maintenance of monitoring probes are captured in the Workmate system.

Monitoring results are captured onto a spreadsheet (WWTP Monitoring). It is important these records are complete and up to date and meet the monitoring requirements as per the permit. The WWTP Monitoring 2026 spreadsheet provided at the time (1st January – 18th March 2026) was incomplete for several days in the time period provided. It has therefore come to NRW's attention that there were instances where the Operator did not monitor in accordance with the permit for the following parameters on a daily basis:

- Chemical Oxygen Demand (COD)
- Total Suspended Solids (TSS)
- Total Nitrogen
- Total Phosphorus

Based on the information provided, Dairy Partners has failed to monitor in accordance with the permit. **This is considered a contravention of permit condition 3.5.1 and non-compliance scores have been allocated to each parameter (COD, TSS, Total Nitrogen and Total Phosphorus) against criteria IR3E – Monitoring. As the failure to monitor for these parameters were in the same monitoring period (quarter), the non-compliance scores have been consolidated where appropriate.**

Action Ref CAR_NRW0051581.9 – The Operator is to ensure monitoring for emissions to water is undertaken as per the requirements of the permit. Investigation to the root cause of monitoring failure is to be undertaken and findings shared with NRW.

Continuous monitoring is required for the daily discharge volume, temperature and pH. Such results are recorded on a separate spreadsheet, WWTP Results (this spreadsheet also includes the wider process monitoring results). Again, several days' worth of data is missing and records incomplete. Table S3.2 specifies continual monitoring of discharge volume, pH and temperature. It is NRW's understanding that such parameters are automatically recorded by the SCADA/Colubris system and therefore results should be available and lack of record keeping in line with the Operators own SOP's such as SOP WWTP 003[1] which is considered the failing factor.

Action Ref CAR_NRW0051581.10 – The Operator is to provide a complete results

spreadsheet for WWTP Results for 1st January to 31st March 2026. Any missing data must be explain and a root cause investigation undertaken as to why.

The insufficient and incomplete records in accordance with the Operators own procedures is considered a contravention of permit condition 1.1.1. A non-compliance score has been assigned against criteria IR1A – General Management. A non-compliance score of C3 – minor has been assigned.

Infrastructure - Primary containment.

The audit included a focused assessment of the primary containment arrangements for infrastructure within the ETP. This area was identified as one of the most significant weaknesses during the audit, with notable gaps in both documentation and operator understanding of the assets present on site.

The Operator was unable to provide an asset register for the ETP, and there was a lack of available information relating to tank design and construction standards, inspection and maintenance regimes, asset life expectancy, or any written scheme of examination. These deficiencies indicate that the primary containment assets are not being managed through a structured and documented approach.

While a Planned Preventive Maintenance (PPM) document is in place, it lacks sufficient detail to demonstrate effective management of primary containment infrastructure. A robust understanding and management of primary containment assets is essential to minimise the risk of containment failure and potential pollution incidents.

The absence of available and adequate documentation, inspection regimes, and asset management arrangements for primary containment assets constitutes a contravention of Permit Condition 1.1.1 (General Management). A non-compliance score of C3 – minor has therefore been assigned.

Action Ref CAR_NRW0051581.11 – The Operator must develop and implement appropriate procedures for the primary containment of ETP infrastructure, including tanks, pipework, critical valves, and associated assets. This shall include, as a minimum, an up-to-date asset register and supporting management systems to demonstrate that effective measures are in place to maintain primary containment integrity and minimise the risk of pollution.

The primary containment tanks are provided with high level alarms and are linked to the SCADA/Colubris system. These systems were shown to NRW Officers during the audit.

Please note, this audit did not assess secondary containment. There is ongoing work to improve the ETP secondary containment with the installation of the Secondary Containment Lagoon (SCL) in process. Work on the SCL was observed to be in progress at the site. NRW did not inspect any aspect of this work and is not part of this audit – may be subject to future inspections.

Continuous improvements

The operator stated that they are seeking to continually improve operations and activities at the site, with discussions being had at site director levels.

The Operator tracks and records ETP performance and complaints investigated promptly, providing detailed root cause investigation responses as of late.

The ongoing communications and strive for improvements is welcomed.

Summary

Overall, the Operator demonstrated a good level of understanding of the ETP process. However, improvements are required in the monitoring and control of the activated sludge process within the aeration tank, alongside improved understanding and management of ETP infrastructure, particularly in relation to primary containment.

Improvements to the site's sludge tanks, which have recently been associated with odour complaints, are currently in progress and will be addressed through a forthcoming permit variation.

END

[1] SOP WWTP 003 – “The WWTP Operator must record all analysis results promptly and accurately. Results must be logged in the WWTP results folder. The WWTP Operator will compile and report the results to management during the daily morning meeting”.

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 required for the permit condition assessed to avoid non-compliance. No non-compliance scored at this time
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(1) – Emissions to water
- IR3A(2) – Emissions to air
- IR3A(3) – Emissions to 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.

Disputing the Content of this Compliance Assessment Report Form

If you disagree with the content of this Compliance Assessment Report form, you should submit your concerns, in writing, to the regulating officer who issued it within **15 working days** of its issue. This will be treated as a **Stage 1 review**.

If you are not satisfied with the outcome of the stage 1 review, you may request a **Stage 2 appeal**. This request must be submitted **within 21 working days** of receiving the response from the stage 1 review.

Further details on our review and appeal process are available at: [Natural Resources Wales / Appeal a regulatory decision from Natural Resources Wales](#)

Concerns Not Related to the Content of this Compliance Assessment Report Form

If your concerns do not relate to the content of the Compliance Assessment Report form, you should first attempt to resolve the issue with the regulating officer or their line manager.

If the issue remains unresolved, please contact our **Customer Contact Team**:

- **Telephone:** 0300 065 3000 (Monday to Friday, 09:00–17:00)
- **Email:** enquiries@naturalresourceswales.gov.uk

They will provide details on how to escalate your concerns through our **Complaints and Commendations procedure**.

If you are dissatisfied with our response, you may contact the **Public Services Ombudsman for Wales**:

- **Telephone:** 0300 790 0203
- **Email:** 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.