

Compliance Assessment Report CAR_NRW0045835

Permit being assessed: XP3830UR.

For: Haverfordwest Creamery, **held by:** The First Milk Cheese Company Ltd

At: Haverfordwest Creamery Pembroke Road , Merlins Bridge, HAVERFORDWEST, Dyfed, SA61 1JN.

Type of assessment: Site Inspection,

Reason: Routine.

On: 11/12/2024 between 10:00 and 15:00.

Parts of permit assessed: Management, Emissions & Monitoring.

NRW Lead Officer: Rhydian Cox, accompanied by Kirsty Thomas.

Report sent to: SHE Manager, SHE Manager, on 23/12/2024.

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	Action only (X)	
IR1A - Installations - Management - General Management	Action only (X)	
IR4A - Installations - Information - Records	Action only (X)	
IR1A - Installations - Management - General Management	Action only (X)	
IR1A - Installations - Management - General Management	Action only (X)	
IR3B - Installations - Emissions and monitoring - Emissions of substances not controlled by emission limits	Action only (X)	
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	Assessed (A)	
IR3D - Installations - Emissions and monitoring - Noise and vibration	Assessed (A)	
IR3C - Installations - Emissions and monitoring - Odour	Assessed (A)	

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?

Criteria	Action needed	Complete by
IR1A	Action 1 - Provide written procedures for the diversion mechanisms in place for the surface water runoff from site to the ETP, in particular, areas that previously drained to emission point W1 (including actions and checks to be undertaken by staff). Please also provide evidence of sufficient capacity at the ETP to cope with storm event.	31/01/2025
IR1A	Action 2 - First Milk informed NRW Officers of a routine check of the W1 outfall undertaken by First Milk engineers. Please detail/provide the routine procedure and schedule of checks undertaken by First Milk at the W1 outfall.	31/01/2025
IR4A	Action 3 - Provide the most recent site drainage plans for the site highlighting the areas that could drain to emission point W1. Please indicate on the drainage plans the diversion mechanisms in place.	31/01/2025
IR1A	Action 4 - Provide NRW with evidence of how the additional load from site runoff will not affect the ETP process efficiency, overloading or shock loading from contaminants. Provide an update of First Milks' plan for any future segregation of clean waste streams from the ETP.	31/01/2025
IR1A	Action 5 - Please provide the emergency procedure plan (for both First Milk and AOL) in the event of a spill at the factory demonstrating how the ETP would respond and cope.	31/01/2025
IR3B	Action 6 - Please provide further information on the conclusion of the investigations into the root cause of the green algae. Please also provide evidence demonstrating that the algae is not impacting ETP performance and/or the final discharge.	31/01/2025

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.

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 Compliance Assessment Report (CAR) details the comments of Natural Resources Wales (NRW) Officers for the site inspection conducted on 11 December 2024 at The First Milk Cheese Company Limited, Haverfordwest Creamery, Pembroke Road, Merlins Bridge, Haverfordwest, Pembrokeshire, SA61 1JN for activities held by The First Milk Cheese Company Limited (the operator) under the environmental permit ERP-XP3830UR.

The visit purpose was to inspect and discuss the surface water outfall from the First Milk site to the Merlin's Brook (W1), including an inspection of the pollution prevention measures in place, and to undertake a tour of the noise sources identified by their 'noise reports' (*SHE-POL-016 Noise Management Plan v4 and 2024.J004582-7849-02 First Milk Haverfordwest Noise Assessment Issue 02 Full*). Further discussions were also had on the frequency of W2 outfall inspections. No non-compliance scores were recorded against the operator's permit conditions on this inspection.

1.0. W1 Outfall

NRW Officers undertook an inspection of the W1 outfall into Merlin's Brook. The outfall is located to the North of the site and was previously utilised to drain uncontaminated site drainage. Following an incident on 4th August 2021 outlined within CAR_NRW0038790, this discharge point was temporarily suspended¹ on a voluntary basis with all surface water now diverted to the effluent treatment plant (ETP) in the first instance. First Milk informed NRW Officers that the ETP had sufficient capacity to accommodate surface water runoff volumes including storm events (capacity available in balance tank/divert tanks). NRW Officers informed First Milk that Best Available Technique (BAT) is to avoid diverting clean water to an ETP as this could put additional load on the ETP, reducing process efficiency, and could also lead to a risk of overloading in high rainfall events. First Milk confirmed they had future plans to look at segregating clean water streams from the effluent discharge.

¹First Milk should inform NRW when they plan to reuse the emission point W1. First Milk must ensure appropriate pollution prevention measures are in place with only clean uncontaminated runoff permitted to be discharged from the emission point. If the outfall is to remain permanently blocked off, First Milk must ensure appropriate permanent solutions are used/are maintained e.g. high integrity valves that are locked closed.

First Milk talked NRW Officers through the several failsafe mechanisms they have put in place to temporarily prevent any discharge from the W1 outfall. Mitigation measures have been detailed below, starting with the engineering block.

1.1. Manual isolation valves - Valve located within the engineering stores which currently diverts all surface water from the site to the ETP (Image 1). The manual isolation valve located within the Engineering stores building (located adjacent to the northern site boundary), has been shut and is locked in a closed position meaning all surface water from several site locations is diverted to the ETP and not out via the W1 outfall. A surface water procedure sign was displayed in the area.

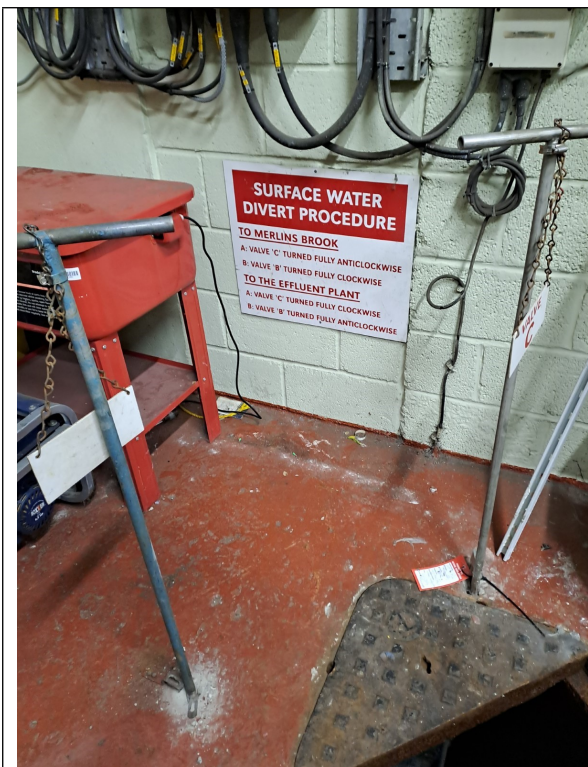


Image 1 - Manual Isolation Valves within the engineering stores

1.

2.2. Inflatable bladder - Within the line running from the valve area within the engineering building to the W1 outfall, there is an inflatable bladder in place. This bladder has an airline linked to a pH meter located within the engineering stores (Image 2). If effluent enters the line outside of the parameters of the pH meter, the Envirovalve device (Image 3) is triggered, and the bladder is automatically inflated to seal the pipe.



Image 2&3 - Airline to the inflatable bladder from the Envirovalve system

1.

2.3. Bung - The final mitigation measure is the use of a manual bung at the outfall which seals the end of the pipe – this bung can be observed at the outfall (Image 4).



Image 4 - Bung at the outfall

The outfall itself appeared in good condition, the bung was visible with no evidence of leaks or spills of any liquids from the outfall onto the plinth. Merlin's Brook appeared to be flowing clear with no evidence of any pollution or matter to give rise to any concerns. First Milk employees undertake a weekly visual check of the W1 outfall.

1.2. Emergency Procedures

Discussions were also had regarding emergency procedures and specifically how staff within the engineering stores prevent and notify ETP operators in the event of a spill which has resulted in contaminated effluent entering the system and flowing towards the ETP. Staff made aware of the spill would notify the ETP operators in the first instance, to allow the ETP operators to manually divert flows into the holding tank prior to the contaminated effluent entering and possibly impacting the efficacy of the ETP. The effluent contained within the holding tank can then be gradually introduced into the ETP for treatment as to not overwhelm the system, or can be tankered away for treatment/disposal. There is also an automated probe within the engineering stores which will trigger an alarm/ automatically notify the ETP operators in the event of a flow of contaminated effluent following a spill. First Milk should also ensure that there are documented procedures in place to cover scenarios where there are limited/no staff onsite.

ACTION 1 - Provide written procedures for the diversion mechanisms in place for the

surface water runoff from site to the ETP, in particular, areas that previously drained to emission point W1 (including actions and checks to be undertaken by staff). Please also provide evidence of sufficient capacity at the ETP to cope with storm event.

ACTION 2 - First Milk informed NRW Officers of a routine check of the W1 outfall undertaken by First Milk engineers. Please detail/provide the routine procedure and schedule of checks undertaken by First Milk at the W1 outfall.

ACTION 3 - Provide the most recent site drainage plans for the site highlighting the areas that could drain to emission point W1. Please indicate on the drainage plans the diversion mechanisms in place.

ACTION 4 - Provide NRW with evidence of how the additional load from site runoff will not affect the ETP process efficiency, overloading or shock loading from contaminants. Provide an update of First Milk's plan for any future segregation of clean waste streams from the ETP.

2.0. Effluent Treatment Plant (ETP)

NRW Officers continued next to the ETP. First Milk SHE manager explained that the plant had been on shutdown for the last 11 days with operations resuming that afternoon (11/12/2024). There were no offensive odours identified during the inspection of the ETP.

ETP operators AOL, had undertaken a CCTV survey of the final effluent pipe leading from the ETP to the W2 outfall. The footage was replayed to NRW Officers. The internal pipe appeared to be in good condition with little to no evidence of biofilm seen on the pipe wall, this we believe is reflective of the installation of the MBR filters which is also evidenced by the lack of material being deposited at the outfall screen. A report is due to be produced and shared with NRW following the results of the CCTV investigation.

Discussions were also had with AOL regarding procedures for if a spill was to occur in the factory and the measures in place at the ETP to deal with said spill. AOL verbally outlined the failsafe measures at the ETP in the event of a spill at the factory including an automated shut down and diversion to the holding tanks in the event of the pH meter being triggered. AOL explained the pH probe was on the DAF.

ACTION 5 - Please provide the emergency procedure plan (for both First Milk and AOL) in the event of a spill at the factory demonstrating how the ETP would respond and cope.

2.1. Algae within Aeration Lanes

A green algae within the ETP aeration lanes was first identified during a previous site inspection on 16 July 2024 and documented in CAR_NRW0044817. During the time of the previous inspection AOL stated that the algae was likely due to the ambient temperature and usually dissipates over night as the temperature decreases. This algae was observed once more on the 11 December 2024 and appeared to be in a significantly greater volume compared to the previous observation. The presence of algae indicates high levels of nutrients.



Image 5&6 - Green algae seen within the ETP aeration lanes

AOL again stated that further investigations had been undertaken, and the algae appears to have no impact on the final discharge with the effluent remaining within the parameters

outlined in the permit.

ACTION 6 - Please provide further information on the conclusion of the investigations into the root cause of the green algae. Please also provide evidence demonstrating that the algae is not impacting ETP performance and/or the final discharge.

2.2. DAF Cover

The plastic cover which had been installed over the primary DAF had been damaged by the latest named storm to hit the UK (Storm Darragh). At the time of inspection, contractors were onsite undertaking repairs and installing a permanent fixed cover with inspection windows over the primary DAF to help contain any potential fugitive emissions.

3.0. Noise

An overview of noise sources on site was requested by NRW Officers to assist with the Improvement Condition (IC) work (IC6) which requires First Milk to have an up-to-date Noise Management Plan (NMP) in line with BAT. The IC also requires a noise reduction programme.

A site tour was undertaken with several noise sources inspected. Some noise sources observed on site included the following:

Main evaporator/main evaporator pump (Image 7);



Cheese room outlet, vacuum pump room outlet and condenser fans (Image 8&9);



Cream dispatch pump (Image 10);



Milk intake pumps (Image 11);



During the inspection, varying noise was heard within the site boundary. During NRW Officers first arrival to site, noise generated by the main evaporator was most dominant.

Milk tanker deliveries were being undertaken on site at the time of the visit with noise being

generated from engine idling and pumps.

First Milk talked NRW Officers through their proposed noise improvement programme with the first improvements lined up for Q1 2025. Proposed improvements included a range of mitigation options e.g. acoustic barriers.

A CAR form has been issued separately detailing the outcome of the IC6 NMP review work.

4.0. W2 Inspection Frequency

Discussions were had regarding the regime of inspecting/cleaning the W2 outfall. An action within the Regulation 36 notice placed on First Milk on 11th August 2023, following the incident which occurred at the outfall in June 2023.

The action was to undertake a daily check and clean of the outfall screen, with a weekly reporting requirement. First Milk have been routinely reporting the outcomes of these inspections to NRW.

A significant amount of time has now passed and a number of improvements to the system have been made, including the installation of the Membrane Bio-reactor filters (outlined within CAR_NRW0044817). The continuous reports provided by First Milk have demonstrated a sharp decline in the volume of material identified at the outfall, with little to no material accumulation over the past 6 months since the installation of the new filters.

As such, with agreement from NRW, First Milk have been gradually reducing the frequency of these inspections. Following discussions, NRW are now content that the formal reporting regime is no longer required. NRW have agreed to suspend the regime of inspecting and reporting as it's no longer deemed necessary.

First Milk have agreed to continue to use and maintain the screen installed at the outfall and will continue to visually assess the outfall once a month on an informal basis. There is no requirement to report the outcome of the visual inspections, other than when there is something of note. The CCTV camera at the outfall will also remain.

END

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 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

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.