

Compliance Assessment Report CAR_NRW0044817

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: 16/07/2024 between 10:00 and 15:00.

Parts of permit assessed: Emissions & Monitoring, Permitted Activities.

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

Report sent to: Neil Shawcross, SHE Manager, on 21/08/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2A - Installations - Operations - Permitted activities	Action only (X)	
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	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
IR2A	Include installation of MBR's in pending permit variation	30/09/2024

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 16 July 2024 at The First Milk Cheese Company Limited, Haverforwest Creamery, Pembroke Road, Merlins Bridge, Haverforwest, 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 the outfall from the First Milk effluent treatment plant to the Western Cleddau River, and to undertake an inspection of the effluent treatment plant following a number of changes to the infrastructure. No non-compliance scores were recorded against the operator's permit conditions on this inspection.

1.0 Outfall Inspection

In response to a number of issues linked to reports of 'milky substances' discharging from the outfall, NRW served a Regulation 36 notice on the 11th of August 2023. Part of the notice required First Milk to '*Implement controls to prevent or minimise discharge of polluting matter*', First Milk then implemented a schedule of routine monitoring and cleaning of the outfall. The outcome of the inspections are then reported to NRW on a weekly basis. First Milk also designed and engineered a screen to fit over the outfall for the purpose of capturing and containing any material that may discharge from the end of the pipe.

First Milk provided a brief update on the changes that have occurred at the effluent treatment plant (ETP) and how the volume of material (biofilm) captured by the screen at the outfall had declined significantly over time. It is First Milk's intention to undertake further CCTV inspections to establish the remaining quantity of biofilm within the pipe and if it is still forming and detaching. First Milk outlined a plan to undertake further ice pigging (cleansing) of the line if required. There is also a plan to undertake 'Tile testing' to establish the growth of the material found within the line. First Milk must keep NRW informed and updated on these plans. The intention is to reduce the frequency of inspections and cleaning of the outfall screen given the minimal quantities of material now being captured. This will need to be agreed in writing with NRW, prior to reducing the frequency of inspections. First Milk explained that the outfall screen is to remain in place as a failsafe. An inspection of the outfall was then undertaken by NRW officers. The outfall is located approximately 1km to the east of the First Milk site, discharging treated effluent from the ETP into the Western Cleddau.



Image 01 – First Milk outfall with the screen removed in preparation for cleaning and inspection.



Image 02 – Adjacent DCWW outfall running at full bore.

The First Milk outfall is located directly adjacent to the Dŵr Cymru Welsh Water (DCWW) outfall which discharges from the Merlin's Bridge Sewage Treatment Works (STW). The discharge from the First Milk outfall had been stopped to allow the inspection and cleaning to occur, the DCWW outfall appeared to be discharging at full bore.

Weather conditions were dry and overcast at the time of the inspection, the tide was low. The banks and intertidal areas surrounding the outfall were observed to be clear with no evidence of any residual deposits or materials that had escaped the screen.



Image 03 – No evidence of any material on the banks in the vicinity of the outfall.

There was some rubbish above the outfall, which could be attributed to members of the public undertaking fishing activities. No odours were detected emanating from the First Milk outfall. NRW officers observed the operatives contracted by First Milk undertaking the routine cleaning/inspection of the screen. The screen appeared to be clean with very minimal material collected, the majority of which appeared to be leaves and other detritus, with an insignificant amount of biofilm. This material was removed from the screen and placed into a bucket to be weighed for the reporting to NRW.



Image 04 – Operators flushing the screen prior to collecting the material.



Image 05 – Operators collecting the material accumulated on the screen to be weighed for reporting.

It was evident that much consideration had been given to the design and engineering of the screen and outfall surround, it appeared to be effective at capturing and containing any material from the outfall pipe and withstanding the tough conditions of the intertidal environment. Following the cleaning, the screen was reassembled and securely fastened. First Milk discharge was then ramped back up to full bore. The discharge from the First Milk was observed to be clear with no identifiable odours. First Milk have placed a camera above the outfall to enable monitoring of the discharge 24/7. A live video feed is then able to be observed by the ETP operators and remotely by First Milk staff.



Image 06 – Screen reassembled, and flow returned to normal rate.



Image 07 – CCTV camera positioned above the First Milk outfall for 24/7 monitoring.

2.0 ETP Inspection

The purpose of this inspection was to observe and discuss the efficacy of the recently re-installed and commissioned Membrane Bioreactors (MBR) filters following the transition from a secondary Dissolved Air Flootation (DAF) and Mecana filters. Historically, the site was permitted to operate with the use of MBR filters and these were originally installed as part of the ETP operations. Once the MBR filters had reached end of life, the site commissioned DAF and Mecana filters in place of the MBRs and the change acknowledge through the permits operating techniques. The site have recently transitioned back to using MBR filters in the ETP. This change in operation is not yet reflected in their environmental permit.

ACTION 01 – Include installation of MBR's in pending permit variation.

The removal of the DAF2 and Mecana filters and reversion back to MBR filters must be appropriately documented within the site's environmental permit. First Milk must include the changes to the ETP outlined above within the pending permit variation.

Action Due: 30/09/2024

Some slight offensive odours were identified by NRW officers when walking between the plants within the ETP. No odours were identified outside of the site/ETP boundary.

The First Milk ETP is operated by Aqueous Operations Limited. AOL representatives provided an overview of the MBR installation, commissioning, and operation. There are four cells/bays each with 6 MBR's in place. All 24 MBRs were observed to be operational, AOL representatives then explained to NRW officers how the filters operate and how the system is cleaned, monitored, and maintained. The first Clean in Place (CIP) of the MBR filters was undertaken on the 15th of May 2024, with the second CIP cycle occurring around seven weeks later. There is a cleaning schedule in place with each cell being cleaned on rotation every 6 weeks. The MBRs installed at the First Milk are engineered to have a lifespan of approximately 10 years with the implementation of a cleaning and maintenance schedule. Each pair of MBRs have a designated sample point located behind the cells. A sample of the water was taken from one of the sample points with the sample observed to be clean and free from contaminants and suspended solids.



Image 08 – Recently commissioned MBR filters operational.

Green algae was observed on the surface of the effluent within the aeration lanes. AOL stated that the algae dissipates usually in the evening when the ambient temperature drops. They also informed NRW officers that they had engaged in discussions with ETP specialists on the algae, who had confirmed that is not thought to be an issue or likely to lead to any issues. AOL also stated that there was no need to add any chemicals or to provide any further treatment. The final effluent from the ETP remains within quality parameter limits set out in their environmental permit. Further investigations into the algae may be required should the issue persist, worsen, or further concerns come to light.



Image 09 – Algae observed on the surface of the aeration lanes.

The operator explained that the secondary DAF plant was now redundant, it is being retained on site for the time being but there are no plans to recommission it. One of the two redundant Mecana filters had also been retained onsite. The primary DAF was also observed by NRW officers. There was a plastic cover pinned over the top of the primary DAF, used to contain any potential odour emissions.



Image 10 – Primary DAF with plastic cover

Sludge is skimmed from the top of the DAF and contained in an adjacent tank before being collected by a tanker for disposal.

Following the ETP tour, officers returned to the site office to continue discussions.

3.0 Further Discussions

Further discussions were had on the pending permit variation. Pre-application advice was previously provided by NRW on the 11th of April 2024. The permit variation revolves around increasing production, containment, and proposed methods to be implemented to address all concerns raised during the pre-application discussions. First Milk outlined the various consultants they have been liaising with to discuss all aspects of the pending variation. Officers outlined the delays currently being experienced by the Permitting department and advised on the current timescales for permit determination.

Officers left site at 15:00

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 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.