

Compliance Assessment Report CAR_NRW0042009

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: Audit,

Reason: Incident Response (Incident number 2303911).

On: 13/06/2023 - 21/06/2023 between 11:45 and 14:30.

Parts of permit assessed: 1.0, 2.0, 3.0, 4..0.

NRW Lead Officer: Richard Taylor.

Report sent to: Neil Shawcross, Safety, Health & Environmental Manager, on 01/09/2023.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2A - Operations - Permitted activities	C2 Significant	2.2.1
IR4C - Information - Notification	C2 Significant	4.3.1
IR2A - Operations - Permitted activities	C2 Significant	3.1.1

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

Total non-compliances recorded	Total non-compliance score
3	93

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	Actions have been listed in the form to introduce periodic checks on the concrete plug integrity and seal.	31/07/2023
IR4C	Site need to follow permit reporting procedures as laid down at 4.3.	31/07/2023
IR2A	Adhere to inspection and testing measures laid down in this CAR form	31/07/2023

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

First Milk Cheese Company Limited

Permit EPR XP3830UP/V006

NRW Site Inspection

NRW undertook a site inspection on 13th June following notifications received by NRW on 24th and 26th May 2023 (Ref WIRS 2303866 and 2303911) regarding water quality at the Western Cleddau where First Milk have an outlet point (W2) for their treated effluent. First Milk demonstrated through their telemetry readings that they were within their permit limits for turbidity, flow, and pH between 9.45am on 24th May and 9.45am on 26th May.

First Milk were contacted by email by site inspector RT at 14.57 pm on 26th May with the following questions.

1. Is there an issue with the pipe lining mentioned? (a pipe lining was reportedly folded back by an inspection carried out by the EHO/PCC Food safety team)
2. Where do the surface drains feed into?

First Milk responded at 17.53 pm on 26th May.

- 'I can confirm that the overflow runs to a surface water drain however must stress that our surface water drains under normal circumstances are directed to the Effluent Treatment Plant and so is no risk to the watercourse nearby.
- I think that there must have been some miscommunication or lack of clarity during the EHO visit regarding where these drains go to.
- Dye testing has been carried out today on the drains and confirm that they route to the effluent plant (witnessed by Welsh Water)'.

At this point, First Milk should have informed NRW under permit condition 4.3.1(a) that they were being investigated by Dwr Cymru as the origin of a milky substance which was interfering with the normal running operation of the Merlin's Bridge treatment works. The investigation led to the discovery of an unauthorised connection located in the First Milk untreated effluent drain (Grid reference SM94149502) on 7th June which had the potential to emit untreated effluent into Dwr Cymru's sewer which led to Dwr Cymru's Merlin's Bridge wastewater treatment works (WwTW) and bypassed First Milk's own effluent treatment plant.

The overflow was blocked with a concrete plug inside the drain on 7th June 2023 (pic 7 below). This was visually inspected by NRW on 13th June. Up until this point, the unauthorised connection had been effectively operated by First Milk as an undeclared and unpermitted discharge point. This had the potential to release untreated effluent from First Milk's drain into a network sewer pipe owned by Dwr Cymru and fed into the Dwr Cymru sewage treatment works at Merlin's Bridge.

An OPNOT (notification) was reported to NRW by Dwr Cymru (DCWW Ref 316581280 dated 7st June 2023). This was in response to their investigation which commenced on 26th May regarding a white substance entering their treatment works. It listed the details around discovering the unauthorised connection pipe. It stated that the estimated maximum flow of this incomer into their sewer was between 10-20 litres per second through a 150mm diameter pipe. First Milk staff were present at the drain at the time and witnessed the dye tracing being carried out by Dwr Cymru. (Pic 4). First Milk had the potential to emit this volume of discharge from the permitted site at times of high use such as CIP clean downs when the effluent would be high strength (high chemical and biological oxygen demand - BOD and COD) and of high pH, all with potential to significantly disrupt operation of the sewage treatment works.

The effluent emitted from the unauthorised connection pipe had a disruptive effect on the functioning of the receiving Dwr Cymru treatment works. Letter ref WIRS 2303864 from Dwr Cymru was received by NRW dated 8th August. This states that the treatment works at Merlin's Bridge was not able to fully mitigate the impact of the effluent which led to a deterioration in final effluent quality. Samples of effluent and river water taken by NRW on 6 June 2023 showed significantly elevated BOD, COD, suspended solids and ammonia concentrations compared to typical operation and upstream of the Dwr Cymru discharge point.

The additional effluent loading from First Milk had the potential to affect the normal functioning of the sewage works with an additional risk to the receiving waters of the Western Cleddau from the Dwr Cymru outlet pipe.

The date when the overflow pipe was constructed inside First Milk's drain is currently unknown.

When the unauthorised connection pipe was identified through the investigation between May 26th and 7th June, it was not reported to NRW with immediate effect. First Milk failed to notify NRW of the nature of the pipe until 13th June at the NRW audit despite members of staff being present at the Dwr Cymru investigation and dye tracing exercise. (Pic 4 below).

NRW considers these matters to constitute non-compliance with the permit conditions listed below.

Further investigation into root causes of these non-compliances will be undertaken.

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1.0 Notification Failure

First Milk failed to inform NRW of the discovery of the overflow pipe following the 26th of May- 7th June investigation until the NRW site inspection on 13th June. Permit conditions relating to notifying NRW of accidents or potential accidents are located at section 4.3. in the site permit.

4.3.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) inform Natural Resources Wales

The failure to inform NRW immediately of the existence of the unauthorised connection pipe is not in compliance with this permit condition. First Milk confirmed their awareness of the existence of the overflow during the NRW site inspection on 13th June but did not notify NRW during the period 26th May-13th June. The failure to notify allowed the potential of the unauthorised connection pipe to remain unidentified to the

regulator which, until it was blocked on 7th June, potentially allowing polluting matter to be released and to have a significant impact on the environment, people and property, namely, the safe operation of the neighbouring Dwr Cymru sewage treatment plant at Merlin's Bridge and the Western Cleddau river. The potential for significant impact on public health and the environment to remain unknown to NRW is a **category 2 non-compliance with permit condition 4.3.1(a)(i).**

Action 1 – Provide to NRW by 30 September 2023 a copy of the current management procedure implementing notifications to NRW required by the First Milk environmental permit.

Category 2 – 31 points

2.0 Unpermitted Activity.

The First Milk Cheese Company had the potential to emit untreated effluent to sewer through an overflow pipe that is not included within the site permit boundary. The untreated effluent had the potential to cause a significant impact on the operation of the receiving Dwr Cymru wastewater treatment works and consequently on the Western Cleddau river.

Permit condition 2.2.1 states that the activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7. This has partially been replicated at figure 1 below.

The unauthorised connection outside the permit boundary with significant potential is category 2 non-compliance with permit condition 2.2.1.

Action 2 – First Milk to provide proposals to NRW by 30 September 2023 for permanent abandonment of the pipeline connection between the First Milk internal effluent pipework system and the public sewer, including grouting of the full length of the connection and capping at both ends and periodic inspection of the capping.

Category 2 – 31 points

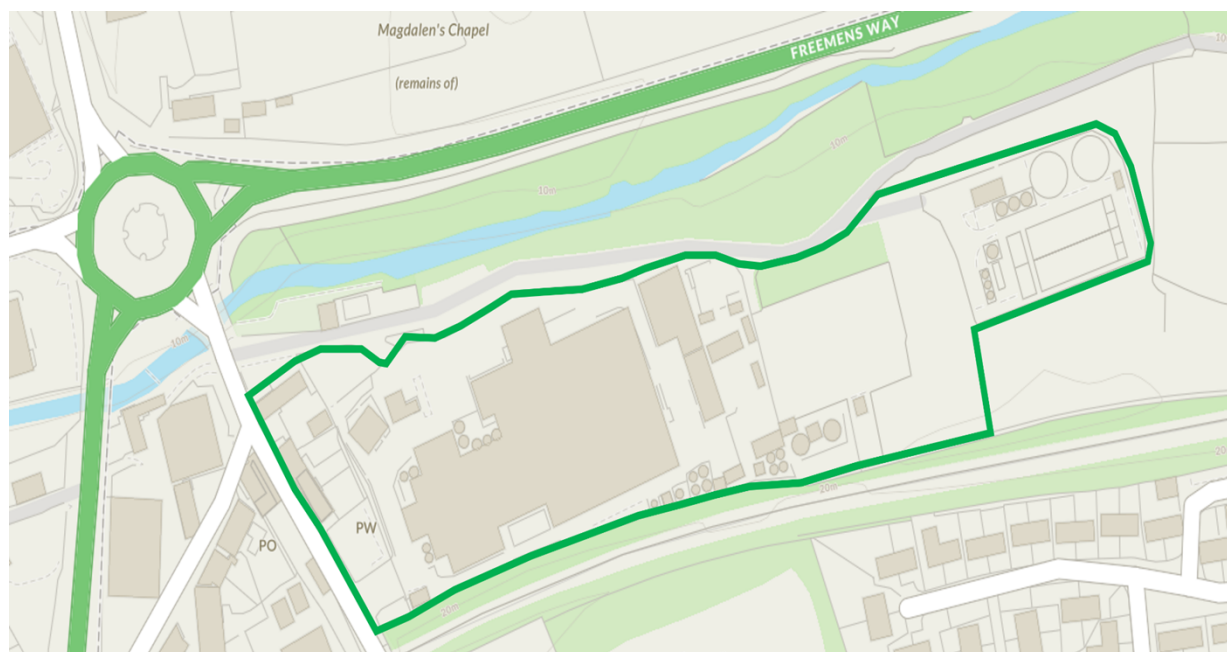


Figure 1. The Permitted Site Boundary

The First Milk permit boundary is indicated by the darker green line. The unauthorised connection pipe was located inside the drain at the corner of the northernmost building in the centre of the map. It took untreated effluent out through the permit boundary into an adjacent Dwr Cymru sewer pipe under the road outside First Milk's permitted site.

3.0 Undeclared Emission point

Permit conditions relating to declared emission points are found at Condition 3.1.1.

'There shall be no point source emissions to water, air, or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.'

First Milk was not compliant with this permit condition by allowing an emission point to release untreated site effluent from an unpermitted point. This is a non-compliance with permit condition 3.1.1 because First Milk operated a point emission source which was not listed in the permit. The unauthorised emission point had the potential to have a significant environmental impact.

Action 3 – First Milk to review the Haverfordwest Creamery drainage system for other potential unpermitted discharge routes to the local sewer network, water courses and groundwater and provide a written report to NRW by 30 September 2023 setting out further steps to investigate and rectify identified unpermitted discharge risks.

Cat 2 - 31 points



Fig 2 above. Taken on 22nd May 2023 by visiting EHO PCC food safety team. Shows milky effluent pooling in the First Milk yards. This acts as a possible source of high COD/BOD pollution if left to overflow off site.



Fig 3 Dwr Cymru gravity fed drain SM94149502 taken by Dwr Cymru staff shows milky effluent entering their drain on 7th June through an unpermitted emission point inside First Milks site boundary.



Fig 4 Taken by Dwr Cymru shows the same drain during dye tracing on 7th June by Dwr Cymru in the presence of First Milk staff. This confirmed the existence of the overflow pipe which allowed untreated effluent to overflow from the First Milk site into the Dwr Cymru

drain which flowed to their treatment works at Merlin's Bridge.



Fig 5 above. The same drain pictured outside the First Milk permitted fence line taken at the NRW inspection on 13th June 2023.



Fig 6 above. Shows the same drain in the road outside the fence with First Milk's overflow drain in the near ground. The overflow connected both drains. Concrete work has since blocked off the route from 7th June.

Fig 7 below – inside First Milk's drain (SM94149502) A new concrete plug has been placed inside the drain, between the upper orange sleeved condensation pipe and the lower milky effluent channel. It was seen to be shaped to allow effluent to flow past the blocked hole which is hidden behind the orange plastic pipe sleeve. Milky effluent was seen to be flowing left to right towards the First Milk effluent treatment plant and cannot get through the now blocked hole. The opposite end of the pipe in the drain pictured above was also seen to be dry after placing the concrete seals at either end of the pipe.

The concrete needs to be periodically checked to ensure continuous integrity. An annual dye tracing exercise

needs to be carried out to ensure the seal remains intact.	
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4.0 Consideration of further permit conditions.

Permit condition 4.3.1(a) (ii) requires the First Milk to take measures necessary to limit environmental consequences from incidents and accidents.

At the inspection, the repairs to block off the pipe flow with shaped concrete plugs was seen to be working. The repairs should have been carried out to BS EN 1504-9:2008 standards for repairing concrete structures and quality control. Periodic inspection and testing (dye testing) is required to ensure that the concrete is sound, and the seal is robust. This needs to be done at periodic intervals to be decided by First Milk and agreed with NRW. This will be subject to audit at future inspections.

Permit Condition 4.3.1(a)(iii) requires necessary measures to be in place to prevent further incidents and accidents.

The improvements in place were seen as being robust to prevent a reoccurrence, but the condition of the plugs needs to be tested periodically to ensure it remains robust and confidence is maintained. We therefore include a First Milk action to enable this to occur.

Action 4 – First Milk to provide NRW with a copy of a written procedure to conduct a visual inspection on the concrete plug together with a dye tracing exercise to ensure the seal between the effluent system and the sewer is maintained until completion of Action 2 above. Inspections will be scheduled on a periodic basis to be agreed with NRW.

5.0 W1 Outlet point

During the inspection, the W1 outlet for the First Milk was visited. This is permitted to drain

uncontaminated surface runoff away from site. The access was well maintained with evidence of recent brush clearing activity to maintain access. The outlet flows into a contributory brook which feeds the western Cleddau. The water was seen to be clear, with no signs of milky product or no odour. No invasive weeds were seen in the vicinity.



Fig 8. Shows First Milks W1 outlet for uncontaminated runoff. The access was well maintained with no evidence of pollutants or odour.

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.