

Our Ref: EPR/XP3830UR

Mr Neil Shawcross
The First Milk Cheese Company Limited
Haverfordwest Creamery
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Merlin's Bridge
Haverfordwest
Pembrokeshire
SA61 1JN

Date: 24th May 2024

Dear Mr Shawcross

EPR- XP3830UR First Milk (Haverfordwest Creamery) Improvement Conditions Review

Thank you for submitting First Milk's response to discharge the requirements of Improvements Condition (IC) 9 of the environmental permit EPR/XP3830UR.

An initial email was received on 13/07/2022 from James Cherry (First Milk) in relation to IC9 which contained updated EMS documentation for the Effluent Treatment Plant (ETP) operation managed by JEMS Environmental Ltd (a contractor of First Milk).

A new contractor is now in place for the management and responsibility of the ETP, "Aquaoperations" (AOL). In order to complete the review of IC9, NRW requested the updated relevant AOL EMS documents to be submitted for review (no further review of the JEMS Environmental Ltd documents will be undertaken as these have now been superseded).

Documents received from First Milk/AOL:

- First Milk Haverfordwest ETP Business Continuity and Incident Management Plan, October 2023;
- First Milk Haverfordwest ETP Monitoring and Control Document, December 2022;
- Business Performance System Index;
- AOL ISO 14001 certificate.

A full copy of the EMS for the site has not been provided.

As you are aware, ICs were included as part of a recent permit review and variation (V006 issued 08/04/2022) following the publication of the revised Best Available Techniques (BAT) Reference Documents (BREF) for Food, Drink and Milk Industries. Improvement Conditions have been included to bring the site up to the necessary standard.

During the permit variation V006, IC9 was included in the environmental permit.

IC9 - The Operator shall submit to Natural Resources Wales an updated Environment Management System which incorporates recent changes made to the Effluent Treatment Process.

As per condition 1.1.1 of the environmental permit, you must have a written management system in place that identifies and minimises risk of pollution, including those arising from operations, maintenance, accidents, incidents, nonconformances, closure and those drawn to the attention of the operator as a result of complaints. It is the operator's responsibility to ensure the EMS is implemented at site. You must also ensure appropriate resources are utilised and all staff are trained and competent.

We have reviewed the response provided in relation to IC9. Our review has been undertaken using relevant guidance including: the Best Available Techniques Reference Document for the Food, Drink and Milk Industries (2019); Natural Resources Wales "How to comply with your environmental permit" 2014.

As previously stated, the full EMS has not been provided, the documents provided form part of the overall EMS. AOL's *Business Performance System Index*, lists a large number of supporting documents. These have not been submitted for NRW's review.

It is also noted that since the submission of these EMS associated documents for IC9, there have been changes to the ETP operation. First Milk have reverted back to using Membrane Bio-Reactor units (MBRs) and ceased use of the secondary Dissolved Air Floatation (DAF) plant and Mecana filters. Changes to the ETP will be required to be fully detailed in the pending permit variation submission, to be agreed with NRW. All relevant documentation will require updating to account for such changes. However, pending a permit variation determination, key MBR management arrangements should be provided in the updated response to IC9.

The documents that have been provided contain insufficient detail to discharge IC9. Please see the following comments for your consideration (updates to the relevant documents will be required):

First Milk Haverfordwest ETP Business Continuity and Incident Management Plan

- Section 1 Purpose – The document describes the following; *“The purpose of this Business Continuity & Incident Management Plan is to identify major risks to continuous operation of the ETP and set out the policies and procedures to be followed by Aqua Operations (AOL) in the event of a major incident or disaster, allowing the restoration of services to the widest extent possible in a minimum time frame but ensuring*
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safety and environment take the highest priority". This document must cover all risks identified and not just major events.

- Section 2 Objectives – For the purpose of this review, NRW's remit covers the environmental management aspect of the document only. NRW will not provide comment on other items included in the document e.g. personnel health and safety (including its associated procedures) or business continuity).
- Section 3 – Key personnel must be available at all times to manage the ETP operations and management during and after an incident.
- Section 5 of the document states "See Appendix C for details on the roles and responsibilities of each team". No appendix C has been provided. Therefore, the document is lacking detailed information for staff roles and responsibilities at present. It will be pertinent that there are clearly defined roles and responsibilities within AOL's recovery teams and how there is communication/incident notification and co-ordination with First Milk.
- Section 6 of the document makes reference to a BCDR plan. It is not clear what BCDR stands for and if this is a separate plan to this *Business Continuity and Incident Management Plan*. Further details and clarification needed.
- Section 7 Risk Analysis – this section of the report focuses on equipment/asset failure situations and how they are mitigated. It is noted that section 9 provides details procedures for dealing with other scenarios such as spillages of chemicals that do not form part of this risk analysis section.

All potential incidents (including accidents, incidents non-conformances etc) should be identified as part of this incident management plan. **It is unclear if this document is in fact the sites full incident management plan/accident prevention and management plan as it does not contain all the necessary information that would be required for an accident management plan (please signpost to other documentation if this information is available elsewhere).**

For an accident/incident management plan, it is recommended that all risks are tabulated using the source, pathway, receptor model to help establish aspect and impacts. Once hazards are identified, mitigation measures that are/will be in place to minimise risk can be detailed and referenced so relevant procedures in place can follow. Please also consider other incidents that could take place such as vandalism, extreme weather etc.

The risk assessment table must also include the probability of the incident occurring, the impact and the overall risk rating. Please see accidents and incidents section of "*How to Comply with your environmental permit*" for further information - [How to comply with](#)

[your environmental permit \(naturalresources.wales\)](#). This guidance also contains information on other matters that will be important to your site that have not been considered in this document (e.g. planning drills or exercises to test your accident and emergency procedures and ensuring that your employees know what to do. Your accident plan must also say how you will record, investigate, and respond to accidents or breaches of your permit).

If there are other documents that cover these items (possibly listed in the *Business Performance System Index*), or any other items listed in this response, please use clear signposting/referencing to the relevant documents in place.

- An accident/incident management plan must also contain a site plan which identifies location of any emergency kits or equipment for fire, spill kits and drain caps as well as a list of key contacts and their contact numbers.
- Many of the mitigation measures listed in section 7.1 are secondary measures following an incident already taking place. Mitigation measures should be implemented to minimise an identified risk happening. Details of secondary containment measures in place at the site must be documented. The table is also missing details on the impacts of such risks happening, see previous comment above.
- Section 8 AOL Personnel – This section does not include site specific details of AOL personnel responsible for the ETP at First Milk Creamery e.g. The agreed number of Site Operators.
- Section 9 Procedures (spillages of chemicals) – See comments regarding section 7 above.
- An accurate drainage plan must also be maintained and signposted as needed. The plan should also include the layout of the ETP operations and a description of the ETP operations.
- NRW have been in discussions with First milk regarding several incidents relating to the ETP discharge, including the emission of biofilm and flocculant to the receiving water. This document is lacking detail on these incidents and how these types of incidents are and will be managed. Preventative maintenance will be important. Reference to planned preventative maintenance plans will be required.

A survey of the site's drainage network must be undertaken at least annually (or following changes to the network) to ensure the integrity of the drainage network and part of biofilm maintenance. Please update the documentation to reflect this.

- Where supporting documentation has been referenced, e.g. BPS 5-6-3 F1 Emergency Preparedness Plan – Haverfordwest for harm to personnel, these documents have not been reviewed.

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- The document does not clearly explain when NRW needs to be notified of an incident and refers the reader back to the environmental permit. Make clear when NRW must be notified and include relevant contact details.
 - Information is lacking on how incidents are investigated and how the findings of such investigations are reviewed/followed up.
 - The document is also lacking detail on how access of information to staff is being provided e.g. site notice board with key information? How do staff gain access to the incident management plan?
 - It is unclear if there is a clear communication plan (documented procedure) between AOL and First milk. Details regarding how First Milk manage AOL and maintain assurance that AOL is ensuring compliance with the permit (all aspects, energy use, odour, noise as well as ELV) must be documented. Please update the document and/or reference/ provide relevant supporting documents.
 - There is no indication of how regular this document is reviewed and by who. Continuous improvement of operations is important, and updates also need to be included in updated documents.
 - Please include details of the relevant legislation and documentation that was reviewed and used as guidance in the preparation of this document.

First Milk Haverfordwest ETP Monitoring and Control Document – December 2022

- The document must include an overview/descriptive summary of the specific aspects of the ETP serving the First Milk Haverfordwest Creamery and how it is managed. Detailed information is required on the key control parameters and actions taken when effluent goes out of the required/expected specification (e.g. high/low pH, COD load at primary DAF, at AST inlet, AS lane DO levels, MLSS, sludge age, microscopy checks, MBR fouling rates, etc). Section 3.2 Influent and effluent parameter action plans only list actions for some parameters, not all. Please review and update as required to include a complete and up to date action plan of influent and effluent parameters.
- Please review the ETP schematic provided in Section 1.2, Figure 2 and update as required. As discussed, First Milk have stated that there have been recent changes to the ETP (Bio DAF/DAF 2 to no longer be used. Site has reverted back to MBR's). Ensure the figure reflects the latest ETP set up.
- Table 1 does not list the complete set of parameters to be monitored as listed in the environmental permit Table 3.2.

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- Section 1.5 discusses continuous monitoring but there is no mention of the monitoring of other parameters such as iron which are required to be monitored weekly. Also include details of any other key process parameters monitored onsite (other than the parameters listed in the environmental permit) to monitor plant effectiveness.
 - Provide detail on monitoring instruments calibration and maintenance.
 - Detailed information regarding communication between First Milk and AOL is lacking. As previously mentioned, details regarding how First Milk manage AOL and maintain assurance that AOL is ensuring compliance with the permit (all aspects, energy use, odour, noise as well as ELV) must be documented. Please update the document and/or reference/ provide relevant supporting documents.
 - Irregular and uncontrolled discharges to the ETP are noted as potential scenarios and would require First Milk to notify the ETP operator AOL. This further emphasises the need for a clear communication plan between the two parties. Appropriate measures should be in place at the Creamery and the ETP to mitigate such incidents.
 - A site drainage plan with sample point and discharge point locations should be included.
 - There is missing information in relation to monitoring of uncontrolled emissions as have been seen on site recently e.g. biofilm and flocculant. Detailed information on how such incidents are monitored must be included and/or reference to applicable associated documentation. The revised document must reflect the changes and experience gained from recent incidents.
 - Include the relevant contact details for those to be notified in Section 4, communication of ETP incidents.
 - Figure 1 identifies other AOL procedure documents that NRW would expect to see as part of the EMS. This includes operational procedures, daily operating instructions and ETP training and development. Please include relevant signposting/document references. NRW would also expect maintenance procedure documents to be in place. Please include further information.
 - Operational control information is lacking. Operational; control information must include detailed information for example (but not limited to):
 - Procedures for process start up, shut down and normal operations;
 - Process control strategy, including aeration control, sludge wasting, and biomass management;
 - Key controls and actions plans as previously highlighted above;
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- Sludge management – details of sludge management plans including sludge wasting, thickening, dewatering and disposal. How sludge handling facilities are well-maintained and operated. Sludge analysis for quality checks;
 - Environmental considerations – details on handling hazardous chemicals, gases or equipment. Spill plans and details on measures to mitigate odour and noise and other potential environmental impacts of the treatment process;
 - Maintenance and equipment – detailed maintenance procedures and schedules for all equipment in the treatment process, regular inspections, maintenance records, contingency plans or backup systems.
 - Include information in relation to continuous improvements:
 - Is there a mechanism for identifying opportunities for process optimisation and improvement?
 - Are there regular performance reviews and audits conducted to evaluate the effectiveness of the treatment process?
 - Are corrective actions implemented when deviations or non-conformances are identified, and is there a process for tracking their effectiveness?

Business Performance System Index

- Only a contents list has been provided. Therefore, a full detailed review of each listed item has not been undertaken.
- Please confirm the documentation listed is specific to the First Milk site/operations where suitable.

AOL ISO 14001 certificate

- It is acknowledged that AOL EMS is certified to ISO 14001.
- It is unclear if First Milk have their own EMS certified to ISO14001 standards. The permit variation (V006) determined following the publication of the revised Best Available Techniques (BAT) Reference Documents (BREF) for Food, Drink and Milk Industries, specified that First Milk's current EMS needed improvement (particularly in relation to periodic independent auditing). The EMS at this time was noted to be based on ISO 14001 requirements however was not externally accredited. Please provided detailed information on the site's current EMS status and evidence that the EMS is now fully compliant with BAT 1.

Please review the comments above and update the EMS documentation as necessary. You will need to review and submit a response/updated document to NRW by the 21/06/2024 (unless otherwise agreed in writing with NRW).

Yours sincerely



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Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi.

Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.