

Compliance Assessment Report

Report ID:
CAR_NRW0034632

This form will report compliance with your permit as determined by an NRW officer

Site	Haverfordwest Creamery	Permit Ref	XP3830UR		
Operator/Permit holder	The First Milk Cheese Company Ltd				
Regime	Installations				
Date of assessment	16/05/2019	Time in	N/A	Out	N/A
Assessment type	Check Monitoring/Sampling				
Parts of the permit assessed	1 Management; 2 Operations; 3 Emissions and Monitoring; 4 Information				
Lead officer's name	Cowie, Douglas				
Accompanied by					
Recipient's name/position	Colin Reed/ Senior SHE Manager	Date issued	06/03/2020		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
A1 - Specified by permit	A	
B1 - Infrastructure - Engineering for prevention and control of emissions	A	
B3 - Infrastructure - Site drainage engineering (clean and foul)	A	
B4 - Infrastructure - Containment of stored materials	A	
F1 - Amenity - Odour	A	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	A	
G2 - Monitoring and Records, Maintenance and Reporting - Records of activity, site diary/journal/events	A	
H2 - Resource Efficiency - Energy efficiency	A	

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Site description

The First Milk Cheese Company Ltd operates a milk processing and cheese production facility at Haverfordwest Creamery, Merlin's Bridge, Haverfordwest. The company is a subsidiary of First Milk Ltd, the UK's largest dairy farmer co-operative. The facility is permitted as an installation under Section 6.8 (The Treatment of Animal and Vegetable Matter and Food Industries) of the Environmental Permitting Regulations (EPR).

Milk from approximately 300 local farms is pasteurised and processed at the installation to produce a range of cheeses and whey products. The permitted installation includes an integrated effluent treatment plant (ETP) which discharges to the Western Cleddau. An agreed nutrient 'off-set' scheme mitigates the creamery's treated effluent discharge through a combination of nutrient management measures at (scheme member) dairy farms.

Purpose of visit/assessment

During 2019 the European Commission (EC) is expected to publish its revised Best Available Techniques Reference (BRef) document and BAT Conclusions (BATc) for Food, Drink & Milk installations. Natural Resources Wales (NRW) is required to review the operator's environmental permit against these revised standards. During this intervention we discussed the revised BATc and how they are likely to apply to First Milk's permitted activities.

Other matters discussed during this intervention:

- Creamery capital investment projects
- Proposed combined heat & power (CHP) project
- Effluent Treatment Plant (ETP) inspection

The relevant permit conditions are listed under Sections 1.1, 1.4, 2.1, 2.3, 3.3, 3.5 & 4.1 of First Milk's permit.

Permit review: Revised BATc for the Food, Drink & Milk industry sector

The Industrial Emissions Directive (IED) is the main statutory instrument regulating pollutant emissions from industrial installations in Europe. According to Article 14(3) of the IED, Best Available Techniques (BAT) conclusions shall be the reference for setting the permit conditions to installations covered by the Directive.

During 2019 the European Commission (EC) is expected to publish its revised Best Available Techniques Reference (BRef) document and BAT Conclusions (BATc) for Food, Drink & Milk installations. Haverfordwest Creamery is permitted as a milk processing installation (cheese manufacturing) and therefore the revised Food, Drink & Milk BRef/BATc applies to its activities.

Primary and Secondary BRefs/BATc

There are often situations where more than one set of BATc may be relevant to a permitted installation. In these circumstances, the primary function of the installation influences which takes precedence i.e. the 'primary' BATc. For Haverfordwest Creamery, the primary BRef/BATc is Food, Drink & Milk.

The requirements of any published revised secondary BRef/BATc documents are considered where they are relevant. For Haverfordwest Creamery, the Waste Treatment BRef/BATc would apply to the on-site ETP (biological treatment of non-hazardous waste).

Secondary BRefs/BATc do not set the permitting timescale for the installation unless it undergoes a substantial change, which would necessitate a full permit review.

Permit review and EPR Regulation 61

Following publication of the revised Food, Drink & Milk BRef/BATc, the UK along with other European Union (EU) Member States must ensure these BATc are implemented into relevant environmental permits. The mechanism for implementing this will be a permit review and the operator (First Milk) can expect to receive correspondence from NRW's Permitting Service regarding this process. Initially the operator will be asked to respond to an EPR Regulation 61 Statutory Notice Requiring Information. Our notice sets out the information we require from the operator to carry out our permit review.

The response to the Regulation 61 Notice needs to be sufficiently detailed for NRW to assess and be able to explain the assessment to the public. It is not enough for an operator to simply state that you are or intend to be compliant; you must explain how. A narrative response is normally sufficient. Progress towards achieving BAT and an assessment of an operator's BAT compliance will be monitored periodically.

BAT 'gap' analysis

To support the permit review process, it is necessary to compare the current permitted activities against the revised standards and emission limits. This 'gap' analysis aims to identify potential operational issues for First Milk as early as possible within the prescribed compliance timescale of **four years from the date of BATc publication** (the 'compliance date'). It can also reveal any interpretational ambiguities within the BRef/BATc which require further regulatory consideration.

The regulating officer has shared a template proforma to facilitate any gap analysis. The proforma is intended as a simple tool to highlight if First Milk:

- can comply with the revised BATc now;
- can comply with the revised BATc by the compliance date (Dec 2023); or
- cannot comply with the revised BATc (potential derogation)

The importance of narrative information which explains *how* BATc compliance has been achieved cannot be overstated. The simple template proforma shared with the operator during this visit is not designed to capture this information, which will be required in order to satisfy our Regulation 61 Information Notice.

The operator is reminded that in addition to the Food, Drink and Milk BATc, the requirements of any published secondary BATc which are also applicable e.g. waste treatment should also be part of any gap analysis. These will also be assessed as part of NRW's permit review. All existing BATc documents can be found here:

<https://eippcb.jrc.ec.europa.eu/reference/>

The operator is encouraged to begin a BAT-gap analysis as early as possible. If you feel you are unable to meet specific BATc, it is important you raise this with us at the earliest opportunity.

Derogations

For situations where an operator cannot meet a BAT-Associated Emission Level (BAT-AEL), the operator must state if it wishes to continue operating. If an operator wishes to operate beyond the fourth anniversary of the BATc being published (the compliance date) and cannot meet the limits, a derogation will be required. NRW's Regulation 61 Information Notice will include further information regarding derogations.

Applying for a derogation from the IED requirements is not a simple process and requires careful technical consideration. There are two parts to a derogation application:

- there must be a technical, geographical or local environmental reason for a derogation; and
- you must show that the costs of achieving the BAT-AEL is disproportionate to the environmental benefit gained.

If applying for a derogation against a BAT-AEL, the applicant is expected to model the environmental impact of the release to demonstrate there is no adverse environmental effect.

EC Medium Combustion Plant Directive (MCPD)

Haverfordwest Creamery operates three gas-fired boilers with a combined thermal input capacity of 24MWth. These boilers were in operation before 20 December 2018 and therefore would be classified as existing plant under the MCPD.

Combustion plant which supply electricity are normally subject to additional controls under the MCPD (Specified Generators). For IED installations, the requirements for specified generators will inform site-specific BAT.

The MCPD requirements and emission limits applying to existing plant (including specified generators) at food and drink installations will be implemented by the Food, Drink & Milk BATc permit review. The Regulation 61 Information Notice is likely to include a section specifically dealing with medium combustion plant.

<https://www.gov.uk/guidance/medium-combustion-plant-and-specified-generators-environmental-permits#ied-chapter-2-permits-affected-by-the-regulations>

Fees and charges

The permit review application fee will be the cost of an OPRA-based *normal* variation if you can demonstrate compliance/intended compliance with the BAT conclusions by Dec 2023.

If you are unable to meet specific BAT conclusions by Dec 2023 and intend to apply for a derogation, the fee will be the cost of an OPRA-based *substantial* variation.

Invoices are normally sent after the Regulation 61 response due date. To ensure the correct application fee is applied, an updated completed EP OPRA spreadsheet will be required as part of the operator's Regulation 61 response.

Please note: additional application fees will apply if you have any medium combustion plant and/or specified generators on site.

EU Exit and further guidance

Regardless of whether the United Kingdom leaves the European Union with or without a deal, there will be no change to NRW's role and remit in the short to medium term. Welsh Government and DEFRA have been clear that there will be no change to the current level of environmental protection. This means that unless we are directed otherwise, NRW will continue to issue, regulate and review all permits and licenses in line with our current practice.

Further sector-specific BAT interpretation guidance for the UK may become available over the

coming weeks/months, which we will share as soon as it becomes available.

Capital investment projects

First Milk is investing approximately £6.5m to increase production capacity and efficiency at Haverfordwest Creamery. This investment includes new or replacement:

- silos and buildings
- pasteurisers and milk separators
- heat recovery equipment
- whey handling systems
- 'cheddaring' tower (process unit)

The new cheddaring* tower lies at the heart of the creamery and became operational in November 2019. It replaces a unit installed in the mid-1980s. The new tower is larger and will allow the creamery to sustain its recent growth.

*Cheddaring is unique to Cheddar cheese. It involves adjusting the acidity and using the weight of the curd to extract additional whey. The cheddaring process also changes the flavour and texture of the cheese.

During this visit the inspecting officer took the opportunity to meet First Milk's technical manager and view the new pasteuriser unit and silos as shown in the photographs below.





NRW welcomes this investment at Haverfordwest Creamery, which should not only realise greater efficiencies and environmental benefits, but should also place First Milk on a firm footing to meet future challenges within a highly competitive sector.

Combined heat & power (CHP) project

At the time of inspection, First Milk was considering a small CHP scheme to reduce the creamery's vulnerability to escalating energy costs.

The company has since finalised the scheme design and applied for a permit variation to incorporate the CHP unit into the installation permit. NRW issued the associated variation notice (V004) on 3 February 2020.

The new CHP unit has a thermal input capacity of approximately 2.7MWth and is fuelled by natural gas. It provides a means for the creamery to produce its own electricity, and by-products such as steam and low-temperature hot water also reduces the mains gas demand required for steam generation. The CHP is classified as a new Medium Combustion Plant (MCP) and an excluded specified generator as it is part of an IED Chapter II permitted installation.

The new CHP unit benefits from being able to comply with the rules set outlined in Standard Rules permit SR2018 No 7 'New, Low Risk, Stationary Medium Combustion Plant 1 and < 20MWth (in operation after 20/12/2018). The installation permit has been varied accordingly with reference to SR2018 No.7.

NRW understands this scheme is treated as permitted development under planning regulations.

The introduction of the CHP is relevant to the periodic energy efficiency and possibly the efficient use of raw materials review required every four years under permit conditions 1.2.1 and 1.3.1. The next reviews are likely to be triggered under the main permit review which necessary to reflect revised BATc (see above).

Effluent Treatment Plant

A short inspection of the ETP was undertaken with representatives from First Milk and Severn

Trent Services (STS). A mild odour was detectable along the Merlin's Bridge STW access track directly north of the ETP, however this was transitory and was not perceived to be offensive by the inspecting officer. There was evidence of appropriate odour control measures in place for fixed ETP assets. This compliance assessment did not extend to potentially odorous sludge transfer activities (no tanker transfers took place during the inspection).

The overall visual appearance of the ETP was clean and tidy. The STS operators demonstrated a clear understanding of plant telemetry and status of each treatment process.

Primary sludge dewatering

Previously the operator considered adding a sludge screw press unit to allow dewatering of primary sludge, and an associated reduction in sludge transfer and recovery costs. Although a successful trial was undertaken in 2018, the operator has decided not to install a permanent sludge press for the time being. Relevant regulatory guidance has already been provided by email on 28 September 2018. We would expect the agreed operating techniques and odour management plans/procedures for the ETP to be updated and submitted for our consideration before any permanent sludge press is installed.

Recurring pollution reports

STS representatives provided a short report in response to reports of pollution on land north of the STW access track and opposite the ETP site entrance in July and August 2018. The reports were notified to NRW, Pembrokeshire County Council (PCC) and First Milk. The operator's investigation and sample analysis has identified evidence of an effluent spill, but it has not identified a link between the permitted installation and the affected area. The report concludes that the visual appearance of the spill and the chemical and biological characteristics of the samples are more akin to sewage or 'grey water', rather than creamery effluent.

NRW is aware of recurring reports of pollution/spills affecting this location, particularly after heavy rainfall. We have inspected the site and we accept that no link with the permitted installation has been proven following these incidents. There are sewer lines and land drains in and around the area in question and further investigation of these assets may be needed to pinpoint the cause. NRW does not expect First Milk or STS to pursue this unless evidence is obtained that links the creamery and/or ETP with this recurring issue.

Revised BATc applying to ETP operations

STS and First Milk representatives were briefed about the requirements of the relevant BRef/BATc applying to the on-site ETP. The primary set of standards and emission limits for this installation will be derived from the Food, Drink & Milk (FDM) BRef/BATc. Elements of the Waste Treatment BRef/BATc may also apply to the ETP. The operator is advised to look carefully at:

- the monitoring requirements for emissions to water [BAT 4];
- the appropriate techniques and BAT Associated Emission Levels (BAT-AELs) for direct emissions to a receiving water body [BAT 12]; and
- specific BATc for dairies [BAT 21, BAT 22 & BAT 23]

Some effluent monitoring parameters are likely to change following implementation of the BATc; an example of this is the introduction of a Total Nitrogen (N) limit in place of the current permitted ELV for ammonia. Also, the requirement to monitor Biological Oxygen Demand (BOD) is not reflected within BAT 12 and appears to have been replaced by a BAT-AEL for Chemical Oxygen Demand (COD).

The operator has been advised to consider additional Total N sampling and analysis to benchmark performance against the relevant BAT-AEL. This data may inform the operator's future response to NRW's Regulation 61 Information Notice.

Pollutant Release and Transfer Register

A query was raised regarding annual reporting of non-hazardous waste transfers from the installation for the purposes of the Pollutant Release and Transfer Register (PRTR). It appears that relevant waste transfer data for 2016 - 2018 has previously been omitted in error from First Milk's annual PRTR submissions for Haverfordwest Creamery. The operator is advised to email the missing data to **industryregulation.swwales@cyfoethnaturiolcymru.gov.uk** to allow NRW to update the relevant national databases.

Guidance for PRTR data entry is available to download from the portal homepage (<http://prtr.defra.gov.uk/data-entry-system/>). Within the data entry part of the portal, there are separate data entry pages for pollutant releases and waste transfers; both are required to complete the annual PRTR submission.

Summary and further actions required

Haverfordwest Creamery is permitted as a milk processing installation (cheese manufacturing) and therefore the revised Food, Drink & Milk BRef/BATc applies to its activities, along with any relevant secondary BRefs/BATc such as Waste Treatment. A permit review is necessary to incorporate relevant BATc into the operator's installation permit.

The operator is encouraged to begin a BAT-gap analysis as early as possible in preparation for the Regulation 61 Information Notice which will follow. Also, we would advise the operator to look carefully at the BAT conclusions applying to water emissions and consider additional sampling & analysis (where relevant) to benchmark plant performance against the revised standards.

Further sector-specific BAT interpretation guidance for the UK may become available over the coming weeks/months, which we will share as soon as it becomes available.

First Milk is investing approximately £6.5m to increase production capacity and efficiency at Haverfordwest Creamery. NRW welcomes this investment and we viewed some of the improved site infrastructure during this visit.

NRW has issued a variation notice (V004) incorporating the operator's new CHP unit into the installation permit. The unit should allow First Milk to reduce the overall energy costs for the creamery.

The on-site Effluent Treatment Plant was inspected. No amenity issues were identified during this visit. The operator has decided not to pursue a permanent sludge press (dewatering) unit at the ETP for the time being. Recurring pollution reports during 2018 on land near the ETP entrance were discussed, however following investigation no link has been proven with the permitted installation.

The operator is advised to email the missing PRTR data for waste transfers between 2016 – 2018 to **industryregulation.swwales@cyfoethnaturiolcymru.gov.uk** to allow NRW to update the relevant national databases.

Persons present

First Milk Cheese

Paul Rowe	Site & Group Projects Director
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Colin Reed	Senior Safety, Health & Environment Manager
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Mark Jenkins	Technical Manager
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Severn Trent Services

Dafydd Lewis	Wastewater Treatment Lead Process Engineer
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Dean Chambers	Operator / Maintainer
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Natural Resources Wales

Douglas Cowie	Senior Officer – Industry & Waste Regulation
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[END OF SECTION 2]

EPR Compliance Assessment Report

**Report ID:
CAR_NRW0034632**

This form will report compliance with your permit as determined by an NRW officer

Site	Haverfordwest Creamery	Permit Ref	XP3830UR
Operator/Permit holder	The First Milk Cheese Company Ltd	Date	16/05/2019

Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition.

Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. 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 its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.