

## **Permit with introductory note**

The Environmental Permitting (England & Wales) Regulations 2010

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The First Milk Cheese Company Limited

Haverfordwest Creamery  
Pembroke Road  
Merlins Bridge  
Haverfordwest  
Pembrokeshire  
SA61 1JN

Permit number  
EPR/XP3830UR

# **Haverfordwest Creamery**

## **Permit number EPR/XP3830UR**

### **Introductory note**

#### **This introductory note does not form a part of the permit**

The main features of the permit are as follows.

The installation is located at Merlins Bridge, at the southernmost limits of the town of Haverfordwest in Wales. The Installation covers approximately six acres and employs 69 people directly and 350 farmers indirectly as suppliers. The installation comprises one main building with several smaller ones. The key operations regulated by the EPR permit are the processing of milk to produce cheeses and whey and the associated effluent treatment plants.

The main activities of cheese production include: receipt and storage of milk, which is then pasteurised; producing curds and whey by adding bacteria and rennet which coagulates the milk. The curds are then separated, cooked, compressed and cut to form cheese chips. These are then salted, compressed to form large blocks of cheese under vacuum and then cut into 20kg blocks. The cheese is then packed, stored and dispatched.

The separated whey is used to produce skimmed whey and whey cream. The whey cream is further treated by pasteurisation and ageing. The site is also authorised for the packing of butter and pasteurisation of skimmed whey. This can be concentrated to 32 to 35% suspended solids by evaporation.

The plant is capable of producing per year approx:

- 45,000 tonnes hard pressed cheese
- 3663 tonnes whey cream butter
- 79,137 tonnes concentrated whey

Some refrigeration activity is carried out within the installation to preserve food materials. R22 refrigerant is used for this purpose. The site also uses ammonia as a water coolant.

Foul water from the installation includes all production effluent, dirty water, domestic wastewaters and detergents from cleaning activities and surface water discharged at milk intake and whey distribution areas. Storm wastewater contains surface waters from areas of the site where milk and whey are not transferred between vehicles and storage. The stormwater contains blow down from the site's compressors and vacuum pump room. Foul water, process condensate effluent and contaminated surface water are currently discharged via a dedicated effluent treatment plant operated by United Utilities Industries Ltd (UUI). The effluent is treated at Veolia Water Treatment Services effluent treatment plant (ETP) and then sent on to Welsh Water's Merlins Bridge Sewage Treatment Works (STW) for further treatment prior to release to Merlins Brook.

There is one emission point of uncontaminated surface water run-off to Merlins Brook and one soakaway for uncontaminated water from two land drains.

There are three boilers on site with a combined capacity of 24MW. These are the three point sources of air emissions identified within the application. A variation issued on the 29<sup>th</sup> July 2010 allowed for the addition of an on site effluent treatment plant (ETP) and the use of Processed Fuel Oil (PFO) in the on site boilers. The variation allowed existing heavy fuel oil and PFO to be used on site. This variation also allow for the boilers to burn natural gas in place of the heavy fuel oil and the processed fuel oil.

This variation, EPR/XP3830UR/V003, is for a new wastewater treatment plant to treat the crude and condensate effluent from the cheese plant to replace the existing facility in place at the site. The variation also includes a new pipeline to allow for the treated effluent to be pumped and discharged directly to the western Cleddau via a new discharge point (W2).

To offset the potential environmental impact from the new discharge point First Milk have proposed a mitigation statement that sets out how First Milk will work in partnership with its farming members to put into place a programme of on-farm mitigation methods to offset the discharge from the ETP. The annual reduction will be equivalent, or more, than that discharged from the new effluent treatment plant.

The nearest human receptors are a shop, post office and a few houses within 50m to the west of the site and the site is bordered on one side by the railway with open spaces on the other two sides.

There are several designated sites within the vicinity of the installation:

- Daugleddau SSSI 1081m (by radial search)
- Afonydd Cleddau / Ceddau Rivers SAC 1118 m (by radial search)
- Pembrokeshire Marine / Sir Benfro Forol SAC 1254m (by radial search)
- Gas works land section SSSI 1268m (by radial search)
- Hook Wood SSSI 3527m (by radial search)
- Pembrokeshire Bat Sites and Bosherton Lakes SAC 8252m (by radial search)

The site participates in a climate change agreement for the dairy sector (ref: PP3.02). The site operates an Environmental Management System that is externally certified to ISO 14001 by the accreditation organisation LRQA (Certificate number: LRQ 0772775).

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application BV7788ID	Received 08/03/2005	
Response to request for information	Responses dated 25/08/2005 and 12/09/2005	
Permit determined	12/10/2005	
Permit transfer application received	12/02/2007	
Request for information	01/03/2007 and 23/05/2007 Received 24/05/2007	
Permit transferred	02/07/2007	
Variation Application EPR/XP3830UR/V002 ( PAS Ref BP3332KU)	Duly Made 31/12/2009	
Request for Information	08/04/2010 Received 17/06/2010	
Request for information	11/05/2010 Received 27/05/2010	
Variation determined EPR/XP3830UR/V002	29/07/2010	
Application EPR/XP3830UR/V003 (variation and consolidation)	Duly made 20/03/2013	Application for effluent treatment plant and to update the permit to modern conditions.
Variation determined EPR/XP3830UR	29/07/2013	Varied and consolidated permit issued in modern condition format.

End of introductory note

# Permit

The Environmental Permitting (England and Wales) Regulations 2010

**Permit number**  
**EPR/XP3830UR**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/XP3830UR/V003 authorising,

**The First Milk Cheese Company Limited** (“the operator”),

whose registered office is


**Pickhill Lane**  
**Cross Lanes**  
**Wrexham**  
**LL13 0UE**

company registration number 05893846

to operate an installation at

**Haverfordwest Creamery**  
**Pembroke Road**  
**Merlins Bridge**  
**Haverfordwest**  
**Pembrokeshire**  
**SA61 1JN**

to the extent authorised by and subject to the conditions of this permit.

Name	Date
	<b>29/07/2013</b>

Authorised on behalf of Natural Resources Wales

# Conditions

## 1 Management

### 1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

### 1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

## **1.4 Avoidance, recovery and disposal of wastes produced by the activities**

- 1.4.1 The operator shall take appropriate measures to ensure that:
- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **2 Operations**

### **2.1 Permitted activities**

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

### **2.2 The site**

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

### **2.3 Operating techniques**

- 2.3.1 (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by Natural Resources Wales.
- (b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.
- 2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

- 2.3.3 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.
- 2.3.6 The combustion plant on site may be operated on either HFO natural gas or PFO (manufactured to BS 2869; 2006 standard) subject to the revised monitoring requirements as detailed in schedule 3 table S3.1.
- 2.3.7 The PFO shall be independently tested, at a UKAS accredited laboratory, annually by the Operator to ensure it conforms to BS2869; 2006.

## **2.4 Improvement programme**

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.
- 2.4.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales within 14 days of completion of each improvement.

## **2.5 Pre-operational conditions**

- 2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed].

# **3 Emissions and monitoring**

## **3.1 Emissions to water, air or land**

- 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.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.



## **3.2 Emissions of substances not controlled by emission limits**

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

## **3.3 Odour**

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

## **3.4 Noise and vibration**

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

## **3.5 Monitoring**

- 3.5.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1 and S3.2;
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 and S3.2 unless otherwise agreed in writing by Natural Resources Wales.

## 4 Information

### 4.1 Records

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by Natural Resources Wales, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by Natural Resources Wales.

### 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) each year. The report(s) shall include as a minimum:
- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production /treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to Natural Resources Wales, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

## 4.3 Notifications

- 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,
  - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) in the event of a breach of any permit condition the operator must immediately—
- (i) inform Natural Resources Wales, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
  - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es).

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) Natural Resources Wales shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.3.6 Natural Resources Wales shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.3.7 Where the operator has entered into a climate change agreement with the Government, Natural Resources Wales shall be notified within one month of:

- (a) a decision by the Secretary of State not to re-certify the agreement;
- (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
- (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

## **4.4 Interpretation**

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

# Schedule 1 - Operations

**Table S1.1 activities**

Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A1	Section 6.8 Part A(1)(e) - "Treating and processing milk, the quantity of milk received being more than 200 tonnes per day (average value on an annual basis)".	Processing of milk to produce cheese and butter products.	From receipt and storage of raw materials to despatch of finished product from the installation.
A2	Section 5.4 Part A(1)(i) Disposal of non-hazardous waste in a facility with a capacity of more than 50 tonnes per day by biological treatment.	Treatment of process effluent	Receipt of crude and condensate effluent from the cheese plant to discharge to Western Cleddau.  To begin operation on 1 <sup>st</sup> July 2014 or as agreed with NRW
<b>Directly Associated Activity</b>			
A3	Steam and electrical power supply	Burning oil in combustion plant (For use of Processed fuel oil (HFO)).  Natural gas from February 2014 or as agreed with NRW.	From receipt of fuel to emission of combustion products.
A4	Steam and electrical power supply	Operation of boilers. (For use of heavy fuel oil (HFO)).  Natural gas from February 2014 or as agreed with NRW.	From receipt of fuel to disposal of waste and release of combustion products in plant with an installed capacity of 24MW thermal input.
A5	Storage and handling of wastes.	-	From generation to despatch of waste.
A6	Refrigeration	-	From receipt and storage of raw materials to despatch of finished product from the installation.
A7	Odour control unit	Operation of an air extraction system and biological filter to control odour from the sludge treatment process	From extraction of air from the sludge building and sludge tank, through the biological odour control filter.

**Table S1.2 Operating techniques**

<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application	The response to questions 2.1 and 2.2 given in pages 9 to 40 of the application.	08/03/2005
Variation Application	Variation Application sections 1.1 – 1.9, 2.0 and 3.0. Non technical summary Site Plan	31/12/2009
Response to request for further information	Response to Schedule 5 – Items 2 - 6	27/05/2010
Variation Application EPR/XP3830UR/V003	Section M – Non technical summary of the intended plant design Section O – Nitrate Management Plans for First Milk farmers Section 1 – Emergency preparedness and critical incident management plans Section 2 – Raw materials and chemical inventory	20/03/2013

**Table S1.3 Improvement programme requirements**

<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	On agreement of pre-operational condition 2 (POC2) the Operator will provide a progress report based on the agreed mitigation report.	6 months from receipt and agreement of POC 2
IC2	The Operator shall submit to Natural Resources Wales, for approval, a revised odour management plan that incorporates and identifies potential sources of odour from the new effluent treatment plant.	31/07/2014
IC3	The Operator shall submit to Natural Resources Wales, for approval, a revised noise management plan that incorporates and identifies potential sources of noise from the new effluent treatment plant.	31/07/2014
IC4	The Operator shall submit to Natural Resources Wales, for approval, a revised emissions management plan that incorporates and identifies potential sources of fugitive emissions from the new effluent treatment plant.	31/07/2014
IC5	The Operator shall submit to Natural Resources Wales details of the conversion to natural gas for the emission points A1, A2 and A3 and the associated timeframe for the conversion.	3 months prior to conversion

<b>Table S1.4 Pre-operational measures for future development</b>		
<b>Reference</b>	<b>Operation</b>	<b>Pre-operational measures</b>
POC 1	Effluent treatment plant	The Operator shall provide to Natural Resources Wales details of the soil investigation undertaken as part of the borehole survey for the effluent treatment plant and the associated pipeline. This information will form part of the site condition report submitted as part of the variation application EPR/XP3830UR/V003.
POC 2	Effluent treatment plant	<p>The Operator shall submit a report, for agreement with Natural Resources Wales, detailing the mitigation measures to be adopted by the farms linked to the proposed scheme. The report will consist of, but not be limited to, the following requirements:</p> <ol style="list-style-type: none"> <li>1) Scheme scope and methodology.</li> <li>2) Organogram detailing roles and responsibilities.</li> <li>3) Details of the participating farms.</li> <li>4) Details of the measures to be employed at the farms.</li> <li>5) Methodology of how a baseline will be set to enable comparison.</li> <li>6) Timeframe for implementation.</li> <li>7) How reductions will be measured / monitored at each farm.</li> <li>8) Frequency of review to confirm the status /summary of the measures implemented on each farm (to demonstrate continued compliance)</li> <li>9) List of guidance to be utilised to calculate or measure the off-set.</li> <li>10) Contingency measures. For example if a farm leaves the scheme.</li> <li>11) Collation and reporting of information.</li> </ol> <p>The scheme must ensure that pollution reductions at farms within the scheme will equal, or be greater than, the amount of nutrients discharged by the effluent plant to the Cleddau Catchment.</p>
POC 3	Effluent treatment plant	The Operator will submit plans, for agreement with Natural Resources Wales, detailing the associated timelines for the commissioning of the new effluent treatment plant (activity reference A2).

## Schedule 2 - Waste types, raw materials and fuels

**Table S2.1 Raw materials and fuels**

Raw materials and fuel description	Specification
Heavy fuel oil (HFO)	Sulphur content maximum 0.1%
Processed Fuel Oil (PFO)	Manufactured to BS 2869:2006 standard (when operating with PFO)
Raw milk	Maximum quantity 1,000,000 litres



## Schedule 3 – Emissions and monitoring

**Table S3.1 Point source emissions to air – emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 on site plan SP04 14/01/05	Oxides of Nitrogen as NO <sub>2</sub>	Boiler no.1 (600 boiler)	No limit set	-	Annually	BS EN 14792
	Total Particulates		No limit set	-	Annually	BS EN 13284-1
	Sulphur dioxide		No limit set	-	Annually	BS EN 14791
A2 on site plan SP04 14/01/05	Oxides of Nitrogen as NO <sub>2</sub>	Boiler no.2 (800 boiler)	No limit set	-	Annually	BS EN 14792
	Total Particulates		No limit set	-	Annually	BS ISO 9096
	Sulphur dioxide		No limit set	-	Annually	BS EN 14791
A3 on site plan SP04 14/01/05	Oxides of Nitrogen as NO <sub>2</sub>	Boiler no.3 (Danks boiler)	No limit set	-	Annually	BS EN 14792
	Total Particulates		No limit set	-	Annually	BS ISO 9096
	Sulphur dioxide		No limit set	-	Annually	BS EN 14791

**Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on site plan SP04 and SP05 14/01/05. NGR 94651454	No parameter set	Uncontaminated site drainage water from site to Merlins Brook	No limit set	-	-	-
W2 on site plan in schedule 7. Location 196342, 214759.	Maximum daily discharge volume	Discharge from effluent treatment plant reference A4	2500 m <sup>3</sup> /day	Total daily volume	Continuous	
	Maximum rate of discharge		120 m <sup>3</sup> /hr	Instantaneous	Continuous	Flow meter
	Temperature		35°C	Absolute maximum	Continuous	Standard thermocouple
	Biochemical oxygen demand		40 mg/l	Absolute maximum	Weekly	BS EN 1899-1
			20 mg/l	95 <sup>th</sup> percentile <sup>1</sup>		
	Total suspended solids		60 mg/l	Absolute maximum	Weekly	BS EN 872
			30 mg/l	95 <sup>th</sup> percentile <sup>1</sup>		
	Ammonia		10 mg/l	Absolute maximum	Weekly	BS EN ISO 11732
			3.5 mg/l	95 <sup>th</sup> percentile <sup>1</sup>		
	Total phosphates		5 mg/l	Absolute maximum	Weekly	BS EN ISO 15681-1
			3 mg/l	95 <sup>th</sup> percentile <sup>1</sup>		
	Iron		10 mg/l	Absolute maximum	Weekly	BS EN ISO 11885
			5 mg/l	95 <sup>th</sup> percentile <sup>1</sup>		
	Aluminium		2 mg/l	Absolute maximum	Weekly	BS EN ISO 11885
			1 mg/l	95 <sup>th</sup> percentile <sup>1</sup>		
	pH		6 - 9 mg/l	Absolute maximum	Continuous	BS ISO 10523
WL1 on site plan SP05 14/01/05. East side of site	No parameter set	Discharge of two uncontaminated land drains to one soakaway	No limit set	-	-	-

<sup>1</sup> For 95% of all measured values according to look up table

**Table S3.3 Annual limits**

Substance	Medium	Limit (including unit)
Mercury and its compounds	Water	228g – Compliance based on mass balance calculation
Cadmium and its compounds	Water	96g – Compliance based on mass balance calculation

## Schedule 4 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

**Table S4.1 Reporting of monitoring data**

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	A1, A2, A3	Every 12 months	1 January
Emissions to water Parameters as required by condition 3.5.1	W2	Every 6 months	1 January, 1 July

**Table S4.2: Annual production**

Parameter	Units
Production of dairy products	tonnes

**Table S4.3 Performance parameters**

Parameter	Frequency of assessment	Units
Energy usage	Annually	MWh
Potable water usage	Annually	tonnes
Non potable water usage	Annually	tonnes
Waste disposal and/or recovery	Annually	tonnes
Mass of ammonia released to water	Annually	tonnes
Mass of refrigerants released	Annually	tonnes
Annual report with the amount of nitrates, suspended solids and phosphates reduced from the farm management scheme.	Annually	kg

**Table S4.4 Reporting forms**

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by Natural Resources Wales	29/07/13
Water	Form water 1 or other form as agreed in writing by Natural Resources Wales	29/07/13
Energy usage	Form energy 1 or other form as agreed in writing by Natural Resources Wales	29/07/13
Water usage	Form water usage 1 or other form as agreed in writing by Natural Resources Wales	29/07/13
Other performance indicators	Form performance 1 or other form as agreed in writing by Natural Resources Wales	29/07/13

## Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

### Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

#### **(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution**

##### **To be notified within 24 hours of detection**

Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

#### **(b) Notification requirements for the breach of a limit**

##### **To be notified within 24 hours of detection unless otherwise specified below**

Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

### Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

<b>Name*</b>	
<b>Post</b>	
<b>Signature</b>	
<b>Date</b>	

\* authorised to sign on behalf of the operator

## Schedule 6 - Interpretation

*“accident”* means an accident that may result in pollution.

*“application”* means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

*“authorised officer”* means any person authorised by Natural Resources Wales under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

*“EP Regulations”* means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

*“emissions of substances not controlled by emission limits”* means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

*“groundwater”* means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

*“Industrial Emissions Directive”* means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

*“Look up table”* The limit for any of the relevant parameters set out in tables S3.2 may be exceeded where: in a series of samples of the discharge taken at regular but randomised intervals in a period of 12 consecutive months as listed in in the look up table, no more than the relevant number of samples, as listed in column 2, exceed the applicable limit for that relevant parameter.

**Look up table**

Number of samples taken in any period of 12 months	Maximum number of samples permitted to exceed limit for given determinand
4–7	1
8–16	2
17–28	3
29–40	4
41–53	5
54–67	6
68–81	7
82–95	8
96–110	9
111–125	10

*“mass balance calculation”* means that for the purposes of demonstrating compliance or non-compliance with a specified limit the release shall be calculated. Annual mass releases for Mercury and Cadmium shall be calculated from the maximum potential concentration of the metal present as contamination multiplied by the volume of the chemicals used on site during the Year. An allowance may be deducted for any proportion of the chemicals used that can be demonstrated not to have reached the emission point. The concentration of Mercury and Cadmium shall be calculated from the annual mass release and the volume of effluent discharged during the Year.

*“MCERTS”* means the Environment Agency’s Monitoring Certification Scheme.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

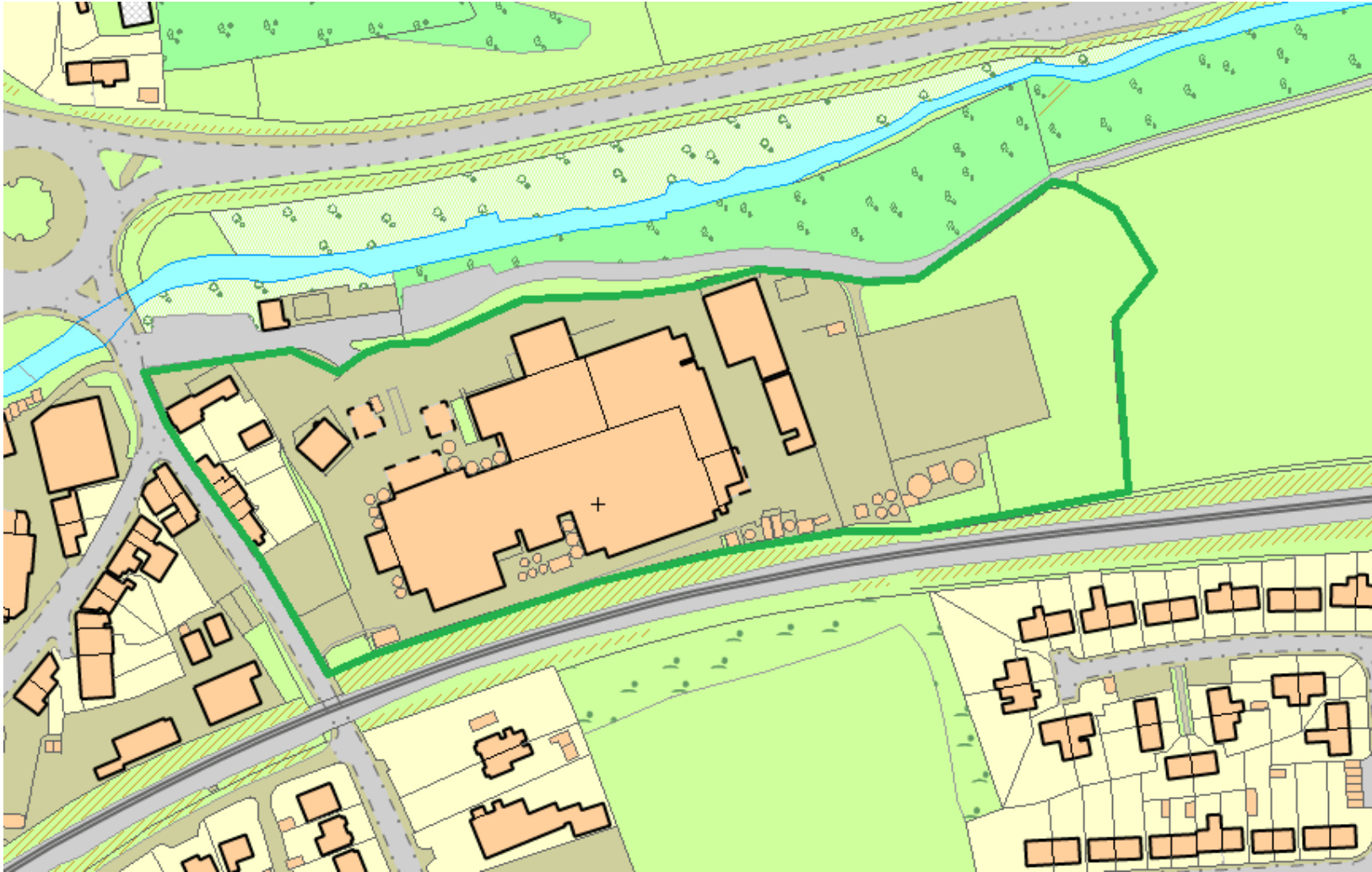
Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

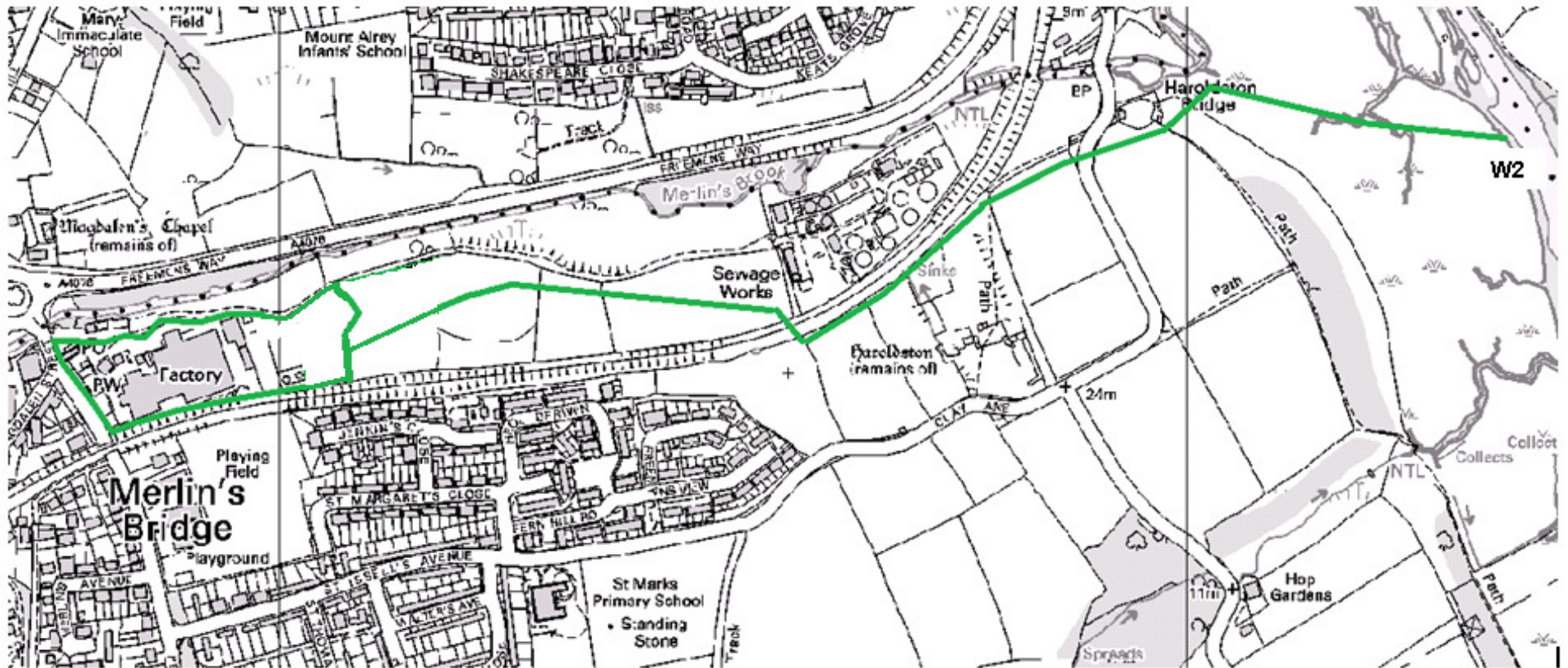
*“Natural gas”* means naturally occurring methane with no more than 20% by volume of inert or other constituents

*“year”* means calendar year ending 31 December.

## Schedule 7 - Site plan







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