Habitats Regulations Assessment – PAN-027140

OGN 200 Form 1B

Record of a Habitats Regulations Assessment

Plan or project name, brief description or application reference number	PAN-027140 (EPR/XP3830UR/V007) Haverfordwest Creamery
HRA iteration/version	Version 1 Note: previous HRA completed for PAN-019159. This permit application was rejected due to the lack of containment on the site, potential for release and impact on the SACs.

1. Plan or Project Details

Information about the plan or project		
1	**Date application received**	07/10/24
2	**Applicant details**	The First Milk Cheese Company Limited
3	**NRW team responsible for carrying out, or requiring to be carried out, the plan or project, and name of lead officer**	N/A
4	**Activity/ies proposed**	The First Milk Cheese Company Ltd have applied for a variation to their permit for Haverfordwest creamery (permit number EPR/XP3830UR) to increase the maximum production capacity by 227 tonnes per day (specifically from a total of 1260 tonnes per day

		to 1487 tonnes per day). The increase in capacity will also result in the addition to the site of • 2 new cheese vats (each with 30,000 litre capacity), taking the total to 10. • 1 additional milk intake bay • 1 additional milk storage silo (increasing volume by 300,000 litres (total volume on site will increase to 1,678,000 litres)) • Increased size of outgoing whey concentrate silo (larger silo replacing an older, smaller silo and increasing the storage capacity by 40,000 litres to 90,000 litres in total. Overall the 6 whey silos/tanks will then hold a total site volume of 500,900 litres). • New cream tank holding 100,000 litres. • Expansion of existing milk pasteurisers & separators • Increased pipework size for various product routes • Replacement of the older whey clarifier • Expansion of the membrane plants and modifications to the whey evaporator to increase capacity for whey processing in line with the increase in milk processing and cheese production • Expansion of cleaning in place (CIP) set and removal of 2 others. The total volume of milk, whey and cream held in silos and tanks would increase from 1,730,900 litres to 2,170,900 litres. The applicant has proposed installation of containment measures to mitigate the pollution risk from the failure of the primary (milk, whey and cream) storage vessels. The Effluent Treatment Plant (ETP) was upgraded in 2024 with the re-installation of a Membrane Bio-Reactor (MBR) system to improve the quality and consistency of the final discharge. The applicant has stated the ETP has sufficient capacity to cope with the increase in effluent from the capacity uplift. Further improvements are planned for the ETP to deliver further Phosphorous removal by the installation of a precipitation process (coagulant dosing and mixing), with a Meccana cloth filter. The applicant has proposed the PAC (Polyaluminium Chloride) used for dosing, will be contained within a bunded IBC. The mixing/dosing unit and ancillary pipes will be over hard standing which drains to the site drainage system. The site drainage system is contained and circulates back to the ETP. In the event of a release of dosing substance the design has accounted for its capture to mitigate a pollution risk.

		To ensure permit limits (including Aluminium) are met, the dosing system will have a dedicated flow meter to control and automate dosing at the right level. Daily analysis is normal for ETP operation and monitoring compliance against permitted levels with the ability to divert effluent to the final divert tank if necessary. The applicant has stated the current site services are already suitably sized to be able to cope with the increase in throughput due to the type of change to the production cycle not having a significant effect on loadings (i.e. longer production window followed by normal cleaning window rather than an overall increase of volumes through the system at one time). The proposal would not add any new point source emissions to air or water and emission limits will remain unchanged for the effluent treatment plant.
5	**Relevant legislation or statutory basis**	Environmental Permitting (England and Wales) Regulations 2016 Industrial Emissions Directive 2010/75/EU
6	**Location**	Haverfordwest Creamery, Pembroke Road, Merlins Bridge, Haverfordwest, Pembrokeshire, SA61 1JN NGR: SM 94890 14500
7	**Plan or project documents, including any application documents**	Documents can be accessed: Internal on the DMS here. External on the public register here
8	**Environmental Statement**	N/A
9	**Pre-application correspondence**	Documents can be accessed internally on the DMS here.
10	**NRW team responsible for preparing this HRA report, and lead officer**	Emily Ingram, Permitting Officer Installations and RSR Permitting

11	**Team or person responsible for approving the plan or project (competent authority role)**	Installations and RSR Permitting

2. Determining the need for a Habitats Regulations Assessment

2.1 Is there any possibility that the plan or project could negatively affect any European sites?	YES
2.2 Is the whole of the plan or project directly and only connected with or necessary to the management of one or more European sites, for the purposes of conserving the habitats or species for which the European site(s) is/are designated?	NO
~~**2.3 Is there a possibility that the plan or project could affect any other feature of the European site(s) concerned, or of another European site, in a way that would undermine that feature's conservation objectives?**~~	N/A

3. Considering the likelihood of a significant effect (LSE)

3.1 Renewal of a project authorisation on the same or more restrictive terms as an extant authorisation

Is this a renewal of an extant authorisation which complies with NRW approved criteria for ruling out significant effects of renewals (see Part 2 of OGN200) without conducting a project-specific LSE test?	NO

3.2 Likelihood of significant effects (LSE) test

3.2.1 Which European sites might be affected by the plan or project?

(a)	**Based on the plan or project specification, or information provided in the application, it is considered that these European sites have features which could be negatively affected by the plan or project**	The location of the following sites are within the 10km screening distance relative to the site search location point (shown on the map below). • **Pembrokeshire Marine / Sir Benfro Forol (UK0013116) - SAC** – located downstream of the part of Merlin's Brook considered most vulnerable to pollution from the storage silos (Merlin's Brook is a tributary of the Western Cleddau and it follows the northern boundary of the installation at a distance of approximately 30 metres). • **Afonydd Cleddau / Cleddau Rivers (UK0030074) - SAC** – located approximately 300 meters upstream from where Merlin's brook joins the Western Cleddau. Although the SAC is located 300 meters upstream, there are mobile features of this SAC that migrate through the area that could potentially be impacted by pollution from the storage tanks
(b)	**The potential for the plan or project to negatively affect these European sites was also initially considered, but can be ruled out without further consideration**	• **Pembrokeshire Bat Sites and Bosherton Lakes / Safleoedd Ystlum Sir Benfro a Llynnoedd Bosherton (UK0014793) - SAC** – South Pembrokeshire, so not hydrologically connected to Merlin's Brook or the Cleddau Rivers SAC at Haverfordwest. • **West Wales Marine / Gorllewin Cymru Forol (UK0030397) - SAC** – Not hydrologically connected within 10 km of the closest point of the site to the watercourse

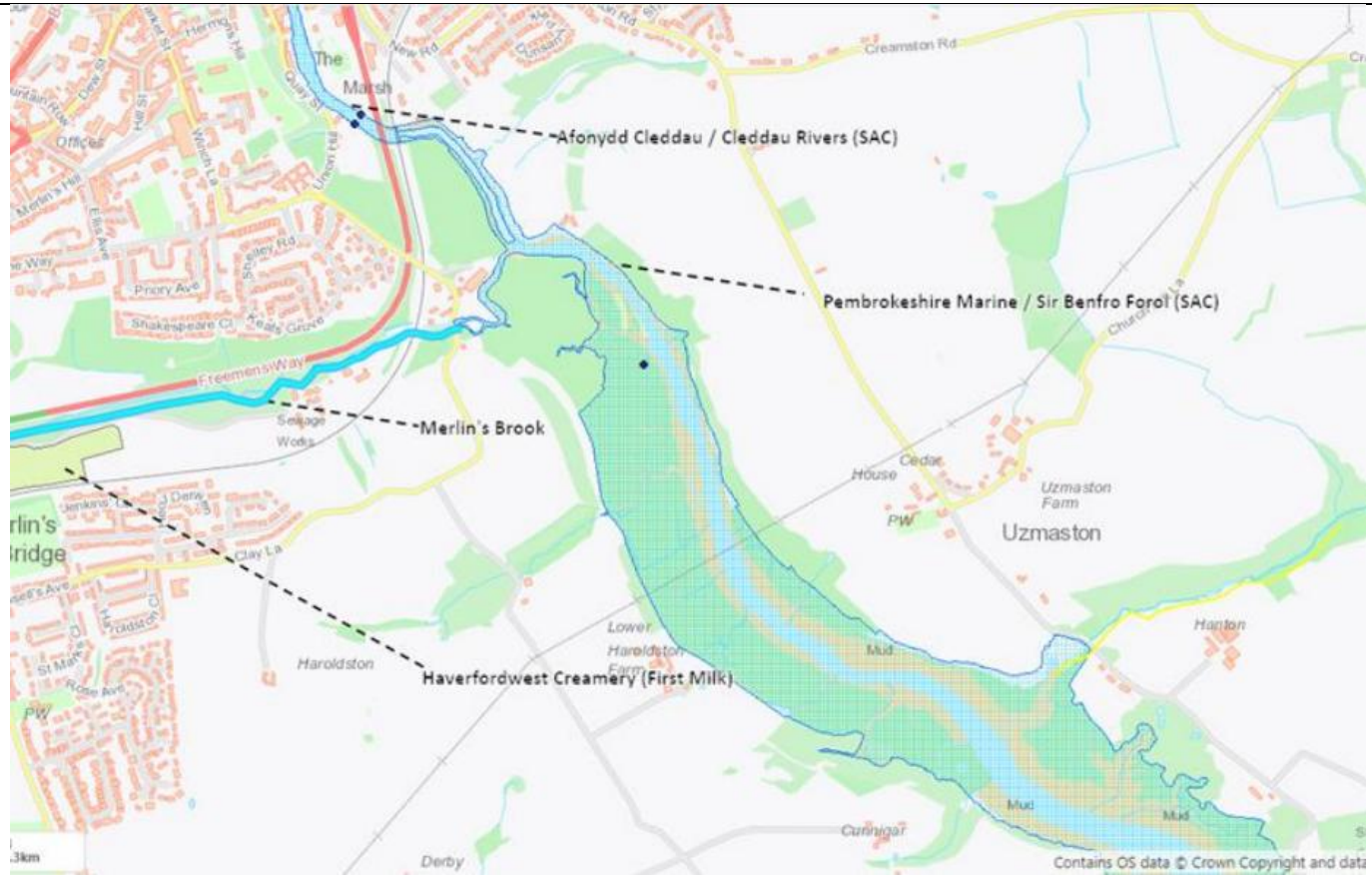

Figure 1 - Location of Pembrokeshire Marine / Sir Benfro Forol and Afonydd Cleddau/ Cleddau Rivers Special Area of Conservation relative to the installation and Merlin's Brook

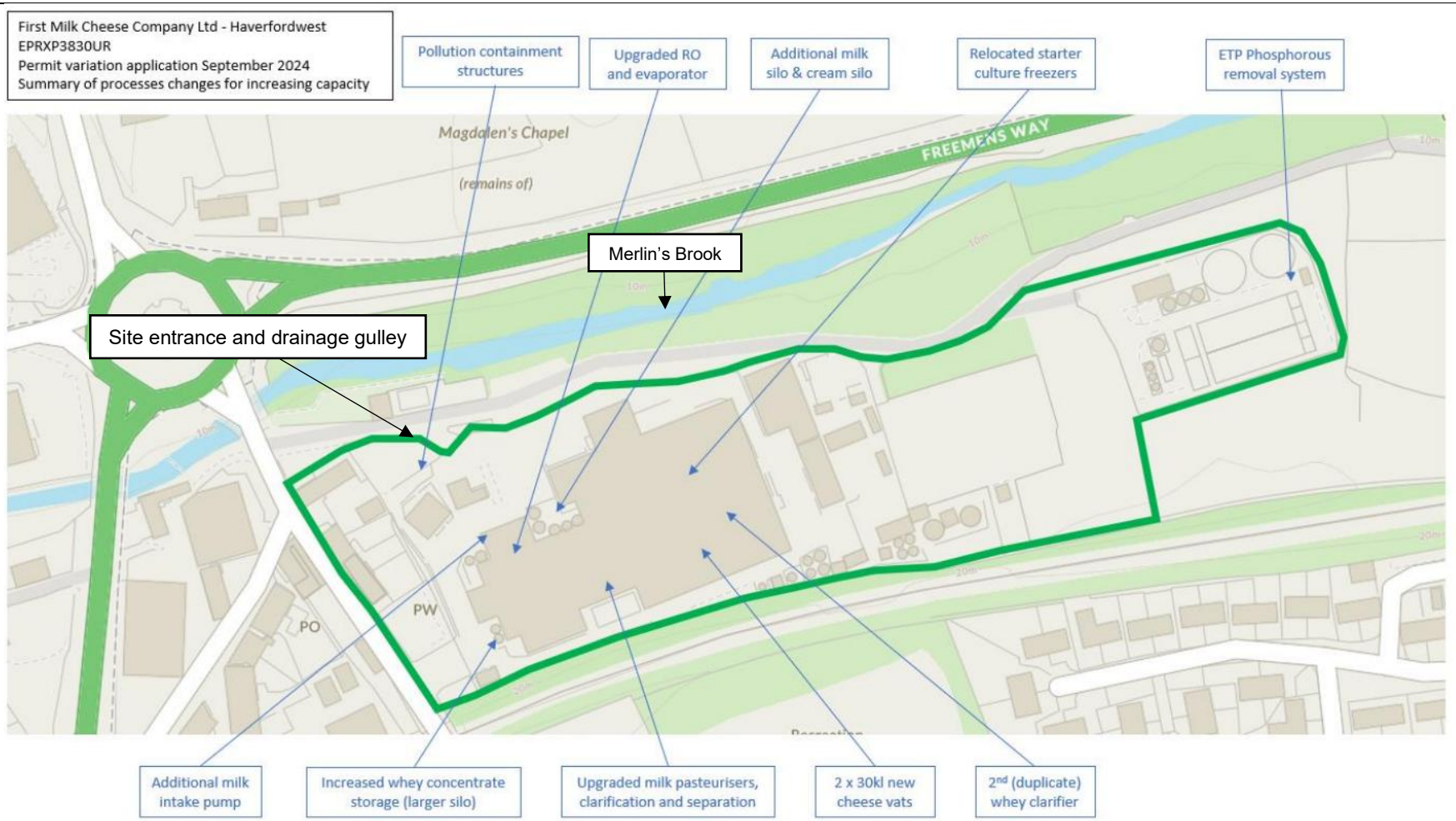

Figure 2 - Site Plan with summary of proposed changes and proximity to Merlin's Brook

3.2.2 Screening for likelihood of significant effect

Table 3.2.2 Screening assessment			
Designated site feature	**Relevant conservation objectives**	**Screening conclusion – 'SCREEN OUT', 'SCREEN IN' or 'IN COMB'**	**Explanation**
European site name: SAC – Pembrokeshire Marine / Sir Benfro Forol			
1160 Large shallow inlets and bays ***1.12 Estuarine & intertidal habitats*** 1130 Estuaries ***1.12 Estuarine & intertidal habitats***	Pembrokeshire Marine Regulation 37 Report – June 2025 – Advice provided by Natural Resources Wales in fulfilment of Regulation 37(3) of the Conservation of Habitats and Species Regulations 2017 Location of features: Pembrokeshire Marine non-interactive A3 map – 23/11/16	SCREEN IN	Site located within 10 km (down river) from discharge point. There are several key species covered by this habitat that can be potentially impacted. Toxic contamination In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to this feature. The substances (milk, cream and whey) have a high BOD and nutrient content. Therefore the impacts from toxic contamination cannot be ruled out at this stage. PAC dosing system: If the ETP PAC dosing is not managed appropriately then the level of Aluminium in the wastewater discharge entering the Western Cleddau river and SAC, could exceed recommended levels. Al is toxic to fish and can accumulate in sediment and the food chain, causing habitat degradation. However, the PAC dosing system is designed to avoid this Aluminium exceedance (and reduce Phosphorus levels) with no change to permit limits. Therefore, toxic contamination from this source can be ruled out. In addition, the design of the PAC system includes it being placed within the existing ETP containment system (as well as the container

1140 Mudflats and sandflats (not covered by seawater at low tide) ***1.12 Estuarine & intertidal habitats***			itself being bunded) which drains back to the head of the works. In theory if this containment is adequate, there is no credible pathway from spills to enter surface waters, however, there is still some risk that the existing ETP containment system is not of sufficient integrity. However, this would be tertiary containment of the PAC IBC (although secondary for the pipework). The site already undertakes annual CCTV surveys, as well as more recent additional survey work. Compliance related to ETP containment and drainage integrity is being followed up by the Industry Regulation site officers as a wider site issue, so is deemed outside the scope of this variation. Therefore, toxic contamination from this source can be ruled out. Nutrient enrichment In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to this feature. Therefore the impacts from Nutrient Enrichment cannot be ruled out at this stage. Smothering Milk and cream have a very high biological oxygen demand. In the event of a spill into the watercourse the high BOD can lead to smothering of aquatic species. In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to this feature. Therefore, this impact pathway cannot be ruled out at this stage. Changes in salinity regime Release of milk, cream and whey are unlikely to alter the salinity regime of the watercourse, so no realistic mechanism of effect. Changes in thermal regime Not a realistic mechanism of effect, as it is expected that milk, cream and whey would be at ambient temperature on entry to the SAC. Turbidity Discharge of milk, cream and whey can lead to turbidity through reduction of light and suspension of substances (cream and whey). In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is
1170 Reefs ***1.12 Estuarine & intertidal habitats*** ***1.13 Submerged marine habitats***			
1330 Atlantic salt meadow *Glauco-Puccinellietalia maritimae* (ASM) ***1.12 Estuarine & intertidal habitats***			

			hydrologically connected to this feature. Therefore, this impact pathway cannot be ruled out at this stage. Siltation The discharge is unlikely to be of a significant flow rate to disturb the river bed to cause siltation. The discharge would also unlikely to carry large particles that could deposit causing siltation. Therefore, no realistic mechanism of effect. Habitat loss & Physical Damage No impact pathway. The proposal is unlikely to cause physical damage resulting in habitat loss.
1150 Coastal lagoons *Priority feature ***1.11 Coastal Habitats (sensitive to abstraction)***		SCREEN OUT	No impact pathway This feature of the SAC is not located within 10 km downstream of the proposed site and location o f discharge points.
8330 Sea caves (submerged or partially submerged) ***1.13 Submerged marine habitats***		SCREEN OUT	No impact pathway This feature of the SAC is not located within 10 km downstream of the proposed site and location of discharge points.
1110 Sandbanks (which are slightly covered by sea water all the time) ***1.13 Submerged marine habitats***		SCREEN OUT	No impact pathway This feature of the SAC is not located within 10 km downstream of the proposed site and location of discharge points.
1364 Grey seal *Halichoerus grypus* ***2.12 Marine Mammals***		SCREEN IN	Toxic contamination In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to the SAC. The substances (milk, cream and whey) have a high BOD and nutrient content. Therefore impacts from toxic contamination cannot be ruled out at this stage. PAC dosing system: If the ETP PAC dosing is not managed appropriately then the level of Aluminium in the wastewater discharge entering the Western Cleddau river and SAC, could exceed recommended levels. Al is toxic to fish so could cause a decline in the fish population and available food

			source for the grey seal. As well as there being potential direct toxic effects through dietary exposure. However, the PAC dosing system is designed to avoid this Aluminium exceedance (and reduce Phosphorus levels) with no change to permit limits. Therefore, toxic contamination from this source can be ruled out. In addition, the design of the PAC system includes it being placed within the existing ETP containment system (as well as the container itself being bunded) which drains back to the head of the works. In theory if this containment is adequate, there is no credible pathway from spills to enter surface waters, however, there is still some risk that the existing ETP containment system is not of sufficient integrity. However, this would be tertiary containment of the PAC IBC (although secondary for the pipework). The site already undertakes annual CCTV surveys, as well as more recent additional survey work. Compliance related to ETP containment and drainage integrity is being followed up by the Industry Regulation site officers as a wider site issue, so is deemed outside the scope of this variation. Therefore, toxic contamination from this source can be ruled out. Changes in salinity regime Release of milk cream and whey are unlikely to alter the salinity regime of the watercourse, so no realistic mechanism of effect. Changes in thermal regime Not a realistic mechanism of effect, as it is expected that milk, cream and whey would be at ambient temperature on entry to the SAC. Turbidity Discharge of milk, cream and whey can lead to turbidity through re duction of light and suspension of substances (cream and whey). In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to this feature. Therefore, this impact pathway cannot be ruled out at this stage. Physical Damage No impact Pathway - The proposal is unlikely to cause physical damage to the seals. Disturbance (noise)

			No impact pathway – as noise not associated with accidental spills.
1102 Allis Shad *Alosa alosa* and 1103 Twaite shad *Alosa fallax* ***2.5 Anadromous fish***		SCREEN IN	Toxic contamination In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to this feature. The substances (milk, cream and whey) have a high BOD and nutrient content. Therefore the impact from toxic contamination (e.g. fish kill) cannot be ruled out at this stage. PAC dosing system: If the ETP PAC dosing is not managed appropriately then the level of Aluminium in the wastewater discharge entering the Western Cleddau river and SAC, could exceed recommended levels. Al is toxic to fish and could cause a decline in their population. However, the PAC dosing system is designed to avoid this Aluminium exceedance (and reduce Phosphorus levels) with no change to permit limits. Therefore, toxic contamination from this source can be ruled out. In addition, the design of the PAC system includes it being placed within the existing ETP containment system (as well as the container itself being bunded) which drains back to the head of the works. In theory if this containment is adequate, there is no credible pathway from spills to enter surface waters, however, there is still some risk that the existing ETP containment system is not of sufficient integrity. However, this would be tertiary containment of the PAC IBC (although secondary for the pipework). The site already undertakes annual CCTV surveys, as well as more recent additional survey work. Compliance related to ETP containment and drainage integrity is being followed up by the Industry Regulation site officers as a wider site issue, so is deemed outside the scope of this variation. Therefore, toxic contamination from this source can be ruled out. Nutrient Enrichment In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to this feature. Therefore the impact from Nutrient Enrichment cannot be ruled out at this stage. Acidification
1099 River lamprey *Lampetra fluvaitilis* and 1095 Sea lamprey *Petromyzon marinus* ***2.5 Anadromous fish***			

			Milk, whey and cream are only mildy acidic and would be rapidly neutralised in the receiving water, so there is no realistic mechanism of effect. Changes in salinity regime Release of milk cream and whey are unlikely to alter the salinity regime of the watercourse, so no realistic mechanism of effect. Changes in thermal regime Not a realistic mechanism of effect, as it is expected that milk, cream and whey. Turbidity Discharge of milk, cream and whey can lead to turbidity through re duction of light and suspension of substances (cream and whey). In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to this feature. Therefore, this impact pathway cannot be ruled out at this stage. Siltation The discharge is unlikely to be of a significant flow rate to disturb the river bed to cause siltation. The discharge would also be unlikely to carry large particles that could cause siltation. Therefore no realistic mechanism of effect. Habitat loss & Physical Damage No impact pathway. The proposal is unlikely to cause physical damage resulting in habitat loss. Entrapment All changes associated with the proposal will occur on land within the installation boundary, so there is no likelihood of fish entrapment occurring as a result.
1355 Otter *Lutra lutra* ***2.9 Mammals of riverine habitats***		SCREEN IN	Toxic contamination In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to the SAC. The substances (milk, cream and whey) have a high BOD and nutrient content. Therefore impacts from toxic contamination cannot be ruled out at this stage.

			PAC dosing system: If the ETP PAC dosing is not managed appropriately then the level of Aluminium in the wastewater discharge entering the Western Cleddau river and SAC, could exceed recommended levels. Al is toxic to fish so could cause a decline in the fish population and available food source for the otter. As well as there being potential direct toxic effects through dietary exposure. However, the PAC dosing system is designed to avoid this Aluminium exceedance (and reduce Phosphorus levels) with no change to permit limits. Therefore, toxic contamination from this source can be ruled out. In addition, the design of the PAC system includes it being placed within the existing ETP containment system (as well as the container itself being bunded) which drains back to the head of the works. In theory if this containment is adequate, there is no credible pathway from spills to enter surface waters, however, there is still some risk that the existing ETP containment system is not of sufficient integrity. However, this would be tertiary containment of the PAC IBC (although secondary for the pipework). The site already undertakes annual CCTV surveys, as well as more recent additional survey work. Compliance related to ETP containment and drainage integrity is being followed up by the Industry Regulation site officers as a wider site issue, so is deemed outside the scope of this variation. Therefore, toxic contamination from this source can be ruled out. Nutrient enrichment In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connect e d to the SAC. Therefore, impacts from Nutrient Enrichment cannot be ruled out at this stage. Acidification Milk, whey and cream are only mildy acidic and would be rapidly neutralised in the receiving water, so there is no realistic mechanism of effect. Changes in salinity regime Release of milk cream and whe y are unlikely to alter the salinity regime of the watercourse, so no realistic mechanism of effect. Changes in thermal regime

			Not a realistic mechanism of effect, as it is expected that milk, cream and whey would be at ambient temperature on entry to the SAC. Habitat Loss & Physical Damage No impact Pathway. The proposal is unlikely to cause physical damage resulting in habitat loss. Entrapment All changes associated with the proposal will occur on land within the installation boundary, so there is no likelihood of otter entrapment occurring as a result. Disturbance (noise) No impact pathway – as noise not associated with accidental spills.
1441 Shore dock *Rumex rupestris* ***2.11 Coastal plants***		SCREEN OUT	No impact pathway This feature of the SAC is not located within 10 km downstream of the proposed site and location of discharge points.
European site name: SAC - Afonydd Cleddau / Cleddau Rivers			
1095 Sea lamprey Petromyzon marinus ***2.5 Anadromous fish***	Core Management Plan including Conservation Objectives for Afonydd Cleddau / Cleddau Rivers SAC – V3 Sept 2022 Location: SAC_UK0030074_Summary_Map001	SCREEN IN	Toxic contamination The designated site is upstream from the installation and Merlin's Brook. However Lamprey are mobile features and populations can still be impacted given that the Cleddau is tidal at the point where Merlin's Brook joins it and also that these species are found in the Pembrokeshire Marine SAC, from which they may travel into the Cleddau Rivers SAC. In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct impact pathway to the watercourse (Pembrokeshire Marine SAC) downstream of this designated site that could impact the populations of these fish species. Therefore impacts from toxic contamination cannot be ruled out at this stage. For potential impacts from ETP PAC dosing these will be the same as described in the section on Anadromous fish in the Pembrokeshire Marine SAC above. Nutrient enrichment In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct impact pathway to the watercourse (Pembrokeshire Marine SAC) downstream of this
1099 River lamprey *Lampetra fluviatilis* ***2.5 Anadromous fish***			

			designated site that could impact the populations of these fish species. Therefore the impacts from nutrient enrichment cannot be ruled out at this stage and it is noted that the Cleddau Rivers SAC is sensitive to phosphate inputs. Acidification Milk, whey and cream are only mildy acidic and would be rapidly neutralised in the receiving water, so there is no realistic mechanism of effect. Changes in salinity regime Release of milk cream and whey are unlikely to alter the salinity regime of the watercourse, so no realistic mechanism of effect. Changes in thermal regime Not a realistic mechanism of effect, as it is expected that milk, cream and whey would be at ambient temperature on entry to the SAC. Habitat Loss & Physical Damage No impact Pathway. The proposal is unlikely to cause physical damage resulting in habitat loss. Turbidity Discharge of milk, cream and whey can lead to turbidity through reduction of light and suspension of substances (cream and whey). In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's Brook which is hydrologically connected to this feature. Therefore, this impact pathway cannot be ruled out at this stage. Siltation The discharge is unlikely to be of a significant flow rate to disturb the river bed to cause siltation. The discharge would also unlikely to carry large particles that could deposit causing siltation. Therefore no realistic mechanism of effect. Entrapment No impact pathway. All changes associated with the proposal will occur on land within the installation boundary, so there is no likelihood of otter entrapment occurring as a result.

1096 Brook lamprey *Lampetra planeri* ***2.6 Non-migratory fish & invertebrates of rivers***		SCREEN IN	As above. In addition: Smothering Milk and cream have a very high biological oxygen demand. In the event of a spill into the watercourse the high BOD can lead to smothering of aquatic species. In the event of a catastrophic failure of the primary containment for milk, cream and whey there is a direct pathway to Merlin's brook which is hydrologically connected to this feature. This could impact the populations of these designated features. Therefore, this impact pathway cannot be ruled out at this stage.
1163 Bullhead *Cottus gobio* ***2.6 Non-migratory fish & invertebrates of rivers***			
1355 European Otter *Lutra lutra* ***2.9 Mammals of riverine habitats***		SCREEN IN	Toxic contamination Nutrient enrichment Although there is not a direct impact pathway to this feature at this location, the Cleddau Rivers SAC flows downstream into the Pembrokeshire SAC and the river itself is tidal at its confluence with Merlin's Brook. As such the loss of containment of milk, cream or/and whey could damage features such as fish that the otter predate downstream from this designated site, which is the principal mode of impact on this species. Therefore, we cannot rule out likelihood of significant affects at this stage. Impact as described in the section on Otter in the Pembrokeshire Marine SAC above. For potential impacts from ETP PAC dosing these will be the same as described in the section on Otter in the Pembrokeshire Marine SAC above. Acidification Changes in salinity regime Changes in thermal regime Entrapment Disturbance noise Habitat Loss and Physical Damage No impact pathways for the same reasons given for this species in the section on Pembrokeshire Marine SAC above.
3260 Watercources of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-*		SCREEN OUT	Toxic contamination Nutrient enrichment Acidification Changes in salinity regime Changes in thermal regime

Batrachion vegetation ***1.3 Riverine Habitats & running waters***			Habitat loss Physical damage Turbidity Siltation No impact pathway. The non-mobile features are located upstream from the site and any discharge
7110 Active raised bogs *Priority feature ***1.2 Bogs & wet habitats***		SCREEN OUT	Toxic contamination Nutrient enrichment Acidification Changes in thermal regime Habitat loss Physical damage Smothering No impact pathway. The non-mobile features are located upstream from the site and any discharge
91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* *Priority feature ***1.1 Fens & wet habitats***		SCREEN OUT	Toxic contamination Nutrient enrichment Smothering Changes in salinity regime Changes in thermal regime Habitat loss Physical damage Turbidity Siltation No impact pathway. The non-mobile features are located upstream from the site and any discharge.

TABLE 3.2.3 Screening decision of the plan or project 'alone'	
~~(a) If the screening conclusion for all features for all sites in Table 3.2.2 is 'SCREEN OUT'~~	**~~The plan or project is not likely to have a significant effect on any European site, and no further consideration under the Habitats Regulations is required in order to determine the approval/application.~~**
(b) If the conclusion for any features in	**The plan or project is likely to have a significant effect on one or more European sites and therefore an appropriate assessment is required.**

Table 3.2.2 is 'SCREEN IN'	
~~(c) If there are no features in Table 3.2.2 that are 'SCREEN IN' and any features that are 'IN COMB'~~	**~~The plan or project is not likely to have a significant effect on any European sites when considered alone, but the possibility of significant effects in combination with other plans and projects needs to be considered.~~**

4. Appropriate assessment of the plan or project when considered alone

4.1 Assessment of plan or project as defined

Table 4.1 Appropriate assessment			
European site feature/s	**Description of impacts**	**Assessment in view of conservation objectives**	**Can adverse effect on site integrity be ruled out? 'YES' or 'NO'**
European site name: SAC – Pembrokeshire Marine / Sir Benfro Forol			
Habitats ***1.12 Estuarine & intertidal habitats:*** • 1160 Large shallow inlets and bays, • 1130 Estuaries • 1140 Mudflats and sandflats (not covered	Toxic contamination Nutrient enrichment Smothering Turbidity The main impact pathway from the proposal is the risk of loss of primary containment from the new silos for Whey, Cream and Milk. These substances could then enter the surface water drainage system and Merlin's Brook (located approximately 65 meters from the proposed silos and 38 metres from the site entrance). Merlin's Brook is hydrologically connected to the Western Cleddau (1500	The installation of further milk and cream silos and the increase in size of the whey silo, increases the volume of milk products that could be released. Currently only primary containment is in place. Should this containment fail and a pollution incident occur, milk products could be released into the surface water network and to Merlin's Brook. Milk products have a high BOD and nutrient concentration. This could lead to oxygen depletion and suffocation/toxic contamination of aquatic species, and changing the competitive balance	**YES**

by seawater at low tide) • 1170 Reefs *(also **1.13 Submerged marine habitats**)* • 1330 Atlantic salt meadow *Glauco-Puccinellietalia maritimae* (ASM) ***Species*** ***2.5 Anadromous fish:*** • 1102 Allis Shad *Alosa alosa* • 1103 Twaite shad *Alosa fallax* • 1099 River lamprey *Lampetra fluvaitilis* • 1095 Sea lamprey *Petromyzon marinus* ***2.12 Marine Mammals:*** 1364 Grey seal *Halichoerus grypus* ***2.9 Mammals of riverine habitats:***	meters downstream). Therefore, in the event in loss of containment there is an impact pathway for the released substances (milk, cream and whey) to reach the watercourse. Toxic contamination Milk products are highly toxic towards aquatic life and would result in damage to aquatic life population if they entered the watercourse. Nutrient Enrichment Milk products are very nutrient rich. In the event of loss of containment the site the discharge of milk to the environment could damage the features Smothering Milk and cream have a very high biological oxygen demand. In the event of a spill into the watercourse the high BOD can lead to smothering of aquatic species. Turbidity Discharge of milk, cream and whey can lead to turbidity through reduction of light and suspension of substances (cream and whey). In the event of a catastrophic failure of the primary containment for milk, cream and whey there is an direct pathway to Merlin's Brook which is hydrologically connected to this feature. Mitigation measures: The applicant has undertaken hydraulic modelling to assess the pollution risk from a primary tank failure. Without further containment measures, there would likely be a significant off-site pollution event. Mitigation is in the form of an attenuation pit where spills would flow to. All drainage in the area would flow to the attenuation pit, and any product in the pit would have to be pumped out into the effluent drainage system to the ETP or has the option of tanker collection. These measures have been proposed in line with CIRIA C736 guidance.	towards opportunistic species. In turn, this could have an impact on predator species. However, the applicant has proposed a new containment solution - milk product spills would drain to an attenuation pit, and any product captured would need to be manually pumped out into the effluent drainage system to the ETP or there is the option of it being tankered off. The applicant has proposed the design will meet CIRIA C736 guidance and if built in accordance with this will greatly reduce the risk of release to Merlin's Brook. As part of the proposal there is a flood barrier proposed as part of the containment system, across the north gate entrance. This would be opened during abnormal operations i.e. projects that involve larger vehicles on site that need to use the entrance space to be able to turn around. The applicant stated at a site visit that they have a change management process that would be used to consider project risks, however we have not been provided with a copy. Additional operational procedures to manage the containment system including the flood barrier have not yet been put in place due to being in the design phase. If the containment system is not managed appropriately (e.g. the flood barrier left open and unmanned) then adverse effects could not be ruled out. However, the applicant has stated these procedures will be in place for the operation and ahead of the increase in capacity. There is no secondary containment currently in place and the proposed mitigation will provide a level of protection far greater than currently exists. There is still the risk that once in the effluent drainage system (draining to the attenuation pit or if pumped into the site effluent drainage to the ETP) it could seep into the ground/groundwater through	

1355 Otter *Lutra lutra*	The applicant has stated that these mitigation measures will be in place before the project to increase capacity goes ahead. As part of the Environmental Management System and Operational Procedures there is a maintenance schedule in place including silo crack testing, weekly visual checks, reporting system for leaks and emergency arrangements.	defects in this system. No specific test of the drainage system's integrity has been carried out as part of this project, as the applicant deems the increased capacity will not significantly change the network loading (due to how the production/cleaning cycles will run), so feels there is not a need to carry out an in-depth assessment and would be part of their on-going maintenance/operational activities. They currently carry out annual CCTV drainage surveys and further assessment of the site effluent drainage system is already being undertaken and being followed up by Industry Regulation as part of on-going wider compliance assessment of the site. It is understood that the variation is unlikely to increase this risk. The installation of the attenuation pit, along with ensuring impermeable areas and adequate drainage to it, and the impermeability of the pit itself, will improve the containment situation on the site.	
European site name: SAC - Afonydd Cleddau / Cleddau Rivers			
Species ***2.5 Anadromous fish:*** • 1095 Sea lamprey *Petromyzon marinus* • 1099 River lamprey *Lampetra fluviatilis* ***2.6 Non-migratory fish & invertebrates of rivers:*** • 1096 Brook lamprey	As per the description for Pembrokeshire Marine SAC described in the row above. In addition, the Cleddau Rivers SAC is sensitive to nutrient enrichment from phosphate inputs. Mitigation as detailed for the Pembrokeshire Marine SAC above.	As per the description for Pembrokeshire Marine SAC described in the row above. In addition, the Cleddau Rivers SAC is sensitive to nutrient enrichment from phosphate inputs. Although the Afonydd Cleddau / Cleddau Rivers SAC site is located 300 meters upriver from the Haverfordwest creamery, some of the designated features are mobile and damage to the designated sites down stream of the site could impact the overall population in this SAC upstream of the discharge point where Merlin's Brook enters the Western Cleddau river.	**YES**

Lampetra planeri • 1163 Bullhead *Cottus gobio* ***2.9 Mammals of riverine habitats:*** 1355 European Otter *Lutra lutra*			

4.3 Concluding the appropriate assessment of the plan or project alone

Table 4.3 Conclusion of the appropriate assessment alone	
(a) If Table 4.1, or the right hand column of Table 4.2 if applicable, is 'YES' for all features	**It has been ascertained that the plan or project, when considered alone, will not adversely affect the integrity of any European sites.**
~~**(b) If there are any 'NO's in the right hand column of Table 4.2**~~	~~**It has not been ascertained that the plan or project, when considered alone, will not adversely affect the integrity of one or more European sites.**~~
(c) Are there are any residual effects of the plan or project (net of mitigation measures) which, though not adverse on their own, could be significant when considered in combination with the effects of other plans or projects?	**NO**. The project does not involve any change to permit limits for water discharges. Therefore, there is no alteration to the existing discharge regime and no new or increased pathway for potential effects on the SACs. As a result, the project will not give rise to likely significant effects, either alone or in combination with other plans or projects. In-combination assessment is not required.

6. Conclusion

HRA is not required because there is no conceivable impact on any European sites. **(As documented in section 2.1)**	
HRA is not required because the whole of the plan or project is directly connected with or necessary to the management of one or more European sites, for the purposes of conserving the habitats or species for which the site(s) is/are designated, and the plan or project is not likely to have a significant effect on any other European sites.	

(As documented in section 2.2 and 2.3)	
This project is a renewal of a current permission which complies with NRW agreed criteria for ruling out likely significant effects of a renewal without conducting a project-specific LSE test. Therefore, it is considered not likely to have a significant effect on any European sites, either alone or in-combination with other plans or projects. **(As documented in section 3.1 of this form)**	
The plan or project has been screened for likelihood of significant effects and is considered not likely to have a significant effect on any European sites. (As documented in section 3.2 of this form, and section 5 if applicable)	
In light of the conclusions of an appropriate assessment it has been established that the plan or project will not adversely affect the integrity of any European sites, taking into account any conditions or restrictions as applicable, either alone or in-combination with other plans or projects. **(As documented in section 4 of this form, and section 5 if applicable)**	**X**
In light of the conclusions of the appropriate assessment, it has <u>not</u> been ascertained that the plan or project will not adversely affect the integrity of any European sites, as documented in section 4 of this form, and section 5 if applicable. **Approval for the plan or project <u>cannot</u> be given unless either:** • **the plan or project specification, and/or the terms under which it might be approved, are modified so as to remove the risk of adverse effects, and a revised HRA is prepared, or** • **the plan or project (not being an SSSI consent*) satisfies the requirements for a derogation and a Derogation Notice is prepared and submitted for consideration by the appropriate authority, normally Welsh Ministers** **(*SSSI consents cannot be given as derogations)**	
Signed: E Ingram **Name: Emily Ingram** **Position: Lead Specialist Permitting Officer** **Date: 14/05/2026**	
Was this HRA conclusion an escalated decision? YES or NO	**NO**

7. Consultation with the ANCB and how sections 2, 3, 4 and 5 of this HRA report (as applicable) take into account that advice.

Relevant section of the HRA report	Correspondence and/or meetings with the ANCB	Description of how the comments from the ANCB have been taken into account
2 **3** **4** **5**	ANCB response to HRA consultation: agree with the content and conclusions of the draft and have no further comments to make. From: Mair Rees, date: 13/05/26, available in document: "OGN200 Form 3 ANCB internal advice cons MR". Available on the internal DMS here.	HRA finalised as-is due to agreement with conslusions of the draft.

9. Appendix - Supporting information

These documents are contained within the DMS folder - EPR-XP3830UR

Past advice from Pembrokeshire Environment team on PAN-019159 – permit variation refusal based on lack of containment https://cyfoethnaturiolcymru.sharepoint.com/:u:/r/teams/Regulatory/Permitting/SW%20EPR%20Regulated%20Industry/EPR-XP3830UR/Enviroment%20team%20response%20Habitats%20regulatory%20assessment%20for%20permit%20variation%20PAN.msg?csf=1&web=1

(App2) RAB - 24-07-02 First Milk WPM Report Issue 01 (initial spill modelling and containment conceptual design) - https://cyfoethnaturiolcymru.sharepoint.com/teams/Regulatory/Permitting/SW%20EPR%20Regulated%20Industry/EPR-XP3830UR/PAN-027140%20-%20Application%20Variation%20email%201%20of%202.msg

24-139-20B Effluent Attenuation Design (detailed design) - https://cyfoethnaturiolcymru.sharepoint.com/teams/Regulatory/Permitting/SW%20EPR%20Regulated%20Industry/EPR-XP3830UR/PAN-027140%20Schedule%205_310326_AttentuationPitDrawing.msg

RAB - First Milk Haverfordwest – Water Pollution Management Technical Note v1 (update of spill modelling based on detailed design) – https://cyfoethnaturiolcymru.sharepoint.com/teams/Regulatory/Permitting/SW%20EPR%20Regulated%20Industry/EPR-XP3830UR/PAN-027140%20Schedule%205%20Response_ContainmentModellingUpdate.msg