


## Annex (iv) – SSSI Assessment Form

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| <p><b>SSSI Assessment for permit/licence and deployment applications</b></p>  |  |
| <p>To be completed by Permitting Officers for any applications for a permission which Natural Resources Wales has considered under S28I duty to notify SNCB and take their advice into account. This applies to all proposed permissions within a SSSI, and to operations outside the SSSI boundary which are likely to damage its special features.</p> <p>NRW as a Section 28G authority has, when exercising its functions, a general duty to take reasonable steps, consistent with the proper exercise of its functions, to further the conservation and enhancement of the flora, fauna or geological or physiological features by reason of which the site is of special interest'</p> <p>Part 1 – SSSI Assessment<br/>         Part 2 – Formal notification to SNCB (to be completed if part 1 assessment concludes likely damage, not likely to damage because of conditions or you cannot conclude no likely damage)<br/>         Part 3 – Decision</p> |   |

### Part 1 – SSSI Assessment

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| 1. Permitting officer/team  | Emily Ingram<br>Installations and RSR Permitting  |
| 2. Permit application reference and site name                                 | PAN-027140 (EPR/XP3830UR/V007) Haverfordwest Creamery   |
| 3. a. SSSI name(s)<br>b. location<br>c. NRW Operational Area/Environment Team | <p>a. Afon Cleddau Gorllewinol / Western Cleddau River<br/>           b. National Grid Reference: SM867308 to SM958153<br/>           c. South West Wales – Pembrokeshire Environment Team (Lead Officer: Ross Grisbrook)</p> <p>a. Gas Works Lane Section (Haverfordwest)<br/>           b. National Grid Reference: SM 958154<br/>           c. South West Wales – Pembrokeshire Environment Team (Lead Officer: Chris Lawrence)</p> <p>a. Milford Haven Waterway<br/>           b. National Grid Reference: SM830040 - SM960120<br/>           c. South West Wales – Pembrokeshire Environment Team (Lead Officer: Chris Lawrence)</p> |

4. Brief description of proposal

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 and increase in size of milk product storage. 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. No secondary containment for external silos / primary containment exists currently. 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 containment system consists of impermeable areas, external site walls raised and a flood barrier placed across the north gate entrance with all drainage going to an attenuation pit (which requires pumping out into the effluent drainage system). The flood barrier will only be open for abnormal operations e.g. projects where larger vehicles need to use the opening to turn around.

Improvements are also 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 ETP 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. There is no change to permit limits proposed.

There is no change to air emissions as a result of the variation, apart from bringing into regulation existing Medium Combustion Plant, in line with MCPD requirements.

The site is located close to Merlin's Brook which feeds the Western Cleddau river, part of the Milford Haven Waterway SSSI. The site has two water discharge points, W1 surface water discharge point enters Merlin's Brook and W2 is an effluent discharge point from the site's Effluent Treatment Works. W2 directly enters the Milford Haven Waterway SSSI. The Western Cleddau River SSSI is upstream of the discharges. The Gas Works Lane Section (Haverfordwest) SSSI is not hydraulically linked / a geological feature.

Application documents can be accessed Internal on the DMS [here](#).

Figure 1 – proximity of installation to SSSIs  
**Haverfordwest**

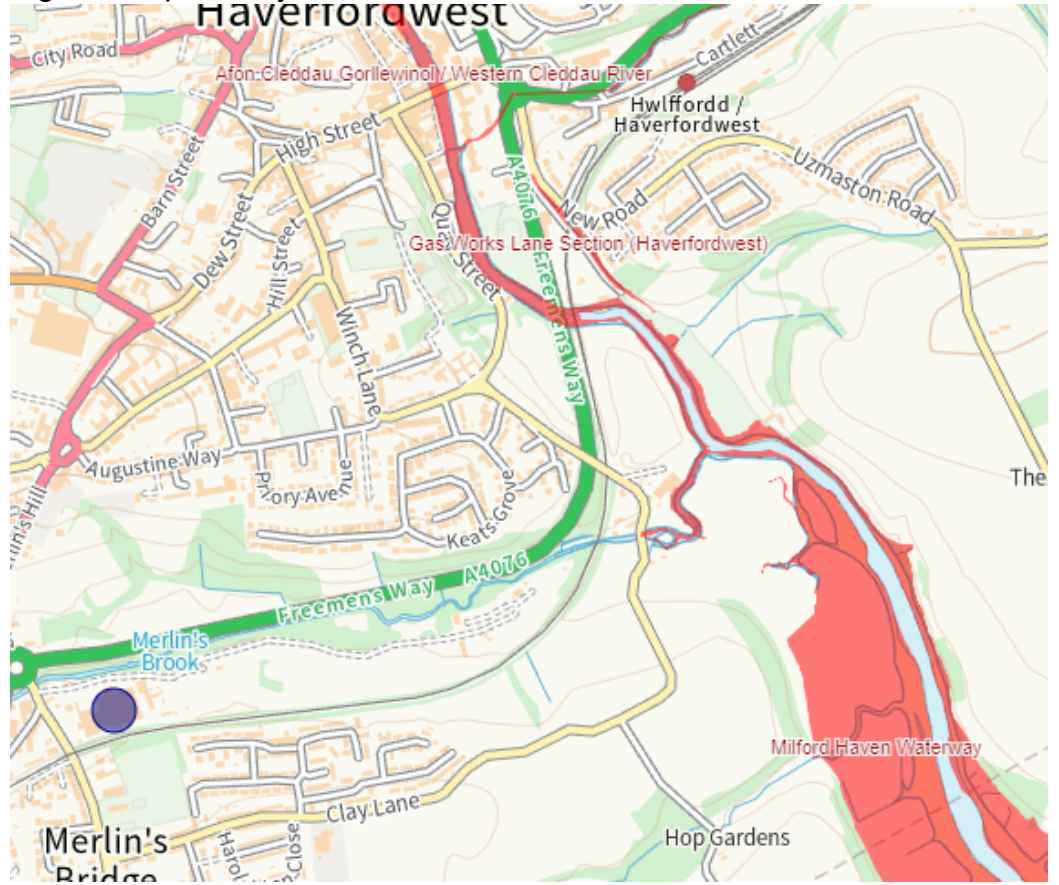
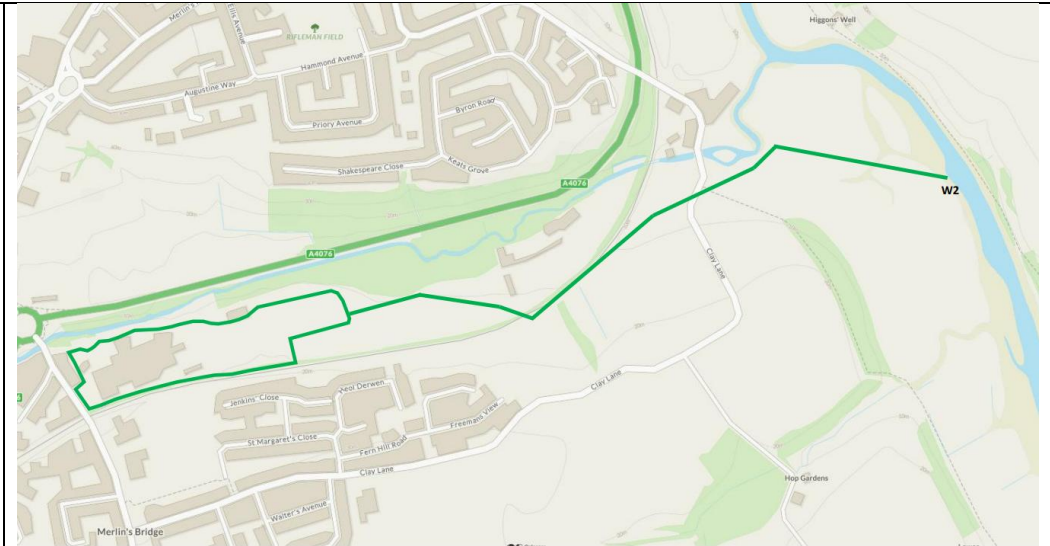


Figure 2: Site boundary and emission points (including W1)



Figure 3: Site boundary and emission points (including W2)



5. What aspects of the proposed permission are likely to damage the SSSI features of special interest?

1. Western Cleddau River: The “list of operations” requiring consent includes “ref 7 – dumping, spreading or discharging of any materials”. There is a risk of discharge to the Western Cleddau river of milk product from a catastrophic spill into Merlin’s Brook (a tributary) near the installation or Polyaluminium Chloride from PAC dosing operations directly into the Western Cleddau river from the W2 discharge point. These discharges would be downstream of the Western Cleddau River SSSI and part of the Milford Haven Waterway SSSI. However, there would be an impact on mobile species such as fish and otter.
2. Gas Works Lane Section (Haverfordwest): There are no activities likely to cause damage.
3. Milford Haven Waterway: There are no activities likely to cause damage that fall under the SSSI “list of operations”, however, there is a risk of discharge to the Western Cleddau river of milk product from a catastrophic spill into Merlin’s Brook (a tributary) near the installation or Polyaluminium Chloride from PAC dosing operations directly into the Western Cleddau river from the W2 discharge point.

The following SSSI(s) features and potential impacts have been considered to assess the likelihood of damage:

1. Western Cleddau River
  - River habitats including water crowfoot habitat
  - Associated riverside habitats (including semi-natural broadleaved woodland, scrub, marshy grassland, swamp and mire)
  - Otter
  - Fish (bullhead, brook lamprey, river lamprey, sea lamprey)
2. Gas Works Lane Section (Haverfordwest)
  - Silurian sedimentary rocks exposed in a road cutting

### 3. Milford Haven Waterway

- Estuaries (contains all shore types and communities)
- Specialised marine habitats (including eelgrass beds, rockpools, overhangs and underboulder communities)
- Sand grapers and bristle worms in muddy gravel shores
- Bristle worms in poorly sorted mixed sediment shores
- Bristle worms in variable salinity muddy gravel shores
- Serrated wrack, sponges and sea-squirts on tide-swept lower mid-shore rock
- Serrated wrack with sponges, sea-squirts and red seaweeds on tide-swept lower mid-shore mixed substrata
- Kelp, sea-squirts and sea mats on tide-swept subtidal fringe rock
- Oyster beds on shallow subtidal muddy sediment
- Saltmarsh (including Atlantic salt meadows)
- Reedbeds
- Semi-natural ancient woodland
- Saline lagoons
- Marsh pea
- Spurge-laurel
- Wayfaring tree
- Dwarf eelgrass
- Assemblage of coastal flowering plants
- Assemblage of saltmarsh and intertidal flowering plants
- Assemblage of mosses and liverworts
- Assemblage of nationally rare and scarce lichens
- Shelduck
- Wigeon
- Teal
- Curlew
- Dunlin
- Little grebe
- Otter
- Tentacled lagoon worm
- Brown hair-streak butterfly
- Assemblage of saltmarsh invertebrates
- Greater horseshoe bats
- Lesser horseshoe bats
- Geology: Non-marine Devonian - Little Castle Head

Mechanisms of impact:

Toxic contamination

Nutrient enrichment

Smothering

Turbidity

### **Scenario A: catastrophic release of milk products**

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 at 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 the smothering of species.

Turbidity – discharge of milk, cream and whey can lead to turbidity through reduction of light and suspension of substances (cream and whey).

Mitigation: The applicant has proposed a containment solution for the site in line with CIRIA C736, which would mitigate the risk of release to the watercourse. No further capacity increase will be allowed until it is in place. There are already permit conditions in place that state:

*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.*

*3.2.3 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.*

### **Scenario B: ETP releases high level of Aluminium**

Toxic contamination – if the ETP PAC dosing is not managed appropriately then the level of Aluminium in the wastewater discharge entering the Western Cleddau river, could exceed recommended levels. Al is toxic to fish and could cause a decline in their population, and resultant impact on other species that prey on them such as otters.

Mitigation: The PAC dosing system is designed to avoid this Aluminium exceedance (and reduce Phosphorus levels) with no change to permit limits requested as part of the variation. Therefore, toxic contamination from this source is unlikely. There are already permit conditions that state:

*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.*

*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.*

### **Overall Conclusion**

The applicant's mitigation (site containment system that meets CIRIA C736 and PAC dosing that demonstrates BAT) is planned to be in place before the proposed activities take place, resulting in them not likely to damage the SSSI. There are existing permit conditions in place

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| <p>that stipulate management of risks including from spills / pollution. In addition to this, the use of Improvement Conditions are being considered and will be agreed with Industry Regulation to ensure once built the containment system meets the proposed (CIRIA best practice) design and environmental management procedures are put in place to manage it appropriately i.e. inspection, maintenance, operation.</p> |   |
| <p>6. Summary of any informal advice received from internal experts (if required and including pre-app advice)</p>  | <p>N/A</p>  |
| <p>7. Recommendation</p>  | <p>The proposed permission is <b>not likely to damage</b> any of the flora, fauna or geological or physiological features which are of special interest at:</p> <p style="text-align: center;"><b>1. SSSI Gas Works Lane Section (Haverfordwest)</b></p> <p>The proposed permission is <b>not likely to damage</b> any of the flora, fauna or geological or physiological features which are of special interest because of <b>conditions</b> at:</p> <p style="text-align: center;"><b>1. SSSI Western Cleddau River</b><br/><b>2. SSSI Milford Haven Waterway</b></p> |
| <p>8. Signature and date assessment made</p>  | <p>E.Ingram<br/>28/04/26</p>  |
| <p>9. Officers name and job title</p>   | <p>Emily Ingram,<br/>Lead Specialist Permitting Officer</p>   |

## Permitting

### Formal Notification under Section 28I of the Wildlife and Countryside Act 1981

Part 2 Formal notification under S28I – To be completed for all permit applications assessed as: not likely to damage because of conditions, likely to damage SSSI and those where we are unable to conclude no likely damage.

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| <p>10. Date Notice of intention to permit activity likely to damage SSSI sent to NRW (SCNB)</p> | <p><b>22/04/26</b></p> <p>We have assessed that PAN-027140 (EPR/XP3830UR/V007) Haverfordwest Creamery is likely to damage Western Cleddau River SSSI and Milford Haven Waterway SSSI and request your formal advice. We have assessed that this damage could be mitigated by including conditions.</p> <p>Information on the permit application can be found in Part 1 of this form and the DMS folder <u><a href="#">EPR-XP3830UR</a></u>.</p> |
| <p>11. Advice received from NRW (SNCB)</p>  | <p>I agree with the conclusions written above and the development should be allowed to proceed providing the proposed mitigation is put in place.</p>   |
| <p>12. Name and job title of conservation/marine officer (sign and date)</p>                    | <p>Mair Rees 13/05/26</p>   |
| <p><b>Part 3 – To record NRW decision following SNCB Advice</b></p>                             |   |
| <p>13. DECISION</p>   | <p>The permission is <b>not likely to damage</b> any of the flora, fauna or geological or physiological</p>   |

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|   | <p>features which are of special interest because of <b>conditions</b></p> <p>Conditions proposed are pre-operational (POC4) and improvement conditions (IC12 and IC13) included as part of the permit variation to ensure containment arrangements are adequate before operating at an increased capacity.</p> |
| 14. Natural Resources Wales (Section 28G Authority) (permitting service) is minded to | <b>Issue the permission with conditions to ensure no damage to SSSI</b>   |
| 15. Is decision in line with advice from SNCB   | Yes   |
| 16. Signature and date assessment completed   | E.Ingram 14/05/26   |
| 17. Officers name and job title   | Emily Ingram, Lead Specialist Permitting Officer  |