CRoW Appendix 4 (140_10_SD02)

CRoW Act 2000: Natural Resources Wales application for permission - Formal Notice

Natural Resources Wales Formal Notice.

Requirements of Section 28I of the Wildlife & Countryside Act 1981 as amended by the Countryside and Rights of Way Act (CRoW) 2000.

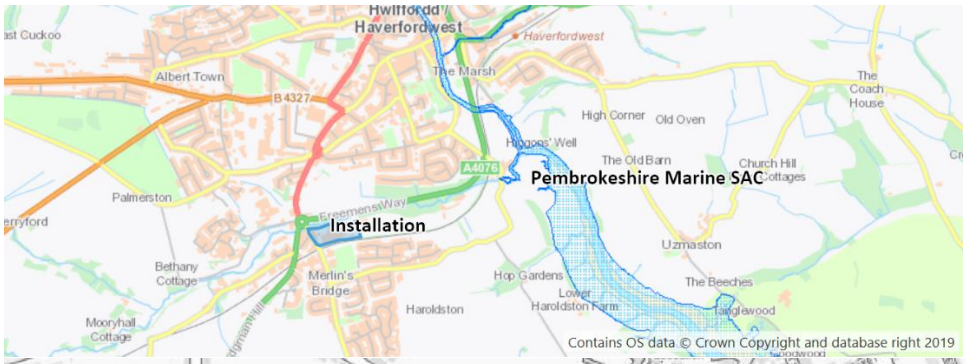
Duty in relation to granting any consent, licence or permit for activities likely to damage Sites of Special Scientific Interest (SSSI).

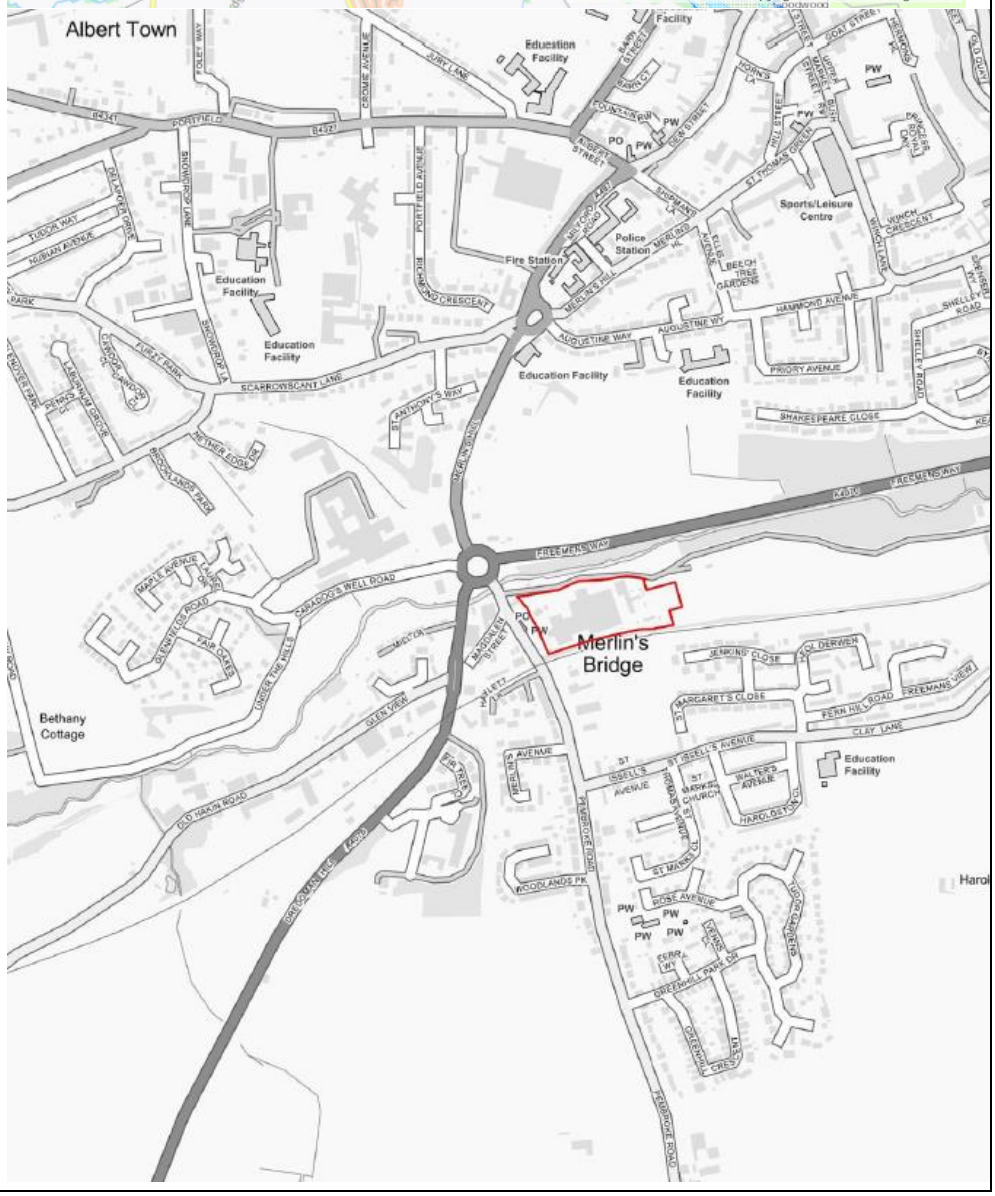
Guide to filling in this form for Natural Resources Wales staff:
To be completed by Permitting Officers for any applications for a permission which the Natural Resources Wales has considered under S28G duties to protect and enhance SSSIs. This applies to all proposed permissions within a SSSI, and to operations outside the SSSI boundary which are likely to damage its special features.
Refer to OI 140_10 'Applying the Countryside and Rights of Way (CRoW) Act 2000 to applications for permits with potential for impact on Sites of Special Scientific Interest (SSSI)', including the flowchart in Appendix 2.

Pink italic text – drafting notes, to be deleted before completion/consultation.
Blue text – examples, to be replaced with permission-specific information.
Ensure you have completed all sections.

1. Natural Resources Wales area/region/NPS hub:	Wales South West – Pembrokeshire Environment Team
2. Name of SSSI:	SSSI Milford Haven Waterway 32WP3 SSSI Gas Works Lane Section (Haverfordwest) 32WSW SSSI Afon Cleddau Gorllewinol / Western Cleddau River 32WML
3. Type of permission:	Environmental Permit Application – Variation to an existing EPR permit
4. Date for Natural Resources Wales permit determination:	26/08/2020
5. Predicted 28 day date for response from NRW conservation/ecology (under S28 I(4)):	***28 days: 25/05/2020***
6. Natural Resources Wales reference no:	PAN-010479

7. National grid reference:	NGR: 194885, 214495





8. Description of proposal:	This is a variation application to an existing installation permit. The First Milk Cheese Company Limited propose to install a Combined Heat and Power (CHP) combustion unit at their existing Haverfordwest Creamery site, the site is already permitted under EPR permit number EPR/XP3830UR. The variation is to add a natural gas fuelled 2.7 MW thermal input CHP unit which will provide heat and power to the other processes on site and enable the creamery to reduce their use of external supplied power. The CHP is classed as a new Medium Combustion Plant (MCP) and an excluded Specified Generator as it is part of an installation as defined in Chapter II of the Industrial Emissions Directive. As a natural gas engine, the primary emissions from the CHP unit are emissions to air of oxides of nitrogen (NOx) and carbon monoxide (CO). The applicant has completed an air emissions risk assessment based on the recognised H1 methodology. In line with current NRW guidance the applicant has completed H1 tool air emissions risk assessment and provided detailed air dispersion modelling for any parameters that did not screen out as insignificant. CO emissions screened out as insignificant through the use of the H1 tool, the applicant has submitted the H1 tool which has been checked by us and we confirm we agree with their conclusion. There are no environmental standards for protected conservation areas for CO therefore it will not be discussed in this Appendix 4 and NOx emissions will be discussed only. Detailed air dispersion modelling has been completed for the NOx emissions as they did not screen out as insignificant in the H1 tool initial screening tests. The detailed air dispersion modelling has been completed at full operational hours (8760 hours per year) and the maximum permitted emission limit value, this provides a conservative approach. There are no changes of emissions to water or ground as part of this variation application.
9. Is the proposed activity within (wholly or partially) the SSSI boundary?	NO
10. Has there been any pre-application discussion or correspondence with NRW conservation/ecology	NO

11. What aspect(s) of the proposed permission may damage the features which are of special interest for the SSSI?

The following 'Operations Requiring Consent' (or other activities associated with the permission) that may cause damage) are relevant to the proposed permission.

Air emissions from the combustion unit. Increased NOx airborne concentrations. Nutrient nitrogen deposition and acid deposition and smothering impacts. There are no discharges to surface water or ground as part of this variation.

The following SSSI features and mechanisms of impact have been considered to assess the likelihood of damage:

This form has been completed using the following docuemnts for reference:

- CCW: Site of Special Scientific Interest: Management Statement Milford Haven Waterway
- Gasworks Lane Section (Haverfordwest) Site of Special Scientific Interest Your Special Site and Its Future
- CCW: Site of Special Scientific Interest: Management Statement Western Cleddau River

SSSI Features

1. SSSI 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

2. SSSI Gasworks Lane Section (Haverfordwest)
- Silurian sedimentary rocks exposed in a road cutting

3. SSSI 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)

Mechanisms of Impact:
Toxic contamination – increased NOx airborne concentration
Nutrient enrichment – nutrient nitrogen deposition from NOx emissions
Acidifcation – acid deposition from NOx emissions
Smothering – from NOx emissions, particulate matter is not a pollutant of concern from natural gas combustion sources

12. Decision

1. SSSI Milford Haven Waterway

Toxic Contamination

NOx: A long-term critical level of 30 µg/m^3 NOx (annual) and short-term critical level of 75 µg/m^3 NOx (daily) have been assumed for SSSI Milford Haven Waterway. The maximum long-term process contribution (PC) is <1 % of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum short-term PC is <10 % of the short-term critical level therefore the short-term impact from NOx emissions can be considered insignificant.

Nutrient Enrichment

The minimum nutrient nitrogen critical load value of 10 kgN/ha/yr has been assumed for SSSI Milford Haven Waterway. The maximum nitrogen deposition process contribution is <1 % of the lower critical load value, therefore long-term nutrient nitrogen enrichment impacts can be considered insignificant.

Acidification

The acid deposition critical load values of 0.856 kEq/ha/yr (Min N), 4.856 kEq/ha/yr (Max N) and 4.0 kEq/ha/yr (Max S) have been assumed for SSSI Milford Haven Waterway. The maximum total acid deposition process contribution is <1 % of the critical load function. Therefore, long term acid deposition impacts can be considered insignificant.

Smothering

See above for impacts from nutrient enrichment and acidification.

2. SSSI Gasworks Lane Section (Haverfordwest)

Toxic Contamination

Feature is not expected to be sensitive to toxic contamination, however assessment has been completed by the applicant therefore is included for completeness.

NOx: A long-term critical level of 30 µg/m^3 NOx (annual) and short-term critical level of 75 µg/m^3 NOx (daily) have been assumed for SSSI Gasworks Lane Section (Haverfordwest). The maximum long-term process contribution (PC) is <1 % of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum short-term PC is <10 % of the short-term critical level therefore the short-term impact from NOx emissions can be considered insignificant.

Nutrient Enrichment

Feature is not expected to be sensitive to nutrient enrichment.

Acidification

Feature is not expected to be sensitive to acidification.

Smothering

Feature is not expected to be sensitive to smothering.

3. SSSI Western Cleddau River

Toxic Contamination

NOx: A long-term critical level of 30 µg/m^3 NOx (annual) and short-term critical level of 75 µg/m^3 NOx (daily) have been assumed for SSSI Western Cleddau River. The maximum long-term process contribution (PC) is <1 % of the long-term critical level therefore long-term impact from NOx emissions can be considered insignificant. The maximum short-term PC is <10 % of the short-term critical level therefore the short-term impact from NOx emissions can be considered insignificant.

Nutrient Enrichment

The minimum nutrient nitrogen critical load value of 8 kgN/ha/yr has been assumed for SSSI Western Cleddau River. The maximum nitrogen deposition process contribution is <1 % of the lower critical load value, therefore long-term nutrient nitrogen enrichment impacts can be considered insignificant.

Acidification

The acid deposition critical load values of 0.223 kEq/ha/yr (Min N), 0.756 kEq/ha/yr (Max N) and 0.39 kEq/ha/yr (Max S) have been assumed for SSSI Western Cleddau River. The maximum total acid deposition process contribution is <1 % of the critical load function. Therefore, long term acid deposition impacts can be considered insignificant.

Smothering

See above for impacts from nutrient enrichment and acidification.

Conclusion:

i) The proposed permission is **not likely to damage** any of the flora, fauna or geological or physiological features which are of special interest at **SSSI Milford Haven Waterway.**

i) The proposed permission is **not likely to damage** any of the flora, fauna or geological or physiological features which are of special interest at **SSSI Gasworks Lane Section (Haverfordwest).**

i) The proposed permission is **not likely to damage** any of the flora, fauna or geological or physiological features which are of special interest at **SSSI Western Cleddau River.**

Natural Resources Wales is minded to:
Issue the permission

13. Name and job title of Natural Resources Wales officer:	Rebecca Williams Permitting Officer, Installations & RSR
14. Date form sent to NRW conservation/ecology	28/05/2020
For Natural Resources Wales use only, once NRW conservation/ecology response received	
15. NRW conservation/ecology comment on assessment:	*Please delete as appropriate:* i) NRW conservation/ecology advise the operation can go ahead ii) NRW conservation/ecology advise the operation can go ahead with conditions iii) NRW conservation/ecology advise against permitting the operation Please ensure that the NRW conservation/ecology response is attached to this Formal Notice.
16. Name and job title of NRW conservation/ecology officer:	Chris Lawrence (Senior Officer – Pembrokeshire Environment Team) 
17. Date of receipt of NRW conservation/ecology response:	19/06/2020