



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/Bridgend
2. Name of SSSI:	Cefn Cribwr Grasslands SSSI Penycastell SSSI
3. Type of permission:	Application for a new bespoke environmental Permit (Anaerobic Digestion Facility – Installation)
4. Date for Natural Resources Wales permit determination:	05/04/2016
5. Predicted 28 day date for response from NRW conservation/ecology (under S28 I(4)):	Filed for audit
6. Natural Resources Wales reference no:	PAN000099
7. National grid reference:	SS 84224 79991

8. Description of proposal:	Agrivert Limited is applying for an environmental permit to operate the Parc Stormy Anaerobic Digestion (AD) Facility at Stormy Down, Porthcawl, Bridgend, CF33 4RS. The NGR for the main emission point to air is as stated in the National Grid Reference row above. The proposed site currently comprises previously developed and unused land and is to be located within the Parc Stormy part of the former RAF Stormy Down air base in Bridgend. Current operations on the wider site include cement production and the production of renewable energy generation through solar photo-voltaic panels and an application has recently been approved for a 105m high wind turbine at the site. The site is bounded by arable farmland to the south and the west. There is a former quarry to the North and an operational limestone quarry to the west. The facility will process and manage up to 75,000 tonnes of biodegradable organic waste per annum (including process liquids). The facility will comprise the following elements: • 2 x primary & 2 x secondary digester tanks • 1 x storage tank • Pumping containers • 3 x pasteurisation units • 2 x CHP units with associated ancillary equipment • Silage clamp • Reception building • Bio filter • Site office For most of the year it is anticipated that there will be 30 HGV movements per day with up to 60HGV movements during the busiest periods. The capacity at the facility will be met primarily with food waste being collected from households in the local area as well as Carmarthenshire, Ceredigion and Pembrokeshire. The facility allows authorities flexibility to collect segregated wastes. A small quantity of silage will be delivered to the facility each year for use as an energy crop. This is required to help balance the digester biology. Liquid wastes will include compost leachate, waste cooking oils, drinks manufacturing waste and rainfall collected from on-site water attenuation and the harvesting of rain water that falls on the roof of the reception building. The biogas produced from the waste material will be fed through gas engines, which generate electricity. The electricity is transmitted directly into the national grid via a high voltage connection. It is anticipated that the facility will generate in the region of 28GWh of electricity per annum, which is the equivalent power for 6240 households in addition to that used for the operation of the AD facility itself. Site location maps are located at the end of this document.
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: 1. Dumping, spreading or discharging of any materials. The following SSSI features and mechanisms of impact have been considered to assess the likelihood of damage: 1. <i>Potential for deposition of NO_x, and acidification on the main features within the SSSI's.</i>	

12. Decision

The proposed permission is **not likely to damage** any of the special interest features of Penycastell SSSI and Cefn Cribwr Grasslands SSSI.

Penycastell SSSI is not sensitive to acidification therefore no critical loads for acidification are applied to this site. A NO₂ deposition velocity of 1.5mm/s has been applied to this site. Ancient woodland sites, have a NO₂ deposition velocity of 3mm/s.

At ancient woodland locations and SSSI's, the maximum PC to annual mean NO_x concentrations is 0.8 µg/m³ (2.5% of the relevant assessment level), which occurs at ancient woodland site 3 to the north of proposed facility. At a number of ancient woodland sites the PC from the proposed facility is less than 1% of the relevant assessment level and at these locations no significant effect is anticipated. At locations where the PC is more than 1% of the relevant assessment level, the predicted PEC is less than 70% of the relevant assessment level and as such the proposed facility is not likely to have a significant effect on annual mean NO_x concentrations at ancient woodland locations.

At ancient woodland and SSSI locations, the maximum PC to nitrogen deposition is 0.22 kg N/ha/yr at AW3 (2.2% of the relevant assessment level, in this case the lower critical load). At a number of ancient woodland locations assessed, the PC to nitrogen deposition is less than 1% of the relevant assessment level. The total deposition at Locations AW 1-8, AW13 and AW18-21 exceeds the higher critical load (20 kgN/ha/yr), however this is predominantly due to background deposition rather than the PC from the proposed facility. The total deposition at all other assessed locations is within the higher critical load and therefore no exceedances are predicted.

Regarding locations where the critical load is exceeded and the PC to nitrogen deposition is greater than 1% of the relevant assessment level, discussion have been undertaken between the consultants and the ecologists for the project to determine whether the increase in nitrogen deposition as a result of the proposed facility at these locations would be significant. Following advice from an ecologist the PC has been considered in relation to the background deposition, at each of these locations, the PC increases background levels by 1% or less and as result no significant effects are predicted at these locations. It is therefore unlikely that the proposed facility would have a significant effect on nitrogen deposition at any of the locations assessed. At ancient woodland receptor locations, the PC to acid deposition is greater than 1% of the minimum critical load at all ancient woodland locations assessed with the exception of AW21. However, the increase in acid deposition at ancient woodland sites assessed does not result in any exceedance of the higher critical load and total deposition is less than 70% of the higher critical load at all ancient woodland locations assessed. Therefore, the proposed facility is unlikely to have a significant effect on acid deposition at ancient woodland locations. An assessment of significance has been undertaken based on criteria set out by the EA for industrial facilities. The results of dispersion modelling have shown that the criteria set by the EA are met and that the proposed facility would not have a significant effect on ambient pollutant concentrations, nitrogen deposition or acid deposition at each of the assessed statutorily designated receptors. In addition, no exceedances of air quality limit values or critical loads are predicted as a result of the proposed facility. The EA criteria are not met at all ancient woodland sites assessed, however discussions with the ecologists who undertook the planning application and review of the PC from the proposed facility in relation to background levels have indicated that the proposed facility would be unlikely to have a significant effect on ambient pollutant concentrations, nitrogen deposition and acid deposition at ancient woodland sites within 2km of the proposed facility.

Natural Resources Wales is minded to:
Issue the permission

13. Name and job title of Natural Resources Wales officer:	Saul White Senior Permitting Officer
14. Date form sent to NRW conservation/ecology	N/A
For Natural Resources Wales use only, once NRW conservation/ecology response received	
15. NRW conservation/ecology comment on assessment:	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:	
17. Date of receipt of NRW conservation/ecology response:	

Map View of Site and surrounding Areas of interest

Figure 4: Location of Designated Sites

