Annex (iv) – SSSI Assessment Form

SSSI Assessment for permit/licence and deployment applications	Cyfoeth Naturiol Cymru Natural Resources Wales

Part 1 – SSSI Assessment

1. Permitting officer/team	Jennifer McGuire Lead Specialist Officer, Installations and Radioactive Substances Permitting
2. Permit application reference and site name	Application reference: PAN-025564 Permit number: EPR/AB3095HL Site name: Rhosddu Farm Poultry Unit
3. a. SSSI name(s) b. location c. NRW Operational Area/Environment Team	a. Bryngwyn Hall Stables and Coach House SSSI b. Meifod, Powys c. North Powys Environment Team a. Allt Y Main Mine SSSI b. Allt Y Main c. North Powys Environment Team a. Gweunydd Ty-Brith SSSI b. Deuddwr c. North Powys Environment Team a. Gwern-Y-Brain Dingle SSSI b. Gulsfield c. North Powys Environment Team
4. Brief description of proposal	The site is currently permitted under permit number EPR/AB3095HL for a Section 6.9 A(1)(a) activity (rearing of poultry or pigs intensively in an installation with more than 40,000 places for poultry). The existing permit allows for a maximum of 56,000 free-range laying birds. The operator has submitted an application to increase the permitted number of free-range laying birds from 56,000 to 64,000, representing an increase of 8,000 birds.

	Currently, the site features three houses: two multi-tier (aviary) houses and one flat-deck (perchery) house. To accommodate this increase, the operator has also requested the removal of the existing 16,000-bird flat-deck house, with plans to replace it with a new 24,000-bird multi-tier house. The manure from this new aviary house will be removed via a manure belt twice per week, as opposed to the current method of collecting manure in a deep pit within the flat-deck house. This modification is expected to reduce ammonia and odour emissions, even with the increased bird numbers. Additionally, the operator is requesting an expansion of the site's permit boundary to include an additional field for the birds to range.

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

<u>Gweunydd Ty-Brith SSSI</u>

The following activities are likely to cause damage:
Operations requiring consent for this site include:

6. *Dumping, spreading or discharging of any materials.*

Intensive poultry farming is associated with emissions of ammonia (NH3) to air. This proposal is to increase bird numbers and so the potensial for the impact of increased emissions of ammonia needs to be considered. Any impact from physical disturbance does not need to be considered due to the distance between the installation and the site (approx 3.8km).

The following SSSI(s) features and potential impacts have been considered to assess the likelihood of damage:
The site is designated for dry grassland which is largely dominated by common ben *Agrostis capillaris,* crested dog's-tail *Cynosurus cristatus* and Yorkshire-fog *Holcus lanatus*. There are also a number of other prominent species. The sites features are sensitive to the effects of airbourne ammonia, including nitrogen deposition.

However, the operator has sufficiently demonstrated that the variation will results in a overall reduction in ammonia emissions from the site. The proposal involves swapping out a single tier house (perchery). This house currently houses 16,000 birds and manure is collected within a “deep pit” system where it is collected within the house and cleared out at the end of each cycle (approx 13 months). This house will be replaced with a modern milti-tier house (aviary) where manure is removed regularly from the house via a belt system. Although the new house will house more birds

than the current house (8,000 more), by using a modern manure removal systems, ammonia emissions will reduce. This reduction can be demonstrated by the use of the standard emissions factors for poultry[1] which recommends that the ammonia emission factor (kg/NH3/animal place/year) for the free range layers in modern multi-tier houses with belt removal is 0.066 for the indoor proportion of birds and 0.024 for the outdoor proportion of birds. In comparison for free range single tier houses, the ammonia emission factor is 0.137 for the indoor proportion of birds and 0.024 for the outdoor proportion.

For typical free range systems, in a 24-hour period it is estimated that birds spend:

- 10% of time on the range
- 90% of time within the housing

Therefore ammonia emissions can be calculated as follows:

	Indoor emissions (kg/NH3/year)	Outdoor emissions (kg/NH3/year)	Total emissions (kg/NH3/year)
Existing single tier 16,000 house	14,400 (90% of birds) x 0.137 = 1,972.8	1600 (10% of birds) x 0.024 = 38.4	2,011.2
Proposed 24,000 multi-tier house	21,600 (90% of birds) x 0.066 = 1,425.6	2,400 (10% of birds) x 0.024 = 57.6	1,483.2

We have reviewed the applicants proposal, including the housing design, and agree the variation will reduced emissions of ammonia. Therefore there is no impact pathway to the site and hence no likelihood of damage to the site as a result of the proposal.

Bryngwyn Hall Stables and Coach House SSSI

The following activities are likely to cause damage:
There are no specific operations requiring consent listed in the sites citation (and associated supporting documents) relevant to the activity being assessed however the impact of increased emissions of ammonia have the potensial to cause damage. Any impact from physical disturbance does not need to be considered due to the distance between the installation and the site (approx 2.8 km).

The following SSSI(s) features and potential impacts have been considered to assess the likelihood of damage:
The site has been identified as a breeding site for Lesser Horseshoe Bats (*Rhinolophus hipposideros*). While the applicant has demonstrated that the proposed change in house type will reduce ammonia emissions, it is important to note that the site's feature is not sensitive to airborne ammonia as detailed on NRW mapping systems[2]. Therefore, there is no likelihood of any damage to this site as a result of the proposal.

[1] Natural Resources Wales / Emission factors for poultry for modelling and reporting
[2] View open data on access, flood, habitats, landscapes, marine, designated land, water quality, and woodlands

Allt Y Main Mine SSSI

The following activities are likely to cause damage:
There are no specific operations requiring consent listed in the sites citation (and associated supporting documents) relevant to the activity being assessed. However, as discussed above, impact of ammonia emissions needs to be considered. Any impact from physical disturbance does not need to be considered due to the distance between the installation and the site (approx 3.7 km).

The following SSSI(s) features and potential impacts have been considered to assess the likelihood of damage:
This site is also designated for Lesser horseshoe bats *Rhinophus Hippoideros* which, as discussed for Allt Y Main SSSI, are not sensitive to airbourne ammonia (as detailed on NRW mapping systems). Therefore, there is no likelihood of any damage to this site as a result of the proposal.

Gwern-Y-Brain Dingle SSSI

The following activities are likely to cause damage:
Operations requiring consent for this site include:

1. *Dumping, spreading or discharging of any materials.*

Intensive poultry farming is associated with emissions of ammonia (NH3) to air. This proposal is to increase bird numbers and so the potensial for the impact of increased emissions of ammonia needs to be considered. Any impact from physical disturbance does not need to be considered due to the distance between the installation and the site (approx 4.5km).

The following SSSI(s) features and potential impacts have been considered to assess the likelihood of damage:
The site is designated as is the best tectonically undisturbed section through the highly fossiliferous Nod Glas shales of Onnian age. While the applicant has demonstrated that the proposed change in house type will reduce ammonia emissions, it is important to note that the site's feature is not sensitive to airborne ammonia as detailed on NRW mapping systems. Therefore, there is no likelihood of any damage to this site as a result of the proposal.

2. Summary of any informal advice received from internal experts (if required and including pre-app advice)	N/A – no likelihood of damage
3. Recommendation	The proposed permission is **not likely to damage** any of the flora, fauna or geological or physiological features which are of special interest
4. Signature and date assessment made	Jennifer McGuire 11/06/2025
5. Officers name and job title	Jennifer McGuire Lead Specialist Officer, Installations and RSR Permitting Team