



**Campaign for the Protection of Rural  
Wales Brecon and Radnor Branch  
Upper Noyadd, Clyro, HR3 5JS  
01497 820814**

Ms Louise Evans  
Planning Department Powys County Council,  
The Gwalia, Ithon Road,  
Llandrindod Wells, Powys LD1 6AA

4/11/2021

Dear Louise Evans

**21/1381/FUL - Erection of 2 additional broiler rearing units, to include the installation of air scrubbers, air scrubbing units to the 2 existing poultry houses, feed bins, dirty water tanks, and an extension to the concrete apron**

**Brecon & Radnor branch of CPRW wishes to object to this application.**

**History of poultry units on the farm**

**SC/2017/0003 Request for an EIA Scoping Opinion in relation to 2 no poultry rearing buildings and associated works  
18/0475/FUL Erection of 2 No. agricultural buildings for poultry production, with associated feed bins, hardstandings, drainage attenuation pond and a new highway access to the A481 – 90,000 broiler chickens, units brought into operation October 2020**

**19/0742/NMA Application for a non-material amendment to planning approval 18/0475/FUL in relation to the rewording of condition 28 – variation of Condition 28 – delivery times**

**19/1502/DIS Discharge of conditions 5, 12, 13 and 14 from planning consent 18/0475/FUL**

**19/1656/DIS Discharge of conditions 11, 31 and 32 of planning application 18/0475/FUL in relation to lighting, private water supply details and manure management.**

**20/0022/FUL Erection of a covered manure store**

**20/0795/FUL Installation of a steel container comprising a ground source heat pump together with underground pipework and 2 No. boreholes | Wernhalog Farm Llanfaredd Builth Wells Powys LD2 3TE – renewable energy heating systems for poultry house**

**Grounds of objection:**

- 1. Manure Management: Existing sheds**
- 2. Manure management: Proposed new sheds**
- 3. Manure and dirty water (inc waste water from scrubbers) storage**
- 4. Water consumption**
- 5. Ecology Report**
- 6. Transport**
- 7. Ammonia Emissions**

8. Ancient woodland
9. Landscape
10. Disease risk
11. Noise
12. Odour
13. Climate change
14. Other outstanding requirements
15. Cumulative and in-combination impacts

**IN SUMMARY:**

1. It would be wrong to approve doubling a development when the existing development has unacceptable environmental impacts, which were neither properly addressed in the original application nor monitored since, without addressing these. These impacts need to be fully taken into consideration according to EIR legislation.
2. The overall argument made by the applicant's agent is that addition of scrubbers to the existing development makes this *whole* development more sustainable and obliges Powys to approve it. Improved sustainability only relates to direct ammonia emissions from the sheds, not to other impacts, not even to total ammonia emissions to the environment which are significantly increased as a result of the enlargement of the development. However in accepting this argument the statutory authorities demonstrate that sustainability of the existing development is a material planning consideration. It follows that they are required to examine sustainability in relation to all other environmental impacts of this proposed development.
3. PCC is responsible for guaranteeing that a development in the Wye SAC catchment will show phosphate neutrality for the Wye SAC during its lifetime. We do not see any way that PCC can give such a guarantee.

Details of CPRW Brecon & Radnor Branch objection are set out below.

## 1. Manure Management: Existing sheds

EIA Regs (Wales) 2017 Sch 4 sets out what information should be included in an ES, including:

'5. A description of the likely significant effects of the development on the environment resulting from, inter alia—  
...(e)the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;'

In other words, the Regs require the consideration of impacts of the proposed development in the context of its cumulation with existing sheds. Disposal of manure is a key topic, and safe disposal of all manures produced on the farm must be assured, including poultry manure from the existing sheds. Existing arrangements are not satisfactory (see below) and correction, as it reduces spreadable area, will impact on quantities of manure requiring export from the farm.

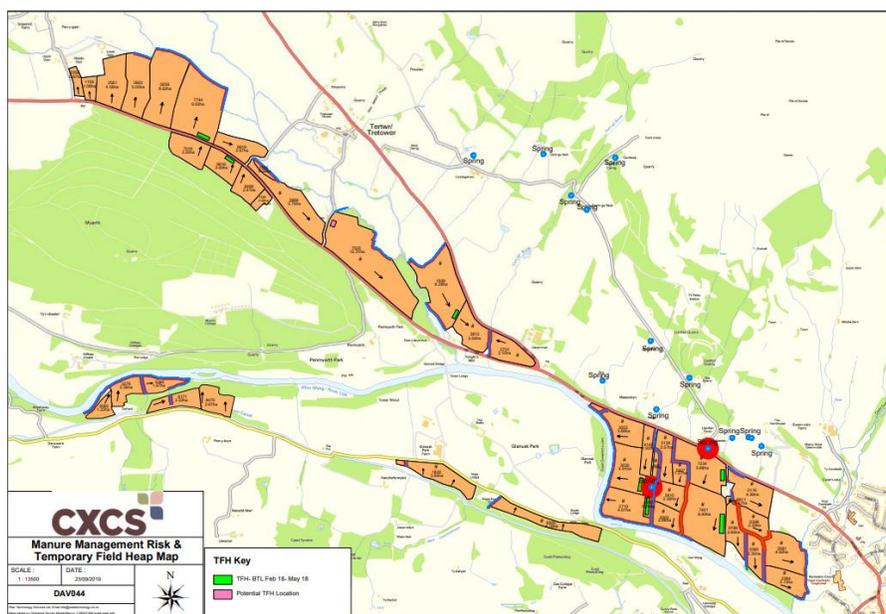
**Imports/exports between holdings and transport implications:** So before considering the proposed export of manure and dirty water generated by the expansion of the poultry sheds in this application, we need to look at the destination of

manure produced by the existing poultry sheds. See application 19/1656/DIS: the following table shows projected manures on both the applicant’s holdings for 2020.

Livestock	WERNHALOG			GLANUSK		
	No.	Tonnes Manure	Kg N	No.	Tonnes Manure	Kg N
Poultry	90000	1944	35100			
Cattle				1450	2088	9570
Sheep	3420	3972	23536		598	3600
			58636			13170
Export			-32480			-10068
Import			10068			32480
Total N			36224			35582
Ha. spreadable land			184			186

These figures are taken from the final MMP produced in support of application 19/1656/DIS [doc 258247], which we refer to as MMP 2020. Figures for manure & nitrogen produced differ only slightly from quantities found using Welsh Water Regs data, which also indicate a figure just under 24 tonnes for the phosphate content of a single year’s manure from 90,000 broilers. Dirty waters are not addressed in MMP 2020, nor does MMP 2020 address the phosphate content of manures, despite NRW having previously issued advice that MMPs for intensive poultry units should do so. In order to achieve spreading rates below 250kg/Ha p.a. (but still greater than the revised maximum spreading rate of 170kg/Ha applicable from 2023) on both the applicant’s holdings, it’s projected that 1160 tonnes of higher nutrient poultry manure will be exported from Wernhalog to Glanusk every year, and 1678 tonnes of lower nutrient cattle manure exported from Glanusk to Wernhalog. At an estimated 27 tonnes per HGV this equates to 42 return journeys of over 50 miles in the one direction and 62 in the other, transporting manure from one farm to another. NB: manure calculations exclude any manure from 1160 dairy cows on the Glanusk holding in 2020. How is this explained? Does this need correction?

**Spreading at Glanusk – environmental implications:** There is a further problem: CPRW has serious concerns about the proposed spreading of high nutrient poultry manure on the Glanusk holding. See MMP 2020 spreading plan below:





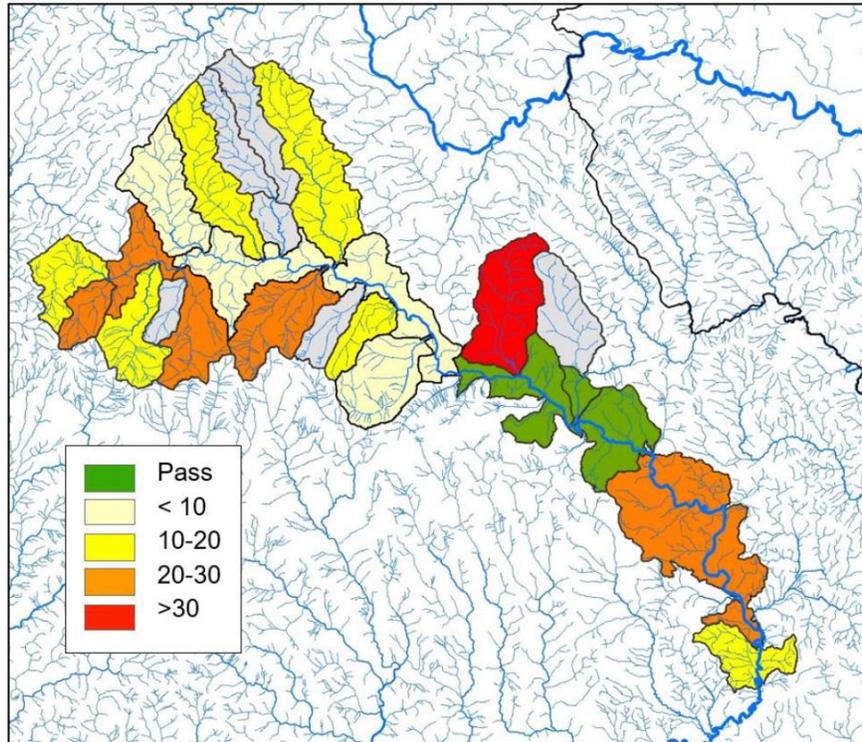
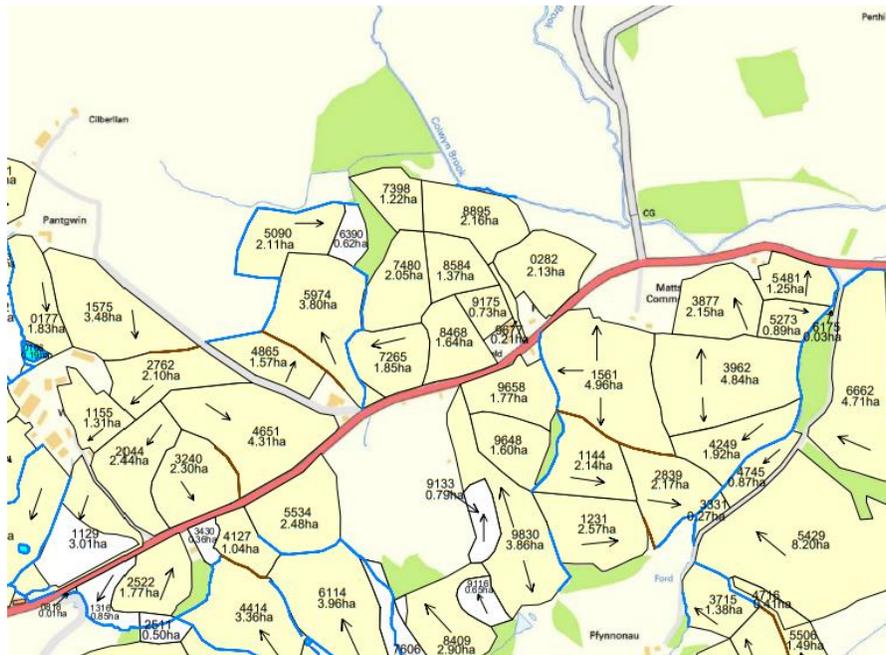


Figure 21. Compliance against phosphorus targets in the River Usk SAC. Water bodies shaded green pass their target. Other colours fail the target with different colours representing the magnitude of failures in  $\mu\text{g l}^{-1}$ , expressed as the larger of annual means and growing season means.

The disposal of large quantities of untreated poultry manure and dirty wash waters is one of the major environmental challenges posed by this type of development<sup>ii</sup>. Poultry manure is high in nitrates and phosphates, contains toxic chemicals including excess pharmaceutical residues and landspreading is a major source of ammonia emissions. The environmental acceptability of proposed developments is supposedly established through the conditioning of thoroughly scrutinized MMPs. In this instance, Conditions 2 and 10 to the 18/0475/FUL permission bind the development to the MMP dated 8/1/19 (MMP 2019) together with accompanying maps, while Condition 32 requires submission of a new and revised MMP. However, even had the officer managed to condition adherence to a valid and final MMP, such a condition is incapable of providing reassurance: CPRW has established that Powys has not ever enforced against a breach of MMP (confirmed in an FOI dated 30/10/20) and does not see proactive enforcement as its responsibility. In this case, the situation is complicated further in that the enforcing authority for a significant portion of the MMP is a neighbouring LPA who have apparently not at any stage been consulted on the application.

**Spreading on and adjacent to Colwyn Brook Marshes SSSI:** The River Usk SAC is not the only designated site directly threatened by this approved MMP 2020. The images below are 1) extract from MMP 2020 (p 30), and 2) extract from NRW mapping of designated sites:



Sites of Special Scientific Interest (SSSI)

**SSSI NAME:** Colwyn Brook Marshes (North & South)

**SSSI ID:** 1055

**SSSI CODE:** 32WXD

**Centre X:** 307592

**Centre Y:** 255679

**METADATA:** <http://libcat.naturalresources.wales/webview/?infile=details.glu&loid=98776&rs=47910&hitno=13&straig>

**Type:** Biological

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Comparing these two it's clear that **parts of the Colwyn Brook Marshes SSSI are contained within the MMP 2020 spreading area.** This issue was raised by NRW in their letter of 11/12/19, and a revised MMP addressing problems with the inclusion of fields 0282, 7298, 5974 and 5090 was requested. Inexplicably, NRW have then, on 8/4/20, given approval to and insisted upon adherence to the MMP 2020 (uploaded to Powys portal on 30/3/20) from which the extract above is taken.

From the citation for the Colwyn Brook Marshes SSSI: *'The site comprises two wetland areas situated on level ground at the foot of the Carneddau Hills close to Hundred House. They support an unusually diverse mixture of swamp fen meadow and damp grassland plant communities and **together comprise one of the largest areas of fen remaining in Powys.*** [our emphasis] *The Colwyn Brook flows through both areas and provides additional aquatic interest. The wetlands are an important refuge for otter *Lutra lutra* and support a range of scarce invertebrate species.'* This is an important site, and this fundamental error in the MMP 2020 needs urgent correction. For effective protection of a wetland area such as this we would also argue that protection should go further than the proposed exclusion from manure spreading with 10m buffer and, instead, a substantial buffer should be required on all sides of the SSSI to ensure the ecological interest of the site is not damaged by leaching of nutrients from manure spreading.

Just a couple of further points about the MMP 2020: pages 109-112 contain the Manure Management Risk Maps. According to these maps all fields identified for spreading fall within the high risk or very high risk categories, defined respectively as *'Yellow areas – high risk. Spreading can take place throughout the year on these areas subject to ground conditions, but restrict application in the winter'* and *'Orange areas – very high risk. Avoid these areas in winter and in dry summers when the soil cracks down to the drains, or when soil is compacted'*. With changing weather patterns this may constitute a challenge to safe disposal of manures by spreading. Also, fields shown for spreading at Wernhalog also include the fields on which the sheds are built. Neither issue is addressed by either applicant or NRW.

In short, there are already very serious questions to be answered about the destination of poultry manure from the existing sheds which need addressing. The planning landscape has also changed since the original application was given approval: NRW have acknowledged the plight of Welsh rivers and the seriousness of phosphate overloading and has issued new planning guidance, Welsh Government has declared an ecological emergency, new Welsh water regulations have introduced lower maximum spreading thresholds. It is unacceptable to proceed as though manure disposal for the first 90,000 poultry is satisfactorily resolved, and the necessary corrections may have implications for the current proposals.

**Rivers Wye & Usk - Habitats Regulations Assessment:** Powys Council Planners were explicitly requested (see NRW letter 11/12/19 [doc 230617] and NRW letter 12/2/10 [doc 245351], planning portal for 19/1656/DIS) to update the River Wye HRA in view of amendments made to the MMP. The request was accompanied by a warning that **'We would object to the planning application if the requirements are not met'**. There is no indication this was done – there is no comment from the County Ecologist regarding Condition 32 and no revised HRA is uploaded to the planning portal. The HRA is an essential tool in environmental protection. Was this request ever satisfied? If not, why not? If not, why did NRW not raise the matter again? If there is an HRA why is this key piece of environmental information for an EIA application not made available to the public? And why did neither NRW nor Powys consider it necessary to prepare an HRA in respect of risk to the River Usk SAC?

**Outstanding requirement: The assessment of environmental impacts of manure management for the existing sheds and the MMP 2020 for the existing sheds are profoundly unsatisfactory and must be revisited.**

## 2. Manure Management: Proposed new sheds

### *Manure Management*

- 9.36 All manures and dirty water arising from the operation of the proposed development will be disposed of via export from the site to a licensed Anaerobic Digester Plant. See **Appendix 2**. The removal of the waste to a licensed AD plant removed any potential environmental impacts. A contingency for manure storage is available for storing within the covered manure store at Wern Halog, in the unlikely event that the manure cannot be immediately exported to the AD Plant.

The above extract from the ES, and similar statement in the Manure Management Strategy document, make up the entirety of the consideration of disposal of manure and dirty water from the proposed enlargement of the poultry enterprise. This is not good enough; the development is within the catchment of the River Wye SAC and is required to demonstrate phosphate neutrality.

NRW's Planning Position Statement and Interim Planning Guidance states:

In relation to developments to which this document applies, we would expect that any measures relied upon to avoid or mitigate potential impacts on a SAC due to increased amounts or concentration of phosphates, are supported by evidence from the developer which demonstrates that those measures are guaranteed and maintained for the lifetime of the development, and are effective, reliable, and timely. We would also seek confirmation by the local planning authority that the measures can be legally enforced to ensure they will be implemented as proposed.

For each measure, we would therefore expect details on:

- How the measure would avoid or reduce adverse effects on the SAC (considering the predicted duration of the effects);
- How the measure will be implemented, and by whom;
- How the measure will be maintained, the duration of any maintenance, and details of who will be responsible for its maintenance;

The application entirely fails to address the issues of 1) avoidance or reduction of adverse effects on the SAC, the 2) maintenance of mitigation arrangements and the potential for legal enforcement:

1. Treatment of phosphate rich manure by AD will not reduce the phosphate content in the digestate, which will itself be spread to land. So, while the problem is shifted off the farm, it is highly likely that the consequence is only to move phosphates from one part of the catchment to another. A review of GP Biotech's spreading locations as notified on their website<sup>iii</sup> confirms this to be the case.
2. There are no practical mechanisms open to the LPA whereby they are able to confirm their ability to legally enforce the maintenance of this arrangement throughout the lifetime of the development (up to 50 years), nor can there be any guarantee that GP Biotec will even continue in operation throughout the life of the poultry sheds. See 1 above – the LPA has confirmed in response to FOI that they do not enforce manure management and it is hard to envisage how they could realistically do so without NRW's assistance with evidence collection.

GP Biotec's letter states their current (as at Feb 2021) ability to accept an estimated 1,100 tonnes of poultry manure p.a.: *'we can confirm we would currently be in a position to take all of the manure arising from your two additional broiler rearing sheds (estimated at 1100 tonnes per annum into our AD facility'*. This is not a commitment, let alone a legal

undertaking. Additionally, this quantity falls a long way short of the estimated manure production from 90,000 birds of 1,944 tonnes indicated on the Manure Management Plan supplied in support of 19/1656/DIS. No mention is made of dirty wash waters from either the existing or the new sheds, nor of waste waters from ammonia scrubbers.

**Outstanding requirement: The application has failed to satisfy NRW's stated requirements and does not demonstrate that the development can achieve phosphate neutrality.**

### **3. Manure and dirty water (including waste water from scrubbers) storage**

The applicant has received recent planning permission for a manure store at Wernhalog, however the application is silent on the adequacy of capacity for storage of manures and dirty water to accommodate times when spreading is not a possibility, export is for any reason delayed or impossible, or following the introduction of closed periods under the Water Regulations from 2024.

Site Drainage Plan indicates that there will be one 45,000 L dirty water tank for washing water, and two 20,000 L tanks for scrubber waste water. For the existing sheds all roof and apron run off is channelled to the attenuation pond (p14 Hydro-Logic Services report), except during clean out when (ES para 10.5) run off from the apron will be diverted to dirty water tanks. For new sheds it's proposed that all apron run off is channelled to the dirty water tanks, and all roof run off to the attenuation pond. Why is apron run off treated differently for new and old sheds – should the old sheds be retrofitted to take all apron run off to dirty water tanks? We question whether any roof and apron run off should be taken to the attenuation pond, given the eventual destination of these waters in the Cnithio Brook, itself a tributary of the River Wye SAC. No calculation is given for the quantities of washing and waste water arising over each cycle nor the frequency of disposal. Despite the statement at 9.36 of the ES, the destination of dirty water is unclear – this is not dealt with in the letter from GP Biotec.

**Outstanding requirement: Confirmation of satisfactory treatment of roof and apron run off and of adequate storage for manures and dirty waters required.**

### **4. Water consumption**

There is no information in the ES about water consumption or extraction. 8 cycles per annum across 4 poultry sheds and the operation of scrubbers in each of these must place considerable demands either on public water supplies and/or aquifers. The application is silent on this point. Given the proliferation of poultry units in the region and the increasing unreliability of water supply which is anticipated as a consequence of climate change, we believe that this information is essential to the consideration of the environmental impacts of the application. This is in any case a requirement of Sch. 4 of the EIA (Wales) Regulations 2017, as set out in the ES (p5):

5. A description of the likely significant effects of the development on the environment resulting from, inter alia—
  - (a)...

(b) the use of natural resources in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;

The newly published report from the UN Office for Disaster Risk Reduction<sup>iv</sup> highlights the increased global risk of drought and the necessity to take urgent action on water and land management. While Wales is a relatively wet part of the UK weather patterns are changing and longer dry spells and appear to be more frequent, while the abnormally heavy rains which also seem to be part of a new weather pattern are unlikely to do much to replenish aquifers. Increased supplies of water from Wales to England are under consideration.

Dwr Cymru commented on the 2018 application to the effect that the applicant should be aware that the development is located within a Drinking Water Catchment. While the emphasis in this earlier advice relates to water quality, given changing rainfall patterns and an increase in housing development, potential impacts on water quantity are also relevant.

**Outstanding requirement: Assessment of risk to Drinking Water Protected Area and impacts on water resources is required.**

## 5. Ecology Report

The images below are taken from 1) the landscaping proposals submitted to secure the discharge of Condition 5 (application 19/1502/DIS), and 2) the location plan submitted for the present application. A comparison of the two indicates that a number of existing mature trees and hedgerows previously identified as being retained will have to be removed to accommodate the expansion, and that the location of the native hedgerow which was to have been planted now sits under the site of the new sheds. The loss of these features, whether existing or projected as a condition to the previous application, needs to be brought into the consideration of biodiversity and habitat loss.

**Planting Schedule**

Code	Species Name	Size	Quantity	Specification
T1	Betula pendula (Silver Birch)	8-20cm	300-350cm	Standard, Clear stem 175-200cm
T2	Quercus robur (Pedunculate Oak)	8-20cm	300-350cm	Standard, Clear stem 175-200cm
T3	Fagus sylvatica (European Beech)	8-20cm	300-350cm	Standard, Clear stem 175-200cm
T4	Corylus avellana (Hazel)	8-20cm	300-350cm	Standard, Clear stem 175-200cm
T5	Salix cinerea (Grey Willow)	8-20cm	300-350cm	Standard, Clear stem 175-200cm

**Hedgerow Species**

Code	Species Name	Size	Quantity	Specification
H1	Betula pendula (Silver Birch)	60-80cm	1x1	Transplant, BK or Container green
H2	Corylus avellana (Hazel)	60-80cm	1x1	Transplant, BK or Container green
H3	Crataegus monogyna (Hawthorn)	60-80cm	1x1	Transplant, BK or Container green
H4	Prunus spinosa (Blackthorn)	60-80cm	1x1	Transplant, BK or Container green
H5	Viburnum opulus (Guelder Rose)	60-80cm	1x1	Transplant, BK or Container green

**Planting Specification**

Please see accompanying written specification for full details of layout, plants, planting and watering guidelines and specifications. In addition to accompanying written specification all landscaping works must comply with the below:

**Protection**  
All hedgerow planting must be protected with spiral rubber guards 60cm x 50cm and covered with a 50cm bamboo, installed in accordance with manufacturer's recommendations.

**Other**  
All other proposed hedgerow, boundary or screen planting must be protected with a 1.8m x 1.7m x 105mm tree shelter and staked with a 1.8 x 3.8 x 3.8mm stake, installed in accordance with manufacturer's recommendations.

**Other**  
All other trees (Holly, Vitivernum Guelder Rose) and shrubs should be protected with 60cm x 120 x 105mm shrub shelter and staked with a 40cm x 120mm stake, installed in accordance with manufacturer's recommendations.

All planting operations unless otherwise stated to be undertaken and protected during construction.

**Timing**  
All landscaping works are to be completed in the nearest planting season or within 12 months of completion of development.

**Management and Maintenance**

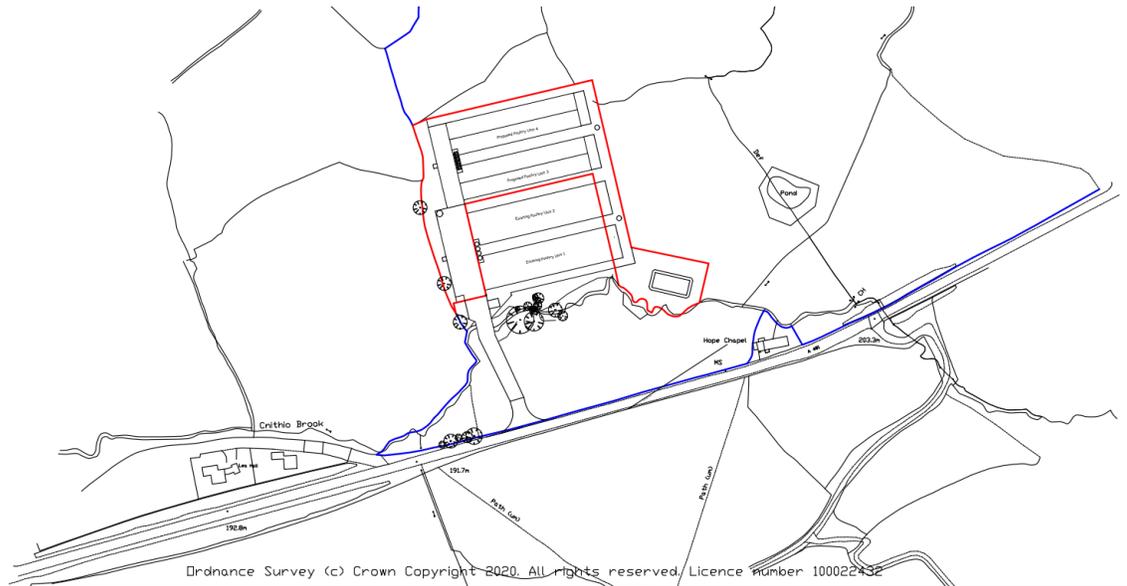
**Trees and Shrubs**  
All proposed trees and shrubs are to be watered monthly and maintained in a weed free condition, during the regular visits. Hedgerows should be cut back and plants will need to be removed and any cracks, gaps and tree and shrub guards/shelters to be adjusted, replaced and repaired as necessary. Tree and shrub guards/shelters are to be removed after the first 2-3 years and where possible in order of sunlight until they can be removed according to manufacturer's life expectancy.

**Hedgerows**  
Proposed native hedgerows are to be trimmed back in the first Spring to a height of 75cm above the ground to encourage dense bushy growth, they should then be allowed to grow to the height specified. Hedger should not be grazed until late autumn or early spring so that wildlife can take advantage of the berries and buds produced during the winter months. Hedger trimming will also avoid the bird nesting season (March to August) and care should be taken to avoid any damage to crops grazed within the hedgerows.

**General Notes**

Drawing is for planning purposes only.  
Do not scale from drawing.  
All tree works to be carried out under supervision of Approved arboriculturalist.  
All Species and site layout are indicative and to be avoided prior to construction factoring in potential easement requirements.  
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**Soft Landscape Plan**



Extended Phase 1 Survey was undertaken in March, a suboptimal month for the identification of existing biodiversity on site and no search of public records has been conducted. The survey is restricted to the red line site area only, so that the wider ecological impacts are excluded from consideration, including impacts from ammonia emissions from manure spreading.

In particular, the site survey does not assess the ecological interest of the Ancient Semi Natural Woodland (Unique ID 20410) which would, if the proposed new sheds are built, be located immediately adjacent to the new poultry buildings. While this woodland is not shown on NRW’s map of sensitive sites, this does not indicate an absence of sensitive ecological interest, only that NRW have not yet gathered and assessed evidence for such, a lack which the Ecological Report fails to address. APIS data (currently based on a 3-year average for 2017-9, and so preceding the construction of the existing sheds) shows the pre-development levels of ammonia concentration at this woodland standing at  $1.25\mu\text{g}/\text{m}^3$ , N deposition rates at  $27.16\text{kg N}/\text{Ha}/\text{yr}$ , both exceeding the critical thresholds above which it is acknowledged harms will result. See 8 below for the Woodland Trust’s comments on the suitability of these thresholds for adequate protection of Ancient Woodland features.

The Ecology Report provided in support of this application does not identify potential impacts immediately adjacent to the site. It falls very far short of assessing ecological impacts of the development as a whole – see 7 and 8 below.

**Outstanding requirement: Assessment of wider impacts on ecology and biodiversity is outstanding.**

## **6. Transport**

No information is supplied regarding anticipated additional traffic movements. The information below was supplied in support of the 2018 application for the existing sheds:

**Table 3 – Proposed Commercial Traffic Generation at Horsley Brook Poultry Unit**

Day	Activity	Vehicle Size	Proposed Number
1	Chick Delivery	16.5m HGV	2
2			
3			
4			
5			
6			
7	Feed Delivery	16.5m HGV	1
8			
9			
10			
11	Feed Delivery	16.5m HGV	1
12			
13			
14			
15	Feed Delivery	16.5m HGV	1

16			
17			
18			
19	Feed Delivery	16.5m HGV	1
20			
21			
22			
23	Feed Delivery	16.5m HGV	1
24			
25			
26			
27	Feed Delivery	16.5m HGV	1
28			
29			
30	Catching Gang Bird Removal (Thinning)	Mini Bus 16.5m HGV	1 4
31	Feed Delivery	16.5m HGV	1
32			
33			
34	Feed Delivery	16.5m HGV	1
35			
36			
37	Feed Delivery	16.5m HGV	1
38	Catching Gang Bird Removal (final clearance)	Mini Bus 16.5m HGV	1 9
39			
40	Manure Removal	Tractor & Trailer	6
41	Washing Gang	Mini Bus	1
42	Gas Delivery	Tanker	1
43	Shavings Delivery	16.5m HGV	1
44	Dirty Waster Removal	Tanker	3
45	Chick Crumb	16.5m HGV	1

We assume that this table **does** relate to one flock cycle at the Wernhalog poultry operation, despite the heading of Horsley Brook Poultry Unit, and even though there is no recognition of the traffic implications of the imports and exports of thousands of tonnes of poultry and cattle manure between the Wernhalog and Glanusk operations. According to this table the existing sheds generate 52 HGV movements per cycle, which at 8 cycles p.a. is 416 HGV movements p.a. with a further 208 HGV movements p.a. (see 1. above) associated with manure import/export between farms.

The additional sheds can then be assumed to add up to a further 416 HGV movements (as per table) together with

approximately 144 HGV movements between GP Biotec and Wernhalog (1944 ÷ 27 x 2). These figures do not take account of waste water removal from the use of scrubbers.

As the table indicates the traffic movements peak at the end of each cycle during the period of flock clearance, washing and preparation for the new flock.

It's a significant omission from the ES that there is no consideration of the social, environmental and climate change impacts of this heavy additional traffic load on rural roads.

**Outstanding requirement: Assessment of impacts from poultry unit traffic required.**

## **7. Ammonia Emissions**

7.13 of the ES states 'The ammonia modelling, with abatement offered by the Inno+ scrubbing system confirms that the proposals represent an improvement in ammonia and nitrogen deposition rates to protected sites in the surrounding area.' Isopleth letter of 13<sup>th</sup> May, billed as an In-Combination Assessment, even argues 'The scheme does not adversely affect the integrity of one or more SAC or SPAs in view of the site's conservation objectives, indeed I consider that, as it results in a betterment, there is a Statutory Obligation under the Habitats Directive for the local authority to approve the scheme'.

This is jumping the gun somewhat: the ammonia report considers only emissions from the sheds themselves and does not address emissions from other operations such as the storage and spreading of poultry manure. The 'Inventory of Ammonia Emissions from UK Agriculture 2019 (DEFRA Contract SCF0107) March 2021'<sup>v</sup> indicates that emissions from manure storage and landspreading are likely to be more than double those arising from the housing itself.

The 90% reduction of ammonia assumed for the proposed model of scrubbers does not take into account potential waning of % mitigation with age, nor the compromise to effectiveness resulting from high temperatures and the need to provide supplementary ventilation for the birds. **While housing emissions from the sheds will be reduced by the installation of scrubbers and assuming the full 90% mitigation, the net position is that TOTAL ammonia emissions from the proposed enlarged development, including landspreading, are increased by slightly more than 1/3 over current levels.** The impact of these increased emissions has been neither recognized nor assessed since landspreading and storage emissions are not addressed. **No effective protection is achieved for biodiversity and the surrounding environment without consideration of the impacts of all ammonia emissions related to this development. Powys is committed to the s6 Biodiversity Duty imposed by the Environment Act (Wales) and the same act commits NRW to the Sustainable Management of Natural Resources. Both are failing these duties if they do not address the environmental impacts of ammonia emissions from manure spreading.**

New NRW guidance (summer 2021) on assessment of ammonia impacts specifically requires the assessment of impacts of landspreading: '**Landspreading: if you are required to carry out a habitats regulation assessment (HRA), Environmental Impact Assessment (EIA), or are within close proximity to a sensitive site then landspreading must be included in the assessments of impacts.**'<sup>vi</sup> [our emphasis]

On a webpage last updated in July 2021<sup>vii</sup>, NRW published the following statement for the Mid Wales Area Statement

under the heading 'Sustainable Land, Water and Air':

*'As rural farm businesses look to diversify, poultry units have become increasingly popular on many farm holdings, with large incentives from the food sector. Whilst this has clearly benefitted the agricultural sector, there have been harmful impacts on the natural environment as a direct result of the significant increases in ammonia and nitrates from the volume of manure generated. While ammonia air pollution emissions have generally stabilised across the UK, they have increased significantly in Mid Wales largely due to this expansion in poultry numbers. Wales is now the largest producer of free-range eggs in Europe. This trend is continuing as rural businesses continually have a need to diversify.*

*Ammonia is toxic to native plants and habitats, and its accumulation and spread in the natural environment can lead to significant damage to habitats and species loss. Ammonia pollution from the increasing number of intensive agricultural units is now a very significant threat to the survival of the rich variety of rare pollution-sensitive lichens scattered throughout Mid Wales. **Urgent measures are required to address this ongoing threat to our natural environment.** [our emphasis]*

**Outstanding requirement: The assumption that introduction of ammonia scrubbers will reduce total ammonia emissions from the enlarged development to below the total emissions from existing sheds is simply incorrect. The Ammonia Report supplied is inadequate in scope and a new report addressing all emissions from the development is required.**

## **8. Ancient Woodland**

*'Ancient woods are our richest and most complex terrestrial habitat in the UK and they are home to more threatened species than any other. Centuries of undisturbed soils and accumulated decaying wood have created the perfect place for communities of fungi and invertebrates. Other specialist species of insects, birds and mammals rely on ancient woodlands....*

*Ancient woods are irreplaceable. We can't replace the complex biodiversity of ancient woods which has accumulated over hundreds of years. Many species that thrive in ancient woodland are slow to colonise new areas. All ancient woodlands are unique, and are distinctive of their locality.*

*Once what little we have left is gone, it's gone for good.'<sup>viii</sup>*

In respect of another Radnorshire IPU application (Llanshay 19/0743/FUL), the Woodland Trust wrote the following:

**Impacts to ancient woodland from nitrogen air pollution:** *Nitrogen pollution is one of the most significant and immediate threats to ancient woodlands and other semi-natural ecosystems in the UK. In the UK, rates of atmospheric nitrogen deposition have increased substantially leading to eutrophication and acidification of ancient woodland habitats. Accumulations of extra nutrients, as well as reduction in soil pH, are negatively affecting habitats whose important biodiversity developed in direct response to low atmospheric levels of reactive nitrogen. This is leading to direct loss of species, but there is also a growing evidence-base that is revealing wider impacts on*

*ecosystem functionality and resilience, such as the loss of the soil fungi that trees rely on, resulting in more susceptibility to stress from climate and trees diseases (i.e. acute oak decline).*

The Importance of Ancient Woodland and its protection is recognized in PPW11 6.4.26: *'Ancient woodland and semi-natural woodlands and individual ancient, veteran and heritage trees are irreplaceable natural resources, and have significant landscape, biodiversity and cultural value. Such trees and woodlands should be afforded protection from development which would result in their loss or deterioration unless there are significant and clearly defined public benefits; this protection should prevent potentially damaging operations and their unnecessary loss.'*

The Ammonia Report identifies 39 separate Ancient Woodlands within 5km of the site. The distinction the authors seek to make between N sensitive AWs and others is misleading – see 5 above. Exceedances (above the NRW threshold percentage (1%) of the Critical Level and Critical Load), sometimes very substantial, are predicted at 22 of these 39 sites. There are still more Ancient Woodlands in proximity to the three areas of landspreading, including the Glanusk holding where it is intended the majority of the poultry manure from existing sheds is to be spread.

Meanwhile the recent report by the Woodland Trust 'Wood Wise'<sup>ix</sup> suggests that ammonia emissions thresholds currently applied are too high to protect trees and woodlands and their associated species.

*'Worryingly, there is increasing evidence that ecologically significant impacts occur at lower nitrogen concentrations, suggesting that current thresholds are not robust enough. The nitrogen deposition threshold for key components of woodland ecosystems such as the life-support fungi associated with tree roots (ectomycorrhizae) has recently been proposed to be nearer to 5–6kg of nitrogen per hectare per year (N/ ha/y), whereas the current threshold for most woodland in the UK (last revised in 2010) is 10kg N/ha/y.*

*Similarly, the current threshold for the concentration of ammonia in the air is insufficient to avoid impacts on the most sensitive species. It is set at 1µg NH<sub>3</sub>/m<sup>3</sup>, but ecologically significant changes occur at levels as low as 0.5µg NH<sub>3</sub>/m<sup>3</sup>. There is also growing concern about the impacts of acute toxicity on woodland species arising from spikes in ammonia concentrations during, for example, slurry/manure spreading, so annual mean ammonia concentrations may not be the most robust way of assessing impacts.'*

CPO letter 23/10/19 also states *"the attributes of ecosystem resilience (PPW 6.4.9 refers<sup>x</sup>) should be used to assess the current resilience of the site"*. The background nitrogen deposition at the woodland adjacent to the site as currently reported on the APIS website is 27.6kg N/ha/year to woodland as compared to currently recommended thresholds of 10-20 kg N/Ha/year and more cautious thresholds referred to above of 5-6 kg N/Ha/year. This is a substantial exceedance and indicates woodland in this area is already under major stress. APIS data now reflects the 2017-2019 three-year average meaning that any nitrogen producing developments since 2019, including the existing sheds are not reflected in the data. Investigation of the environmental baseline is a requirement of the EIA (Wales) Regs 2017 Sch 4.

'Critical levels' are defined as *"concentrations of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur according to present knowledge"* and 'critical loads' are defined as *"a quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge"* (APIS). It follows that local woodland habitats, even those least sensitive to ammonia/nitrogen, are already adversely impacted by levels of ammonia and nitrogen deposition likely to result in significant harmful effects.

**Outstanding requirement: The assessment of impacts on Ancient Woodland is outstanding.**

**9. Landscape**

Viewpoint 3: View from PRow on Aberedw Hill



t 3: View from PRow on Aberedw Hill



The LVIA concludes *‘with the implementation of a successful mitigation strategy, the overall impact on the landscape is considered to have a minor/negligible overall effect on the surrounding landscape character and a minor visual effect. It should be considered that this type of development is not out of character within the receiving landscape.’* We have already seen how the proposed development removes the promised landscaping for the existing sheds, together with existing trees and hedgerows. The photos above (from 2018 and 2021 LVIAs respectively) show the rising contours of the site which will make the new sheds more prominent in the landscape. These photos also show the nature and scale of surrounding farm buildings.

Landmap assessments are accompanied by reasoning and comment which puts the overall evaluation into context. For example, the overall assessment of the Visual and Sensory Landmap area is ‘moderate’ although described as *‘Generally peaceful, settled farmland with pleasant views. Gently rolling hills & valleys with strong pastoral field patterns, wooded watercourses and scattered trees & small woodlands. Numerous small villages and scattered farms.* The surprisingly low evaluation reflects the assessor’s view that this type of unspoilt rural landscape is so typical of Radnorshire as not to merit more. Across the different aspect areas containing the site comments on the pleasant views in and out, the tranquility, absence of artificial light are typical. The Historic Landscape assessor characterizes the areas as having *‘Irregular field*

*pattern in the broad valley bottom and on the lower valley sides along the Cnithio Brook. Dispersed farms and mill sites probably of late medieval and post-medieval origin.’* Given these descriptions of the site, it’s hard to see how a development of 4 x 99m x 24m buildings, industrial in appearance, together with feed bins and substantial concrete apron/lorry park can be *‘not out of character for the receiving landscape’*.

The ZTV assumes a building height of 6m, although extensions to the existing buildings to accommodate scrubbers will bring their maximum height to 7.438m, and the height of the new buildings is given as 6.4m. Visibility will clearly extend beyond the limits indicated on the existing ZTV, though this already indicates visibility from the open access hills to north, south and west of the site. No viewpoint on this access land, criss-crossed by rights of way and popular for outdoor recreation, has been selected. Instead the viewpoints are located on lower ground and closer to the site. This is not explained.

The LVIA identifies only the Landmap areas within which the site sits, instead of looking at the wider landscape which will be impacted by this development. A quick look at neighbouring landmap aspect areas yields:

Carneddau Historic Landscape Evaluation: **High**

Aberedw Hill Historic Landscape Evaluation: **High**

Aberedw Hill Visual & Sensory Evaluation: **High**

Edw Historic Landscape Evaluation: **Outstanding**

Upland Valley, Edw & Adjacent Visual & Sensory Evaluation: **High**

**Outstanding requirement: The assessment of landscape impacts is not fit for purpose and should be revisited.**

## **10. Disease risk**

The ES is required to address risks to human health: EIA (Wales) Regs 2017 Sch 4 ‘Information for inclusion in environmental statements’ para (5)(d).

No account has yet been taken, in the assessment of poultry developments in Powys, of the risks of disease which arise from this type of farming and also from the density of the units permitted across the county. We appreciate that Development Control does not have clear advice on this risk but it is our belief that a responsible LPA should urgently seek such advice rather than ignore a potentially catastrophic risk of this nature.

Radio 4 recently broadcast a short series on zoonotic viruses, called The Jump<sup>xi</sup>. The second of the 3 episodes deals with bird flu and is a good summary of the issues. (This is available to listen to on the link in endnote ix below.) The programme explains how the design of industrial poultry farms and the spreading of poultry manure enables the transmission of dangerous pathogens to humans and other animals: through the powerful roof fans that expel an aerosol of pathogens into the air, which can then spread out and be inhaled by humans and, importantly, through the spreading of untreated chicken manure on farmland which attracts wild birds which in turn become infected with dangerously mutated pathogens from the chicken manure and then spread these deadly pathogens more widely in the environment. Manure can also infect humans.

Poultry shed extractor fans pump out a continuous aerosol of chicken bacteria, viruses, faecal particles, fungi and ammonia

into the surrounding environment. The programme explains that the fans can transmit fatal disease pathogens to humans who inhale the expelled aerosols that drift from them. It also describes how mutations occurring in poultry farms are the source of dangerous bird flu outbreaks. In industrially raised poultry avian flu can develop into deadly forms. Indoor poultry farming is an ideal environment for virus mutation and transmission, both between chickens and to humans. Bird flu can be many times more lethal than the current coronavirus. In 1997 the H5N1 Bird Flu outbreak which escaped from Hong Kong poultry markets to infect people had a 30 % mortality rate including children. Some bird flu has a 60% mortality rate in humans<sup>xii</sup>.

Pathogens borne in such aerosols can infect people several kilometres away from the source. Legionella, for example, can drift in the air to infect people up to 7km or more away<sup>xiii</sup>. The proposed buildings are close to non-associated neighbours and to the town of Rhayader itself.

The information given in the BBC programme regarding the disease transmission risk via poultry manure spreading is of very great concern. Planners have a duty to promote healthy and safe communities. The proposed poultry development and its related manure spreading and storage would create an ongoing serious disease risk to the local population and wider environment, and should, therefore, be recommended for refusal.

Even where bird flu outbreaks do not result in human disease, the potential for substantial and widespread economic damage is very real: <https://www.theguardian.com/environment/2021/jun/16/is-polands-chicken-boom-behind-its-devastating-bird-flu-outbreak> – more than 330 outbreaks of highly pathogenic bird flu since late 2020 has resulted in massive culling and huge economic loss and worst hit regions are those with the highest concentrations of IPUs.

**Outstanding requirement: Assessment of health risks required.**

## **11. Noise**

The noise assessment addresses only the noise from the fans and scrubbers on the sheds. There is no consideration of the traffic noise, the noise from night time clearing and catching gangs, cleaning, manure removal etc.

Powys planners have already agreed to vary the condition 28 attached to the previous application as below:

*Condition 28 of planning permission reference 18/0475/FUL reads as follows;*

*“All deliveries to and from site in connection with this permission shall be carried out between the following hours, Monday to Fridays from 07.30 to 18.00 hours, Saturdays from 08.00 to 13.00 hours and at no time on Sundays, Bank and public holidays”.*

*This application seeks to vary the above condition to read as follows;*

*“All deliveries to and from site in connection with this permission shall be carried out between the following hours – 07.00 – 21.00 (with the exception of live bird transport which can be undertaken outside of these hours)”.*

(Extract from supporting statement to NMA application.)

Condition 28 was attached to the previous permission ‘In order to control development which has the potential to have

*adversely affect the amenity of the area in contradiction to policy DM13 of the Powys Local Development Plan and Planning Policy Wales’.* It follows that the potential for noise nuisance associated with poultry traffic, loadings and unloads etc., was recognized in relation to the previous application, even though the protection of amenity provided by this condition was subsequently removed.

***Outstanding requirement: No conclusions as to the acceptability of noise impacts can be reached without consideration of these other sources of noise nuisance – assessment of impacts including all noise sources is required. No reliance can be placed on any condition which might be imposed regarding hours of operation, since it’s entirely likely any such protective condition would be removed post approval.***

## **12. Odour**

Odour predictions are presented as averages and so do not address peak odour emissions which will be generated on shed clearing and cleaning. This will happen at a predicted 8 times a year, lasting several days on each occasion, potentially constituting a major nuisance for those affected. Nor does the report address manure storage and spreading.

***Outstanding requirement: Odour implications of manure spreading and peak odour operations need to be assessed and appropriate reports supplied.***

## **13. Climate change**

The ES is required to address ‘*the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change*’: EIA (Wales) Regs 2017 Sch 4 ‘Information for inclusion in environmental statements’ para (5)(f).

PPW 11 refers to climate change throughout and asks, 2.28

- *will the causes and impacts of climate change be fully taken into account through location, design, build, operation decommissioning and restoration and*
- *does it support decarbonisation and the transition to a low carbon economy?*

4.1.4. says ‘*land use and transport must be integrated. The planning system must ensure it enables integration:*

- *between transport measures and land use planning*’

PPW 11 3.30: *In 2019 the Welsh Government declared a climate emergency in order to coordinate action nationally and locally to help combat the threats of climate change. The planning system plays a key role in tackling the climate emergency through the decarbonisation of the energy system and the sustainable management of natural resources’. And 3.33 ‘*We need to plan for these impacts, reducing the vulnerability of our natural resources and build an environment which can adapt to climate change. The planning system plays a significant role in managing this risk. Development allowed today will be around for decades to come. The most important decision the planning system makes is to ensure the right developments are built in the right places.*’*

And yet the Environmental Statement (2.6) states: ‘A formal scoping opinion has not been requested from the Local Planning Authority. The scope of the Environmental Statement has been based on the scoping of the Environmental Statement in relation to application reference 18/0475/FUL.’

There is no reasonable justification for relying on the scoping for another EIA application to limit the extent of ES information provided in support of this current application. The assertion that climate is in fact scoped out for 18/0475/FUL cannot be verified since no application documents for SO/2017/0003 are uploaded to the planning portal, but this is in any case irrelevant in view of the recognition since that time by both Welsh Government and the LPA of the increasing urgency of climate change considerations.

Powys has now joined Welsh Government in declaring a Climate Change Emergency (September 2020) and we can surely expect that the LPA will look to follow Welsh Government advice and make full use of the planning system to try to shape a more climate friendly Powys. There are many aspects of this application which require consideration in the context of climate change impacts and vulnerability, among these: emissions and environmental harm, including emissions from manure spreading and transport; water use and potential water contamination; poultry feed stocks and deforestation in other countries; strategic planning for dietary change to reduce climate impacts.

The urgent issue of deforestation is receiving much attention at the COP26. Welsh Government has declared a climate change emergency, takes credit for innovative legislation intended to protect future generations from the consequences of irresponsible short-term decision-making, has committed all public bodies by means of the Well-being of Future Generations (Wales) Act to the goal to become a ‘globally responsible Wales’. The intensive poultry industry depends on feed imported from the Americas where production involves large scale habitat destruction and environmentally costly transport. Welsh public bodies should withdraw support for the expansion of the poultry industry until the poultry companies can provide verifiable confirmation that the production of feedstocks is not associated with deforestation. This is not the case at the moment – see Bureau of Investigative Journalism articles linked<sup>xiv</sup> below.

**Outstanding requirement: CPRW considers that the council must take climate change impacts into account in consideration of this application.**

#### **14. Other outstanding requirements**

Consideration of the following seems to be entirely omitted from application documents:

- Impacts on listed buildings
- Cut and fill to accommodate new buildings on a sloping site, potential destabilization/flooding issues and landscape impacts.

#### **15. Cumulative impacts and in-combination assessment**

The ES does not address cumulative impacts, as it is argued that most impacts are strictly local to the development itself. There is no in-combination ammonia assessment as Isopleth incorrectly state that the development will produce a reduction of ammonia emissions and so refute the need for an in-combination assessment as requested by NRW. There

are a number of other intensive poultry and pig units within a few km of the site. Cumulative and in-combination impacts must be reviewed.

NRW's remarks (from letter dated 7/9/2021) below are entirely unsatisfactory – despite the introduction of scrubbers, ammonia emissions will be significantly increased if the additional sheds are built (see 7 above) and the Isopleth document is actually a refusal to submit an in-combination assessment. Has anyone read it?

*'The predicted process contributions are lower than the existing scenario. However the figures are at a level of significance, and must be considered for the River Wye SAC. We would therefore advise an in-combination assessment is required.*

*An in-combination assessment by Matt Stooling of Isopleth dated 13th May 2021 referenced 01.0217.001 v1 has been submitted with the proposal. We have reviewed this document and have no further advice to provide. This document may be used to inform your authority's Stage 1 HRA for the River Wye SAC.'*

**Outstanding requirements:**

- 1. Assessment of cumulative and in-combination impacts is outstanding.**
- 2. NRW must reiterate the request for in-combination assessment.**

The above demonstrates very serious defects in the application information supplied and also the absence of critical information including LVIA and Manure Management Plan.

- CPRW B&R encourages Powys Planning Department to refuse this application.
- We trust that Powys County Council will liaise with NRW in order to clarify responsibilities with respect to safeguarding SACs and other habitats from environmental impacts of intensive poultry farming. We do not believe the current LPA Planning and NRW Environmental Permitting regimes are fit for purpose in achieving this.

Jonathan Colchester



**Chair: Brecon & Radnor Branch  
Campaign for the Protection of Rural Wales**

[brecon-and-radnor-cprw.wales](http://brecon-and-radnor-cprw.wales)

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<sup>i</sup> [Natural Resources Wales / Tighter phosphate targets change our view of the state of Welsh rivers](#)

<sup>ii</sup> [\(PDF\) Poultry manure management \(researchgate.net\)](#)

<sup>iii</sup> [Spreading Archives - GP Biotec](#)

<sup>iv</sup> Special Report on Drought 2021 [New UNDRR report launched with stark warnings that drought could be next pandemic | UN-Water \(unwater.org\)](#)

<sup>v</sup> [Inventory of Ammonia Emission from \(defra.gov.uk\)](#)

<sup>vi</sup> [Natural Resources Wales / Ammonia assessments for developments that require a permit or planning permission](#)

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vii [Natural Resources Wales / Sustainable land, water and air](#)

viii [Ancient Woodland - British Habitats - Woodland Trust](#)

ix Woodland Trust 'Wood Wise' page 19 'Nitrogen – An Insidious Threat' by Alistair Hotchkiss [Woodwise, Evidence for Action, Spring 2021 \(woodlandtrust.org.uk\)](#)

x These attributes are: diversity, extent, condition, connectivity and adaptability to change. [Planning Policy Wales - Edition 11 \(gov.wales\)](#) (page 138)

xi [BBC Radio 4 - The Jump - Available now](#)

xii [INTENSIVE POULTRY & PIGS AND THE THREAT OF PANDEMIC – Brecon & Radnor Branch of CPRW \(brecon-and-radnor-cprw.wales\)](#)

xiii An Outbreak of Legionnaires Disease Caused by Long-Distance Spread from an Industrial Air Scrubber in Sarpsborg, Norway - Clinical Infectious Diseases, Volume 46, Issue 1, 1 January 2008, Pages 61–69, [Outbreak of Legionnaires Disease Caused by Long-Distance Spread from an Industrial Air Scrubber in Sarpsborg, Norway | Clinical Infectious Diseases | Oxford Academic \(oup.com\)](#)

xiv [The bean destroying the planet: can the soya trade be cleaned up? — The Bureau of Investigative Journalism \(en-GB\) \(thebureauinvestigates.com\)](#)

[Cargill: the company feeding the world by helping destroy the planet — The Bureau of Investigative Journalism \(en-GB\) \(thebureauinvestigates.com\)](#)