

SCAIL Modelling Report

Erection of a poultry unit including silos and all associated works

Ty Nant, Talybont, Ceredigion, SY24 5DN

Prepared for E Evans and Co



land & property professionals

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1. INTRODUCTION

- 1.1 This statement should be read in conjunction with all the other documents that have been submitted in connection with the planning application for the erection of a poultry unit at Ty Nant, Talybont.
- 1.2 The purpose of this SCAIL assessment is to assess the proposed impact the development will have on ecological interest of the area. Particular note is given to the levels of ammonia which shall arise from the proposed poultry unit.
- 1.3 Basic Ammonia modelling has been carried out, and is discussed and analysed within this statement.

2. LOCATION & PROPOSAL

- 2.1 The proposal is on land adjacent to the existing range of modern farm buildings that serve the unit. It is noted that the farm buildings are positioned between the Farmhouse and the proposed development. The existence of modern buildings adjoining the proposed development is beneficial as it provides an ideal screen for the development from the Farmhouse.
- 2.2 It is accessed via a new farm track access.
- 2.3 There are no other poultry units in the immediate vicinity, and therefore there will be limited cumulative impact.
- 2.4 The proposal is for a poultry unit, which will be within a permanent unit, which will be fan ventilated and a manure conveyor belt associated with it.

PROTECTED ENVIRONMENTAL SITES

- 3.1 Within a 10km radius of the proposed site, there are 30 designated environmental sites which range from 3.09kms to 9.77kms away.
- 3.2 The 4 closest Ancient Woodlands have also been assessed.

4. SCAIL MODELLING

4.1 SCAIL is an acronym for 'Simple Calculation of Atmospheric Impact Limits. It is a basic screening tool to assess the potential impact from agricultural sources on

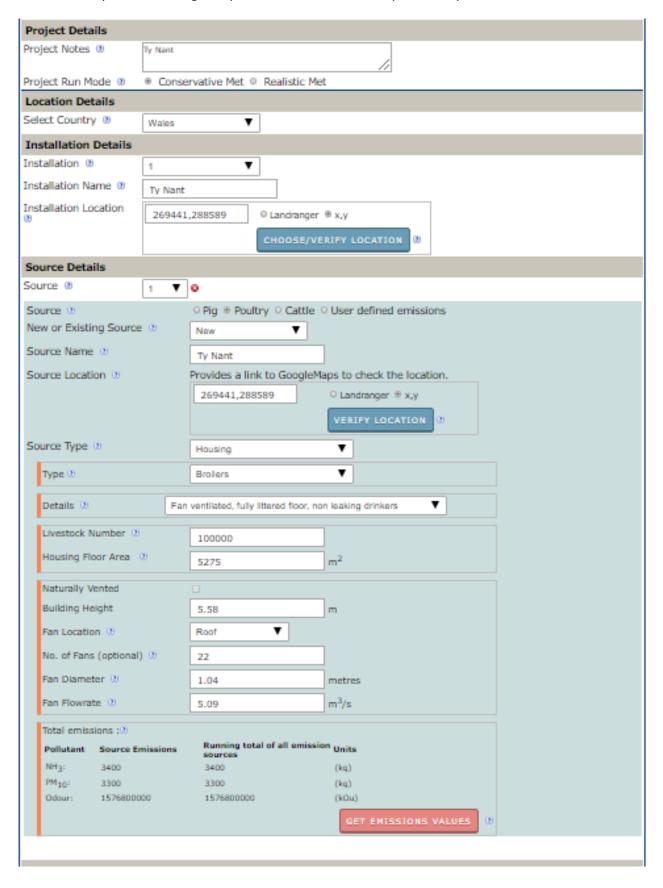
- protected environmental sites. The SCAIL assessment provides the assessor with a worst-case scenario of the impact of agricultural developments.
- 4.2 No Integrated Pollution and Prevention Control Permit (IPPC) is required for the free-range unit, given the proposal does not exceed the housing of over 40,000 hens.
- 4.3 The SCAIL modelling provides information on the background concentrations and depositions at the receptor (SSSI's) and the process contribution the proposal will have on those critical levels.
- 4.4 In Appendix 1 you will find the calculations of the SCAIL for the protected environmental sites for the proposed poultry unit.
- 4.5 In relation to the proposed poultry unit and its associated emissions, it is calculated that it will have a 1% process contribution at the closest SSSI.
- 4.6 In light of the above calculations, it is envisaged that detailed modelling will not be required on the impact on the SSSI's.

5. Conclusion

5.1 In light of the above assessment and analysis, it is considered that there would be no significant detrimental impact upon any of the environmental sites within 10km and therefore no further modelling will need to be undertaken.

Appendix 1

Proposed building Simple Calculation of Atmospheric Impact Limits



Site No.	Name	Distance(km)	Designation	Country	Easting	Northing
1	Gwaun Troed-Rhiw- Seiri a Llyn Mynydd- Gorddu	3.09	SSSI	undefined	267713.7	286027.3
2	Craigypistyll	3.27	SSSI	undefined	271141.6	285795.8
3	Coed Cwm Cletwr	3.46	SSSI	undefined	267837	291654.5
4	Mwyngloddfa Llety Ifan Hen (Vaughan Mine)	3.589	SSSI	undefined	269472.8	285000.2
5	Mwyngloddfa Nant-y- Cagl (Eaglebrook Mine)	3.939	SSSI	undefined	273340.5	289146
5	Mwyngloddfa Llechweddhelyg	3.94	SSSI	undefined	268360.4	284800.1
7	Cwmsymlog	4.782	SSSI	undefined	269908	283829.5
В	Dyfi	4.824	SSSI	undefined	265269.8	291012.3
9	Cors Fochno	4.852	SAC	undefined	265413	291293.4
10	Mwyngloddfa Brynyrafr	4.988	SSSI	undefined	274384	287918
11	Banc Llety-Spence	5.013	SSSI	undefined	270024.1	283610.5
12	Cae Ty-Hen	5.226	SSSI	undefined	264263.6	289297.5
13	Coed Cwm Einion	5.78	SAC	undefined	269467	294368.5
14	Coed Cwm Einion	5.78	SSSI	undefined	269467	294368.5
15	Pen Llyn a'r Sarnau / Lleyn Peninsula and the Sarnau	5.959	SAC	undefined	265363.6	292935.2
16	Dyfi Estuary / Aber Dyfi	5.959	SPA	undefined	265366.6	292938
17	Pencarreg-Gopa a Moel Hyrddod	6.288	SSSI	undefined	271197	294626.5
18	Pencreigiau,R Llan	7.082	SSSI	undefined	274166.7	293863.3
19	Pumlumon (Plynlimon)	7.598	SSSI	undefined	276636	286146.2
20	Mwyngloddfa Cwmbrwyno	8.201	SSSI	undefined	271363.9	280616.6
21	Cwm Llyfnant	8.442	SSSI	undefined	271964.5	296644.5
22	Borth - Clarach	8.724	SSSI	undefined	260722.6	288907.2
23	(Ponterwyd Quarry)	8.935	SSSI	undefined	274028.5	280921.3
24	Pfordd Coed Dol-Fawr	9.035	SSSI	undefined	270227.7	279588.7
25	Afon Rheidol Ger Capel Bangor	9.357	SSSI	undefined	265341.5	280177.8
26	Coedydd a Cheunant Rheidol (Rheidol Woods & Gorge)	9.495	SSSI	undefined	274885.4	280810.3
27	Coedydd a Cheunant Rheidol / Rheidol Woods and Gorge	9.495	SAC	undefined	274885.9	280810.7
28	Coed y Gofer	9.549	SSSI	undefined	264388.4	296692.1
29	Rheidol Shingles and Backwaters	9.736	SSSI	undefined	263168.8	281142.1
30	Bryn Bras	9.776	SSSI	undefined	274306	280109.4
		_				



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Site Information	27905 Ancient Ser	ni Natural W	oodland			•	8				
Region: Site Name: Site Code: ® Designation Sta Distance from I Receptor Type: Grid Reference Met Site: ® Run Mode: ® PM ₁₀ Percentile	rstallation (m): ® : :: ®		N/A User def 142	ined wed, / 288731 stive	Semi Natu Mixed and						
No. Name		No. of sources	No. of new	PM ₁₀	NH ₃	Odour (kOula)		Dep N	Dep Aold (kEq	Cono	Cono
1 Ty Nant		1	sources	(t/a)	(t/a) 3.4	(NOU/E)) NH ₃ (µg/m3) 5.08	(kg/ha/yr) 26.39	H+/ha/yr)	PM ₁₀ (µg/m ³	100000000000000000000000000000000000000
	s/Concentrations ar	1.			0.4		0.00	20.00	1.701		
	epositions and Critica		NH ₃ (µg/m3)		Dep. (N/ha/yr)		Aold Dep. (kEq H+/ha	(yr)	PM ₁₀ (µg/m²	E)	Odour (Ou/m8)
1	ution (PC) at recepto		5.08154		.60		2.700		-		-
Predicted Envir	centration at recepto conmental Deposition (PEC) ®		0.83 5.91	1	.92 .52		1.48 (N:1.: 4.18	-		-	
Environmental A or Critical Load /	ssessment Level Level ®		Lower: 1 Upper: 3	Mi	.0 cadleaved xed and Yo codland		maxN: 1.3 maxS: 1.0 minN: 0.26 Broadleav and Yew V	3 ed, Mixed	-		-
				A	LTERNAT	IVE C	RITICAL L	OAD INFO			
USE OWN TH	RESHOLDS?										
% of relevant sta	indard PC ®		Lower: 5089 Upper: 1699		6%		205%		-		-
% of relevant sta	indard PEC ®		Lower: 5919 Upper: 1979		5%		317%		-		-
EXCEEDANCE	29		Lower: 4.91 Upper: 2.91		.52		2.86		-		-
Project Notes											
Ty Nan	t										

Site Int	formation	30889 Ancient Sen	ni Natural W	/oodland				•	8				
Design Distar Recep Grid F Met S Run M PM ₁₀	lame: fode: ® nation Stat nce from In stor Type: Reference: ite: ® lode: ® Percentile:	stallation (m): ®		N/A Use 300 Bro 269 SEN Con	89 Anci r defin adleave	ed ed, Mi 8824	emi Natu						
	ation Inform	mation ?		-					-			_	-
No.	Name		No. of sources	No. o new source	cti	M ₁₀ (a)	NH ₃ (t/a)	(kOula)	Cono NH _S (µg/m3)	Dep N (kg/ha/yr)	Dep Aold (kEq H+/ha/yr)	Cono PM ₁₀ (µg/m3)	Cono Odour (Ouim3)
1	Ty Nant		1	1	-		3.4	-	1.78	9.23	0.623	-	-
Total D	epositions	/Concentrations an	d Exceeda	nces 🖰									
Concer Loads/		positions and Critica	ı	NH ₃ (µg/m8)		N De (kg f	p. Wha/yr)		Aold Dep. (kEq H+/ha	(yr)	PM ₁₀ (µg/m3		dour Dulm3)
Proces	s Contribu	tion (PC) at receptor	edge	1.77661		13.8	0		0.930		_		
		entration at receptor		0.83		17.9	2		1.48 (Nt1.2	28 S:0.20)	-	-	
	ted Enviro	nmental eposition (PEC) ®		2.61		31.7	2		2.41		-	-	
	nmental As cal Load / I	sessment Level Level ®		Lower: Upper:		Mixe	adlessved ad and Yo adland	.	maxN: 1.3 maxS: 1.0 minN: 0.28 Broadleav and Yew V	3 3 ed, Mixed	-	-	
						AL	TERNAT	IVE CR	ITICAL L	OAD INFO			
USE	OWN THE	ESHOLDS?											
% of re	elevant star	ndard PC ®		Lower:		1385	%		70%		-	-	
% of re	elevant star	ndard PEC ®		Lower: 2 Upper: 8		3175	%		183%		-	-	
EXCE	EDANCE ®)		Lower: Upper: I exceed:	No	21.7	2		1.09		-	-	
Project	t Notes												
	Ty Nant												4

22

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Site Information 30871 Ancient Semi Natural Woodland

Region:

Site Name: 30871 Ancient Semi Natural Woodland

Site Code: ® N/A Designation Status: ® User defined Distance from Installation (m): ® 212

Broadleaved, Mixed and Yew Woodland Receptor Type:

269257,288694 Grid Reference: Met Site: ® SENN Run Mode: ® Conservative PM₁₀ Percentile: ® Average

Installation Information 2

	No.		sources			NH ₃ (t/a)	Odour (kOula)		(kg/ha/yr)	Dep Aold (kEq H+/ha/yr)	PM _{so}	Cono Odour (Ou/m8)
П	1	Ty Nant	1	1	-	3.4	-	2.81	14.6	0.985	-	-

Total Depositions/Concentrations and Exceedances 2:

Concentrations/Depositions and Critical Loads/Levels	NH ₃ (µg/m3)	N Dep. (kg N/halyr)	Aold Dep. (kEq H+/ha/yr)	PM ₁₀ (µg/m3)	Odour (Ou/m8)
Process Contribution (PC) at receptor edge Background concentration at receptor edge ® Predicted Environmental Concentration/Deposition (PEC) ®	2.81011 0.83 3.64	21.90 17.92 39.82	1.500 1.48 (N:1.28 S:0.20) 2.98	-	-
Environmental Assessment Level or Critical Load / Level ®	Lower: 1 Upper: 3	10.0 Broadleaved, Mixed and Yew Woodland ALTERNATIVE CO	maxN: 1.32 maxS: 1.03 minN: 0.28 Broadleaved, Mixed and Yew Woodland	-	-
USE OWN THRESHOLDS?					
% of relevant standard PC ®	Lower: 281% Upper: 94%	219%	114%	_	_
% of relevant standard PEC ®	Lower: 364% Upper: 121%	398%	226%	-	-
EXCEEDANCE ®	Lower: 2.64 Upper: 0.64	29.82	1.66	-	-

Project Notes

Ty Nant

SAVE RESULTS (8) SAVE INPUTS (8)

Site Information 30884 Ancient Semi Natural Woodland Region: Site Name: 30884 Ancient Semi Natural Woodland Site Code: ® N/A User defined Designation Status: ® Distance from Installation (m): ® 269 Receptor Type: Broadleaved, Mixed and Yew Woodland Grid Reference: 269644.288412 Met Site: ® SENN Run Mode: ® Conservative PM₁₀ Percentile: ® Average Installation Information 2 No. of sources Name (tra) (tha) 1 Ty Nant 3.4 2.02 10.47 0.707 Total Depositions/Concentrations and Exceedances 25 Concentrations/Depositions and Critical Loads/Levels PM₁₀ (µg/m8) N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) Odour (Ou/m8) Process Contribution (PC) at receptor edge 2.01658 15.70 1.100 Background concentration at receptor edge ® 0.83 17.92 1.48 (N:1.28|S:0.20) 2.85 33.62 2.58 Predicted Environmental Concentration/Deposition (PEC) ® maxN: 1.32 10.0 Environmental Assessment Level Lower: 1 or Critical Load / Level ® Upper: 3 maxS: 1.03 Broadleaved, minN: 0.28 Mixed and Yew Woodland Broadleaved, Mixed and Yew Woodland Lawer: 202% 157% 83% % of relevant standard PC ® Upper: 67% 195% % of relevant standard PEC ® Lower: 285% 336% Upper: 95% EXCEEDANCE ® .awer: 1.85 23.62 1.26 Upper: No Project Notes Ty Nant

SAVE RESULTS (8) SAVE INPUTS (8)

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24

Site Information Craigypistyll (SSSI) Y (8) Region: Wales Site Name: Craigypistyll Site Code: ® 4289 Designation Status: ® SSSI Distance from Installation (m): ® 3270 Habitat Receptor Type: Grid Reference: 271141.6,285795.8 Met Site: 00 SENN Run Mode: (8) Conservative PM₁₀ Percentile: ® Average Installation Information 3 Name Dep Aold (kEq H+/ha/yr) Odour (kOu/a) (tra) (trai) 0.018 3.4 Ty Nant 0.05 0.26 Total Depositions/Concentrations and Exceedances 8 Concentrations/Depositions and Critical Loads/Levels Aold Dep. (kEq H+/ha/yr) N Dep. (kg N/ha/yr) PM₁₀ Odour (Ou/m8) (µg/m3) (µg/m3) Process Contribution (PC) at receptor edge 0.05051 0.26 0.018 10.64 0.95 (N:0.76|S:0.19) 0.52 Background concentration at receptor edge ® 0.57 10.9 0.97 Predicted Environmental Concentration/Deposition (PEC) ® Environmental Assessment Level 5.0 maxN: 0.75 Lower: 1 or Critical Load / Level ® Upper: 3 maxS: 0.43 8 Inland rock minN: 0.32 Inland rock % of relevant standard PC ® Lawer: 5% 5% 3% Upper: 2% % of relevant standard PEC ® Lower: 57% 218% 129% Upper: 19% EXCEEDANCE ® 5.90 0.22 Lawer: No exceedance Upper: No exceedance Project Notes Ty Nant

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Site Inf	ormation	Mwyngloddfa Llety	Ifan Hen (V	aughan Mine	(SS	SSI)			99						
Region	1:			Wales											
Site N				Mwyngl	oddf	a Llet	ty Ifan i	Hen (Vai	ughan Mine)					
Site O	ode: ®			5436											
Design	ation Stat	us: ®		SSSI											
-		stallation (m): ®		3589											
	tor Type:			Habitat											
	eference:			269472		15000	2								
Met Si				SENN			-								
	ode: ®			Conserv	ration										
	Percentile:	09		Average											
	tion Inform			Average											
		nation o			_	_									
No.	Name		No. of sources	No. of new	PM		NH ₃	Odour (kOu/a)	Cono NH _s	Dep N (kg/ha/yr)		p Aold	Cono PM ₁₀		Cono Odour
			5001000	sources	(tra))	(t/a)	(NOBIA)	(µg/m8)	(Ngritary))		(ha/yr)	(µg/m3	n	(Ou/m8)
1	Ty Nant		1	1	-		3.4	-	0.05	0.23	0.0	16	-		-
	-	/Concentrations an	d Evenada	near D											
TOTAL D	epositions	redicentrations ar	iu Exceeua	iices w	_										
		positions and Critica	si l	NH ₃		N Dep).		Aold Dep.			PM ₁₀			our
Loads/L	.evels			(µg/m3)	1	(Kg N	ha/yr)		(kEq H+/ha/	yr)		(µg/m3	9	(Ou	(m8)
Proces	s Contribut	ion (PC) at receptor	redge	0.04518		0.23			0.016			-			
Backor	ound cono	entration at receptor	r edge ®	0.83		10.50)		0.90 (N:0.7	75IS:0.15)		_		_	
-				0.88	- 1	10.73			0.92	,					
	ted Enviro ntration/D	nmental eposition (PEC) 🏻		0.88		10.73	,		0.92						
					\neg						\neg				$\overline{}$
	nmental As cal Load / L	sessment Level		Lower: 1								-		-	
or Chik	cai Load / L	Level (ii)		Upper: 3		No se	ensitive	habitat	No sensitiv	e habitat o	or				
				00			ecies at	this	species at	this site					
						site									
					h										
						ALT	ERNAT	IVE CI	RITICAL L	DAD INFO					
USE	OWN THE	ESHOLDS?													
					\dashv						\dashv				
% of re	levant stan	dard PC ®		Lower: 5%		n/a			n/a			_		-	
				Upper: 2%											
				upper. 276											
0/ -/	In contrator	dead DEC 00		I	,				- la						
% of re	levant stan	dard PEC ®		Lower: 88%	9 1	n/a			n/a			-		-	
				Upper: 29%	6										
					\rightarrow										
EXCE	DANCE ®)		Lower: No		n/a			n/a			_		-	
				exceedance	•										
				Upper: No											
				exceedance											
Project	Notes														
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SAVE RESULTS (8) SAVE INPUTS (8)



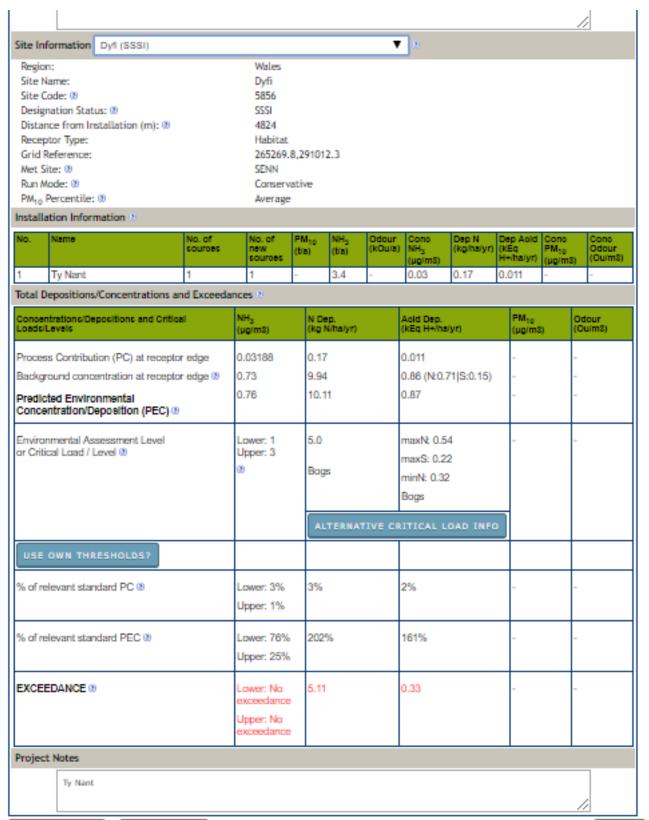
Site Information	Mwyngloddfa Nan	t-y-Cagl (Ea	glebrook Mine	e) (S	SSI)	•	8						
Region:			Wales										
Site Name:			Mwyngle	oddf	a Nant-y-Ca	ıgl (Eagle	brook Mine	e)					
Site Code: ®			5108										
Designation State	us: ®		SSSI										
Distance from In	stallation (m): ®		3939										
Receptor Type:			Habitat										
Grid Reference:			273340.	5,28	9146								
Met Site: ®			SENN										
Run Mode: ®			Conserv	ativ	e								
PM ₁₀ Percentile:	09		Average										
Installation Inform	mation (2)												
No. Name		No. of	No. of	PM	10 NH ₃	Odour	Cono	Dep N		Aold	Cone		Cono
		sources	sources	(t/a)) (t/a)	(kOu/a)	(µg/m8)	(kg/ha/yr)	(kEq H+/h	a/vr)	PM ₁₀ (µg/m3		Odour (Ou/m3)
1 Ty Nant		1	1	-	3.4	-	0.04	0.21	0.01		- pprint	,	
-	/Concentrations ar	nd Exceeda			u. 1			U.E.		,			
Concentrations/De	positions and Critic	NI .	NH _x		N Dep.		Aold Dep.		P	Mag		Odo	ur
Loads/Levels	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(µg/m8)		(kg N/ha/yr)		(kEq H+/ha	(yr)		ug/m3	0		m3)
Process Contribut	ion (PC) at recepto	r edge	0.04044		0.21		0.014		-			-	
Background cono	entration at recepto	r edge (8)	0.52	-	10.64		0.95 (N:0.)	78(5:0.19)				_	
_		a dage o	0.56										
Predicted Enviro	nmental eposition (PEC) ®		0.56		10.85		0.96		-				
Concentrations	eposition (PEC) ···			_					_				
Environmental As	encoment I must		Lower: 1										
or Critical Load / L			Upper: 3										
			09		No sensitiv				OF.				
					or species a site	ii uris	species at	this site					
									_				
					ALTERNA	TIVE C	RITICAL L	OAD INFO					
USE OWN THR	ESHOLDS?												
Of affection and also	deed DO 00		1		- 1-								
% of relevant stan	idard PC ®		Lower: 4%	ľ	n/a		n/a					-	
			Upper: 1%										
				\dashv					\top				
% of relevant stan	dard PEC ®		Lower: 56%	·	n/a		n/a		-			-	
			Upper: 19%	,									
				\dashv					+				
EXCEEDANCE ®)		Lower: No		n/a		n/a		-			-	
			exceedance	•									
			Upper: No										
			exceedance	:									
Project Notes													
Project Notes													
Ty Nant													

80 Site Information | Mwyngloddfa Llechweddhelyg (SSSI) Ŧ Region: Site Name: Mwyngloddfa Llechweddhelyg Site Code: @ 5290 Designation Status: ® SSSI 3940 Distance from Installation (m): ® Habitat Receptor Type: 268360.4.284800.1 Grid Reference: Met Site: @ SENN Run Mode: @ Conservative PM₁₀ Percentile: ® Average Installation Information (8) Name Dep Aold (kEq Cone PM₁₀ Odour new courses (kOuta) (tra) (tra) l-/ha/yr) Ou/m3) (µg/m3) (µg/m3) Ty Nant 3.4 0.04 0.21 0.014 Total Depositions/Concentrations and Exceedances 8 Concentrations/Depositions and Critical Loads/Levels Odour (Ou/m8) N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) PM₁₀ (8m/gu) (ug/m3) Process Contribution (PC) at receptor edge 0.04042 0.21 0.014 0.93 12.04 1.03 (N:0.88|S:0.17) Background concentration at receptor edge ® 12.25 0.97 1.04 Predicted Environmental Concentration/Deposition (PEC) @ Environmental Assessment Level Lower: 1 or Critical Load / Level ® Upper: 3 No sensitive habitat No sensitive habitat or 0 or species at this species at this site. site % of relevant standard PC ® Lower: 4% n/a n/a Upper: 1% % of relevant standard PEC ® Lower: 97% n/a n/a Upper: 32% EXCEEDANCE ® Lower: No n/a exceedance: Upper: No exceedance Project Notes

Ty Nant

SAVE RESULTS (8) SAVE INPUTS (8)





22 Site Information Cors Fochno (SAC) Region: Wales Site Name: Cors Fochno UK0014791 Site Code: ® Designation Status: ® SAC Distance from Installation (m): @ 4852 Receptor Type: Habitat Grid Reference: 265413,291293,4 Met Site: (8) SENN Run Mode: ® Conservative PM₁₀ Percentile: ® Average Installation Information & (tra) (tra) H+/ha/yr) (µg/m3) (Ou/m3) Ty Nant 3.4 0.16 0.011 0.03 Total Depositions/Concentrations and Exceedances 25 Concentrations/Depositions and Critical Loads/Levels PM₁₀ (µg/m8) N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) Odour (Ou/m8) (µg/m3) Process Contribution (PC) at receptor edge 0.03167 0.16 0.011 Background concentration at receptor edge (8) 0.73 9.94 0.86 (N:0.71|S:0.15) 0.76 10.1 0.87 Predicted Environmental Concentration/Deposition (PEC) ® maxN: 0.54 Environmental Assessment Level Lower: 1 5.0 or Critical Load / Level ® Upper: 3 maxS: 0.22 Active raised bogs minN: 0.32 Active raised bogs USE OWN THRESHOLDS? 3% 2% % of relevant standard PC ® Lower: 3% Upper: 1% % of relevant standard PEC ® 202% 161% Lower: 76% Upper: 25% 0.33 EXCEEDANCE ® .awer: No 5.10 exceedance Upper: No exceedance

Project Notes

22 **7** 8 Site Information | Mwyngloddfa Brynyrafr (SSSI) Wales Region: Mwyngloddfa Brynyrafr Site Name: Site Code: ® 5291 Designation Status: ® SSSI 4988 Distance from Installation (m): ® Receptor Type: Habitat Grid Reference: 274384,287918 Met Site: ® SENN Run Mode: ® Conservative PM₁₀ Percentile: ® Average Installation Information 2 Odour (kOu/a) PM₁₀ Cono NH₃ new sources (tra) (trai) Ty Nant 3.4 0.03 0.16 0.011 Total Depositions/Concentrations and Exceedances 2: N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) Odour (Ou/m8) Concentrations/Depositions and Critical PM₁₀ Loads/Levels (µg/m8) (µg/m8) Process Contribution (PC) at receptor edge 0.03067 0.16 0.011 0.52 0.95 (N:0.76|S:0.19) Background concentration at receptor edge ® 10.64 0.55 10.8 0.96 Predicted Environmental Concentration/Deposition (PEC) ® Environmental Assessment Level Lower: 1 or Critical Load / Level ® Upper: 3 No sensitive habitat No sensitive habitat or 8 or species at this species at this site site ALTERNATIVE CRITICAL LOAD INFO % of relevant standard PC ® Lower: 3% n/a n/a Upper: 1% % of relevant standard PEC ® Lower: 55% n/a n/a Upper: 18% EXCEEDANCE ® .awer: No n/a n/a exceedance Upper: No exceedance Project Notes Ty Nant



T 8 Site Information Banc Liety-Spence (SSSI) Wales Region: Site Name: Banc Llety-Spence Site Code: @ 5328 Designation Status: ® 5551 5013 Distance from Installation (m): @ Receptor Type: Habitat Grid Reference: 270024.1,283610.5 Met Site: (0) SENIN Run Mode: @ Conservative PM₁₀ Percentile: ® Average Installation Information 2 Name Cono NH_S Cono PM₁₀ Cono Odour (Ou/m8) (kEq H=/ha/yr) new sources rtañ. (kg/ha/yr) rtrari (pg/m3) (pg/m3) Ty Nant 3.4 0.03 0.16 0.011 Total Depositions/Concentrations and Exceedances 33 Concentrations/Depositions and Critical Loads/Levels N Dep. (kg N/ha/yr) PM₁₀ (µg/m²) Aold Dep. (KEq H+/ha/yr) Odour (Oulm8) (pg/m2) 0.03050 0.16 Process Contribution (PC) at receptor edge 0.011 0.61 11.20 Background concentration at receptor edge (8) 0.99 (N:0.80|S:0.19) 0.64 11.36 Predicted Environmental Concentration/Deposition (PEC) ® Environmental Assessment Level Lower: 1 8.0 maxNt 0.78 or Critical Load / Level ® Upper: 3 maxS: 0.41 Acid grassland minN: 0.37 Acid grassland ALTERNATIVE CRITICAL LOAD INFO USE OWN THRESHOLDS? % of relevant standard PC @ 2% 1% Lower: 3% Upper: 1% 142% 128% % of relevant standard PEC ® Lower: 64% Upper: 21% EXCEEDANCE ® Lower: No 3,38 0.22 exceedance. Upper: No. exceedance **Project Notes** Ty Nant

▼ 8 Site Information Coed Cwm Einlon (SAC) Region: Wales Site Name: Coed Cwm Einion UK0030117 Site Code: ® SAC Designation Status: ® Distance from Installation (m): 09 5780 Receptor Type: Habitat Grid Reference: 269467,294368.5 Met Site: ® SENN Run Mode: ® Conservative PM₁₀ Percentile: ® Average Installation Information & PM₁₀ No. of sources Dep N (kg/ha/yr) Name Odour (kOu/a) Cono NH₃ (µg/m8) Cono PM₁₀ (µg/m3) Odour (Ou/m3) (traj (t/a) Ty Nant 3.4 0.03 0.2 0.014

Total Depositions/Concentrations and Exceedances 25

Concentrations/Depositions and Critical Loads/Levels	NH ₃ (µg/m3)	N Dep. (kg N/halyr)	Aold Dep. (kEq H+/ha/yr)	PM ₁₀ (µg/m3)	Odour (Ou/m3)
Process Contribution (PC) at receptor edge Background concentration at receptor edge ® Predicted Environmental Concentration/Deposition (PEC) ®	0.02594 0.73 0.76	0.20 16.52 16.72	0.013 1.37 (N:1.18 S:0.19) 1.38	-	-
Environmental Assessment Level or Critical Load / Level ®	Lower: 1 Upper: 3	15.0 Tilio-Acerion forests of slopes, screes and ravines	maxN: 1.18 maxS: 0.89 minN: 0.28 Tilio-Acerion forests of slopes, screes and ravines	-	-
USE OWN THRESHOLDS?					
% of relevant standard PC ®	Lower: 3% Upper: 1%	1%	1%	-	-
% of relevant standard PEC ®	Lower: 76% Upper: 25%	111%	117%	-	-
EXCEEDANCE ®	Lower: No exceedance Upper: No exceedance	1.72	0.20	-	-

Project Notes

exceedance

Project Notes

Site Information Pen Llyn a'r Samau / Lleyn Peninsula and the Samau (SAC)

100-1--

Region: Wates

Site Name: Pen Llyn a'r Sarnau / Lleyn Peninsula and the Sarnau

 Site Code: ∅
 UK0013117

 Designation Status: ∅
 SAC

 Distance from Installation (m): ∅
 5959

 Receptor Type:
 Habitat

Grid Reference: 265363.6,292935.2

 Met Site: ∅
 SENN

 Run Mode: ∅
 Conservative

 PM₁₀ Percentile: ∅
 Average

Installation Information 2

No.	Name	courses	No. of new sources	PM ₁₀ (t/a)		Odour (kOu/a)		(kg/ha/yr)	Dep Aold (kEq H+/ha/yr)	PM _{so}	Cono Odour (Ou/m8)
1	Ty Nant	1	1	-	3.4	-	0.03	0.13	0.009		-

Total Depositions/Concentrations and Exceedances 3

Concentration (Depositions and Critical Loads/Levels	NH ₃ (µg/m3)	N Dep. (kg N/ha/yr)	Aold Dep. (kEq H+/ha/yr)	PM ₁₀ (µg/m3)	Odour (Ou/m3)
Process Contribution (PC) at receptor edge Background concentration at receptor edge ® Predicted Environmental Concentration/Deposition (PEC) ®	0.02508 0.73 0.76	0.13 9.94 10.07	0.009 0.86 (N:0.71 S:0.15) 0.87	-	en .
Environmental Assessment Level or Critical Load / Level ®	Lower: 1 Upper: 3	20.0 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	Lutra lutra	-	-
USE OWN THRESHOLDS?		<u> </u>			
% of relevant standard PC ®	Lower: 3% Upper: 1%	196	n/a	-	-
% of relevant standard PEC ®	Lower: 76% Upper: 25%	50%	n/a	=	=
EXCEEDANCE ®	Lower: No exceedance Upper: No exceedance	-9.93	n/a	-	

Project Notes

22 ▼ 8 Site Information Dyfi Estuary / Aber Dyfi (SPA) Region: Wales Site Name: Dyfi Estuary / Aber Dyfi Site Code: ® UK9020284 Designation Status: ® SPA Distance from Installation (m): ® 5959 Receptor Type: Habitat Grid Reference: 265366.6,292938 Met Site: 00 SENIN Run Mode: 09 Conservative PM₁₀ Percentile: ® Average Installation Information 3 Dep N (kg/ha/yr) Dep Aold Cono (kEq PM₁₀ H+lha/yr) (up/m No. of sources (tra) (tra) (µg/m3) Ty Nant 3.4 0.03 0.13 0.009 Total Depositions/Concentrations and Exceedances 8 PM₁₀ (µg/m8) NH₃ (µg/m8) Concentrations/Depositions and Critical N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) Odour (Ou/m3) 0.02506 Process Contribution (PC) at receptor edge 0.13 0.009 Background concentration at receptor edge ® 0.73 9.94 0.86 (N:0.71|S:0.15) 0.76 10.07 0.87 Predicted Environmental Concentration/Deposition (PEC) ® Environmental Assessment Level Lower: 1 5.0 maxN: 0.57 Upper: 3 or Critical Load / Level ® maxS: 0.25 Anser albifrons minN: 0.32 flavirostris (Greenland/Ireland/UK) Anser albifrons flavirostris (Greenland/Ireland/UK) % of relevant standard PC ® Lower: 3% 3% 2% Upper: 1% 153% % of relevant standard PEC ® Lawer: 76% 201% Upper: 25% EXCEEDANCE ® Lawer: No 5.07 0.30 exceedance Upper: No exceedance Project Notes

// **V** (8) Site Information Pencarreg-Gopa a Moel Hyrddod (SSSI) Region: Site Name: Pencarreg-Gopa a Moel Hyrddod Site Code: ® Designation Status: ® SSSI Distance from Installation (m): ® 6288 Receptor Type: Habitat Grid Reference: 271197,294626.5 SENN Met Site: 00 Run Mode: @ Conservative PM₁₀ Percentile: ® Average Installation Information 2 Name No. of new sources (tra) (traj H+/ha/yr) (µg/m3) (Ou/m3) (8m/gu) Ty Nant 3.4 0.02 0.120.008 Total Depositions/Concentrations and Exceedances 2 Aold Dep. (kEq H+/ha/yr) PM₁₀ (µg/m8) Concentrations/Depositions and Critical Loads/Levels N Dep. (kg N/ha/yr) (µg/m3) 0.02361 0.008 Process Contribution (PC) at receptor edge 0.12 Background concentration at receptor edge ® 0.47 10.64 0.95 (N:0.76|S:0.19) 0.49 10.76 0.96 Predicted Environmental Concentration/Deposition (PEC) ® Environmental Assessment Level 5.0 maxNt 0.68 Lower: 1 or Critical Load / Level ® Upper: 3 maxS: 0.35 89 Bogs minN: 0.32 Bogs % of relevant standard PC ® 2% 1% Lower: 2% Upper: 1% 141% % of relevant standard PEC ® Lawer: 49% 215% Upper: 16% EXCEEDANCE ® Lawer: No 5.76 0.28 exceedance

Project Notes

Ty Nant

Upper: No exceedance

T (8) Site Information | Pencreiglau|R Llan (SSSI) Region: Wales Site Name: Pencreigiau | R Llan Site Code: ® 6417 SSSI Designation Status: ® 7082 Distance from Installation (m): @ Habitat Receptor Type: 274166.7,293863.3 Grid Reference: Met Site: ® SENN Run Mode: 09 Conservative PM₁₀ Percentile: ® Average Installation Information 2 No. of sources Name Dep N (tra) (trail Ty Nant 1 3.4 0.02 0.11 0.007 Total Depositions/Concentrations and Exceedances 21 PM₁₀ (µg/m3) Concentrations/Depositions and Critical Loads/Levels N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) Odour (Ou/m3) (µg/m3) Process Contribution (PC) at receptor edge 0.02075 0.11 0.007 0.95 (N:0.76|S:0.19) Background concentration at receptor edge (8) 0.47 10.64 0.49 10.75 0.96 Predicted Environmental Concentration/Deposition (PEC) @ 3.0 maxN: 0.75 Environmental Assessment Level Lower: 1 or Critical Load / Level ® Upper: 3 maxS: 0.43 Standing open minN: 0.32 water - oligotrophic Inland rock 1% % of relevant standard PC ® Lower: 2% 4% Upper: 1% 358% 128% % of relevant standard PEC ® Lower: 49% Upper: 16% EXCEEDANCE ® 7.75 0.21 Lawer: No exceedance Upper: No exceedance

Project Notes

// Site Information | Pumlumon (Plynlimon) (SSSI) Region: Wates Site Name: Pumlumon (Plynlimon) Site Code: ® 5349 SSSI Designation Status: ® 7598 Distance from Installation (m): ® Receptor Type: **Habitat** Grid Reference: 276636,286146.2 Met Site: @ SENIN Run Mode: @ Conservative PM₁₀ Percentile: ® Average Installation Information 3 No. of sources Dep Aold (kEq H+/ha/yr) Name Dep N (kg/ha/yr) Cons PM₁₀ Cons Odour Odour (kOu/a) PM₁₀ (traji (traji (Smim3) (8m/gu) (µg/m3) 0.007 Ty Nant 3.4 0.02 0.1

Total Depositions/Concentrations and Exceedances 35

Concentrations/Depositions and Critical Loads/Levels	NH _S (µg/m8)	N Dep. (kg N/halyr)	Aold Dep. (KEq H+/ha/yr)	PM ₁₀ (µg/m3)	Odour (Ou/m2)
Process Contribution (PC) at receptor edge Background concentration at receptor edge ® Predicted Environmental Concentration/Deposition (PEC) ®	0.01926 0.46 0.48	0.10 13.18 13.28	0.007 1.19 (N:0.94 S:0.25) 1.2	=	=
Environmental Assessment Level or Critical Load / Level ®	Lower: 1 Upper: 3	3.0 Dystrophic loch ALTERNATIVE CO	maxN: 0.76 maxS: 0.44 minN: 0.32 Montane habitats	=	
USE OWN THRESHOLDS?					
% of relevant standard PC ®	Lower: 2% Upper: 1%	3%	1%		=
% of relevant standard PEC ®	Lower: 48% Upper: 16%	442%	158%	-	
EXCEEDANCE ®	Lower: No exceedance Upper: No exceedance	10.26	0.44		-

Project Notes

T (8) Site Information | Mwyngloddfa Cwmbrwyno (SSSI) Wales Region: Site Name: Mwyngloddfa Cwmbrwyno Site Code: ® 4978 5551 Designation Status: ® 8201 Distance from Installation (m): ® Receptor Type: Habitat 271363.9,280616.6 Grid Reference: Met Site: ® SENIN Run Mode: ® Conservative PM₁₀ Percentile: ® Average Installation Information 2 No. of Dep N Odour (Ou/m3) (tra) (tra) (µg/m Ty Nant 1 3.4 0.02 0.09 0.006Total Depositions/Concentrations and Exceedances (8) Concentrations/Depositions and Critical Loads/Levels PM₁₀ (µg/m8) N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) Odour (Ou/m3) (µg/m3) Process Contribution (PC) at receptor edge 0.01780 0.09 0.006 Background concentration at receptor edge ® 0.61 11.20 0.99 (N:0.80|S:0.19) 11.29 0.63 Predicted Environmental Concentration/Deposition (PEC) ® Environmental Assessment Level Lower: 1 Upper: 3 or Critical Load / Level ® No sensitive habitat No sensitive habitat or or species at this species at this site % of relevant standard PC ® Lower: 2% n/a n/a Upper: 1% % of relevant standard PEC ® Lawer: 63% n/a n/a Upper: 21% EXCEEDANCE ® n/a n/a Lawer: No exceedance Upper: No exceedance Project Notes Ty Nant

T (8) Site Information | Own Llyfnant (SSSI) Wales Region: Site Name: Cwm Llyfnant Site Code: ® 4190 Designation Status: ® 9220 Distance from Installation (m): ® 8442 Receptor Type: Habitat Grid Reference: 271964.5,296644.5 Met Site: ® SENN Run Mode: ® Conservative PM₁₀ Percentile: ® Average Installation Information 2 Name No. of sources Dep N (kg/ha/yr) Cons Odour (Ou/m8) new (tra) (tra) (µg/m3) Ty Nant 3.4 0.02 0.13 0.009 Total Depositions/Concentrations and Exceedances 2: PM₁₀ (µg/m8) N Dep. (kg N/ha/yr) Concentrations/Depositions and Critical Loads/Levels Aold Dep. (kEq H+/ha/yr) (µg/m3) Process Contribution (PC) at receptor edge 0.01728 0.13 0.009 0.54 16.10 0.92 (N:0.73|S:0.19) Background concentration at receptor edge ® 0.93 0.58 16.23 Predicted Environmental Concentration/Deposition (PEC) (8) Environmental Assessment Level 5.0 maxN: 0.75 Lower: 1 or Critical Load / Level ® Upper: 3 maxS: 0.43 89 Broad-leaved, minN: 0.32 mixed and yew woodland Inland rock ALTERNATIVE CRITICAL LOAD INFO % of relevant standard PC ® 3% 196 Lower: 2% Upper: 1% 325% 124% % of relevant standard PEC ® Lower: 56% Upper: 19% EXCEEDANCE ® 11.23 0.18 Lawer: No exceedance Upper: No exceedance Project Notes

V 8 Site Information Borth - Clarach (SSSI) Region: Wales Site Name: Borth - Clarach Site Code: ® 5554 Designation Status: ® 9881 Distance from Installation (m): (8) 8724 Receptor Type: Habitat Grid Reference: 260722.6,288907.2 Met Site: (8) SENN Run Mode: ® Conservative PM₁₀ Percentile: ® Average Installation Information 3 Name Dep N (kg/ha/yr) PM₁₀ (t/a) (tra) (8m/gu) (µg/m3) Ty Nant 3.4 0.02 0.09 0.006 Total Depositions/Concentrations and Exceedances 25 PM₁₀ (µg/m3) N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) Concentrations/Depositions and Critical Loads/Levels Odour (Ou/m8) (µg/m3) 0.01672 0.09 0.006 Process Contribution (PC) at receptor edge Background concentration at receptor edge ® 0.87 9.38 0.80 (N:0.67|S:0.13) 0.89 9.47 0.81 Predicted Environmental Concentration/Deposition (PEC) ® Environmental Assessment Level Lower: 1 or Critical Load / Level ® Upper: 3 No sensitive habitat No sensitive habitat or 8 or species at this species at this site % of relevant standard PC ® Lower: 2% n/a n/a Upper: 1% % of relevant standard PEC ® Lawer: 89% n/a n/a Upper: 30% EXCEEDANCE ® Lawer: No n/a n/a exceedance Upper: No exceedance Project Notes Ty Nant

> [Use this Back button. Do not use the browser back button - you could lose all inputs!]

BACK

▼ 8 Site Information Chwarel Ponterwyd (Ponterwyd Quarry) (SSSI) Region: Site Name: Chwarel Ponterwyd (Ponterwyd Quarry) Site Code: ® 6439 SSSI Designation Status: ® Distance from Installation (m): ® 8935 Receptor Type: Habitat Grid Reference: 274028.5,280921.3 Met Site: ® SENN Run Mode: @ Conservative PM₁₀ Percentile: ® Average Installation Information 3 Dep N (kg/ha/yr) Name No. of sources Cons Odour (Ou/m8) Odour (kOu/a) (tra) (tra) (µg/m3) 0.08 Ty Nant 3.4 0.02 0.006 Total Depositions/Concentrations and Exceedances 8 Concentrations/Depositions and Critical Loads/Levels PM₁₀ (µg/m3) N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) Odour (Ou/m8) (µg/m8) 0.09 0.01634 Process Contribution (PC) at receptor edge 0.006 11.20 0.61 0.99 (N:0.80|S:0.19) Background concentration at receptor edge ® 0.63 11.29 Predicted Environmental Concentration/Deposition (PEC) ® Environmental Assessment Level Lower: 1 or Critical Load / Level ® Upper: 3 No sensitive habitat No sensitive habitat or 8 or species at this species at this site site % of relevant standard PC ® Lower: 2% n/a n/a Upper: 1% % of relevant standard PEC ® Lawer: 63% n/a n/a Upper: 21% EXCEEDANCE ® Lawer: No n/a n/a exceedance Upper: No exceedance Project Notes Ty Nant

SAVE RESULTS (8) SAVE INPUTS





% of relevant standard PEC ® Lower: 87% Upper: 29%

Upper: 1%

Lawer: No

exceedance Upper: No exceedance n/a

n/a

n/a

n/a

EXCEEDANCE ®

Project Notes

Ty Nant

SAVE RESULTS

B SAVE INPUTS B



T 3 Site Information Afon Rheidol Ger Capel Bangor (SSSI) Region: Afon Rheidol Ger Capel Bangor Site Name: Site Code: ® Designation Status: ® SSSI Distance from Installation (m): ® 9357 Receptor Type: Habitat Grid Reference: 265341.5,280177.8 Met Site: (8) SENN Run Mode: ® Conservative PM₁₀ Percentile: ® Average Installation Information 2 Dep Aold Cono (kEq PM₁₀ H+iha/yr) (µg/m3) Dep N (kg/ha/yr) Cono NH₃ (kOu/a) Cono Odour (Ou/m3) (tra) (tra) (µg/m3) Ty Nant 3.4 0.02 0.12 800.0 Total Depositions/Concentrations and Exceedances 25 Concentrations/Depositions and Critical Loads/Levels N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) PM₁₀ (µg/m8) (µg/m3) 0.01562 0.12 Process Contribution (PC) at receptor edge 800.0 0.93 19.74 1.03 (N:0.86|S:0.17) Background concentration at receptor edge ® 0.95 19.86 1.04 Predicted Environmental Concentration/Deposition (PEC) ® 5.0 maxN: 0.74 Environmental Assessment Level Lower: 1 or Critical Load / Level ® Upper: 3 maxS: 0.42 8 Broad-leaved, minN: 0.18 mixed and yew woodland Inland rock 2% 1% % of relevant standard PC ® Lower: 2% Upper: 1% % of relevant standard PEC ® 397% 141% Lower: 95% Upper: 32% EXCEEDANCE ® 0.30 .awer: No 14.86 exceedance Upper: No exceedance **Project Notes** Ty Nant

SAVE RESULTS (8) SAVE INPUTS (8)



									_						
Site Info	ormation	Coedydd a Cheuna	nt Rheidol	(Rheidol Woo	ds	& Go	rge) (SS	SI) V	2						
Region	12			Wales											
Site No	ame:			Coedyd	d a	Cheu	nant Rhe	ridol (Ri	neidol Woo	ds & Gorge)				
Site Co	ode: ®			5953											
Design	ation State	us: 09		SSSI											
Distan	ce from In	stallation (m): ®		9495											
	tor Type:	, ,		Habitat											
	eference:			274885.	4.2	80810	0.3								
Met Sit				SENN	,,-										
	ode: (8)			Conserv	ratio	000									
	ercentile:	09		Average											
- 10	tion Inform			Average											
No.	Name		No. of	No. of	PN	A ₁₀	NH _s	Odour	Cono	Dep N	De	p Aold	Cons		Cons
			new	(to	All and the state of the state				(kg/ha/yr)	(ki		PM ₁₀ (µg/m	80	Odour (Ou/m8)	
1	Ty Nant		1	1	-		3.4		0.02	0.12	0.0	008	-	,	-
	-	Consentrations on					0.4		0.00	0.12					
lotal De	epositions	/Concentrations an	d Exceeda	nces (i)											
	trations/De	NH ₃		N De			Aold Dep.			PM ₁₀		Ode			
Loads/L	aleve.		(µg/m3)	(kg N/halyr)			(kEq H+/ha	(yr)		(µg/m3)			(m8)		
Process	Process Contribution (PC) at receptor edge				0.01540				0.008					-	
Backoro	ound conc	entration at receptor	edge (8)	0.61	0.61				0.99 (N:0.80 S:0.19)			-		-	
-			ang-		0.63		19.32		1						
	ed Enviro	nmental eposition (PEC) ®		0.63		19.44			1			-		-	
Conce	iuauonivo	eposition (PEC) @													
Emiron	montal Ass	sessment Level		Lower: 1		5.0			maxN: 1.47						
	al Load / L			Upper: 3		0.0				-					
				(9)		_			maxS: 0.4	3					
				60			d-leaved d and ye		minN: 1.03	3					
							dand ye	nw.	Dwarf shru	ib beath					
									DWATSHIE	an inclusion					
						AL	TERNAT	IVE C	RITICAL L	OAD INFO	•				
uer.	0.WW 7115	FOUNDER									_				
USE	DWN THE	ESHOLDS?													
% of rel	evant stan	dard PC ®		Lower: 2%		2%			0%					_	
70 01 101						2.70			279						
				Upper: 1%											
% of rel	evant stan	dard PEC ®		Lower: 63%		3895	%		44%			-		-	
EXCEEDANCE ®				Lower: No		14.4	4		-0.47			_		_	
				exceedance		1-43-4	-		3.41						
				Upper: No											
				exceedance								<u></u>			

SAVE RESULTS 8 SAVE INPUTS 8

Ty Nant



Content Specific Help Text Site Information | Coedydd a Cheunant Rheidol / Rheidol Woods and Gorge (SAC) Wales Site Name: Coedydd a Cheunant Rheidol / Rheidol Woods and Gorge UK0012748 Site Code: ® SAC Designation Status: ® 9495 Distance from Installation (m): 09 Habitat Receptor Type: 274885.9,280810.7 Grid Reference: Met Site: ® SENN Run Mode: ® Conservative PM₁₀ Percentile: ® Average Installation Information 2 Dep Aold Cono (kEq PM₁₀ H+iha/yr) (µg/m3) Name No. of sources No. of new Dep N (kg/ha/yr) Odour (kOu/a) Cone NH₃ (tra) (t/a) (Ou/m3) (µg/m3) 3.4 0.008 Ty Nant 0.02 0.12 Total Depositions/Concentrations and Exceedances 25 Concentrations/Depositions and Critical Loads/Levels Aold Dep. (kEq H+/ha/yr) PM₁₀ (µg/m8) N Dep. (kg N/ha/yr) Odour (Ou/m8) (µg/m3) Process Contribution (PC) at receptor edge 0.01540 0.12 0.008 0.61 19.32 1.65 (N:1.38|S:0.27) Background concentration at receptor edge ® 0.63 19.44 1.66 Predicted Environmental Concentration/Deposition (PEC) @ Environmental Assessment Level Lower: 1 10.0 maxN: 1.48 or Critical Load / Level ® Upper: 3 maxS: 1.19 Old sessile oak minN: 0.28 woods with flex and Blechnum in the Old sessile oak woods British Isles with Ilex and Blechnum in the British Isles % of relevant standard PC ® Lower: 2% 1% 1% Upper: 1% 194% 112% % of relevant standard PEC ® Lower: 63% Upper: 21% EXCEEDANCE ® 9.44 0.18 Lawer: No exceedance Upper: No exceedance Project Notes

T

Content Specific Help Text **T** B Site Information Coed y Gofer (SSSI) Region: Wales Site Name: Coed y Gofer Site Code: ® 6355 Designation Status: ® SSSI 9549 Distance from Installation (m): @ Habitat Receptor Type: 264388.4,296692.1 Grid Reference: SENN Met Site: 00 Run Mode: @ Conservative PM₁₀ Percentile: ® Average Installation Information 3 Dep N (kg/ha/yr) Dep Aold Cono (kEq PM₁₀ H+ha/yr) (µg/m No. of sources Cono NH₃ Odour (kOu/a) (tra) (tra) 0.12 Ty Nant 3.4 0.02 0.008 Total Depositions/Concentrations and Exceedances (8) N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) PM₁₀ (µg/m3) Concentrations/Depositions and Critical Odour (Ou/m8) (µg/m3) 0.01532 0.12 0.008 Process Contribution (PC) at receptor edge Background concentration at receptor edge ® 0.62 14.14 1.17 (N:1.01|S:0.16) 1.18 0.64 14.26 Predicted Environmental Concentration/Deposition (PEC) ® 5.0 maxN: 1.18 Environmental Assessment Level Lower: 1 Upper: 3 or Critical Load / Level ® maxS: 0.89 Broad-leaved, minN: 0.28 mixed and yew woodland Broad-leaved, mixed and yew woodland ALTERNATIVE CRITICAL LOAD INFO % of relevant standard PC ® Lower: 2% 2% 1% Upper: 1% 285% 100% % of relevant standard PEC ® Lower: 64% Upper: 21% EXCEEDANCE ® Lawer: No 9.26 -0.00exceedance Upper: No exceedance **Project Notes** Ty Nant

Content Specific Help Text **V** (8) Site Information Rheidol Shingles and Backwaters (SSSI) Region: Wales Site Name: Rheidol Shingles and Backwaters Site Code: ® Designation Status: ® SSSI Distance from Installation (m): ® 9736 Receptor Type: Habitat Grid Reference: 263168.8,281142.1 SENN Met Site: ® Run Mode: @ Conservative PM₁₀ Percentile: ® Average Installation Information 2 Dep N Odour (kOu/a) (tra) (traj 0.12 Ty Nant 3.4 0.02 800.0 Total Depositions/Concentrations and Exceedances 8 N Dep. (kg N/ha/yr) Concentrations/Depositions and Critical Aold Dep. (kEq H+/ha/yr) (µg/m3) (µg/m8) Process Contribution (PC) at receptor edge 0.01503 0.12 800.0 Background concentration at receptor edge (8) 0.94 17.38 0.89 (N:0.74|S:0.15) 0.96 17.48 0.9 Predicted Environmental Concentration/Deposition (PEC) ® 5.0 maxN: 0.98 Environmental Assessment Level Lower: 1 or Critical Load / Level ® Upper: 3 maxS: 0.80 8 Broad-leaved, minN: 0.18 mixed and yew woodland Inland rock 2% 1% % of relevant standard PC ® Lower: 2% Upper: 1% 92% % of relevant standard PEC ® Lower: 96% 350% Upper: 32% EXCEEDANCE ® 12.48 -0.08Lawer: No exceedance Upper: No exceedance **Project Notes** Ty Nant

Content Specific Help Text **T** (3) Site Information Bryn Bras (SSSI) Region: Wales Site Name: Bryn Bras Site Code: ® 5693 Designation Status: ® SSSI 9776 Distance from Installation (m): ® Habitat Receptor Type: Grid Reference: 274306,280109.4 Met Site: 09 SENN Run Mode: 00 Conservative PM₁₀ Percentile: ® Average Installation Information 2 Name Dep Aold (kEq H+/ha/yr) Dep N (kg/ha/yr) NH₃ (tra) (tra) (µg/m3) (µg/m3) Ty Nant 3.4 80.0 0.005 0.01 Total Depositions/Concentrations and Exceedances 8 Concentrations/Depositions and Critical Loads/Levels PM₁₀ (µg/m8) N Dep. (kg N/ha/yr) Aold Dep. (kEq H+/ha/yr) Odour (Ou/m8) (µg/m8) 0.01497 0.08 0.005 Process Contribution (PC) at receptor edge 0.61 11.20 0.99 (N:0.80|S:0.19) Background concentration at receptor edge ® 0.62 11.28 Predicted Environmental Concentration/Deposition (PEC) ® Environmental Assessment Level 5.0 maxN: 0.75 Lower: 1 or Critical Load / Level ® Upper: 3 maxS: 0.43 8 Inland rock minN: 0.32 Inland rock 2% 1% % of relevant standard PC ® Lower: 1% Upper: 0% % of relevant standard PEC ® 226% 133% Lower: 62% Upper: 21% EXCEEDANCE ® 0.24 Lawer: No 6.28 exceedance Upper: No exceedance Project Notes Ty Nant

SSSI Name	Background Levels		Contribution to ammonia average (NH3) concentration	Critical level for habitat (ug)	% contribution to NH3 critical levels	Contribution to Nitrogen (N) deposition from this	CL for habitat (kg/ha/	% contribution to N critical loads (CL for
	NH3 (ug)	N (kg)	from this proposal	(ug)	(CL for habitat is 3ug)*	proposal	yr)	habitat Low Level)
27905 Ancient Semi Natural Woodland	0.83	17.92	5.08154	3	169%	39.60	10	396%
30889 Ancient Semi Natural Woodland	0.83	17.92	1.77661	3	59.2%	13.80	10	138%
30871 Ancient Semi Natural Woodland	0.83	17.92	2.81011	3	93.67%	21.90	10	219%
30884 Ancient Semi Natural Woodland	0.83	17.92	2.01658	3	67.21%	15.70	10	157%
Gwaun Troed- Rhiw-Seiri a Llyn Mynydd- Gorddu	0.83	10.50	0.05411	3	1.80%	0.28	3	9.3%
Craigypistyll	0.52	10.64	0.05051	3	1.68%	0.26	5	5.2%
Coed Cwm	0.73	16.52	0.04721	3	1.57%	0.37	5	7.4%
Cletwr								
Cwmsymlog	0.93	12.04	0.03220	3	1.07%	0.17	8	2.1%
Dyfi	0.73	9.94	0.03188	3	1.06%	0.17	5	3.4%
Cors Fochno	0.73	9.94	0.03167	3	1.05%	0.16	5	3.2%
Banc Llety- Spence	0.61	11.20	0.03050	3	1.01%	0.16	8	2%
Cae Ty-Hen	0.87	16.10	0.02907	3	0.9%	0.23	5	4.6%
Coed Cwm Einion	0.73	16.52	0.02594	3	0.8%	0.20	15	1.3%
Coed Cwm Einion	0.73	16.52	0.02594	3	0.8%	0.20	5	4%
Pen Llyn a'r Srnau / Lleyn Peninsula and the Sarnau	0.73	9.94	0.02506	3	0.8%	0.13	20	0.6%
Dyfi Estuary / Aber Dyfi	0.73	9.94	0.02506	3	0.8%	0.13	5	2.6%
Pencarreg- Gopa amoel Hyrddod	0.47	10.64	0.02361	3	0.78%	0.12	5	2.4%
Pencreigiau R Llan	0.47	10.64	0.02075	3	0.69%	0.11	3	3.6%
Pumlumon (Plynlimon)	0.46	13.16	0.01926	3	0.64%	0.10	3	3.3%
Cwm Llfnant	0.54	16.10	0.01728	3	0.57%	0.13	5	2.6%

Afon Rheidol Ger Capel Bangor	0.93	19.74	0.01562	3	0.52%	0.12	5	2.4%
Coedydd a Cheunant Rheidol (Rheidol Woods & Gorge)	0.61	19.32	0.01540	3	0.51%	0.12	5	2.4%
Coedydd a Cheunant Rheidol / Rheidol Woods and Gorge	0.61	19.32	0.01540	3	0.51%	0.12	10	1.2%
Coed y Gofer	0.62	14.14	0.01532	3	0.51%	0.12	5	2.4%
Rheidol Singles and Backwaters	0.94	17.36	0.01503	3	0.50%	0.12	5	2.4%
Bryn Bras	0.61	11.20	0.01497	3	0.49%	0.08	5	1.6%