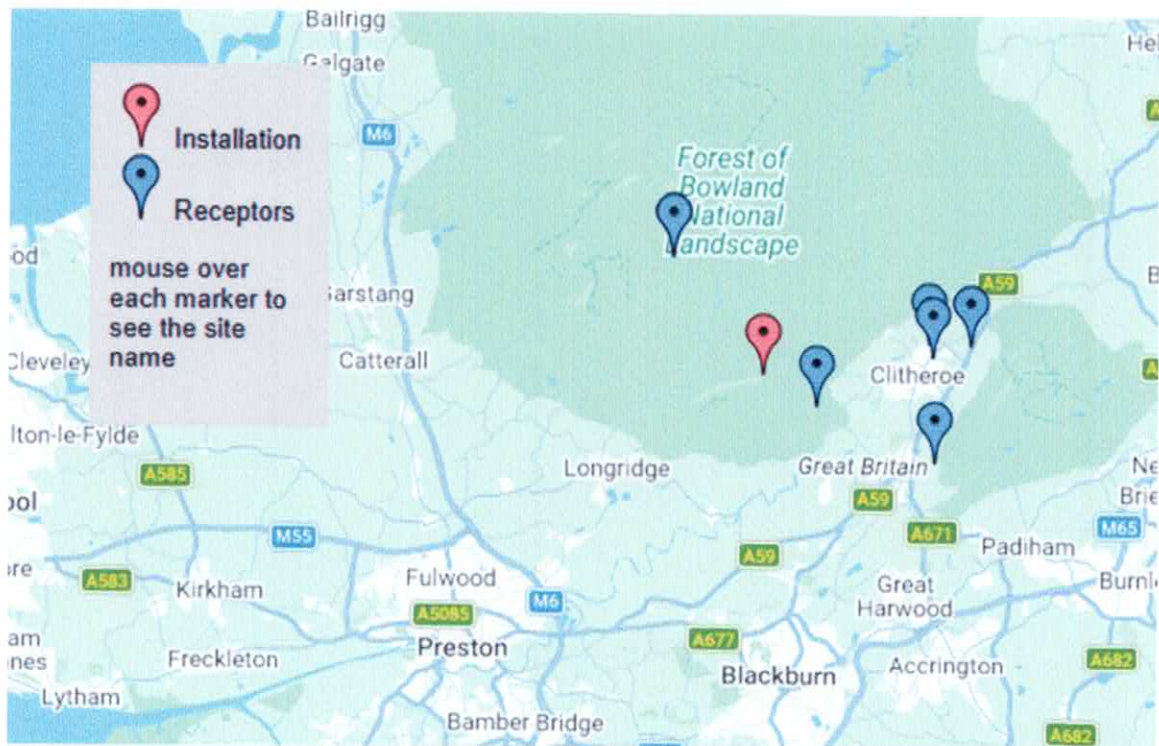


SCAIL ASSESSMENT – Plane tree Farm Slurry Lagoon



The cattle housing will provide storage for 4464m³ of slurry for 180 days.

SCAIL input data is provided as Appendix A

Results are shown as Appendix B

Results data is attached separately as an Excel csv file

The results show that the proposed development will have no significant impact on protected sites

SCAIL

Simple Calculation of Atmospheric Impact Limits

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NOTICES

November 6th 2025 Since 15th May 2023, SCAIL was wrongfully using combustion meteorological output files, instead of agriculture meteorological output files, for **Welsh met sites only**. Whilst wind parameters and met station location are unaffected some land use parameters have been updated which lead to higher modelled concentrations. This has been corrected today. We apologize for the issue, and advise to rerun affected cases.

September 9th 2025: SCAIL background pollution maps for **Ireland** have been updated to the the **year 2021** in line with current APIS ([see announcement](#)).

[Notice Archive](#)

Simple Calculation of Atmospheric Impact Limits from Agricultural Sources (SCAIL-Agriculture) is a screening tool for assessing the impact from pig and poultry farms on human health and on semi-natural areas like SSSIs and SACs. The model provides an estimate of the amount of acidity and nitrogen deposited from a farm as well as predictions of air concentrations of odour and PM10. These values can then be used to assess whether impact limits for human health or habitats are exceeded or not.

Information regarding the use of SCAIL-Agriculture as a screening tool and instructions for completing the assessment form are provided in the SCAIL-Agriculture User Guide. The User Guide also contains background information on regulatory requirements for the use of SCAIL-Agriculture, including instances where further detailed modelling of emissions will be required. **The relevant regulatory authority should be consulted for guidance regarding assessment requirements for planning and permitting purposes.**

[LOAD INPUT DATA](#) ?

Project Details

Project Notes ? Plane Tree Farm Slurry Lagoon

Project Run Mode ? ☐ Hybrid Met ☒ Conservative Met ☐ Realistic Met

Location Details

Select Country ? England ▼

Installation Details

Installation ? 1 ▼

Installation Name ? Lagoon

Installation Location ? 367314,441683 ☐ Landranger ☒ x,y[CHOOSE/VERIFY LOCATION](#) ?

Source Details

Source ? 1 ▼ ✖

Source ? ☐ Pig ☐ Poultry ☒ Cattle ☐ User defined emissions

New or Existing Source ? New ▼

Source Name ? Lagoon

Source Location ? Provides a link to GoogleMaps to check the location.

367314,441683 ☐ Landranger ☒ x,y[VERIFY LOCATION](#) ?

Source Type ? Litter / Manure storage ▼

Type ? Slurry storage ▼

Details ? Tank - with floating cover ▼

Tonnes Fresh Manure (t) ? 4464

Area of Storage (m2) ? 1500

Number of storage days/year ? 180

Total emissions : ?

Pollutant	Source Emissions	Running total of all emission sources	Units
NH ₃ :	540	0	(kg)
PM ₁₀ :	0	0	(kg)
Odour:	0	0	(kOu)

GET EMISSIONS VALUES ?

Designated Site details:

Search Radius ?

10

km

RUN RECEPTOR SEARCH ?

No. of Designated Sites ?

7 found

VERIFY RECEPTOR LOCATIONS ?

Site No.	Name	Distance(km)	Designation	Country	Easting	Northing
1	Hodder River Section	2.873	SSSI	ENGLAND	369817	440271
2	Bowland Fells	6.673	SSSI	ENGLAND	363293	447008
3	Bowland Fells	6.673	SPA	ENGLAND	363293	447008
4	Coplow Quarry	7.699	SSSI	ENGLAND	374878	443120
5	Salthill and Bellmanpark Quarries	7.798	SSSI	ENGLAND	375075	442445
6	Light Clough	8.778	SSSI	ENGLAND	375111	437651
7	Clitheroe Knoll Reefs	9.485	SSSI	ENGLAND	376714	442947

User specified site

Select ? Add site

Site Name

Site Location

Landranger x,y

VERIFY LOCATION ?

Habitat within site

please select...

CHECK BACKGROUND LEVELS ?

Human Health Receptor Details

Receptor

Select ? Add Receptor

PM₁₀ percentile

Annual mean

Receptor Name

Receptor Location

Landranger x,y

VERIFY LOCATION ?

CHECK BACKGROUND PM10 LEVELS ?

SAVE INPUT DATA

CLEAR FORM

CALCULATE

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Content Specific Help Text

Site Information Hodder River Section (SSSI)

Country: ENGLAND
Site Name: Hodder River Section
Site Code: 1001638
Designation Status: SSSI
Distance from Installation (m): 2873
Receptor Type: Habitat
Grid Reference: 369817,440271
Met Site: HIGH
Run Mode: Conservative
PM₁₀ Percentile: Average

Installation Information

No.	Name	No. of sources	No. of new sources	PM ₁₀ (t/a)	NH ₃ (t/a)	Odour (kOu/a)	Conc NH ₃ (µg/m ³)	Dep N (kg/ha/yr)	Dep Acid (kEq H ⁺ /ha/yr)	Conc PM ₁₀ (µg/m ³)	Conc Odour (Ou/m ³)
1	Lagoon	1	1	-	0.54	-	0.03	0.16	0.011	-	-

Total Depositions/Concentrations and Exceedances

Concentrations/Depositions and Critical Loads/Levels	NH ₃ (µg/m ³)	N Dep. (kg N/ha/yr)	Acid Dep. (kEq H ⁺ /ha/yr)	PM ₁₀ (µg/m ³)	Odour (Ou/m ³)
Process Contribution (PC) at receptor edge	0.03069	0.16	0.011	-	-
Background concentration at receptor edge	2.41	20.60	1.666 (N: 1.472 S: 0.195)	-	-
Predicted Environmental Concentration/Deposition (PEC)	2.44	20.76	1.68	-	-
Environmental Assessment Level or Critical Load / Level	Lower: 1 Upper: 3 	No sensitive habitat or species at this site	No sensitive habitat or species at this site	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC	Lower: 3% Upper: 1%	n/a	n/a	-	-
% of relevant standard PEC	Lower: 244% Upper: 81%	n/a	n/a	-	-
EXCEEDANCE	Lower: 1.44 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Plane Tree Farm Slurry Lagoon

[SAVE RESULTS](#) [SAVE INPUTS](#)

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

[BACK](#)

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Content Specific Help Text

Site Information Bowland Fells (SSSI)

Country:	ENGLAND
Site Name:	Bowland Fells
Site Code: 	1005542
Designation Status: 	SSSI
Distance from Installation (m): 	6673
Receptor Type:	Habitat
Grid Reference:	363293,447008
Met Site: 	HIGH
Run Mode: 	Conservative
PM ₁₀ Percentile: 	Average

Installation Information

No.	Name	No. of sources	No. of new sources	PM ₁₀ (t/a)	NH ₃ (t/a)	Odour (kOu/a)	Conc NH ₃ (µg/m ³)	Dep N (kg/ha/yr)	Dep Acid (kEq H ⁺ /ha/yr)	Conc PM ₁₀ (µg/m ³)	Conc Odour (Ou/m ³)
1	Lagoon	1	1	-	0.54	-	0.01	0.04	0.003	-	-

Total Depositions/Concentrations and Exceedances

Concentrations/Depositions and Critical Loads/Levels	NH ₃ (µg/m ³)	N Dep. (kg N/ha/yr)	Acid Dep. (kEq H ⁺ /ha/yr)	PM ₁₀ (µg/m ³)	Odour (Ou/m ³)
Process Contribution (PC) at receptor edge	0.00775	0.04	0.003	-	-
Background concentration at receptor edge 	1.32	20.89	1.705 (N: 1.492 S: 0.213)	-	-
Predicted Environmental Concentration/Deposition (PEC) 	1.33	20.93	1.71	-	-
Environmental Assessment Level or Critical Load / Level 	Lower: 1 Upper: 3 	5.0 Calluna Vulgaris - Deschampsia Flexuosa Heath	maxN: 0.654 maxS: 0.334 minN: 0.321 Calluna Vulgaris - Eriophorum Vaginatum Blanket Mire	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC 	Lower: 1% Upper: 0%	1%	0.46%	-	-
% of relevant standard PEC 	Lower: 133% Upper: 44%	419%	263%	-	-
EXCEEDANCE 	Lower: 0.33 Upper: No exceedance	15.93	1.05	-	-

Project Notes

Plane Tree Farm Slurry Lagoon

SCAIL

Simple Calculation of Atmospheric Impact Limits



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Content Specific Help Text

Site Information Bowland Fells (SPA)

Country:	ENGLAND
Site Name:	Bowland Fells
Site Code: 	UK9005151
Designation Status: 	SPA
Distance from Installation (m): 	6673
Receptor Type:	Habitat
Grid Reference:	363293,447008
Met Site: 	HIGH
Run Mode: 	Conservative
PM ₁₀ Percentile: 	Average

Installation Information

No.	Name	No. of sources	No. of new sources	PM ₁₀ (t/a)	NH ₃ (t/a)	Odour (kOu/a)	Conc NH ₃ (µg/m ³)	Dep N (kg/ha/yr)	Dep Acid (kEq H ⁺ /ha/yr)	Conc PM ₁₀ (µg/m ³)	Conc Odour (Ou/m ³)
1	Lagoon	1	1	-	0.54	-	0.01	0.04	0.003	-	-

Total Depositions/Concentrations and Exceedances

Concentrations/Depositions and Critical Loads/Levels	NH ₃ (µg/m ³)	N Dep. (kg N/ha/yr)	Acid Dep. (kEq H ⁺ /ha/yr)	PM ₁₀ (µg/m ³)	Odour (Ou/m ³)
Process Contribution (PC) at receptor edge	0.00775	0.04	0.003	-	-
Background concentration at receptor edge 	1.32	20.89	1.705 (N: 1.492 S: 0.213)	-	-
Predicted Environmental Concentration/Deposition (PEC) 	1.33	20.93	1.71	-	-
Environmental Assessment Level or Critical Load / Level 	Lower: 1 Upper: 3 	5.0 Circus cyaneus	maxN: 0.822 maxS: 0.180 minN: 0.642 Circus cyaneus	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC 	Lower: 1% Upper: 0%	1%	0.36%	-	-
% of relevant standard PEC 	Lower: 133% Upper: 44%	419%	208%	-	-
EXCEEDANCE 	Lower: 0.33 Upper: No exceedance	15.93	0.89	-	-

Project Notes

Plane Tree Farm Slurry Lagoon



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Content Specific Help Text

Site Information

Coplow Quarry (SSSI)

▼ ⓘ

Country:

ENGLAND

Site Name:

Coplow Quarry

Site Code: ⓘ

1002838

Designation Status: ⓘ

SSSI

Distance from Installation (m): ⓘ

7699

Receptor Type:

Habitat

Grid Reference:

374878,443120

Met Site: ⓘ

HIGH

Run Mode: ⓘ

Conservative

PM₁₀ Percentile: ⓘ

Average

Installation Information ⓘ

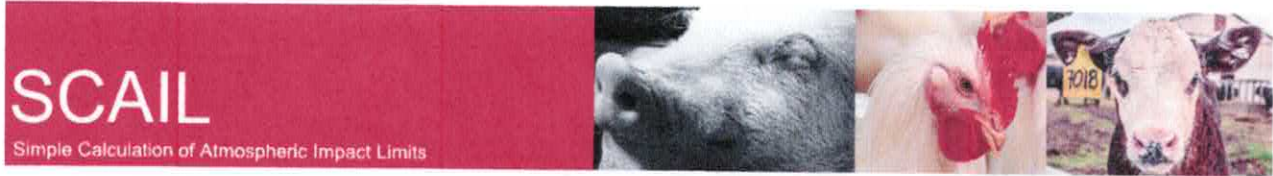
No.	Name	No. of sources	No. of new sources	PM ₁₀ (t/a)	NH ₃ (t/a)	Odour (kOu/a)	Conc NH ₃ (µg/m3)	Dep N (kg/ha/yr)	Dep Acid (kEq H+/ha/yr)	Conc PM ₁₀ (µg/m3)	Conc Odour (Ou/m3)
1	Lagoon	1	1	-	0.54	-	0.01	0.03	0.002	-	-

Total Depositions/Concentrations and Exceedances ⓘ

Concentrations/Depositions and Critical Loads/Levels	NH ₃ (µg/m3)	N Dep. (kg N/ha/yr)	Acid Dep. (kEq H+/ha/yr)	PM ₁₀ (µg/m3)	Odour (Ou/m3)
Process Contribution (PC) at receptor edge	0.00614	0.03	0.002	-	-
Background concentration at receptor edge ⓘ	2.08	20.54	1.679 (N: 1.467 S: 0.212)	-	-
Predicted Environmental Concentration/Deposition (PEC) ⓘ	2.09	20.57	1.68	-	-
Environmental Assessment Level or Critical Load / Level ⓘ	Lower: 1 Upper: 3 ⓘ	No sensitive habitat or species at this site	No sensitive habitat or species at this site	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS? ⓘ					
% of relevant standard PC ⓘ	Lower: 1% Upper: 0%	n/a	n/a	-	-
% of relevant standard PEC ⓘ	Lower: 209% Upper: 70%	n/a	n/a	-	-
EXCEEDANCE ⓘ	Lower: 1.09 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Plane Tree Farm Slurry Lagoon



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Content Specific Help Text

Site Information

Salthill and Bellmanpark Quarries (SSSI) ▼ ⓘ

Country:

ENGLAND

Site Name:

Salthill and Bellmanpark Quarries

Site Code: ⓘ

1002604

Designation Status: ⓘ

SSSI

Distance from Installation (m): ⓘ

7798

Receptor Type:

Habitat

Grid Reference:

375075,442445

Met Site: ⓘ

HIGH

Run Mode: ⓘ

Conservative

PM₁₀ Percentile: ⓘ

Average

Installation Information ⓘ

No.	Name	No. of sources	No. of new sources	PM ₁₀ (t/a)	NH ₃ (t/a)	Odour (kOu/a)	Conc NH ₃ (µg/m3)	Dep N (kg/ha/yr)	Dep Acid (kEq H+/ha/yr)	Conc PM ₁₀ (µg/m3)	Conc Odour (Ou/m3)
1	Lagoon	1	1	-	0.54	-	0.01	0.03	0.002	-	-

Total Depositions/Concentrations and Exceedances ⓘ

Concentrations/Depositions and Critical Loads/Levels	NH ₃ (µg/m3)	N Dep. (kg N/ha/yr)	Acid Dep. (kEq H+/ha/yr)	PM ₁₀ (µg/m3)	Odour (Ou/m3)
Process Contribution (PC) at receptor edge	0.00601	0.03	0.002	-	-
Background concentration at receptor edge ⓘ	1.87	20.28	1.662 (N: 1.448 S: 0.214)	-	-
Predicted Environmental Concentration/Deposition (PEC) ⓘ	1.88	20.31	1.66	-	-
Environmental Assessment Level or Critical Load / Level ⓘ	Lower: 1 Upper: 3 ⓘ	No sensitive habitat or species at this site	No sensitive habitat or species at this site	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ⓘ	Lower: 1% Upper: 0%	n/a	n/a	-	-
% of relevant standard PEC ⓘ	Lower: 188% Upper: 63%	n/a	n/a	-	-
EXCEEDANCE ⓘ	Lower: 0.88 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Plane Tree Farm Slurry Lagoon