



Results

[Scail Home](#) | [User Guide](#) | [SCAIL-Agriculture Report](#) | [SEPA/EA/NIEA/EPA Contact Details](#) | [Online Tutorial](#)

Content Specific Help Text

Site Information **Bowland Fells** ⓘ

Region: England
Site Name: Bowland Fells
Site Code: ⓘ N/A
Designation Status: ⓘ User defined
Distance from Installation (m): ⓘ 8728
Receptor Type: Bogs
Grid Reference: 359707,444449
Met Site: ⓘ CROS
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	Slurry Lagoon	1	1	-	1.9	-	0	0.02	0.001	-	-

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	0.00378	0.02	0.001	-	-
Background concentration at receptor edge ⓘ	3.54	32.34	2.55 (N:2.31 S:0.24)	-	-
Predicted Environmental Concentration/Deposition (PEC) ⓘ	3.54	32.36	2.55	-	-
Environmental Assessment Level or Critical Load / Level ⓘ	Lower: 1 Upper: 3 ⓘ	5.0 Bogs	maxN: 0.76 maxS: 0.44 minN: 0.32 Bogs	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ⓘ	Lower: 0% Upper: 0%	0%	0%	-	-
% of relevant standard PEC ⓘ	Lower: 354% Upper: 118%	647%	336%	-	-
EXCEEDANCE ⓘ	Lower: 2.54 Upper: 0.54	27.36	1.79	-	-

Project Notes

Formation of an earth banked slurry lagoon

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

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

[BACK](#) ⓘ



Results

[Scail Home](#) | [User Guide](#) | [SCAIL-Agriculture Report](#) | [SEPA/EA/NIEA/EPA Contact Details](#) | [Online Tutorial](#)

Content Specific Help Text

Site Information **Bowland Fells**

Region: England
Site Name: Bowland Fells
Site Code: N/A
Designation Status: User defined
Distance from Installation (m): 8727
Receptor Type: Bogs
Grid Reference: 359712,444448
Met Site: CROS
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	Slurry Lagoon	1	1	-	1.9	-	0	0.02	0.001	-	-

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	0.00378	0.02	0.001	-	-
Background concentration at receptor edge	3.54	32.34	2.55 (N:2.31 S:0.24)	-	-
Predicted Environmental Concentration/Deposition (PEC)	3.54	32.36	2.55	-	-
Environmental Assessment Level or Critical Load / Level	Lower: 1 Upper: 3 	5.0 Bogs	maxN: 0.76 maxS: 0.44 minN: 0.32 Bogs	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC	Lower: 0% Upper: 0%	0%	0%	-	-
% of relevant standard PEC	Lower: 354% Upper: 118%	647%	336%	-	-
EXCEEDANCE	Lower: 2.54 Upper: 0.54	27.36	1.79	-	-

Project Notes

Formation of an earth banked slurry lagoon

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

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

[BACK](#) 

Centre for
Ecology & Hydrology



ENVIRONMENT
AGENCY





Results

[Scail Home](#) | [User Guide](#) | [SCAIL-Agriculture Report](#) | [SEPA/EA/NIEA/EPA Contact Details](#) | [Online Tutorial](#)

Content Specific Help Text

Site Information: Beeston Brook Pasture [?](#)

Region: England
Site Name: Beeston Brook Pasture
Site Code: [?](#) N/A
Designation Status: [?](#) User defined
Distance from Installation (m): [?](#) 7755
Receptor Type: Neutral Grassland
Grid Reference: 359382,427971
Met Site: [?](#) CROS
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	Slurry Lagoon	1	1	-	1.9	-	0	0.02	0.002	-	-

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	0.00460	0.02	0.002	-	-
Background concentration at receptor edge ?	3.21	27.16	2.17 (N:1.94 S:0.23)	-	-
Predicted Environmental Concentration/Deposition (PEC) ?	3.21	27.18	2.17	-	-
Environmental Assessment Level or Critical Load / Level ?	Lower: 1 Upper: 3 ?	10.0 Neutral Grassland	maxN: 4.72 maxS: 3.86 minN: 0.85 Neutral Grassland	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ?	Lower: 0% Upper: 0%	0%	0%	-	-
% of relevant standard PEC ?	Lower: 321% Upper: 107%	272%	46%	-	-
EXCEEDANCE ?	Lower: 2.21 Upper: 0.21	17.18	-2.55	-	-

Project Notes

Formation of an earth banked slurry lagoon

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

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

[BACK](#) [?](#)Centre for Ecology & Hydrology
NATURAL, ENVIRONMENTAL AND RESEARCH EXPERTISE

ENVIRONMENT AGENCY



SNIFFER



Results

[Scail Home](#) | [User Guide](#) | [SCAIL-Agriculture Report](#) | [SEPA/EA/NIEA/EPA Contact Details](#) | [Online Tutorial](#)

Content Specific Help Text

Site Information **Darwen River Section**

Region: England
Site Name: Darwen River Section
Site Code: N/A
Designation Status: User defined
Distance from Installation (m): 6470
Receptor Type: Inland Rock & Scree
Grid Reference: 361195,429435
Met Site: CROS
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	Slurry Lagoon	1	1	-	1.9	-	0.01	0.03	0.002	-	-

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	0.00620	0.03	0.002	-	-
Background concentration at receptor edge	2.91	26.74	2.16 (N:1.91 S:0.25)	-	-
Predicted Environmental Concentration/Deposition (PEC)	2.92	26.77	2.16	-	-
Environmental Assessment Level or Critical Load / Level	Lower: 1 Upper: 3	5.0 Inland Rock & Scree	maxN: 4.72 maxS: 3.86 minN: 0.85 Inland Rock & Scree	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC	Lower: 1% Upper: 0%	1%	0%	-	-
% of relevant standard PEC	Lower: 292% Upper: 97%	535%	46%	-	-
EXCEEDANCE	Lower: 1.92 Upper: No exceedance	21.77	-2.56	-	-

Project Notes

Formation of an earth banked slurry lagoon

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

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

[BACK](#) 

Centre for
Ecology & Hydrology



SEPA
Scottish Environment
Partnership Agency



ENVIRONMENT
AGENCY



SNIFFER
AIR QUALITY & ODOUR
MONITORING SYSTEM



Results

[Scail Home](#) | [User Guide](#) | [SCAIL-Agriculture Report](#) | [SEPA/EA/NIEA/EPA Contact Details](#) | [Online Tutorial](#)

Content Specific Help Text

Site Information **Red Scar & Tun Brook Woods** [?](#)

Region: England
Site Name: Red Scar & Tun Brook Woods
Site Code: [?](#) N/A
Designation Status: [?](#) User defined
Distance from Installation (m): [?](#) 1660
Receptor Type: Broadleaved, Mixed and Yew Woodland
Grid Reference: 359072,434170
Met Site: [?](#) CROS
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	Slurry Lagoon	1	1	-	1.9	-	0.06	0.31	0.021	-	-

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	0.06051	0.47	0.032	-	-
Background concentration at receptor edge ?	3.06	44.10	3.41 (N:3.15 S:0.26)	-	-
Predicted Environmental Concentration/Deposition (PEC) ?	3.12	44.57	3.44	-	-
Environmental Assessment Level or Critical Load / Level ?	Lower: 1 Upper: 3 ?	10.0 Broadleaved, Mixed and Yew Woodland	maxN: 1.84 maxS: 1.48 minN: 0.36 Broadleaved, Mixed and Yew Woodland	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ?	Lower: 6% Upper: 2%	5%	2%	-	-
% of relevant standard PEC ?	Lower: 312% Upper: 104%	446%	187%	-	-
EXCEEDANCE ?	Lower: 2.12 Upper: 0.12	34.57	1.60	-	-

Project Notes

Formation of an earth banked slurry lagoon

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

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

[BACK](#) [?](#)

Centre for Ecology & Hydrology
NATURE, ENVIRONMENT RESEARCH COUNCIL



ENVIRONMENT AGENCY



SNIFFER

SCAIL

Simple Calculation of Atmospheric Impact Limits



[Scail Home](#) | [User Guide](#) | [SCAIL-Agriculture Report](#) | [Regulator Contact Details](#) | [Contact Us](#) | [Online Tutorial](#)

We have made a number of improvements to the SCAIL for agriculture tool. We have added cattle as a livestock option to cover their emissions. These are set out for housing, landspreading, manure/slurry storage, grazing and outdoor yards. Users can also add their own emissions. The layout should be simpler to use with larger font and input boxes. If you experience any issues then please [Contact Us](#)

October 18th 2021: SCAIL background pollution maps for Ireland have been updated to the the year 2018.

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

Formation of an earth banked slurry lagoon

Project Run Mode

☒ Conservative Met ☐ Realistic Met

Location Details

Select Country

England

Installation Details

Installation

1

Installation Name

Slurry Lagoon

Installation Location

359665,435721 ☐ Landranger ☒ x,y

[CHOOSE/VERIFY LOCATION](#)

Source Details

Source

1

Source

☐ Pig ☐ Poultry ☒ Cattle ☐ User defined emissions

New or Existing Source

New

Source Name

Dairy Farm

Source Location

Provides a link to GoogleMaps to check the location.

359665,435721 ☐ Landranger ☒ x,y

[VERIFY LOCATION](#)

Source Type

Litter / Manure storage

Type

Slurry storage

Details

please select...

Tonnes Fresh Manure (t)

0

Area of Storage (m2)

2500

Number of storage

days/year

182

Total emissions :

Pollutant	Source Emissions	Running total of all emission sources	Units
NH ₃ :	1911	1911	(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 5 found

[VERIFY RECEPTOR LOCATIONS](#)

Site No.	Name	Distance(km)	Designation	Country	Easting	Northing
1	Red Scar & Tun Brook Woods	1.66	SSSI	England	359072	434170
2	Darwen River Section	6.47	SSSI	England	361195	429435
3	Beeston Brook Pasture	7.754	SSSI	England	359382	427971
4	Bowland Fells	8.728	SPA	England	359712	444448

5	Bowland Fells	8.728	SSSI	England	359707	444449
---	---------------	-------	------	---------	--------	--------

User specified site

5

Add site

Site Name

Bowland Fells

Site Location

359707,444449

Landranger

x,y

VERIFY LOCATION

Habitat within site

Bogs

CHECK BACKGROUND LEVELS

Human Health Receptor Details

Receptor

Select

Add Receptor

PM₁₀ percentile

Annual Average

Receptor Name

Receptor Location

Landranger

x,y

VERIFY LOCATION

CHECK BACKGROUND PM10 LEVELS

SAVE INPUT DATA

CLEAR FORM

CALCULATE