

SCAIL ASSESSMENT – HIGHER GREENHEAD SLURRY LAGOON

The lagoon is required to allow 6 months slurry storage.

Cattle numbers will not increase.

SCAIL input data is provided as Appendix A

Results are shown as Appendix B

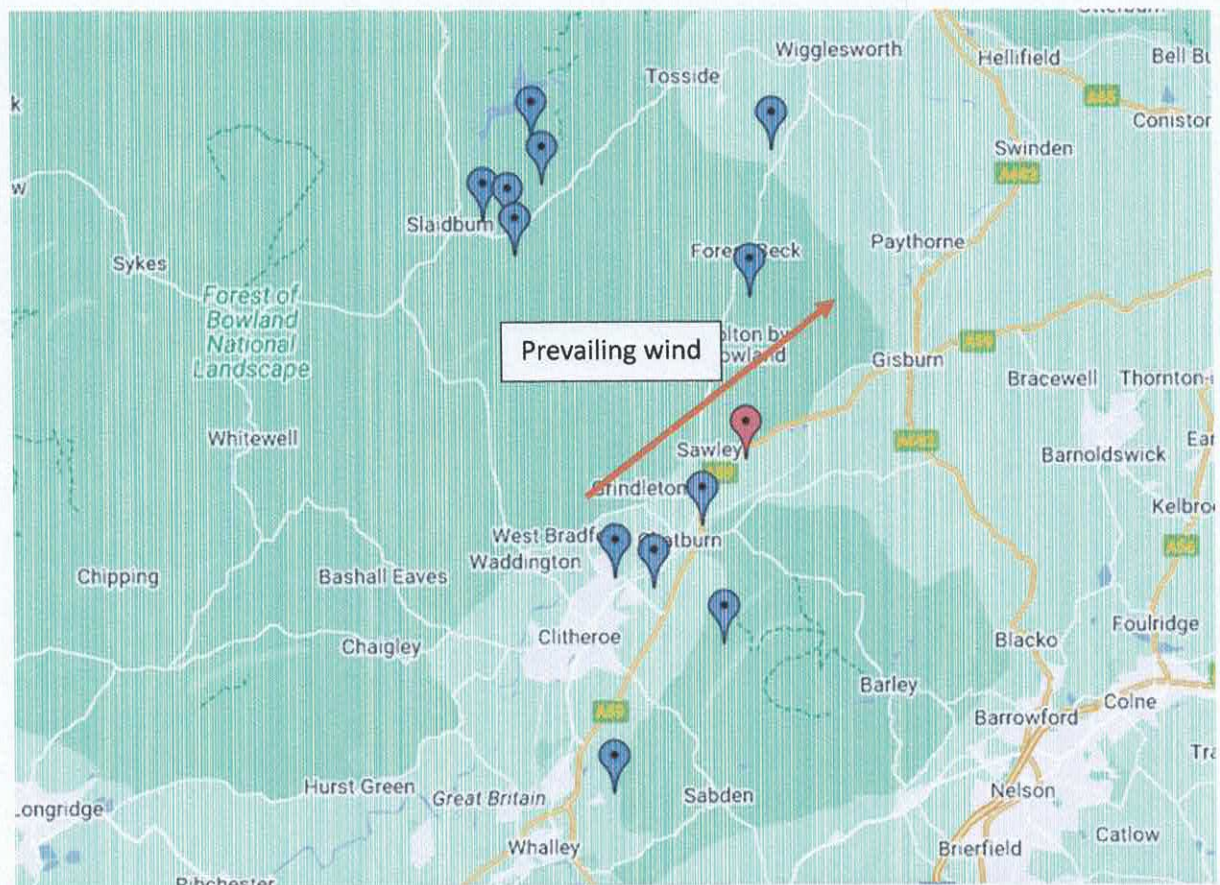
Results data is attached separately as an Excel File (output 11)

The application is subject to a Slurry Infrastructure Grant (SIG)

A floating cover will be installed.

Native species tree planting will be carried out to the west and south

The prevailing wind (W – SW) directs deposition away from the closest protected sites.



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 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 [?](#) Higher Greenhead Farm LagoonProject Run Mode [?](#) ☒ Conservative Met ☐ Realistic Met**Location Details**Select Country [?](#) England [v](#)**Installation Details**Installation [?](#) 1 [v](#)Installation Name [?](#) LagoonInstallation Location [?](#) 378607,446252 ☐ Landranger ☒ x,y
[CHOOSE/VERIFY LOCATION](#) [?](#)**Source Details**Source [?](#) 1 [v](#) [x](#)Source [?](#) ☐ Pig ☐ Poultry ☒ Cattle ☐ User defined emissionsNew or Existing Source [?](#) New [v](#)Source Name [?](#) LagoonSource Location [?](#) Provides a link to GoogleMaps to check the location.378607,446252 ☐ Landranger ☒ x,y[VERIFY LOCATION](#) [?](#)Source Type [?](#) Litter / Manure storage [v](#)**Type** [?](#) Slurry storage [v](#)**Details** [?](#) Tank - with floating cover [v](#)**Tonnes Fresh Manure (t)** [?](#) 4362**Area of Storage (m2)** [?](#) 1440**Number of storage days/year** [?](#) 180**Total emissions :** [?](#)

Pollutant	Source Emissions	Running total of all emission sources	Units
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NH₃:

441

441

(kg)

PM₁₀:

0

0

(kg)

Odour:

0

0

(kOu)

GET EMISSIONS VALUES

Designated Site details:

Search Radius

10

km

RUN RECEPTOR SEARCH

No. of Designated Sites

13 found

VERIFY RECEPTOR LOCATIONS

Site No.	Name	Distance(km)	Designation	Country	Easting	Northing
1	Clitheroe Knoll Reefs	2.052	SSSI	England	377487	444532
2	Salthill & Bellmanpark Quarries	4.076	SSSI	England	376222	442947
3	New Ing Meadow	4.178	SSSI	England	378763	450426
4	Coplow Quarry	4.527	SSSI	England	375237	443229
5	Little Mearley Clough	4.825	SSSI	England	377995	441466
6	North Pennine Dales Meadows	7.934	SAC	England	372716	451567
7	Langcliff Cross Meadow	7.935	SSSI	England	372717	451569
8	White Moss	8.034	SSSI	England	379351	454251
9	Field Head Meadow	8.571	SSSI	England	372562	452327
10	Standridge Farm Pasture	8.803	SSSI	England	373466	453397
11	Bell Sykes Meadows	9.113	SSSI	England	371923	452446
12	Light Clough	9.268	SSSI	England	375120	437664
13	Barn Gill Meadow	9.921	SSSI	England	373191	454564

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 Average

Receptor Name

Receptor Location

Landranger

x,y

VERIFY LOCATION

CHECK BACKGROUND PM10 LEVELS

SAVE INPUT DATA

CLEAR FORM

CALCULATE



Results

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Content Specific Help Text

Site Information		Clitheroe Knoll Reefs (SSSI)	▼ ⓘ
Region:			England
Site Name:			Clitheroe Knoll Reefs
Site Code: ⓘ			3447
Designation Status: ⓘ			SSSI
Distance from Installation (m): ⓘ			2052
Receptor Type:			Habitat
Grid Reference:			377487.4,444532.2
Met Site: ⓘ			CROS
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	0.06	0.004	-	-

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	0.01204	0.06	0.004	-	-
Background concentration at receptor edge ⓘ	1.95	24.92	2.07 (N:1.78 S:0.29)	-	-
Predicted Environmental Concentration/Deposition (PEC) ⓘ	1.96	24.98	2.07	-	-
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: 196% Upper: 65%	n/a	n/a	-	-
EXCEEDANCE ⓘ	Lower: 0.96 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Higher Greenhead Lagoon

SAVE RESULTS ⓘ SAVE INPUTS ⓘ

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

BACK ⓘ