

SCAIL Assessment
Castle Farm, Bilstone

Client: JG and CA Bayley

Reference: 9105r1

Date: 24th February 2025



Report Issue

Report Title: SCAIL Assessment - Castle Farm, Bilstone

Report Reference: 9105

Field	Report Version			
	1	2	3	4
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Date of Issue	24 th February 2025			
Comments	-			

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Appendix 1 - SCAIL Inputs and Outputs

1.0 SCAIL ASSESSMENT

1.1 Instruction

- 1.1.1 Redmore Environmental Ltd was commissioned by JG and CA Bayley to undertake a Simple Calculation of Atmospheric Impact Limits (SCAIL) Assessment in support of an agricultural development on Castle Farm, Bilstone.

1.2 Site Location

- 1.2.1 The development is located on Castle Farm, Bilstone, at approximate National Grid Reference (NGR): 436367, 306153.

1.3 Proposed Development

- 1.3.1 The proposals comprise extensions to three existing livestock buildings to provide space for up to 50 dairy cows all year round, as well as construction of a new building to provide housing for up to 100 dairy heifers and calves for up to six months of the year.

1.4 Reason for Assessment

- 1.4.1 Atmospheric emissions from agricultural developments have the potential to cause changes in pollutant levels at ecological designations. A SCAIL Assessment has therefore been undertaken in order to quantify ammonia concentrations, as well as nitrogen and acid deposition rates, at sensitive locations to provide sufficient information for Natural England to evaluate potential effects as a result of the development.

1.5 Inputs and Outputs

- 1.5.1 The SCAIL model inputs and outputs for the proposed development are provided in Appendix 1.

Appendix 1 - SCAIL Inputs and Outputs



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NOTICE As of **18:30 GMT 18th December 2024** SCAIL Agriculture now uses new emission factors and new housing types for both Pig and Poultry for the UK only (Ireland unaffected). Cattle emission factors are also unaffected. You will **not** be able to load or run an old input file and will have to select the new options and then save your inputs. The published emission factors are available on the following page [Ammonia emission factors for pig and poultry screening, modelling and reporting](#)

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 ?

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

Location Details

Select Country ?

Installation Details

Installation ?

Installation Name ?

Installation Location ? ☐ Landranger ☒ x,y
 ?

Source Details

Source ?

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

New or Existing Source ?

Source Name ?

Source Location ? Provides a link to GoogleMaps to check the location.
 ☐ Landranger ☒ x,y
 ?

Source Type ?

Type ?

Details ?

Livestock Number ?

Housing Floor Area ? m²

Number of days ? days

Naturally Vented ☒

Building Height	4.67	m
Fan Location ?	please select...	
No. of Fans (optional) ?		
Fan Diameter ?		m
Fan Flowrate ?		m ³ /s

Total emissions : [?](#)

Pollutant	Source Emissions	Running total of all emission sources	Units
NH ₃ :	181	1691	(kg)
PM ₁₀ :	508	12631	(kg)
Odour:	2094936480	29722734000	(kOu)

[GET EMISSIONS VALUES](#) [?](#)

Designated Site details:

Search Radius [?](#) km [RUN RECEPTOR SEARCH](#) [?](#)

No. of Designated Sites [?](#) [VERIFY RECEPTOR LOCATIONS](#) [?](#)

Site No.	Name	Distance(km)	Designation	Country	Easting	Northing
1	Ashby Canal	1.022	SSSI	ENGLAND	437178	305532
2	Newton Burgoland Marshes	2.69	SSSI	ENGLAND	438008	308284
3	Sheepy Fields	4.581	SSSI	ENGLAND	433333	302720
4	River Mease	4.74	SAC	ENGLAND	433753	310106
5	River Mease	4.74	SSSI	ENGLAND	433753	310106
6	Kendall,s Meadow	8.507	SSSI	ENGLAND	439119	298104
7	Birches Barn Meadows	9.009	SSSI	ENGLAND	428299	302144

User specified site [Add site](#)

Site Name

Site Location ☐ Landranger ☒ x,y [VERIFY LOCATION](#) [?](#)

Habitat within site [CHECK BACKGROUND LEVELS](#) [?](#)

Human Health Receptor Details

Receptor [Add Receptor](#) [?](#)

Receptor Name

Receptor Location ☐ Landranger ☒ x,y [VERIFY LOCATION](#) [?](#)

[CHECK BACKGROUND PM10 LEVELS](#) [?](#)

SAVE INPUT DATA

CLEAR FORM

CALCULATE



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LOAD INPUT DATA ?

Project Details

Project Notes ?

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

Location Details

Select Country ?

Installation Details

Installation ?

Installation Name ?

Installation Location ? ☐ Landranger ☒ x,y
 ?

Source Details

Source ?

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

New or Existing Source ?

Source Name ?

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

☐ Landranger ☒ x,y

?

Source Type ?

Type ?

Details ?

Livestock Number ?

Housing Floor Area ? m²

Number of days ? days

Naturally Vented ☒

Building Height	5.62	m
Fan Location ?	please select...	
No. of Fans (optional) ?		
Fan Diameter ?		m
Fan Flowrate ?		m ³ /s

Total emissions : [?](#)

Pollutant	Source Emissions	Running total of all emission sources	Units
NH ₃ :	259	1691	(kg)
PM ₁₀ :	726	12631	(kg)
Odour:	2992766400	29722734000	(kOu)

[GET EMISSIONS VALUES](#) [?](#)

Designated Site details:

Search Radius [?](#) km [RUN RECEPTOR SEARCH](#) [?](#)

No. of Designated Sites [?](#) [VERIFY RECEPTOR LOCATIONS](#) [?](#)

Site No.	Name	Distance(km)	Designation	Country	Easting	Northing
1	Ashby Canal	1.022	SSSI	ENGLAND	437178	305532
2	Newton Burgoland Marshes	2.69	SSSI	ENGLAND	438008	308284
3	Sheepy Fields	4.581	SSSI	ENGLAND	433333	302720
4	River Mease	4.74	SAC	ENGLAND	433753	310106
5	River Mease	4.74	SSSI	ENGLAND	433753	310106
6	Kendall,s Meadow	8.507	SSSI	ENGLAND	439119	298104
7	Birches Barn Meadows	9.009	SSSI	ENGLAND	428299	302144

User specified site [Add site](#)

Site Name

Site Location ☐ Landranger ☒ x,y [VERIFY LOCATION](#) [?](#)

Habitat within site [CHECK BACKGROUND LEVELS](#) [?](#)

Human Health Receptor Details

Receptor [Add Receptor](#) [?](#)

Receptor Name

Receptor Location ☐ Landranger ☒ x,y [VERIFY LOCATION](#) [?](#)

[CHECK BACKGROUND PM10 LEVELS](#) [?](#)

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LOAD INPUT DATA ?

Project Details

Project Notes ?

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

Location Details

Select Country ?

Installation Details

Installation ?

Installation Name ?

Installation Location ? ☐ Landranger ☒ x,y
 ?

Source Details

Source ?

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

New or Existing Source ?

Source Name ?

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

☐ Landranger ☒ x,y

?

Source Type ?

Type ?

Details ?

Livestock Number ?

Housing Floor Area ? m²

Number of days ? days

Naturally Vented ☒

Building Height	5.7	m
Fan Location ?	please select...	
No. of Fans (optional) ?		
Fan Diameter ?		m
Fan Flowrate ?		m ³ /s

Total emissions : [?](#)

Pollutant	Source Emissions	Running total of all emission sources	Units
NH ₃ :	855	1691	(kg)
PM ₁₀ :	2397	12631	(kg)
Odour:	9876129120	29722734000	(kOu)

[GET EMISSIONS VALUES](#) [?](#)

Designated Site details:

Search Radius [?](#) km [RUN RECEPTOR SEARCH](#) [?](#)

No. of Designated Sites [?](#) [VERIFY RECEPTOR LOCATIONS](#) [?](#)

Site No.	Name	Distance(km)	Designation	Country	Easting	Northing
1	Ashby Canal	1.022	SSSI	ENGLAND	437178	305532
2	Newton Burgoland Marshes	2.69	SSSI	ENGLAND	438008	308284
3	Sheepy Fields	4.581	SSSI	ENGLAND	433333	302720
4	River Mease	4.74	SAC	ENGLAND	433753	310106
5	River Mease	4.74	SSSI	ENGLAND	433753	310106
6	Kendall,s Meadow	8.507	SSSI	ENGLAND	439119	298104
7	Birches Barn Meadows	9.009	SSSI	ENGLAND	428299	302144

User specified site [Add site](#)

Site Name

Site Location ☐ Landranger ☒ x,y [VERIFY LOCATION](#) [?](#)

Habitat within site [CHECK BACKGROUND LEVELS](#) [?](#)

Human Health Receptor Details

Receptor [Add Receptor](#) [?](#)

Receptor Name

Receptor Location ☐ Landranger ☒ x,y [VERIFY LOCATION](#) [?](#)

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LOAD INPUT DATA ?

Project Details

Project Notes ?

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

Location Details

Select Country ?

Installation Details

Installation ?

Installation Name ?

Installation Location ? ☐ Landranger ☒ x,y

?

Source Details

Source ?

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

New or Existing Source ?

Source Name ?

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

☐ Landranger ☒ x,y

?

Source Type ?

Type ?

Details ?

Livestock Number ?

Housing Floor Area ? m²

Number of days ? days

Naturally Vented ☒

Building Height	5.95	m
Fan Location ?	please select...	
No. of Fans (optional) ?		
Fan Diameter ?		m
Fan Flowrate ?		m ³ /s

Total emissions : [?](#)

Pollutant	Source Emissions	Running total of all emission sources	Units
NH ₃ :	396	1691	(kg)
PM ₁₀ :	9000	12631	(kg)
Odour:	14758902000	29722734000	(kOu)

[GET EMISSIONS VALUES](#) [?](#)

Designated Site details:

Search Radius [?](#) km [RUN RECEPTOR SEARCH](#) [?](#)

No. of Designated Sites [?](#) [VERIFY RECEPTOR LOCATIONS](#) [?](#)

Site No.	Name	Distance(km)	Designation	Country	Easting	Northing
1	Ashby Canal	1.022	SSSI	ENGLAND	437178	305532
2	Newton Burgoland Marshes	2.69	SSSI	ENGLAND	438008	308284
3	Sheepy Fields	4.581	SSSI	ENGLAND	433333	302720
4	River Mease	4.74	SAC	ENGLAND	433753	310106
5	River Mease	4.74	SSSI	ENGLAND	433753	310106
6	Kendall,s Meadow	8.507	SSSI	ENGLAND	439119	298104
7	Birches Barn Meadows	9.009	SSSI	ENGLAND	428299	302144

User specified site [Add site](#)

Site Name

Site Location ☐ Landranger ☒ x,y [VERIFY LOCATION](#) [?](#)

Habitat within site [CHECK BACKGROUND LEVELS](#) [?](#)

Human Health Receptor Details

Receptor [Add Receptor](#) [?](#)

Receptor Name

Receptor Location ☐ Landranger ☒ x,y [VERIFY LOCATION](#) [?](#)

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Content Specific Help Text

Site Information Ashby Canal (SSSI)

Country: ENGLAND
 Site Name: Ashby Canal
 Site Code: 1001311
 Designation Status: SSSI
 Distance from Installation (m): 1022
 Receptor Type: Habitat
 Grid Reference: 437178,305532
 Met Site: COLE
 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	Castle Farm	4	4	-	1.7	-	0.28	1.45	0.098	-	-

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	0.27935	1.50	0.110	-	-
Background concentration at receptor edge	1.72	15.46	1.238 (N: 1.104 S: 0.134)	-	-
Predicted Environmental Concentration/Deposition (PEC) 	2	16.96	1.35	-	-
Environmental Assessment Level or Critical Load / Level	Lower: 1 Upper: 3 	Standing waters	No sensitive habitat or species at this site	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC	Lower: 28% Upper: 9%	n/a	n/a	-	-
% of relevant standard PEC	Lower: 200% Upper: 67%	n/a	n/a	-	-
EXCEEDANCE 	Lower: 1.00 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Castle Farm, Bilstone

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Content Specific Help Text

Site Information Newton Burgoland Marshes (SSSI) ?

Country: ENGLAND
 Site Name: Newton Burgoland Marshes
 Site Code: ? 1001033
 Designation Status: ? SSSI
 Distance from Installation (m): ? 2690
 Receptor Type: Habitat
 Grid Reference: 438008,308284
 Met Site: ? COLE
 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	Castle Farm	4	4	-	1.7	-	0.06	0.3	0.02	-	-

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	0.05719	0.30	0.021	-	-
Background concentration at receptor edge ?	1.70	15.51	1.257 (N: 1.108 S: 0.149)	-	-
Predicted Environmental Concentration/Deposition (PEC) ?	1.76	15.81	1.28	-	-
Environmental Assessment Level or Critical Load / Level ?	Lower: 1 Upper: 3 ?	10.0 Alopecurus pratensis - Sanguisorba officinalis Grassland	maxN: 4.856 maxS: 4.000 minN: 0.856 Alopecurus pratensis - Sanguisorba officinalis Grassland	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ?	Lower: 6% Upper: 2%	3%	2%	-	-
% of relevant standard PEC ?	Lower: 176% Upper: 59%	158%	28%	-	-
EXCEEDANCE ?	Lower: 0.76 Upper: No exceedance	5.81	-3.58	-	-

Project Notes

Castle Farm, Bilstone

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Content Specific Help Text

Site Information Kendall|s Meadow (SSSI) ?

Country: ENGLAND
 Site Name: Kendall|s Meadow
 Site Code: ? 1003916
 Designation Status: ? SSSI
 Distance from Installation (m): ? 8507
 Receptor Type: Habitat
 Grid Reference: 439119,298104
 Met Site: ? COLE
 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	Castle Farm	4	4	-	1.7	-	0.01	0.04	0.003	-	-

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	0.00850	0.04	0.003	-	-
Background concentration at receptor edge ?	1.63	15.42	1.250 (N: 1.102 S: 0.148)	-	-
Predicted Environmental Concentration/Deposition (PEC) ?	1.64	15.46	1.25	-	-
Environmental Assessment Level or Critical Load / Level ?	Lower: 1 Upper: 3 ?	10.0 Alopecurus pratensis - Sanguisorba officinalis Grassland	maxN: 5.071 maxS: 4.000 minN: 1.071 Alopecurus pratensis - Sanguisorba officinalis Grassland	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ?	Lower: 1% Upper: 0%	0%	0%	-	-
% of relevant standard PEC ?	Lower: 164% Upper: 55%	155%	25%	-	-
EXCEEDANCE ?	Lower: 0.64 Upper: No exceedance	5.46	-3.82	-	-

Project Notes

Castle Farm, Bilstone

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Content Specific Help Text

Site Information Birches Barn Meadows (SSSI) ?

Country: ENGLAND
 Site Name: Birches Barn Meadows
 Site Code: ? 2000078
 Designation Status: ? SSSI
 Distance from Installation (m): ? 9009
 Receptor Type: Habitat
 Grid Reference: 428299,302144
 Met Site: ? COLE
 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	Castle Farm	4	4	-	1.7	-	0.01	0.04	0.003	-	-

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	0.00774	0.04	0.003	-	-
Background concentration at receptor edge ?	1.58	14.02	1.116 (N: 1.001 S: 0.115)	-	-
Predicted Environmental Concentration/Deposition (PEC) ?	1.59	14.06	1.12	-	-
Environmental Assessment Level or Critical Load / Level ?	Lower: 1 Upper: 3 ?	10.0 Alopecurus pratensis - Sanguisorba officinalis Grassland	maxN: 4.856 maxS: 4.000 minN: 0.856 Alopecurus pratensis - Sanguisorba officinalis Grassland	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ?	Lower: 1% Upper: 0%	0%	0%	-	-
% of relevant standard PEC ?	Lower: 159% Upper: 53%	141%	23%	-	-
EXCEEDANCE ?	Lower: 0.59 Upper: No exceedance	4.06	-3.74	-	-

Project Notes

Castle Farm, Bilstone

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Content Specific Help Text

Site Information ▼ ?

Country: ENGLAND
 Site Name: River Mease
 Site Code: ? 2000416
 Designation Status: ? SSSI
 Distance from Installation (m): ? 4740
 Receptor Type: Habitat
 Grid Reference: 433753,310106
 Met Site: ? COLE
 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	Castle Farm	4	4	-	1.7	-	0.02	0.12	0.008	-	-

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	0.02237	0.12	0.009	-	-
Background concentration at receptor edge ?	1.61	14.87	1.191 (N: 1.062 S: 0.129)	-	-
Predicted Environmental Concentration/Deposition (PEC) ?	1.63	14.99	1.2	-	-
Environmental Assessment Level or Critical Load / Level ?	Lower: 1 Upper: 3 ?	Cobitis taenia	No sensitive habitat or species at this site	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ?	Lower: 2% Upper: 1%	n/a	n/a	-	-
% of relevant standard PEC ?	Lower: 163% Upper: 54%	n/a	n/a	-	-
EXCEEDANCE ?	Lower: 0.63 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Castle Farm, Bilstone

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Content Specific Help Text

Site Information River Mease (SAC) ▼ ?

Country: ENGLAND
 Site Name: River Mease
 Site Code: ? UK0030258
 Designation Status: ? SAC
 Distance from Installation (m): ? 4740
 Receptor Type: Habitat
 Grid Reference: 433753,310106
 Met Site: ? COLE
 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	Castle Farm	4	4	-	1.7	-	0.02	0.12	0.008	-	-

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	0.02237	0.12	0.009	-	-
Background concentration at receptor edge ?	1.61	14.87	1.191 (N: 1.062 S: 0.129)	-	-
Predicted Environmental Concentration/Deposition (PEC) ?	1.63	14.99	1.2	-	-
Environmental Assessment Level or Critical Load / Level ?	Lower: 1 Upper: 3 ?	Austropotamobius pallipes	No sensitive habitat or species at this site	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ?	Lower: 2% Upper: 1%	n/a	n/a	-	-
% of relevant standard PEC ?	Lower: 163% Upper: 54%	n/a	n/a	-	-
EXCEEDANCE ?	Lower: 0.63 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Castle Farm, Bilstone

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Content Specific Help Text

Site Information Sheepy Fields (SSSI) ▼ ?

Country: ENGLAND
 Site Name: Sheepy Fields
 Site Code: ? 1001283
 Designation Status: ? SSSI
 Distance from Installation (m): ? 4581
 Receptor Type: Habitat
 Grid Reference: 433333,302720
 Met Site: ? COLE
 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	Castle Farm	4	4	-	1.7	-	0.02	0.12	0.008	-	-

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	0.02367	0.12	0.009	-	-
Background concentration at receptor edge ?	1.66	14.68	1.168 (N: 1.048 S: 0.120)	-	-
Predicted Environmental Concentration/Deposition (PEC) ?	1.68	14.8	1.18	-	-
Environmental Assessment Level or Critical Load / Level ?	Lower: 1 Upper: 3 ?	10.0 Cynosurus Cristatus - Centaurea Nigra Grassland	maxN: 4.856 maxS: 4.000 minN: 0.856 Cynosurus Cristatus - Centaurea Nigra Grassland	-	-
ALTERNATIVE CRITICAL LOAD INFO					
USE OWN THRESHOLDS?					
% of relevant standard PC ?	Lower: 2% Upper: 1%	1%	0%	-	-
% of relevant standard PEC ?	Lower: 168% Upper: 56%	148%	25%	-	-
EXCEEDANCE ?	Lower: 0.68 Upper: No exceedance	4.80	-3.68	-	-

Project Notes

Castle Farm, Bilstone

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