



EU Designations of NI Portal Facilities

Larne Operations

Air Quality SCAIL Assessment

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Contents Page

1.	Introduction.....	2
1.1	Site Location and Context.....	2
1.2	Proposed Site Activities.....	3
2.	SCAIL Assessment Methodology.....	4
2.1	Assessment Criteria.....	4
2.2	Input Parameters.....	5
2.3	Ecological Receptors.....	6
3.	Conclusions.....	8

Figures

Figure 1	Site Location Plan
Figure 2	Ecological Receptor Plan

Appendices

Appendix A	Individual Site SCAIL Inputs Cattle and Horses
Appendix B	Individual Site SCAIL Inputs Pigs and Sheep
Appendix C	Individual Site SCAIL Inputs Manure
Appendix D	Report Terms and Conditions



Executive Summary

WYG have undertaken an Air Quality SCAIL Assessment on behalf of DAERA to assess the impacts associated with the movement and inspection of livestock for the proposed development at Larne Harbour.

The assessment includes the impacts of Nitrogen Deposition on the surrounding Ecological sensitive receptors locations.

The assessment of the proposed Cattle, Horse, Pigs, Sheep and storage of Manure have all been considered individually and the cumulative impacts also taken into consideration.

Based on the number of livestock passing through and the time spent at the facility, the assessment illustrates that the cumulative impact of nitrogen deposition on the surround sensitive ecological receptors is considered negligible.

As a result of this assessment, ammonia should not be considered a negative determining factor in assessing this application.



1. Introduction

WYG have undertaken an Air Quality SCAIL Assessment on behalf of DAERA to assess the impacts associated with the movement and inspection of livestock for the proposed development (NI Portal Facilities) at Larne Harbour.

The assessment includes the impacts of Nitrogen Deposition on the surrounding Ecological sensitive receptor locations.

1.1 Site Location and Context

The site is bound to the west, north and south by commercial properties and to the east by residential properties, shown in Figure 1.

The approximate site Northern Ireland National Grid Reference (NGR) is approximately 341140, 402120.

The following assessment stages have been undertaken as part of this assessment:

- Analysis of proposed facility activities
- Identification of surrounding ecological sensitive sites,
- Assessment of proposed site activities using SCAIL model

The results of the assessment are detailed in the following sections of this report.



1.2 Proposed Site Activities

After a review of Figure 1 and details of the site plan and layout it is understood that the proposed site facility activities include:

- Housing of Livestock for inspection,
- Movement of livestock across facility,
- Storage of waste and manure.

The proposed facility will have the following daily imports (based on operations 364 days a year)

1. Cattle – 16
2. Horses 0.1 (worst case of 1 has been used)
3. Pigs – 148
4. Sheep – 53

Additionally, the proposed site will include an effluent take of which the storage is assumed to be 24.5 tonnes.



2. SCAIL Assessment Methodology

SCAIL (Simple Calculation of Atmospheric Impact Limits) is a screening tool for assessing the impact from pig and poultry farms on human health and on seminatural areas like SSSIs and SACs. The model provides an estimate of the amount of acidity and nitrogen deposited as a consequence of ammonia emissions from a farm as well as predictions of air concentrations of ammonia (NH_3). These values can then be used to assess whether impact limits for human health or habitats are exceeded or not.

It should be noted that The SCAIL (Simple Calculation of Atmospheric Impact Limits) assessment is only a screening tool and is deliberately conservative in relation to the levels predicted. There are a number of specific reasons why the SCAIL results would be expected to be higher than the more detailed AERMOD assessment:

- The SCAIL assessment is based on flat ground. The topography of the area surrounding the proposed site can have a significant effect on the potential dispersion associated with any source;
- The input data into the SCAIL model only allows for general information in relation to the locations of the fans to be input. Gable fans are not assigned heights and the number of roof fans is given, but they are not accurately location in position on the building; and
- The met data relied upon in the SCAIL assessment was set to conservative. This allows the model to ensure the highest predicted ammonia level at a specific distance is presented as the predicted level at each receptor. The AERMOD modelling is based on actual measured met data taken in Northern Ireland, for five consecutive years, with the results presented as appropriate.

The initial assessment of this site was carried out using the SCAIL assessment methodology, which is expected to return results significantly higher than those associated with detailed modelling.

2.1 Assessment Criteria

Ammonia (NH_3), Nitrogen deposition and impacts- Ammonia (NH_3) in the atmosphere results primarily from the decomposition and volatilisation of animal wastes. As such it is in principle a natural trace gas. However, as agricultural livestock numbers have dramatically increased, together with increases in nitrogen fertilization, NH_3 emissions have increased accordingly (Sutton et al. 19931). Emissions of ammonia lead to the deposition of nitrogen to vegetative surfaces through processes of wet and dry deposition. Excess nitrogen deposition to terrestrial plants can lead to eutrophication effects, and communities most at risk are those rich in mosses and lichens, and where species richness is comprised of slow growing species. Competition from invasive species, often grasses, poses a threat for many plant communities but the type of species invading will depend on the



proximity of a seed source (arable, farmed land). Nitrogen deposition can also increase the risk of damage from drought (summer and winter) and frost.

Table 2.1 Ammonia Limit Values

Pollutant	Reason	EAL Value	Measured as
Ammonia	Protection of Vegetation	1-3 µg/m ³	Annual Mean

2.2 Input Parameters

SCAIL requires specific information in relation to the site to carry out an assessment of the potential impacts.

The site location, animal numbers and the average consignment off loaded of species/animals were used to calculate the emissions from the proposed facility.

A summary of the site is provided in the Table 2.2 below

Table 2.2 Input Parameters into SCAIL Assessment

Parameter	Proposed
Animal No.	<ol style="list-style-type: none"> Cattle – 16 Horses 0.1 (worst case of 1 has been used) Pigs – 148 Sheep – 53
Animal Type	<ol style="list-style-type: none"> Cattle – Dairy Cattle Horses – Dairy Cows as worst case Pigs – Finishers Sheep – Pig Finishers as worst case
Emissions	Naturally Ventilated

The average consignment off loaded takes approximately 30 minutes depending on species and volume. On occasion an animal may be held longer e.g. 24hr period awaiting paperwork or confirmation from a Great British vet (approximately 4/5 times per year).

Due to the proposed facility is normally not holding the livestock above for 24 hours, a factor (4 hours out of 24 hours) has been applied to consider the representative amount of time livestock to produce a worst case assessment.

2.3 Ecological Receptors

The ecological receptors within 7.5 km of the site have been identified and presented in Table 2.3 and Figure 2.

Table 2.3 Ecological Receptors within 7.5km of the proposed site

Site ID	Designated Site	Approximate Distance to Proposed Scheme (km)	Description
E1	Larne Lough (ASSSI)	0.577	ASSSI - These have been identified as being Northern Ireland's very best wildlife and geological sites.
E2	Larne Lough (SPA)	0.577	SPA - Areas designated under the European Commission on the conservation of wild birds (the Birds Directive). All EU member states are required to identify internationally important areas for breeding, over-wintering and migrating birds and designate them as SPA's.
E3	Waterloo (ASSSI)	1.271	ASSSI - These have been identified as being Northern Ireland's very best wildlife and geological sites.
E4	Portmuck (ASSSI)	4.054	ASSSI - These have been identified as being Northern Ireland's very best wildlife and geological sites.
E5	The Maidens (SAC)	4.406	SAC - These areas are given special protection under the European Union's Habitats Directive to protect some of the most seriously threatened habitats and species across Europe.
E6	Newlands (ASSSI)	4.359	ASSSI - These have been identified as being Northern Ireland's very best wildlife and geological sites.
E7	The Gobbins (ASSSI)	5.386	ASSSI - These have been identified as being Northern Ireland's very best wildlife and geological sites.
E8	Kilcoan (ASSSI)	5.899	ASSSI - These have been identified as being Northern Ireland's very best wildlife and geological sites.
E9	Knock Dhu Sallagh Braes (ASSSI)	6.043	ASSSI - These have been identified as being Northern Ireland's very best wildlife and geological sites.
E10	Ballygalley Head (ASSSI)	6.377	ASSSI - These have been identified as being Northern Ireland's very best wildlife and geological sites.
E11	Carneal (ASSSI)	6.381	ASSSI - These have been identified as being Northern Ireland's very best wildlife and geological sites.

Ammonia impact includes the emissions from each animal housed within the facility and the manure storage on the site.

The predicted ammonia impacts from the entire site and associated livestock are presented in Table 2.4 below.



Table 2.4 Annual Average Ammonia from Proposed Livestock and Manure Storage ($\mu\text{g}/\text{m}^3$)

Site ID	Cattle and Horse	Pigs and Sheep	Manure	Cumulative Total
E1	0.02951	0.05568	0.0009	0.08606
E2	0.02951	0.05568	0.0009	0.08606
E3	0.01522	0.02871	0.0005	0.04439
E4	0.00287	0.00542	0.0001	0.00839
E5	0.00257	0.00484	0.0001	0.00749
E6	0.00245	0.00461	0.0001	0.00714
E7	0.00182	0.00343	0.0001	0.00530
E8	0.00155	0.00292	0.0001	0.00451
E9	0.00151	0.00285	0.0000	0.00441
E10	0.00140	0.00264	0.0000	0.00408
E11	0.00134	0.00253	0.0000	0.00392

Table 2.5 below illustrates the Annual Average Ammonia concentration as Process Contribution in addition to the surrounding background concentrations at the sites and their impact as a percentage of the guidelines

Table 2.5 Annual Average Ammonia PC and PEC from Proposed Livestock and Manure Storage ($\mu\text{g}/\text{m}^3$)

Site ID	EAL ($\mu\text{g}/\text{m}^3$)	Background ($\mu\text{g}/\text{m}^3$)	Total PC ($\mu\text{g}/\text{m}^3$)	PEC ($\mu\text{g}/\text{m}^3$)	PC/ EAL level (%)	EAL/ Guideline level (%)
E1	1	1.66	0.08606	1.74606	8.6	174.6
E2	1	1.66	0.08606	1.74606	8.6	174.6
E3	1	1.66	0.04439	1.70439	4.4	170.4
E4	1	1.12	0.00839	1.12839	0.8	112.8
E5	1	1.12	0.00749	1.12749	0.7	112.7
E6	1	1.97	0.00714	1.97714	0.7	197.7
E7	1	1.12	0.00530	1.12530	0.5	112.5
E8	1	1.58	0.00451	1.58451	0.5	158.5
E9	1	1.46	0.00441	1.46441	0.4	146.4
E10	1	1.46	0.00408	1.46408	0.4	146.4
E11	1	3.1	0.00392	3.10392	0.4	310.4

The ammonia concentrations at these sites are dominated by the background concentrations, which are approximately 112 - 311% of the Environmental Assessment Limit for ammonia.

The maximum process contribution from the cumulative assessment is $<1\mu\text{g}/\text{m}^3$ of the EAL value at the designated site.

The maximum process at any of the priority sites is 8.6% of the EAL level, which is less than the limit level of 50% for this type of site.

As such it is considered the impact of ammonia from the proposed development to be negligible.



3. Conclusions

WYG have undertaken an Air Quality SCAIL Assessment on behalf of the EU Designations of NI Portal Facilities to assess the impacts associated with the movement and inspection of livestock for the proposed development at Larne Harbour.

The assessment includes the impacts of Nitrogen Deposition on the surrounding Ecological sensitive receptors locations.

Overall, the assessment demonstrates that the impact associated with the Cattle, Horse, Sheep, Pigs and associated manure with regard to ammonia emissions on the surrounding ecological sensitive receptors is negligible.

As a result of this assessment, ammonia should not be considered a negative determining factor in assessing this application.



Figure 1 Larne Harbour Proposed Development Plan

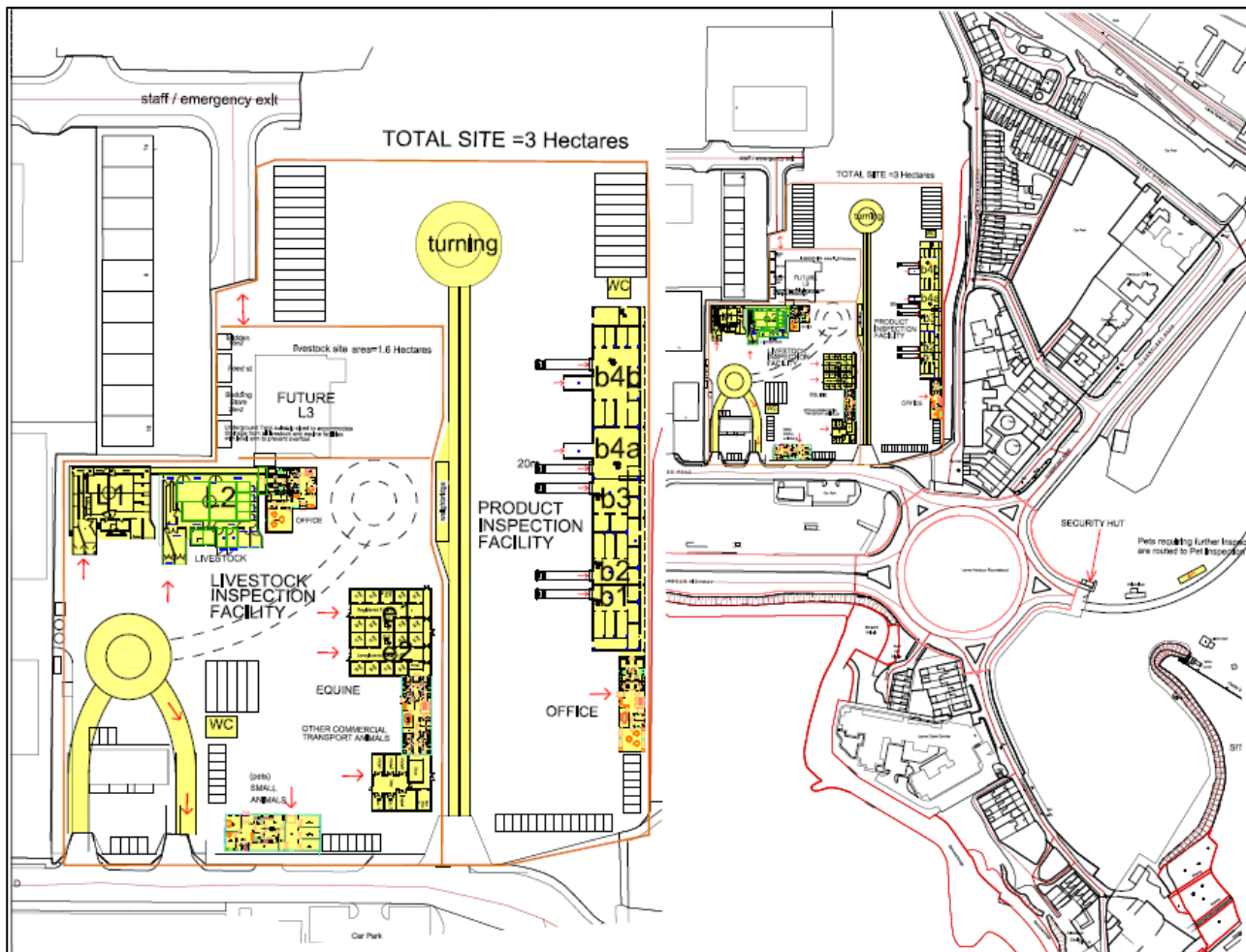
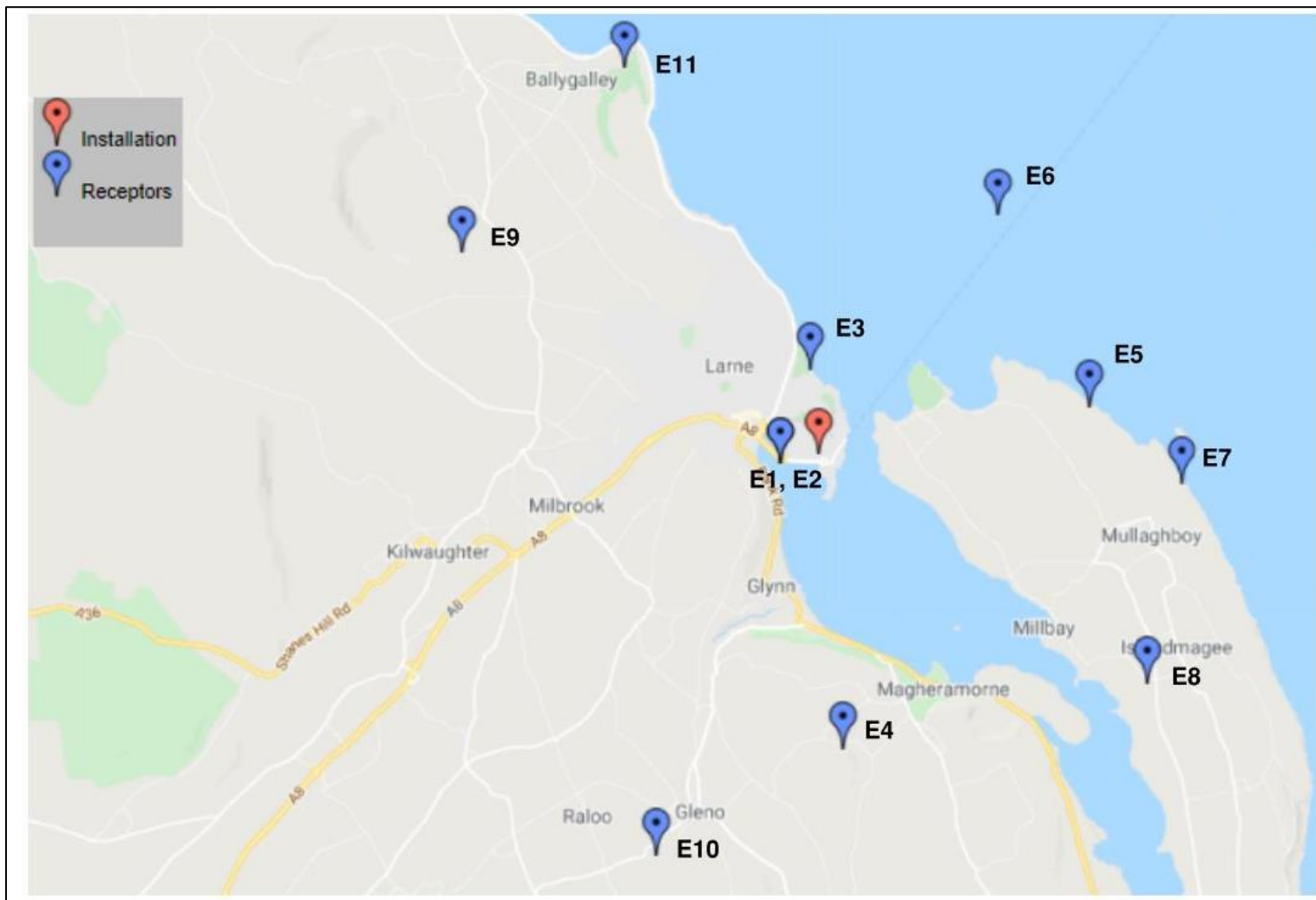




Figure 2 Ecological Receptor Plan





Appendix A Individual Site SCAIL Inputs Cattle and Horses

Site Information											
Larne Lough (ASSI) ?											
Region:	Northern Ireland										
Site Name:	Larne Lough										
Site Code: ?	ASSI106										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	629										
Receptor Type:	Habitat										
Grid Reference:	340622,401870.7										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.44	-	0.18	0.92	0.062	-	-
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				0.17706	0.92	0.062	-	-			
Background concentration at receptor edge ?				1.66	15.68	1.29 (N:1.12 S:0.17)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.84	16.6	1.35	-	-			
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: 18% Upper: 6%	n/a	n/a	-	-			
% of relevant standard PEC ?				Lower: 184% Upper: 61%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.84 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information											
Larne Lough (SPA) ?											
Region:	Northern Ireland										
Site Name:	Larne Lough										
Site Code: ?	UK9020042										
Designation Status: ?	SPA										
Distance from Installation (m): ?	629										
Receptor Type:	Habitat										
Grid Reference:	340622,401870.7										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.44	-	0.18	0.92	0.062	-	-
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		0.17706	0.92	0.062	-	-					
Background concentration at receptor edge ?		1.66	15.68	1.29 (N:1.12 S:0.17)	-	-					
Predicted Environmental Concentration/Deposition (PEC) ?		1.84	16.6	1.35	-	-					
Environmental Assessment Level or Critical Load / Level ?		Lower: 1 Upper: 3 ?	8.0 Sterna dougallii (Europe - breeding)	maxN: 2.04 maxS: 1.60 minN: 0.44 Sterna dougallii (Europe - breeding)	-	-					
<input type="button" value="USE OWN THRESHOLDS?"/>											
% of relevant standard PC ?		Lower: 18% Upper: 6%	12%	3%	-	-					
% of relevant standard PEC ?		Lower: 184% Upper: 61%	208%	66%	-	-					
EXCEEDANCE ?		Lower: 0.84 Upper: No exceedance	8.60	-0.69	-	-					
Project Notes											
Larne Harbour SCAIL											

The



Site Information											
Region:		Northern Ireland									
Site Name:		Waterloo									
Site Code:		ASSI084									
Designation Status:		ASSI									
Distance from Installation (m):		1180									
Receptor Type:		Habitat									
Grid Reference:		341016,403270.7									
Met Site:		PORT									
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	Larne Harbour SCAIL	1	1	-	0.44	-	0.09	0.47	0.032	-	-
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		0.09129	0.47	0.032	-	-					
Background concentration at receptor edge		1.66	15.68	1.29 (N:1.12 S:0.17)	-	-					
Predicted Environmental Concentration/Deposition (PEC)		1.75	16.15	1.32	-	-					
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: 9% Upper: 3%	n/a	n/a	-	-					
% of relevant standard PEC		Lower: 175% Upper: 58%	n/a	n/a	-	-					
EXCEEDANCE		Lower: 0.75 Upper: No exceedance	n/a	n/a	-	-					
Project Notes											
Larne Harbour SCAIL											



Site Information Portmuck (ASSI)											
Region:	Northern Ireland										
Site Name:	Portmuck										
Site Code:	ASSI177										
Designation Status:	ASSI										
Distance from Installation (m):	4013										
Receptor Type:	Habitat										
Grid Reference:	345150,402839.4										
Met Site:	PORT										
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	Larne Harbour SCAIL	1	1	-	0.44	-	0.02	0.09	0.006	-	-
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				0.01724	0.09	0.006	-	-			
Background concentration at receptor edge				1.12	12.46	1.02 (N:0.89 S:0.13)	-	-			
Predicted Environmental Concentration/Deposition (PEC)				1.14	12.55	1.03	-	-			
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: 2% Upper: 1%	n/a	n/a	-	-			
% of relevant standard PEC				Lower: 114% Upper: 38%	n/a	n/a	-	-			
EXCEEDANCE				Lower: 0.14 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information The Maidens (SAC) <input type="button" value="v"/>											
Region:	Northern Ireland										
Site Name:	The Maidens										
Site Code: <input type="button" value="i"/>	UK0030384										
Designation Status: <input type="button" value="i"/>	SAC										
Distance from Installation (m): <input type="button" value="i"/>	4315										
Receptor Type:	Habitat										
Grid Reference:	343678.1,405642										
Met Site: <input type="button" value="i"/>	PORT										
Run Mode: <input type="button" value="i"/>	Conservative										
PM ₁₀ Percentile: <input type="button" value="i"/>	Average										
Installation Information <input type="button" value="i"/>											
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	Larne Harbour SCAIL	1	1	-	0.44	-	0.02	0.08	0.005	-	-
Total Depositions/Concentrations and Exceedances <input type="button" value="i"/>											
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				0.01540	0.08	0.005	-	-			
Background concentration at receptor edge <input type="button" value="i"/>				1.12	12.46	0.00 (N:0.00 S:0.00)	-	-			
Predicted Environmental Concentration/Deposition (PEC) <input type="button" value="i"/>				1.14	12.54	0.01	-	-			
Environmental Assessment Level or Critical Load / Level <input type="button" value="i"/>				Lower: 1 Upper: 3 <input type="button" value="i"/>	No sensitive habitat or species at this site	No sensitive habitat or species at this site	-	-			
<input type="button" value="USE OWN THRESHOLDS?"/>											
% of relevant standard PC <input type="button" value="i"/>				Lower: 2% Upper: 1%	n/a	n/a	-	-			
% of relevant standard PEC <input type="button" value="i"/>				Lower: 114% Upper: 38%	n/a	n/a	-	-			
EXCEEDANCE <input type="button" value="i"/>				Lower: 0.14 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											

DAERA Air Quality SCAIL Assessment



Site Information											
The Gobbins (ASSI) ?											
Region:	Northern Ireland										
Site Name:	The Gobbins										
Site Code: ?	ASSI283										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	5368										
Receptor Type:	Habitat										
Grid Reference:	346562.3,401769.2										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.44	-	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				0.01090	0.06	0.004	-	-			
Background concentration at receptor edge ?				1.12	12.46	1.02 (N:0.89 S:0.13)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.13	12.52	1.02	-	-			
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: 113% Upper: 38%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.13 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information											
Kilcoan (ASSI) ?											
Region:	Northern Ireland										
Site Name:	Kilcoan										
Site Code: ?	ASSI360										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	5932										
Receptor Type:	Habitat										
Grid Reference:	346136.7,398809.7										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.44	-	0.01	0.05	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				0.00928	0.05	0.003	-	-			
Background concentration at receptor edge ?				1.58	15.12	1.21 (N:1.08 S:0.13)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.59	15.17	1.21	-	-			
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: 159% Upper: 53%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.59 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information Knock Dhu Sallagh Braes (ASSI) ▼											
Region:	Northern Ireland										
Site Name:	Knock Dhu Sallagh Braes										
Site Code: ?	ASSI391										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	6020										
Receptor Type:	Habitat										
Grid Reference:	335833.3,404823.9										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.44	-	0.01	0.05	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				0.00906	0.05	0.003	-	-			
Background concentration at receptor edge ?				1.46	15.68	1.26 (N:1.12 S:0.14)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.47	15.73	1.26	-	-			
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: 147% Upper: 49%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.47 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information											
Ballygalley Head (ASSI) ?											
Region:	Northern Ireland										
Site Name:	Ballygalley Head										
Site Code: ?	ASSI399										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	6309										
Receptor Type:	Habitat										
Grid Reference:	338143.1,407622.2										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.44	-	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				0.00839	0.04	0.003	-	-			
Background concentration at receptor edge ?				1.46	15.68	1.26 (N:1.12 S:0.14)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.47	15.72	1.26	-	-			
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: 147% Upper: 49%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.47 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information											
Carneal (ASSI) ?											
Region:	Northern Ireland										
Site Name:	Carneal										
Site Code: ?	ASSI362										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	6474										
Receptor Type:	Habitat										
Grid Reference:	338968.1,396030.2										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.44	-	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		0.00805	0.04	0.003	-	-					
Background concentration at receptor edge ?		3.10	25.62	1.98 (N:1.83 S:0.15)	-	-					
Predicted Environmental Concentration/Deposition (PEC) ?		3.11	25.66	1.98	-	-					
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: 311% Upper: 104%	n/a	n/a	-	-					
EXCEEDANCE ?		Lower: 2.11 Upper: 0.11	n/a	n/a	-	-					
Project Notes											
Larne Harbour SCAIL											



Appendix B Individual Site SCAIL Inputs Pigs and Sheep



Site Information Larne Lough (ASSI)											
Region:	Northern Ireland										
Site Name:	Larne Lough										
Site Code: [?]	ASSI106										
Designation Status: [?]	ASSI										
Distance from Installation (m): [?]	629										
Receptor Type:	Habitat										
Grid Reference:	340622,401870.7										
Met Site: [?]	PORT										
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	Larne Harbour SCAIL	1	1	-	0.33	-	0.13	0.7	0.047	-	-
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				0.13412	0.70	0.047	-	-			
Background concentration at receptor edge [?]				1.66	15.68	1.29 (N:1.12 S:0.17)	-	-			
Predicted Environmental Concentration/Deposition (PEC) [?]				1.79	16.38	1.34	-	-			
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: 13% Upper: 4%	n/a	n/a	-	-			
% of relevant standard PEC [?]				Lower: 179% Upper: 60%	n/a	n/a	-	-			
EXCEEDANCE [?]				Lower: 0.79 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information											
Larne Lough (SPA) <input type="button" value="ⓘ"/>											
Region:	Northern Ireland										
Site Name:	Larne Lough										
Site Code: <input type="button" value="ⓘ"/>	UK9020042										
Designation Status: <input type="button" value="ⓘ"/>	SPA										
Distance from Installation (m): <input type="button" value="ⓘ"/>	629										
Receptor Type:	Habitat										
Grid Reference:	340622,401870.7										
Met Site: <input type="button" value="ⓘ"/>	PORT										
Run Mode: <input type="button" value="ⓘ"/>	Conservative										
PM ₁₀ Percentile: <input type="button" value="ⓘ"/>	Average										
Installation Information <input type="button" value="ⓘ"/>											
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	Larne Harbour SCAIL	1	1	-	0.33	-	0.13	0.7	0.047	-	-
Total Depositions/Concentrations and Exceedances <input type="button" value="ⓘ"/>											
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				0.13412	0.70	0.047	-	-			
Background concentration at receptor edge <input type="button" value="ⓘ"/>				1.66	15.68	1.29 (N:1.12 S:0.17)	-	-			
Predicted Environmental Concentration/Deposition (PEC) <input type="button" value="ⓘ"/>				1.79	16.38	1.34	-	-			
Environmental Assessment Level or Critical Load / Level <input type="button" value="ⓘ"/>				Lower: 1 Upper: 3 <input type="button" value="ⓘ"/>	8.0 Sterna dougallii (Europe - breeding)	maxN: 2.04 maxS: 1.60 minN: 0.44 Sterna dougallii (Europe - breeding)	-	-			
				<input type="button" value="ALTERNATIVE CRITICAL LOAD INFO"/>							
<input type="button" value="USE OWN THRESHOLDS?"/>											
% of relevant standard PC <input type="button" value="ⓘ"/>				Lower: 13% Upper: 4%	9%	2%	-	-			
% of relevant standard PEC <input type="button" value="ⓘ"/>				Lower: 179% Upper: 60%	205%	66%	-	-			
EXCEEDANCE <input type="button" value="ⓘ"/>				Lower: 0.79 Upper: No exceedance	8.38	-0.70	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information											
Region:		Northern Ireland									
Site Name:		Waterloo									
Site Code: ?		ASSI084									
Designation Status: ?		ASSI									
Distance from Installation (m): ?		1180									
Receptor Type:		Habitat									
Grid Reference:		341016,403270.7									
Met Site: ?		PORT									
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	Larne Harbour SCAIL	1	1	-	0.33	-	0.07	0.36	0.024	-	-
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		0.06915	0.36	0.024	-	-					
Background concentration at receptor edge ?		1.66	15.68	1.29 (N:1.12 S:0.17)	-	-					
Predicted Environmental Concentration/Deposition (PEC) ?		1.73	16.04	1.31	-	-					
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: 7% Upper: 2%	n/a	n/a	-	-					
% of relevant standard PEC ?		Lower: 173% Upper: 58%	n/a	n/a	-	-					
EXCEEDANCE ?		Lower: 0.73 Upper: No exceedance	n/a	n/a	-	-					
Project Notes											
Larne Harbour SCAIL											



Site Information											
Region:		Northern Ireland									
Site Name:		Portmuck									
Site Code: ②		ASSI177									
Designation Status: ②		ASSI									
Distance from Installation (m): ③		4013									
Receptor Type:		Habitat									
Grid Reference:		345150,402839.4									
Met Site: ②		PORT									
Run Mode: ②		Conservative									
PM ₁₀ Percentile: ②		Average									
Installation Information ②											
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	Larne Harbour SCAIL	1	1	-	0.33	-	0.01	0.07	0.005	-	-
Total Depositions/Concentrations and Exceedances ②											
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		0.01306	0.07	0.005	-	-					
Background concentration at receptor edge ②		1.12	12.46	1.02 (N:0.89 S:0.13)	-	-					
Predicted Environmental Concentration/Deposition (PEC) ②		1.13	12.53	1.02	-	-					
Environmental Assessment Level or Critical Load / Level ②		Lower: 1 Upper: 3 ②	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 ②		Lower: 1% Upper: 0%	n/a	n/a	-	-					
% of relevant standard PEC ②		Lower: 113% Upper: 38%	n/a	n/a	-	-					
EXCEEDANCE ②		Lower: 0.13 Upper: No exceedance	n/a	n/a	-	-					
Project Notes											
Larne Harbour SCAIL											

DAERA
Air Quality SCAIL Assessment



Site Information											
The Maidens (SAC) ?											
Region:	Northern Ireland										
Site Name:	The Maidens										
Site Code: ?	UK0030384										
Designation Status: ?	SAC										
Distance from Installation (m): ?	4315										
Receptor Type:	Habitat										
Grid Reference:	343678.1,405642										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.33	-	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				0.01166	0.06	0.004	-	-			
Background concentration at receptor edge ?				1.12	12.46	0.00 (N:0.00 S:0.00)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.13	12.52	0	-	-			
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: 113% Upper: 38%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.13 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information											
Newlands (ASSI) ?											
Region:	Northern Ireland										
Site Name:	Newlands										
Site Code: ?	ASSI241										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	4451										
Receptor Type:	Habitat										
Grid Reference:	341671.8,397680										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.33	-	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				0.01111	0.06	0.004	-	-			
Background concentration at receptor edge ?				1.97	18.34	1.45 (N:1.31 S:0.14)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.98	18.4	1.45	-	-			
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: 198% Upper: 66%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.98 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											

DAERA Air Quality SCAIL Assessment



Site Information The Gobbins (ASSI)

Region: Northern Ireland
 Site Name: The Gobbins
 Site Code: ASSI283
 Designation Status: ASSI
 Distance from Installation (m): 5368
 Receptor Type: Habitat
 Grid Reference: 346562.3,401769.2
 Met Site: PORT
 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	Larne Harbour SCAIL	1	1	-	0.33	-	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	0.00825	0.04	0.003	-	-
Background concentration at receptor edge	1.12	12.46	1.02 (N:0.89 S:0.13)	-	-
Predicted Environmental Concentration/Deposition (PEC)	1.13	12.5	1.02	-	-
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: 113% Upper: 38%	n/a	n/a	-	-
EXCEEDANCE	Lower: 0.13 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Larne Harbour SCAIL

DAERA Air Quality SCAIL Assessment



Site Information											
Kilcoan (ASSI) ?											
Region:	Northern Ireland										
Site Name:	Kilcoan										
Site Code: ?	ASSI360										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	5932										
Receptor Type:	Habitat										
Grid Reference:	346136.7,398809.7										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.33	-	0.01	0.04	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				0.00703	0.04	0.003	-	-			
Background concentration at receptor edge ?				1.58	15.12	1.21 (N:1.08 S:0.13)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.59	15.16	1.21	-	-			
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: 159% Upper: 53%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.59 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information Knock Dhu Sallagh Braes (ASSI) ▼

Region: Northern Ireland
 Site Name: Knock Dhu Sallagh Braes
 Site Code: ASSI391
 Designation Status: ASSI
 Distance from Installation (m): 6020
 Receptor Type: Habitat
 Grid Reference: 335833.3,404823.9
 Met Site: PORT
 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 (kO _u /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 (O _u /m ³)
1	Larne Harbour SCAIL	1	1	-	0.33	-	0.01	0.04	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 (O _u /m ³)
Process Contribution (PC) at receptor edge	0.00686	0.04	0.002	-	-
Background concentration at receptor edge	1.46	15.68	1.26 (N:1.12 S:0.14)	-	-
Predicted Environmental Concentration/Deposition (PEC)	1.47	15.72	1.26	-	-
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: 147% Upper: 49%	n/a	n/a	-	-
EXCEEDANCE	Lower: 0.47 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Larne Harbour SCAIL



Site Information Ballygalley Head (ASSI) ▼											
Region:	Northern Ireland										
Site Name:	Ballygalley Head										
Site Code: ⓘ	ASSI399										
Designation Status: ⓘ	ASSI										
Distance from Installation (m): ⓘ	6309										
Receptor Type:	Habitat										
Grid Reference:	338143.1,407622.2										
Met Site: ⓘ	PORT										
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	Larne Harbour SCAIL	1	1	-	0.33	-	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		0.00636	0.03	0.002	-	-					
Background concentration at receptor edge ⓘ		1.46	15.68	1.26 (N:1.12 S:0.14)	-	-					
Predicted Environmental Concentration/Deposition (PEC) ⓘ		1.47	15.71	1.26	-	-					
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: 147% Upper: 49%	n/a	n/a	-	-					
EXCEEDANCE ⓘ		Lower: 0.47 Upper: No exceedance	n/a	n/a	-	-					
Project Notes											
Larne Harbour SCAIL											



Site Information Carneal (ASSI)											
Region:	Northern Ireland										
Site Name:	Carneal										
Site Code:	ASSI362										
Designation Status:	ASSI										
Distance from Installation (m):	6474										
Receptor Type:	Habitat										
Grid Reference:	338968.1,396030.2										
Met Site:	PORT										
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	Larne Harbour SCAIL	1	1	-	0.33	-	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				0.00609	0.03	0.002	-	-			
Background concentration at receptor edge				3.10	25.62	1.98 (N:1.83 S:0.15)	-	-			
Predicted Environmental Concentration/Deposition (PEC)				3.11	25.65	1.98	-	-			
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: 311% Upper: 104%	n/a	n/a	-	-			
EXCEEDANCE				Lower: 2.11 Upper: 0.11	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Appendix C Individual Site SCAIL Inputs Manure

Site Information											
Larne Lough (ASSI) ?											
Region:	Northern Ireland										
Site Name:	Larne Lough										
Site Code: ?	ASSI106										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	629										
Receptor Type:	Habitat										
Grid Reference:	340622,401870.7										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.012	-	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		0.00519	0.03	0.002	-	-					
Background concentration at receptor edge ?		1.66	15.68	1.29 (N:1.12 S:0.17)	-	-					
Predicted Environmental Concentration/Deposition (PEC) ?		1.67	15.71	1.29	-	-					
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: 167% Upper: 56%	n/a	n/a	-	-					
EXCEEDANCE ?		Lower: 0.67 Upper: No exceedance	n/a	n/a	-	-					
Project Notes											
Larne Harbour SCAIL											



Site Information											
Larne Lough (SPA) <input type="button" value="v"/>											
Region:	Northern Ireland										
Site Name:	Larne Lough										
Site Code: <input type="button" value="i"/>	UK9020042										
Designation Status: <input type="button" value="i"/>	SPA										
Distance from Installation (m): <input type="button" value="i"/>	629										
Receptor Type:	Habitat										
Grid Reference:	340622,401870.7										
Met Site: <input type="button" value="i"/>	PORT										
Run Mode: <input type="button" value="i"/>	Conservative										
PM ₁₀ Percentile: <input type="button" value="i"/>	Average										
Installation Information <input type="button" value="i"/>											
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	Larne Harbour SCAIL	1	1	-	0.012	-	0.01	0.03	0.002	-	-
Total Depositions/Concentrations and Exceedances <input type="button" value="i"/>											
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				0.00519	0.03	0.002	-	-			
Background concentration at receptor edge <input type="button" value="i"/>				1.66	15.68	1.29 (N:1.12 S:0.17)	-	-			
Predicted Environmental Concentration/Deposition (PEC) <input type="button" value="i"/>				1.67	15.71	1.29	-	-			
Environmental Assessment Level or Critical Load / Level <input type="button" value="i"/>				Lower: 1 Upper: 3 <input type="button" value="i"/>	8.0 Sterna dougallii (Europe - breeding)	maxN: 2.04 maxS: 1.60 minN: 0.44 Sterna dougallii (Europe - breeding)	-	-			
				<input type="button" value="ALTERNATIVE CRITICAL LOAD INFO"/>							
<input type="button" value="USE OWN THRESHOLDS?"/>											
% of relevant standard PC <input type="button" value="i"/>				Lower: 1% Upper: 0%	0%	0%	-	-			
% of relevant standard PEC <input type="button" value="i"/>				Lower: 167% Upper: 56%	196%	63%	-	-			
EXCEEDANCE <input type="button" value="i"/>				Lower: 0.67 Upper: No exceedance	7.71	-0.75	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information Waterloo (ASSI) ?											
Region:	Northern Ireland										
Site Name:	Waterloo										
Site Code: ?	ASSI084										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	1180										
Receptor Type:	Habitat										
Grid Reference:	341016,403270.7										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.012	-	0	0.01	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				0.00278	0.01	0.001	-	-			
Background concentration at receptor edge ?				1.66	15.68	1.29 (N:1.12 S:0.17)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.66	15.69	1.29	-	-			
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: 0% Upper: 0%	n/a	n/a	-	-			
% of relevant standard PEC ?				Lower: 166% Upper: 55%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.66 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information											
Portmuck (ASSI) ▼ ?											
Region:	Northern Ireland										
Site Name:	Portmuck										
Site Code: ?	ASSI177										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	4013										
Receptor Type:	Habitat										
Grid Reference:	345150,402839.4										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.012	-	0	0	0	-	-
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				0.00057	0.00	0.000	-	-			
Background concentration at receptor edge ?				1.12	12.46	1.02 (N:0.89 S:0.13)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.12	12.46	1.02	-	-			
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: 0% Upper: 0%	n/a	n/a	-	-			
% of relevant standard PEC ?				Lower: 112% Upper: 37%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.12 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information The Maidens (SAC)

Region: Northern Ireland
 Site Name: The Maidens
 Site Code: UK0030384
 Designation Status: SAC
 Distance from Installation (m): 4315
 Receptor Type: Habitat
 Grid Reference: 343678.1,405642
 Met Site: PORT
 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	Larne Harbour SCAIL	1	1	-	0.012	-	0	0	0	-	-

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	0.00051	0.00	0.000	-	-
Background concentration at receptor edge	1.12	12.46	0.00 (N:0.00 S:0.00)	-	-
Predicted Environmental Concentration/Deposition (PEC)	1.12	12.46	0	-	-
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: 0% Upper: 0%	n/a	n/a	-	-
% of relevant standard PEC	Lower: 112% Upper: 37%	n/a	n/a	-	-
EXCEEDANCE	Lower: 0.12 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Larne Harbour SCAIL

DAERA Air Quality SCAIL Assessment



Site Information ?

Region: Northern Ireland
 Site Name: Newlands
 Site Code: ? ASSI241
 Designation Status: ? ASSI
 Distance from Installation (m): ? 4451
 Receptor Type: Habitat
 Grid Reference: 341671.8,397680
 Met Site: ? PORT
 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	Larne Harbour SCAIL	1	1	-	0.012	-	0	0	0	-	-

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	0.00048	0.00	0.000	-	-
Background concentration at receptor edge ?	1.97	18.34	1.45 (N:1.31 S:0.14)	-	-
Predicted Environmental Concentration/Deposition (PEC) ?	1.97	18.34	1.45	-	-
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: 0% Upper: 0%	n/a	n/a	-	-
% of relevant standard PEC ?	Lower: 197% Upper: 66%	n/a	n/a	-	-
EXCEEDANCE ?	Lower: 0.97 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Larne Harbour SCAIL



Site Information											
The Gobbins (ASSI) ?											
Region:	Northern Ireland										
Site Name:	The Gobbins										
Site Code: ?	ASSI283										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	5368										
Receptor Type:	Habitat										
Grid Reference:	346562.3,401769.2										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.012	-	0	0	0	-	-
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				0.00035	0.00	0.000	-	-			
Background concentration at receptor edge ?				1.12	12.46	1.02 (N:0.89 S:0.13)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.12	12.46	1.02	-	-			
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	-	-			
USE OWN THRESHOLDS?											
% of relevant standard PC ?				Lower: 0% Upper: 0%	n/a	n/a	-	-			
% of relevant standard PEC ?				Lower: 112% Upper: 37%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.12 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											

DAERA
Air Quality SCAIL Assessment



Site Information											
Kilcoan (ASSI) ?											
Region:	Northern Ireland										
Site Name:	Kilcoan										
Site Code: ?	ASSI360										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	5932										
Receptor Type:	Habitat										
Grid Reference:	346136.7,398809.7										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.012	-	0	0	0	-	-
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				0.00030	0.00	0.000	-	-			
Background concentration at receptor edge ?				1.58	15.12	1.21 (N:1.08 S:0.13)	-	-			
Predicted Environmental Concentration/Deposition (PEC) ?				1.58	15.12	1.21	-	-			
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: 0% Upper: 0%	n/a	n/a	-	-			
% of relevant standard PEC ?				Lower: 158% Upper: 53%	n/a	n/a	-	-			
EXCEEDANCE ?				Lower: 0.58 Upper: No exceedance	n/a	n/a	-	-			
Project Notes											
Larne Harbour SCAIL											



Site Information Knock Dhu Sallagh Braes (ASSI) ▼

Region: Northern Ireland
 Site Name: Knock Dhu Sallagh Braes
 Site Code: ASSI391
 Designation Status: ASSI
 Distance from Installation (m): 6020
 Receptor Type: Habitat
 Grid Reference: 335833.3,404823.9
 Met Site: PORT
 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	Larne Harbour SCAIL	1	1	-	0.012	-	0	0	0	-	-

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	0.00029	0.00	0.000	-	-
Background concentration at receptor edge	1.46	15.68	1.26 (N:1.12 S:0.14)	-	-
Predicted Environmental Concentration/Deposition (PEC)	1.46	15.68	1.26	-	-
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: 0% Upper: 0%	n/a	n/a	-	-
% of relevant standard PEC	Lower: 146% Upper: 49%	n/a	n/a	-	-
EXCEEDANCE	Lower: 0.46 Upper: No exceedance	n/a	n/a	-	-

Project Notes

Larne Harbour SCAIL

DAERA Air Quality SCAIL Assessment



Site Information											
Site Information		Ballygalley Head (ASSI) ?									
Region:	Northern Ireland										
Site Name:	Ballygalley Head										
Site Code: ?	ASSI399										
Designation Status: ?	ASSI										
Distance from Installation (m): ?	6309										
Receptor Type:	Habitat										
Grid Reference:	338143.1,407622.2										
Met Site: ?	PORT										
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	Larne Harbour SCAIL	1	1	-	0.012	-	0	0	0	-	-
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		0.00027	0.00	0.000	-	-					
Background concentration at receptor edge ?		1.46	15.68	1.26 (N:1.12 S:0.14)	-	-					
Predicted Environmental Concentration/Deposition (PEC) ?		1.46	15.68	1.26	-	-					
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: 0% Upper: 0%	n/a	n/a	-	-					
% of relevant standard PEC ?		Lower: 146% Upper: 49%	n/a	n/a	-	-					
EXCEEDANCE ?		Lower: 0.46 Upper: No exceedance	n/a	n/a	-	-					
Project Notes											
Larne Harbour SCAIL											



Site Information Carneal (ASSI) ▼

Region: Northern Ireland
 Site Name: Carneal
 Site Code: ASSI362
 Designation Status: ASSI
 Distance from Installation (m): 6474
 Receptor Type: Habitat
 Grid Reference: 338968.1,396030.2
 Met Site: PORT
 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	Larne Harbour SCAIL	1	1	-	0.012	-	0	0	0	-	-

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	0.00026	0.00	0.000	-	-
Background concentration at receptor edge	3.10	25.62	1.98 (N:1.83 S:0.15)	-	-
Predicted Environmental Concentration/Deposition (PEC)	3.1	25.62	1.98	-	-
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: 0% Upper: 0%	n/a	n/a	-	-
% of relevant standard PEC	Lower: 310% Upper: 103%	n/a	n/a	-	-
EXCEEDANCE	Lower: 2.10 Upper: 0.10	n/a	n/a	-	-

Project Notes

Larne Harbour SCAIL



Appendix D Report Terms & Conditions

This Report has been prepared using reasonable skill and care for the sole benefit of The EAERA ("the Client") for the proposed uses stated in the report by [WYG Environment Planning Limited] ("WYG"). WYG exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder's permission.

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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary, and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The "shelf life" of the Report will be determined by a number of factors including; its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors.