

EU Designations of NI Portal Facilities

Larne Operations

Air Quality SCAIL Assessment

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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 (NH₃). 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 (NH₃), Nitrogen deposition and impacts- Ammonia (NH₃) 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, NH₃ 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/m³	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
	1. Cattle – 16
	2. Horses 0.1 (worst case of 1 has been used)
Animal No.	3. Pigs – 148
	4. Sheep – 53
	1. Cattle – Dairy Cattle
	2. Horses – Dairy Cows as worst case
Animal Type	3. Pigs – Finishers
	4. 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 (μg/m³)

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 $(\mu g/m^3)$

Site ID	EAL (µg/m ⁻³)	Background (µg/m ⁻³)	Total PC (µg/m ⁻³)	PEC (µg/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 $<1\mu g/m^3$ 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

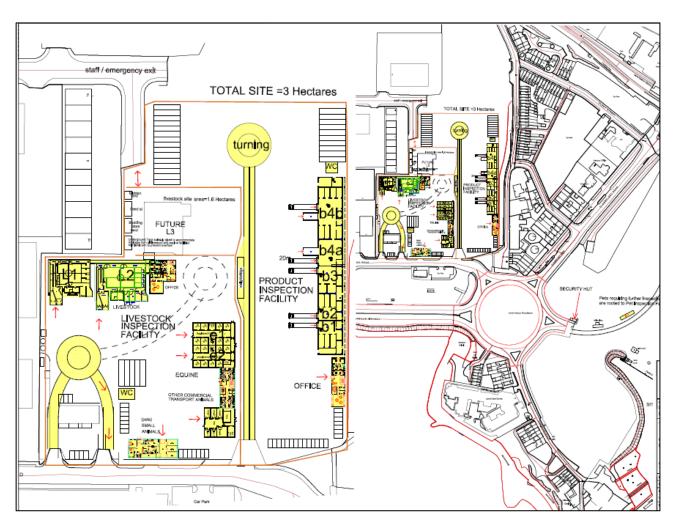
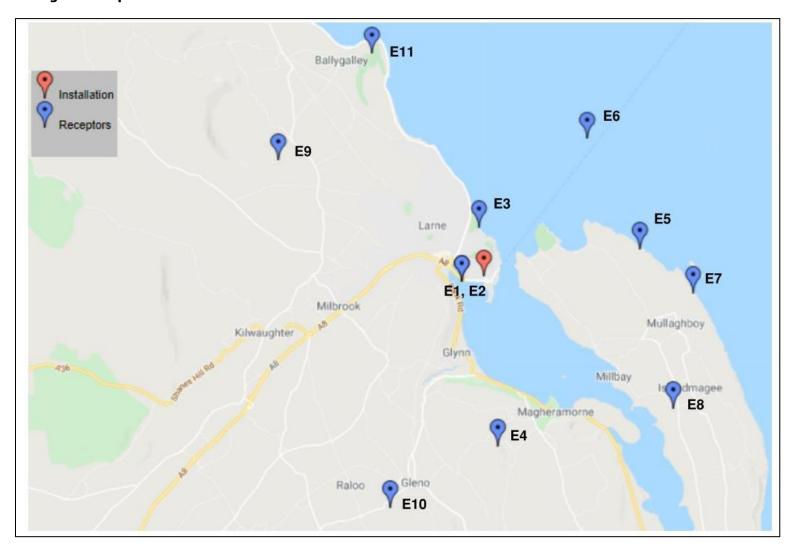


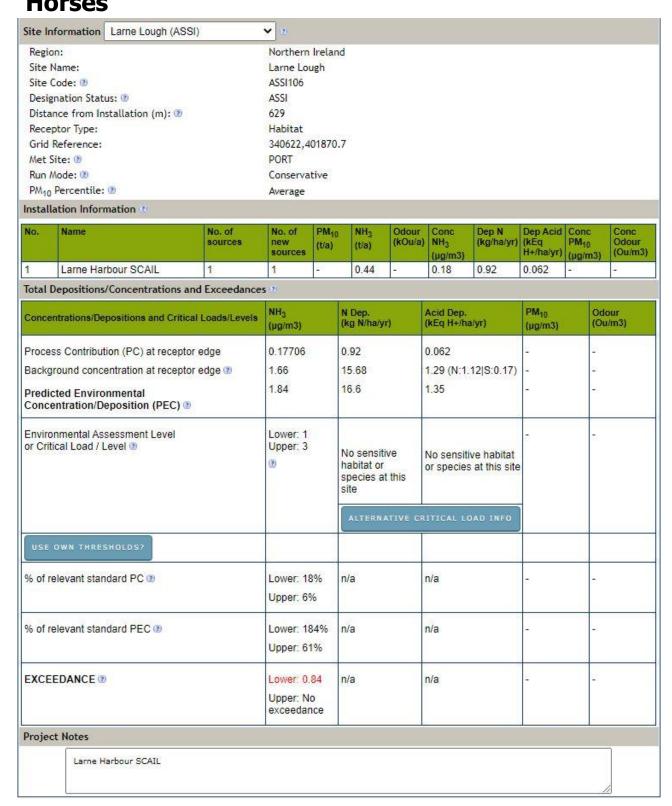


Figure 2 Ecological Receptor Plan





Appendix A Individual Site SCAIL Inputs Cattle and Horses





Regio	n:		Northern I	Irelan	d						
Site N	łame:		Larne Lou	gh							
Site C	Code: 🕲		UK902004	7							
Desig	nation Status: 🕲		SPA								
A CONTRACTOR	nce from Installation (m): 🕲		629								
	otor Type:		Habitat								
200	Reference:		340622,40	1870.	7						
	ite: ①		PORT		•						
	Node: ③		Conservat	ive							
	Percentile: ③		Average								
	ation Information 3		Average								
No.	Name	No. of	No. of	PM ₁₀	NH ₃	Odour	Conc	Dep N	Dep Acid	Conc	Conc
		sources	new sources	(t/a)	(t/a)	(kOu/a)		(kg/ha/yr)	(kEq H+/ha/yr)	PM ₁₀ (μg/m3)	Odour (Ou/m3
1	Larne Harbour SCAIL	1	1	9.8. 1	0.44	-1	0.18	0.92	0.062	-	-
Total D	epositions/Concentrations ar	nd Exceedance	S (2)								
Conce	ntrations/Depositions and Critica	al Loads/Levels	NH ₃ (µg/m3)		N Dep. (kg N/ha/y	r)	Acid Dep. (kEq H+/ha	a/yr)	PM ₁₀ (µg/m3)		our i/m3)
Process Contribution (PC) at receptor edge		0.17706		0.92		0.062		-	-		
Backo	round concentration at recepto	r edge ③	1.66		15.68		1.29 (N:1.12 S:0.17)		-	-5	
		ē.	1.84		16.6		1.35				
	eted Environmental entration/Deposition (PEC)						1.33		i		
CCC 5500C	nmental Assessment Level cal Load / Level ®		Lower: 1 Upper: 3		8.0		maxN: 2.0		8	2	
					Sterna dougallii (Europe -		minN: 0.44				
					breeding)		Sterna dougallii (Europe - breedin				
					ALTERN	ATIVE CF	RITICAL LO				
USE	OWN THRESHOLDS?										
% of re	elevant standard PC ③		Lower: 18' Upper: 6%	480	12%		3%		ā.	ā	
% of re	elevant standard PEC 💿		Lower: 184% Upper: 61%		208%		66%		-	-	
EXCE	EDANCE ®		Lower: 0.8 Upper: No exceedant		8.60		-0.69		-	-	
Projec	t Notes			11.21			2				
Tojec	t Hotes										2

The



Region:		Northern	Irelan	d						
Site Name:		Waterloo		-						
Site Code: (2)		ASSI084								
Designation Status: (1)		ASSI								
Distance from Installation (m):		1180								
Receptor Type:		Habitat								
Grid Reference:		341016,4	02270	7						
Met Site: 10		PORT -	03270.	1						
Run Mode: 3		Conserva	20							
THE PARTY NAMED IN COLUMN TWO IS NOT THE PARTY NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO			tive							
PM ₁₀ Percentile: ® Installation Information ®		Average								
		1		- Inches						
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)	Odour (Ou/m:
1 Larne Harbour SCAIL	1	1	153	0.44	-	0.09	0.47	0.032	-	-
Total Depositions/Concentrations a	nd Exceedance	S (2)	*-	-						
Concentrations/Depositions and Critic	al Loads/Levels	NH ₃ (μg/m3)		N Dep. (kg N/ha/y		Acid Dep. (kEq H+/ha	/yr)	PM ₁₀ (μg/m3)		our ı/m3)
Process Contribution (PC) at receptor	r edge	0.09129		0.47		0.032		_	-	
Background concentration at receptor		1 66		15.68		1.29 (N:1.12 S:0.17)		95 95	8	
background concentration at receptor	r euge w	1.75				1.29 (N:1.12 S:0.17) 1.32		_	-	
Predicted Environmental Concentration/Deposition (PEC) ®								-	-	
Environmental Assessment Level or Critical Load / Level ③		Lower: 1 Upper: 3		No sensitive habitat or species at this site		No sensitive habita or species at this s		-	5	
				ALTERNA	ATIVE CR	ITICAL LO	AD INFO		-	
USE OWN THRESHOLDS?										
% of relevant standard PC ②		Lower: 99 Upper: 39		n/a	3	n/a		-	-	
% of relevant standard PEC ②		Lower: 17 Upper: 58		n/a		n/a		E .	100	
EXCEEDANCE (3)		Lower: 0.75 Upper: No exceedance		n/a		n/a		=	8	
		3							- 20	
Project Notes										- 10
Larne Harbour SCAIL										



Region:		Northern	Irelan	nd						
Site Name:		Portmuck		10						
Site Code: 3		ASSI177								
Designation Status: ③		ASSI								
Distance from Installation (mlı (3)	4013								
Receptor Type:	m). w	Habitat								
Grid Reference:		345150,4	02020							
Met Site: (2)		PORT	02037	.4						
Run Mode: ②		Conserva	2							
			tive							
PM ₁₀ Percentile: ②		Average								
Installation Information ②		West 177			-				hit -	
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 Larne Harbour SCAI	1	1		0.44	1	0.02	0.09	0.006	- (pg/mo)	-
Total Depositions/Concentra				0.11		0.02	0.00	0.000	5	
iotal Depositions/Concentra	ations and Exceedance	SE								
Concentrations/Depositions a	nd Critical Loads/Levels	NH ₃ (μg/m3)		N Dep. (kg N/ha/y	rr)	Acid Dep. (kEq H+/ha	/yr}	PM ₁₀ (μg/m3)		dour u/m3)
Process Contribution (PC) at	receptor edge	0.01724		0.09		0.006				
Background concentration at	receptor edge 😨	1.12		12.46 12.55		1.02 (N:0.89 S:0.13) 1.03			58	
or Medic Red CTS SAP		1.14						8	28	
Predicted Environmental Concentration/Deposition ((PEC) ®	100000		12.00		1.00				
concentration/Deposition (1 20)	Lower: 1 Upper: 3		No sensitive habitat or species at this site		No sensitive habitat or species at this site			_	
Environmental Assessment L or Critical Load / Level ®	evel							-	-3	
		at-		ALTERNATIVE C		IITICAL LO	AD INFO			
USE OWN THRESHOLDS?										
% of relevant standard PC ▣		Lower: 29 Upper: 19		n/a		n/a		-	-2	
% of relevant standard PEC	3)	Lower: 11 Upper: 38		n/a		n/a		-	Tá	
EXCEEDANCE 3		Lower: 0. Upper: Ne exceedan	0	n/a		n/a		-	-83	
								1		
Project Notes										



Site Information The Maidens (SAC)		Manther	lus!-	70						
Region:		Northern		a						
Site Name:		The Maid								
Site Code: 10		UK003038	34							
Designation Status: 2		SAC								
Distance from Installation (m): 🗷		4315								
Receptor Type:		Habitat								
Grid Reference:		343678.1	,40564	12						
Met Site: 13		PORT								
Run Mode: 🕙		Conservat	tive							
PM ₁₀ Percentile: ②		Average								
nstallation Information ②										
No. Name	No. of	No. of	PM ₁₀	NH ₃	Odour	Conc	Dep N	Dep Acid		Conc
	sources	new	(t/a)	(t/a)	(kOu/a)	The second second	(kg/ha/yr)	(kEq H+/ha/yr)	PM ₁₀	Odou (Ou/m
d Laura Hadhaus COAH	2			0.44		(µg/m3)	0.00	D.F.A.	(µg/m3)	Cum
1 Larne Harbour SCAIL	1	1	-	0.44	-	0.02	0.08	0.005	-	Į.
Total Depositions/Concentrations and	Exceedance	s (2)							-	
Concentrations/Repositions and Critical	Loade/Levele	NH ₃		N Dep.		Acid Dep.		PM ₁₀		lour
Concentrations/Depositions and Critical Loads/Levels		(µg/m3)		(kg N/ha/yr)		(kEq H+/ha/yr)		(µg/m3)	(0)	u/m3)
Process Contribution (PC) at receptor	edge	0.01540		0.08		0.005		-	-	
Background concentration at receptor	edge ②	1.12		12.46 12.54		0.00 (N:0.00 S:0.00) 0.01		-07	-	
NA SECTIONS IS 1000		1.14						200		
Predicted Environmental Concentration/Deposition (PEC)		15.05		12.54		0.01			-	
Environmental Assessment Level or Critical Load / Level ③	Environmental Assessment Level			No sensitive habitat or species at this site		No sensitive habitat or species at this site		-	-	
				ALTERN/	TIVE CF	ITICAL LO	OAD INFO		(ā	
USE OWN THRESHOLDS?										
% of relevant standard PC ®		Lower: 29 Upper: 19		n/a		n/a		-:	-	
% of relevant standard PEC ®		Lower: 11 Upper: 38	26880V	n/a		n/a		<u> </u>	12	
EXCEEDANCE ®		Lower: 0. Upper: No exceedan	0	n/a		n/a		•	(5)	
Project Notes		I.								
roject notes										
i i										



Site In	formation The Gobbins (ASS	1)	~								
Desig Distar Recep Grid I Met S Run N PM ₁₀			Northern The Gobb ASSI283 ASSI 5368 Habitat 346562.3 PORT Conservat Average	oins ,4017							
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	Larne Harbour SCAIL	1	1	20	0.44	50	0.01	0.06	0.004	-	-
Total D	epositions/Concentrations an	d Exceedance	s (2)	ba:	- 100		100				
Concer	ntrations/Depositions and Critica	l Loads/Levels	NH ₃ (µg/m3)		N Dep. (kg N/ha/y	7)	Acid Dep. (kEq H+/ha	a/yr)	PM ₁₀ (μg/m3)		Odour Ou/m3)
Backgi Predic	es Contribution (PC) at receptor round concentration at receptor ted Environmental ntration/Deposition (PEC) ®	- Andrews	0.01090 1.12 1.13		0.06 12.46 12.52		0.004 1.02 (N:0. 1.02	89 S:0.13)	- -	-	
	nmental Assessment Level cal Load / Level ③		Lower: 1 Upper: 3		No sensiti habitat or species at site	50700 50800		ve habitat at this site		-	ă
					ALTERN/	TIVE CF	TICAL LO	AD INFO			
USE	OWN THRESHOLDS?										
% of re	elevant standard PC 3		Lower: 19 Upper: 09		n/a		n/a		=	-	Se Se
% of re	elevant standard PEC ®		Lower: 11 Upper: 38		n/a		n/a		-	-	ŝ
EXCE	EDANCE ®		Lower: 0. Upper: Ne exceedan	0	n/a		n/a		ā	2	3
Projec	t Notes										
	Larne Harbour SCAIL										



Site Information Kilcoan (ASSI)	- 8	Y	-75							
Region:		Northern	Irelar	nd						
Site Name:		Kilcoan								
Site Code: ③		ASSI360								
Designation Status: ③		ASSI								
Distance from Installation (m): 3		5932								
Receptor Type:		Habitat								
Grid Reference:		346136.7	,3988	09.7						
Met Site: ③		PORT								
Run Mode: ②		Conserva	tive							
PM ₁₀ Percentile: ®		Average								
Installation Information ②										
	. of urces	No. of new	PM ₁₀	F 10	Odour (kOu/a)	Conc NH ₃	Dep N (kg/ha/yr)	Dep Acid (kEq	Conc PM ₁₀	Conc
		sources	(t/a)	(t/a)	(Included)	(µg/m3)	(ivg. rise j. r)	H+/ha/yr)	(µg/m3)	(Ou/m
1 Larne Harbour SCAIL 1		1		0.44	-	0.01	0.05	0.003	-	-
Total Depositions/Concentrations and Exc	eedance	s (2)		*					- 10	
Concentrations/Depositions and Critical Load	ls/Levels	NH ₃ (μg/m3)		N Dep. (kg N/ha/y	r)	Acid Dep. (kEq H+/ha	a/yr)	PM ₁₀ (μg/m3)		lour u/m3)
Process Contribution (PC) at receptor edge	é	0.00928		0.05		0.003		-	-3	
Background concentration at receptor edge		1.58		15.12		1 21 /NI-1	0010-0 121			
background concentration at receptor edge		0.0396130		1000000		1.21 (N:1.08 S:0.13)		8	150	
Predicted Environmental Concentration/Deposition (PEC) ®		1.59		15.17		1.21		-	27	
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 C		ITICAL LO	AD INFO			
USE OWN THRESHOLDS?										
% of relevant standard PC ®		Lower: 19 Upper: 09		n/a		n/a		-	=3	
% of relevant standard PEC ®		Lower: 15 Upper: 53		n/a		n/a		2	59	
EXCEEDANCE ®		Lower: 0.59 Upper: No		n/a		n/a		5	*	
		exceedar	nce							
Project Notes										



Region:		Northern	Irelan	nd						
Site Name:		Knock Dh	u Sall	agh Braes						
Site Code: (2)		ASSI391								
Designation Status: (2)		ASSI								
Distance from Installation (m): (2)		6020								
Receptor Type:		Habitat								
Grid Reference:			40.40	22.0						
		335833.3	,4048	23.9						
Met Site: 13		PORT	282							
Run Mode: ②		Conserva	tive							
PM ₁₀ Percentile: ③		Average								
nstallation 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/m3)	Dep N (kg/ha/yr)	Dep Acid (kEq H+/ha/yr)	Conc PM ₁₀ (µg/m3)	Conc Odour (Ou/m3
1 Larne Harbour SCAIL	1	1	-:	0.44	-	0.01	0.05	0.003	-	50
Total Depositions/Concentrations	and Exceedance	5 (2)			-	*	10 - 23		*	313
Concentrations/Depositions and Crit	ical Landa/Lavala	NH ₃		N Dep.		Acid Dep.		PM ₁₀	Od	our
concentrations/depositions and crit	icai Lodus/Leveis	(µg/m3)		(kg N/ha/y	r)	(kEq H+/ha	ı/yr)	(µg/m3)	(0)	u/m3)
Process Contribution (PC) at recep	tor edge	0.00906		0.05		0.003		-	-	
Background concentration at recep	tor edge 🙉	1.46		15.68		1 26 /N-1	12 S:0.14)	128	0.2	
Dacinground Concentration at recep	tor cage w	12000		2000000			12(0.0.14)			
Predicted Environmental Concentration/Deposition (PEC)	Ð	1.47		15.73		1.26				
Environmental Assessment Level or Critical Load / Level ③		Lower: 1 Upper: 3		No sensiti habitat or species a site	(0)(0)		ve habitat at <mark>t</mark> his site		-	
				ALTERNA	TIVE CR	ITICAL LO	AD INFO		.,	
USE OWN THRESHOLDS?									8	
% of relevant standard PC ③		Lower: 19 Upper: 09		n/a		n/a				
% of relevant standard PEC ®		Lower: 14 Upper: 49		n/a		n/a		28	-	
EXCEEDANCE ®		Lower: 0. Upper: Ne exceedar	0	n/a		n/a			-	
Project Notes										
										700
Larne Harbour SCAIL										900



Region:		Northern	Irelan	ıd						
Site Name:		Ballygalle	ev Hea	ıd						
Site Code: ②		ASSI399	a l							
Designation Status: (3)		ASSI								
Distance from Installation (m): 3		6309								
Receptor Type:		Habitat								
Grid Reference:		338143.1	40762	72.2						
Met Site: (1)		PORT								
Run Mode: ②		Conserva	tive							
PM ₁₀ Percentile: ①		Average								
Installation Information 2		Average								
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/m:
1 Larne Harbour SCAIL	1	1		0.44	-:	0.01	0.04	0.003	- (pgmo)	-
Total Depositions/Concentrations a	and Exceedance	5 (2)							100	
Concentrations/Depositions and Critic	cal Loads/Levels	NH ₃ (μg/m3)		N Dep. (kg N/ha/y		Acid Dep. (kEq H+/ha	ı/yr)	PM ₁₀ (µg/m3)		lour u/m3)
Process Contribution (PC) at recept	or edge	0.00839		0.04		0.003		-	-	
Background concentration at recept		1.46		15.68		1.26 /N-1	12 S:0.14)	45 45	128	
background concentration at recept	or eage w	750524		(10.0000000)			12 0.0.14)			
Predicted Environmental Concentration/Deposition (PEC)	0	1.47	(6	15.72		1.26		_	-	
Environmental Assessment Level or Critical Load / Level ®		Lower: 1 Upper: 3		No sensiti habitat or species a site	561755	10 T T T T T T T T T T T T T T T T T T T	ve habitat at this site	T.	21	
				ALTERN	ATIVE CR	RITICAL LO	AD INFO			
USE OWN THRESHOLDS?			9			v.				
% of relevant standard PC ®		Lower: 19 Upper: 09		n/a		n/a		-	-0	
% of relevant standard PEC [®]		Lower: 14 Upper: 49		n/a		n/a		ž.	2	
EXCEEDANCE ®		Lower: 0. Upper: Nexceedar	0	n/a		n/a		ē	5	
		1500 E-1000						1		
Project Notes			888 [,							



Region: Site Name:		A Professional Professional								
Site Name:		Northern	Irelan	d						
		Carneal								
Site Code: 10		ASSI362								
Designation Status: 19		ASSI								
Distance from Installation (m): 3		6474								
Receptor Type:		Habitat								
Grid Reference:		338968.1,	39603	80.2						
Met Site: ®		PORT	37003							
Run Mode: (2)		Conservat	10.12							
A STATE OF THE PARTY OF THE PAR		F-744-714-714	ive							
PM ₁₀ Percentile: ® Installation Information ®	13	Average								
Maria Ma		Two are	000	9000	I o t	TANK T	1-			
No. Name No. o sour		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 Larne Harbour SCAIL 1		1	-3	0.44	-	0.01	0.04	0.003	-	_
Total Depositions/Concentrations and Exce	edances	(2)								
Concentrations/Depositions and Critical Loads	/Levels	NH ₃ (μg/m3)		N Dep. (kg N/ha/y	r)	Acid Dep. (kEq H+/ha	a/yr)	PM ₁₀ (μg/m3)		lour u/m3)
Process Contribution (PC) at receptor edge		0.00805		0.04		0.003		32		
Background concentration at receptor edge @	9	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 ②		Lower: 1 Upper: 3		No sensit habitat or species a site	3.72	ATTENDED TO STATE OF THE STATE	ve habitat s at <mark>t</mark> his site	_	2	
				ALTERN	ATIVE CE	RITICAL LO	DAD INFO			
USE OWN THRESHOLDS?										
% of relevant standard PC ③		Lower: 19 Upper: 09	3	n/a		n/a		ā	ā	
% of relevant standard PEC		Lower: 31 Upper: 10	and the con-	n/a		n/a		-	-	
EXCEEDANCE ③		Lower: 2.1	350	n/a		n/a		<u></u>	5	
Project Notes						8				
Larne Harbour SCAIL										100



Appendix B Individual Site SCAIL Inputs Pigs and Sheep



Site Information Larne Lough (ASSI)	Y (2)								
Region:	Northern	-	nd						
Site Name:	Larne Lou	ugh							
Site Code: ③	ASSI106								
Designation Status: ②	ASSI								
Distance from Installation (m): 3	629								
Receptor Type:	Habitat								
Grid Reference:	340622,4	01870	.7						
Met Site: ®	PORT								
Run Mode: (2)	Conserva	tive							
PM ₁₀ Percentile: ②	Average	cive							
Installation Information ②	Average								
No. Name No. of	No. of	PM ₁₀	NH ₂	Odour	Conc	Dep N	Dep Acid	Cone	Conc
No. of sources	new sources	(t/a)	(t/a)	(kOu/a)		(kg/ha/yr)	(kEq H+/ha/yr)	PM ₁₀ (µg/m3)	Odour (Ou/m3
1 Larne Harbour SCAIL 1	1	E8	0.33	₹6	0.13	0.7	0.047	20	ē
Total Depositions/Concentrations and Exceedance	ces 😢								
Concentrations/Depositions and Critical Loads/Level	s NH ₃ (µg/m3)		N Dep. (kg N/ha/y		Acid Dep. (kEq H+/ha	ı/yr)	PM ₁₀ (µg/m3)		lour u/m3)
Process Contribution (PC) at receptor edge	0.13412		0.70		0.047		_	-	
Background concentration at receptor edge ③	1.66		15.68	1	1 20 /N-1	12 S:0.17)	43		
Background concentration at receptor edge S						12 3.0.17)			
Predicted Environmental Concentration/Deposition (PEC) 🕲	1.79		16.38		1.34		-	-	
Environmental Assessment Level or Critical Load / Level ②	Lower: 1 Upper: 3		No sensit habitat or species a site	ODO Version		ve habitat at this site			
			ALTERN	XTIVE CR	ITICAL LO	AD INFO			
USE OWN THRESHOLDS?	- 1							12	
% of relevant standard PC 🖲	Lower: 13 Upper: 49		n/a		n/a		ā	3 4	
% of relevant standard PEC [®]	Lower: 17 Upper: 60		n/a		n/a		ä	=	
EXCEEDANCE ®	Lower: 0. Upper: Ne exceedan	0	n/a		n/a		āī.	8	
Project Notes									



	Larne Lough (SPA)	V	v								
Region:			Northern		d						
Site Name:			Larne Lou	37-37							
Site Code: 12			UK902004	2							
Designation State	JS: ②		SPA								
Distance from In:	stallation (m): 🕲		629								
Receptor Type:			Habitat								
Grid Reference:			340622,40	01870.	.7						
Met Site: 🕙			PORT								
Run Mode: ②			Conservat	ive							
PM ₁₀ Percentile:	2		Average								
Installation Inform	nation 🕲										
No. Name		No. of sources	No. of new	PM ₁₀	NH ₃	Odour (kOu/a)	Conc	Dep N	Dep Acid		Conc
		Sources	sources	(t/a)	(t/a)	(KOU/a)	NH ₃ (μg/m3)	(kg/ha/yr)	H+/ha/yr)	PM ₁₀ (μg/m3)	(Ou/m3
1 Larne Har	bour SCAIL	1	1	-3	0.33	-	0.13	0.7	0.047	-	2
Total Depositions	Concentrations and	d Exceedance	S (3)								
Concentrations/De	positions and Critical	Loade/Levels	NH ₃		N Dep.		Acid Dep.		PM ₁₀		our
Concentrations/De	positions and Critical	LoadsiLevels	(µg/m3)		(kg N/ha/y	r)	(kEq H+/ha	ı/yr)	(µg/m3)	(Ot	ı/m3)
Process Contribut	ion (PC) at receptor	edge	0.13412		0.70		0.047		2	15	
Background conce	entration at receptor	edge ②	1.66		15.68	1	1 29 (N·1	12 S:0.17)	-	-	
		ougo u	1.79		16.38	1	1.34				
Predicted Enviro Concentration/De	nmental eposition (PEC) 🗷		1.79		10.38		1.34				
Environmental Ass or Critical Load / L			Lower: 1 Upper: 3		8.0 Sterna do (Europe - breeding)	ugallii	maxN: 2.0 maxS: 1.6 minN: 0.4 Sterna do (Europe -	0 4 ugallii			
					ALTERN	ATIVE CR	NITICAL LO	AD INFO			
USE OWN THRES	HOLDS?										
% of relevant stan	dard PC ®		Lower: 13 Upper: 49	1350	9%		2%		. .	ā	
% of relevant stan	dard PEC ②		Lower: 17 Upper: 60	A1741	205%		66%		-	-	
EXCEEDANCE (3)	<u> </u>		Lower: 0.7 Upper: No exceedan	,	8.38		-0.70		-	2	
			4:		-				lie.		
Project Notes											



Site In	formation	Waterloo (ASSI)		→								
Regio Site N				Northern Waterloo ASSI084	100000000000000000000000000000000000000	nd						
Distar Recep	otor Type:	us: 🖲 stallation (m): 🗵		ASSI 1180 Habitat	1000010							
Met S Run M	Reference: ite: ② Node: ② Percentile:	(%)		341016,4 PORT Conserva		.7						
	ation Inform			Average								
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)	PM ₄₀	Conc Odour (Ou/m:
1	Larne Har	bour SCAIL	1	1	<u> </u>	0.33	-2	0.07	0.36	0.024	-	-
Total D	epositions)	/Concentrations an	d Exceedance	S (5)								
Concer	ntrations/De	positions and Critical	Loads/Levels	NH ₃ (µg/m3)		N Dep. (kg N/ha/y	r)	Acid Dep. (kEq H+/h		PM ₁₀ (μg/m3)		our ı/m3)
Proces	s Contribut	ion (PC) at receptor	edge	0.06915		0.36		0.024		ž.	2	
Backgr	round conce	entration at receptor	edge ②	1.66		15.68		1.29 (N:1	.12 S:0.17)	-	-	
3 345	ted Enviro entration/D	nmental eposition (PEC) ®		1.73		16.04		1.31		5	8	
CCC 0 35 7 C	nmental As cal Load / L	sessment Level Level ③		Lower: 1 Upper: 3		No sensit habitat or species a site	20054 20054	THE PROPERTY OF THE PARTY OF TH	ive habitat s at this site	25	3	
						ALTERN	ATIVE CE	RITICAL L	DAD INFO			
USE	OWN THRES	SHOLDS?										
% of re	elevant stan	dard PC 2		Lower: 79 Upper: 29	200	n/a		n/a		ā	Ē	
% of re	elevant stan	dard PEC 😨		Lower: 17 Upper: 58		n/a		n/a		-	-1	
EXCE	EDANCE @			Lower: 0. Upper: N exceedar	0	n/a		n/a		-	2	
Projec	t Notes			L								
		arbour SCAIL										



Site Information Portmuck Region:	1000	Northern	leal se	4						
Site Name:		Portmuck		a						
The state of the s										
Site Code: ®		ASSI177								
Designation Status: (1)	NAME AND DOCUMENT	ASSI								
Distance from Installation	(m): 🕲	4013								
Receptor Type:		Habitat								
Grid Reference:		345150,40	02839.	4						
Met Site: 10		PORT								
Run Mode: 📵		Conservat	ive							
PM ₁₀ Percentile: ①		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/m3)	Dep N (kg/ha/yr)	Dep Acid (kEq H+/ha/yr)	PM ₁₀	Conc Odour (Ou/m3
1 Larne Harbour SCA	IL 1	1		0.33	2	0.01	0.07	0.005	-	-
Total Depositions/Concents	ations and Exceedance	s (2)		10000000				20000000		
		NH ₃		N Dep.		Acid Dep.		PM ₁₀	0	dour
Concentrations/Depositions	and Critical Loads/Levels	(µg/m3)		(kg N/ha/y		(kEq H+/ha	a/yr)	(µg/m3)		u/m3)
Process Contribution (PC) a	t receptor edge	0.01306		0.07		0.005		2		
Background concentration a	SECTION AND SECTION AND SECTION ASSESSMENT OF THE PERSON ASSESSMENT OF	1.12		12.46		1 02 (N-0	89 S:0.13)	62	120	
Dackground Concentration a	receptor edge w	3000					05 0.0.13)			
Predicted Environmental Concentration/Deposition	(PEC) 🖲	1.13		12.53		1.02) .		
Environmental Assessment or Critical Load / Level ®	Level	Lower: 1 Upper: 3		No sensit habitat or species a site	SINA Marana		ve habitat at this site	ā	ē	
				ALTERN	ATIVE CR	ITICAL LO	AD INFO			
USE OWN THRESHOLDS?										
% of relevant standard PC	9	Lower: 19 Upper: 09		n/a		n/a		· -	3	
% of relevant standard PEC	②	Lower: 11 Upper: 38	5000	n/a		n/a		-	-	
EXCEEDANCE ®		Lower: 0.	50.755	n/a		n/a		0 <u>0</u>	Ş	
		exceedan								
		- CAUCUGGG						200		
Project Notes		CAGGGGG								



_	The Maidens (SAC)	<u> </u>	> (3)								
Region:			Northern		d						
Site Name:			The Maid	ens							
Site Code: ②			UK003038	84							
Designation Statu	ıs: ③		SAC								
Distance from Ins	tallation (m): 🐵		4315								
Receptor Type:			Habitat								
Grid Reference:			343678.1	,40564	12						
Met Site: ②			PORT								
Run Mode: ②			Conserva	tive							
PM ₁₀ Percentile:	3		Average								
Installation Inform	nation ②		_								
No. Name		No. of	No. of	PM ₁₀	NH ₃	Odour	Conc	Dep N	Dep Acid		Conc
		sources	new	(t/a)	(t/a)	(kOu/a)	The State of	(kg/ha/yr)	(kEq H+/ha/yr)	PM ₁₀	Odour (Ou/m3
			1			k .	(µg/m3)	0.00	and the second	(µg/m3)	(Oumio
	bour SCAIL	1	1	30	0.33	133	0.01	0.06	0.004	-	-
Total Depositions/	Concentrations and	Exceedance	S (?)	- 1					7		
Concentrations/Dep	ositions and Critical	Loads/Levels	NH ₃		N Dep.		Acid Dep.	No.	PM ₁₀		OUF
		-0.000000000000000000000000000000000000	(µg/m3)		(kg N/ha/y	0	(kEq H+/ha	uyr)	(µg/m3)	(Ot	ı/m3)
Process Contributi	on (PC) at receptor	edge	0.01166		0.06		0.004			7.5	
Background conce	ntration at receptor	edge ②	1.12		12.46		0.00 (N:0	00 S:0.00)	8	29	
			1.13		12.52					29	
Predicted Enviror Concentration/De	nmental position (PEC) ②		1,13	3	12.32		0				
Environmental Ass or Critical Load / L	T 7 3 10 10 T 9 0 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T		Lower: 1 Upper: 3		No sensiti habitat or species a site	165865		ve habitat at this site	5	E	
			23	93	ALTERN	ATIVE CR	ITICAL LO	AD INFO			
USE OWN THRES	HOLDS?		8				-				
% of relevant stand	dard PC 🗷		Lower: 19 Upper: 09	con:	n/a		n/a		-	-3	
% of relevant stand	dard PEC ②		Lower: 11 Upper: 38		n/a		n/a		9	27	
EXCEEDANCE ®			Lower: 0. Upper: Nexceedar	0	n/a		n/a			54	
Project Notes			Para sana								



Site In	formation	Newlands (ASSI)		v								
Regio	n:			Northern	Irelar	nd						
Site 1	Name:			Newland:	5							
Site (Code: 🕲			ASSI241								
Desig	nation Statu	ıs: ②		ASSI								
		stallation (m): 🗈		4451								
	ptor Type:	,,		Habitat								
	Reference:			341671.8	3976	RO .						
138270	ite: ②			PORT	,0,,,	50						
	Node: ②			Conserva	tive							
Test of the second	Percentile:	(3)		Average	cive							
CONTRACTOR OF THE PARTY OF THE	ation Inform	0.00		Average								
No.	Name	esection and	No. of	No. of	PM ₁₀	NH ₃	Odour	Conc	Dep N	Dep Acid	Conc	Conc
			sources	new sources	(t/a)	(t/a)	(kOu/a)	NH ₃ (μg/m3)	(kg/ha/yr)	(kEq H+/ha/yr)	PM ₁₀ (μg/m3)	Odour (Ou/m3
1	Larne Har	bour SCAIL	1	1	120	0.33	<u>=</u>	0.01	0.06	0.004	20	ē
Total [Depositions/	Concentrations and	d Exceedance	S (3)								
Conce	ntrations/De	positions and Critical	Loads/Levels	NH ₃ (μg/m3)		N Dep. (kg N/ha/y	r)	Acid Dep. (kEq H+/h		PM ₁₀ (μg/m3)		our ı/m3)
Proces	ss Contribut	ion (PC) at receptor	edge	0.01111		0.06		0.004		a	8	
Backg	round conce	entration at receptor	edge 🕲	1.97		18.34		1.45 (N:1.	31 S:0.14)	ž.	2	
	cted Enviro entration/De	nmental eposition (PEC) ③		1.98		18.4		1.45		-	-	
	nmental Ass ical Load / L	sessment Level evel ®		Lower: 1 Upper: 3		No sensit habitat or species a site	(0.000 (0.000)		ive habitat s at this site		2	
						ALTERN.	ATIVE CF	RITICAL LO	DAD INFO			
	OWN THRES				.,	olegan.		(0.5)				
% OI I	elevant stan	dard PC 🕖		Lower: 19 Upper: 09	200	n/a		n/a		3	-0	
% of re	elevant stan	dard PEC [®]		Lower: 19 Upper: 66		n/a		n/a		ž	=	
EXCE	EDANCE ®			Lower: 0. Upper: N exceedar	0	n/a		n/a		ñ.	8	
Projec	t Notes			Li .								
	0	arbour SCAIL										



Site Information	The Gobbins (ASSI)	1	V (2)								
Region:			Northern	Irelar	nd						
Site Name:			The Gobb	oins							
Site Code: 3			ASSI283								
Designation State	us: ②		ASSI								
Distance from In			5368								
Receptor Type:	THE STREET STREET		Habitat								
Grid Reference:			346562.3	4017	69.2						
Met Site: ③			PORT	, 10171	J71.E						
Run Mode: 3			Conserva	tivo							
PM ₁₀ Percentile:	(3)			LIVE							
Installation Inform			Average								
	nation 2	In. of	No. of	DM	Tarre .	Odens	Conc	D N	Dep Acid	C	C
No. Name		No. of sources	new sources	PM ₁₀ (t/a)	NH ₃ (t/a)	Odour (kOu/a)		Dep N (kg/ha/yr)	(kEq H+/ha/yr)	Conc PM ₁₀ (µg/m3)	Conc Odour (Ou/m3
1 Larne Har	bour SCAIL	1	1	12	0.33	20	0.01	0.04	0.003	-	2
Total Depositions	Concentrations and	Exceedance	S (2)								
Concentrations/De	positions and Critical	Loads/Levels	NH ₃ (µg/m3)		N Dep. (kg N/ha/y		Acid Dep. (kEq H+/ha	a/yr)	PM ₁₀ (μg/m3)		our ı/m3)
Process Contribut	ion (PC) at receptor	edge	0.00825		0.04		0.003		£.	120	
	entration at receptor		1.12		12 46		1.02 (N-0	89 S:0.13)	28	4020	
Dackground conce	siliation at receptor	euge w						09 3.0.13)	-		
Predicted Enviro Concentration/De	nmental eposition (PEC) 🖲		1.13		12.5		1.02		*1	(1-)	
Environmental Ass or Critical Load / L			Lower: 1 Upper: 3		No sensit habitat or species a site	SEC		ve habitat s at this site			
					ALTERN	ATIVE CR	ITICAL LO	AD INFO			
USE OWN THRES	HOLDS?										
% of relevant stan	dard PC 🖲		Lower: 19 Upper: 09		n/a		n/a		3	453	
% of relevant stan	dard PEC ®		Lower: 11 Upper: 38		n/a		n/a		-	-	
EXCEEDANCE ®			Lower: 0. Upper: N exceedar	0	n/a		n/a		<u> </u>	120	
			200			39			1	15	
Droject Notes											
Project Notes											-112



Site Name: Site Code: ASSI360 Designation Status: Distance from Installation (m): Site Site Site Site Site Site Site Site	Region:	- 6		Northern	Irelar	nd						
ASSI360					iretai	IG						
Designation Status:												
Distance from Installation (m):												
Receptor Type: Habitat Grid Reference: 346136.7,398809.7				10000000000								
Section Sect			9									
Met Site: PORT												
No. of sources No. of new		e:			,3988	09.7						
PM10 Percentile:												
No. Name				o diameter conta	tive							
No. of sources No. of				Average								
No sensitive habitat or species at this site No sensitive habitat or species at this No sensitive habitat or spec	Installation Info	ormation ②										
Larne Harbour SCAIL	No. Name			new	1000			NH ₃		(kEq	PM ₁₀	Conc Odour (Ou/m3
Concentrations/Depositions and Critical Loads/Levels (lug/m3) Process Contribution (PC) at receptor edge Background concentration at receptor edge ② 1.58 15.12 1.21 (N:1.08 S:0.13)	1 Larne H	Harbour SCAIL	1	1	-0	0.33			0.04	0.002	-	-
Concentrations/Depositions and Critical Loads/Levels (lug/m3) Process Contribution (PC) at receptor edge Background concentration at receptor edge ② 1.58 15.12 1.21 (N:1.08 S:0.13)	Total Depositio	ns/Concentrations	and Exceedance	5 (2)					235.1			
Process Contribution (PC) at receptor edge Background concentration at receptor edge				Section 1		N Dan		Acid Dan		DM.	00	lour
Background concentration at receptor edge 1.58 1.58 1.12 1.21 (N:1.08 S:0.13)	Concentrations/	Depositions and Cri	tical Loads/Levels	The second second		(kg N/ha/	уг)		/yr)	F 40 100 100 100 100 100 100 100 100 100		
Background concentration at receptor edge 1.58 1.512 1.21 (N:1.08 S:0.13)	Process Contrib	oution (PC) at recer	otor edge	0.00703		0.04		0.003		-	-	
Predicted Environmental Concentration/Deposition (PEC) Environmental Assessment Level or Critical Load / Level Lower: 1 Upper: 3 No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO USE OWN THRESHOLDS? Lower: 1% Upper: 0% Lower: 19% Upper: 0% Lower: 159% Upper: 53% Lower: 159% Upper: 53% EXCEEDANCE Lower: 0.59 Upper: No				(Market Control of Control		1975,020,933			0010-0 401			
Concentration/Deposition (PEC) Environmental Assessment Level or Critical Load / Level No sensitive habitat or species at this site No sensitive habitat or species at this site	Background col	ncentration at recep	otor eage @						08[5:0:13]	-		
Upper: 3 No sensitive habitat or species at this site ***ALTERNATIVE CRITICAL LOAD INFO** USE OWN THRESHOLDS? Lower: 1% Upper: 0% Lower: 19% Upper: 0% Lower: 159% Upper: 53% EXCEEDANCE ** Lower: 0.59 Upper: No No sensitive habitat or species at this site ** Lower: 19% Upper: 0% No sensitive habitat or species at this site ** ** ** ** ** ** ** ** **			1	1.59		15.16		1.21		-	-	
## Comparison of relevant standard PC ** Lower: 1% Upper: 0% ** In/a Upper: 0% ** In/a Upper: 0% ** In/a Upper: 0% ** In/a Upper: 53% ** In/a Upper: No Upper: N				Upper: 3		habitat o	r		NEW CONTRACTOR CO.	0	= 1	
% of relevant standard PC ② Lower: 1%						ALTERN	ATIVE C	RITICAL LO	AD INFO			
Upper: 0%	USE OWN THE	RESHOLDS?										
Upper: 53% Lower: 0.59 n/a n/a Upper: No	% of relevant st	andard PC ③				n/a		n/a		5		
Upper: No	% of relevant st	andard PEC 3				n/a		n/a		-	-3	
	EXCEEDANCE	②		Upper: N	0	n/a		n/a		ā	ē	
Project Notes	Project Notes										1	



Site Name: Site Code: 19	Region:		Northern	Irelar	nd						
ASSI391	NAME OF THE PARTY		Knock Dh	u Sall	agh Braes						
Distance from Installation (m):	Site Code: 19										
Distance from Installation (m):	Designation Status: (3)										
Receptor Type: Habitat Grid Reference: 338833.3,404823.9		(2)	25.00								
Grid Reference: 335831.3,404823.9 PORT PORT PORT Conservative PM ₁₀ Percentile:		<u>₩</u>	11550								
No. of sources No.				4048	23.9						
Run Mode:				,4040.	23.7						
PM10 Percentile:			15.544	tion							
Installation Information P No. Name				tive							
No. Name No. of sources No. of new sources N			Average								
Sources New Sources (t/a) (t/a) (t/a) (kOula) NH _a (kg/mis) (kg/mis)		1000-000		1000000	11700/-		100000			0.00	
Larne Harbour SCAIL	No. Name		new	1000000	10.70) NH ₃		(kEg	PM ₁₀	Conc Odour (Ou/m:
Concentrations/Depositions and Critical Loads/Levels (µg/m3) N Dep. (kg N/halyr) Acid Dep. (µg/m3) (Qu/m3) Odour (Qu/m3) (Qu/m3) 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	1 Larne Harbour SCAIL	1	1		0.33	-1		0.04	0.002	-	
Process Contribution (PC) at receptor edge Background concentration at receptor edge Background concentration at receptor edge 1.46 1.5.68 1.26 (N:1.12 S:0.14) Predicted Environmental Concentration/Deposition (PEC) Environmental Assessment Level or Critical Load / Level Lower: 1 Upper: 3 No sensitive habitat or species at this site site site ALTERNATIVE CRITICAL LOAD INFO USE OWN THRESHOLDS? % of relevant standard PC © Lower: 147% Upper: 0% Lower: 147% Upper: 49% Lower: 0.47 Upper: No exceedance Project Notes	Total Depositions/Concentration	ns and Exceedance	s (2)								
Process Contribution (PC) at receptor edge 0.00686 0.04 0.002	Concentrations/Danasitions and C	citical Loadell avale	NH ₃				Acid Dep.		PM ₁₀	Od	our
Background concentration at receptor edge 1.46 15.68 1.26 (N:1.12 S:0.14)	concentrations/Depositions and C	Titical Loads/Levels	(µg/m3)		(kg N/ha	уг)	(kEq H+/ha	a/yr)	(µg/m3)	(O	ı/m3)
Predicted Environmental Concentration/Deposition (PEC) Environmental Assessment Level or Critical Load / Level Environmental Assessment Level or Critical Load / Level Environmental Assessment Level Depor: 3 No sensitive habitat or species at this site site site site ALTERNATIVE CRITICAL LOAD INFO USE OWN THRESHOLDS? ### AUTOM CRITICAL LOAD INFO Lower: 1% Upper: 0% ### Of relevant standard PC ### Depor: 147% Upper: 49% EXCEEDANCE Lower: 0.47 Upper: No exceedance Project Notes	Process Contribution (PC) at rece	eptor edge	0.00686		0.04		0.002		ē.	2	
Predicted Environmental Concentration/Deposition (PEC) Environmental Assessment Level or Critical Load / Level Environmental Assessment Level or Critical Load / Level Environmental Assessment Level Depor: 3 No sensitive habitat or species at this site site site site ALTERNATIVE CRITICAL LOAD INFO USE OWN THRESHOLDS? ### AUTOM CRITICAL LOAD INFO Lower: 1% Upper: 0% ### Of relevant standard PC ### Depor: 147% Upper: 49% EXCEEDANCE Lower: 0.47 Upper: No exceedance Project Notes	Background concentration at rece	entor edge ②	1 46		15 68		1 26 (N·1	12 5:0 14)	-	25	
Environmental Assessment Level Or Critical Load / Level Described Project Notes Lower: 1 Upper: 3 No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 1% Upper: 0% No of relevant standard PC Described Project Notes Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 1% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO Lower: 147% No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO No sensitive habitat or		spio. dago	cancersons.		2002 00 NO. NO. NO.		and the same of th	12,0.0.17			
Upper: 3 No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO USE OWN THRESHOLDS? Lower: 1% Upper: 0% Lower: 147% Upper: 09 Lower: 147% Upper: 49% EXCEEDANCE D Lower: 0.47 Upper: No exceedance Project Notes		C) ②	1.47		15.72		1.20			8	
% of relevant standard PC ② Lower: 1%			Upper: 3		habitat o	or	Section 1997 Section 1997		<u>-</u>		
% of relevant standard PC ② Lower: 1%					ALTER	NATIVE C	RITICAL LO	DAD INFO			
Upper: 0% Lower: 147% n/a n/a Upper: 49% EXCEEDANCE Dance Lower: 0.47 n/a n/a n/a	USE OWN THRESHOLDS?										
EXCEEDANCE D Lower 0.47 n/a n/a n/a Project Notes	% of relevant standard PC ®		ATTENDED TO	430	n/a		n/a		- E	7 3	
Upper: No exceedance Project Notes	% of relevant standard PEC ③				n/a		n/a		-	-1	
	EXCEEDANCE ®		Upper: No	0	n/a		n/a		2		
			and the same of th				2				
Larne Harbour SCAIL	Project Notes		***	-							



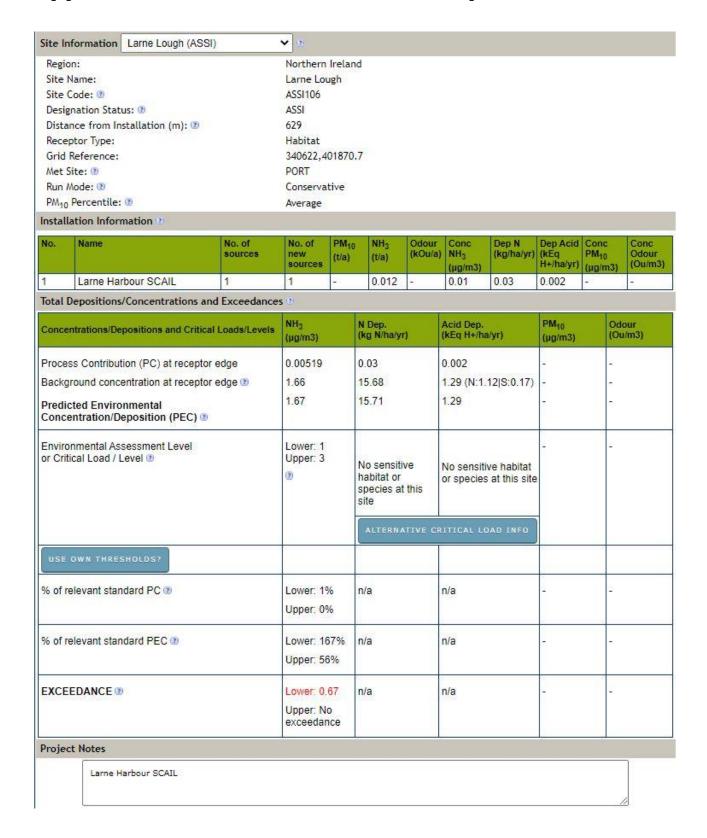
sources new (t/a) (t/a) (kOu/a) NH ₃ (kg/ha/yr) (kEq PM ₁₀ Odo	177 - 27010		Northern	iretan	10						
ASSI399	Site Name:			37.15) E						
Designation Status:				cy i ico							
Distance from Installation (m):	THE PROPERTY OF THE PROPERTY O										
Receptor Type: Grid Reference: 338143.1,407622.2 PORT Run Mode: PORT Run Mode: Receptor Run Mode: Receptor Run Mode: Receptor Run Mode:											
Signature Sign	The second secon		1970 Table								
Met Site: 19 Conservative Run Mode: 10 Conservative Average Installation Information: 17 No. Name No. of sources No. of sourc											
Run Mode: Philip Percentile: Moverage				,40/62	22.2						
PM10 Porcentile: PM20 Installation Information PM20 Installation Installatio			THE COLUMN								
No. Name	The state of the s		Conserva	tive							
No. Name No. of sources No. of new sources N	AND THE RESERVE OF THE PARTY OF		Average								
Sources New	nstallation Information 🖲										
Lame Harbour SCAIL	No. Name	100000000000000000000000000000000000000	new		1000000		NH ₃	(kg/ha/yr)	(kEq	PM ₁₀	Conc Odour (Ou/m
Concentrations/Depositions and Critical Loads/Levels (µg/m3) N Dep. (kg N/hayr) Acid Dep. (µg/m3) (Qdur (Qu/m3)) 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)	Larne Harbour SCAIL	1	1	-	0.33	-			3.70	- (pgino	-
Concentrations/Depositions and Critical Loads/Levels (µg/m3) N Dep. (kg N/hayr) Acid Dep. (µg/m3) (Qdur (Qu/m3)) 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)	Total Depositions/Concentrations a	nd Exceedance	(2)					-	2007.70		
Process Contribution (PC) at receptor edge Background concentration at receptor edge Background concentration at receptor edge 1.46 1.5.68 1.26 (N:1.12 S:0.14)			10000		N Den		Acid Dan		PM	0	dour
Background concentration at receptor edge 1 1.46 15.68 1.26 (N:1.12 S:0.14)	Concentrations/Depositions and Critic	al Loads/Levels	A STATE OF THE STA		(kg N/ha/y	r)		/yr)	The second second		
Background concentration at receptor edge 1.46 15.68 1.26 (N:1.12 S:0.14)	Process Contribution (PC) at receptor	or edge	0.00636		0.03		0.002			-	
Predicted Environmental Concentration/Deposition (PEC) 1.47 15.71 1.26	CONTRACTOR OF THE PROPERTY OF		1 46		15 60	1	1 26 (NI-1	1210:0 141	25	165	
Concentration/Deposition (PEC) Environmental Assessment Level or Critical Load / Level But I Upper: 3 No sensitive habitat or species at this site or species at this site ALTERNATIVE CRITICAL LOAD INFO USE OWN THRESHOLDS? Cower: 1% Upper: 0% Lower: 147% Upper: 0% Lower: 147% Upper: 49% EXCEEDANCE Lower: 0.47 Upper: No exceedance Project Notes	sackground concentration at recepto	n eage @						12 3.0.14)	-	-	
Upper: 3 No sensitive habitat or species at this site ALTERNATIVE CRITICAL LOAD INFO USE OWN THRESHOLDS? Lower: 1% Upper: 0% Lower: 147% Upper: 09% Lower: 147% Upper: 49% EXCEEDANCE D Lower: 0.47 Upper: No exceedance Project Notes		0	1.47		15.71		1.26		-	-	
% of relevant standard PC ② Lower: 1%	vironmental Assessment Level		Upper: 3		habitat or species at this					0	
% of relevant standard PC ② Lower: 1%					ALTERNA	TIVE CR	ITICAL LO	AD INFO			
Upper: 0% Lower: 147% n/a n/a Upper: 49% Lower: 0.47 n/a n/a n/a Upper: No exceedance Project Notes	USE OWN THRESHOLDS?		i.		61				65	3	
Upper: 49% Lower: 0.47 n/a n/a Upper: No exceedance Project Notes	% of relevant standard PC ③				n/a		n/a			-	
Upper: No exceedance Project Notes	% of relevant standard PEC ①		Same and the		n/a		n/a		-	-	
	EXCEEDANCE ®		Upper: N	0	n/a		n/a		5-	8	
	Project Notes									- 4	
	. Systemotes										- 8



Site Ir	formation Carneal (ASSI)		~] (2)									
Regio	on:		Northern I	relar	nd							
Site	Name:		Carneal									
Site	Code: ②		ASSI362									
Desig	nation Status: 🕲		ASSI									
Dista	nce from Installation (m): @	9	6474									
Rece	ptor Type:		Habitat									
Grid	Reference:		338968.1,	39603	30.2							
Met S	Site: 🕲		PORT									
Run /	Mode: ③		Conservat	ive								
PM ₁₀	Percentile: ②		Average									
Install	ation Information ②											
No.	Name	No. of	No. of	PM ₁₀	N	IH ₃	Odour	Conc	Dep N	Dep Acid	Conc	Conc
		sources	new sources	(t/a)		t/a)	(kOu/a)	A COLUMN TO SERVICE AND ADDRESS OF THE PARTY	(kg/ha/yr)	(kEq H+/ha/yr)	PM ₁₀	Odour (Ou/m
	1 004							(µg/m3)	0.00	Land Con Av	(µg/m3) (Outility
1	Larne Harbour SCAIL	1	1	53	10).33	-	0.01	0.03	0.002	-	
Total I	Depositions/Concentrations	s and Exceedance	s (2)				10					
C	atesticas (Depositions and Co	Mines I and all access	NH ₃		N De	ep.		Acid Dep.		PM ₁₀	0	dour
Conce	ntrations/Depositions and Cri	itical Loads/Levels	(µg/m3)		(kg	N/ha/yr)		(kEq H+/ha	/yr)	(µg/m3)	(0	Ou/m3)
Droop	on Contribution (DC) at room	otor odgo	0.00609		0.03	ē.		0.002				
	ss Contribution (PC) at rece									57.K		
Backg	round concentration at rece	ptor edge 🕙	3.10		25.6	62		1.98 (N:1.8	33 S:0.15)	S25	an an	
Dredi	edicted Environmental		3.11		25.6	35		1.98		128	2	
	edicted Environmental ncentration/Deposition (PEC)		cester or		EA FREUE							
	11 P. C.				8					8	9	
	nmental Assessment Level		Lower: 1							(-)?	-	
or Crit	ical Load / Level 🕲		Upper: 3		No s	sensitiv	e	No sensitiv	e hahitat			
			3		CO 2020	itat or	940		at this site			
					1000	cies at t		192.51.0				
					site							
					AT	TEDNAT	TVE CD	ITICAL LO	AD INFO	80		
					_ ^_	TERNA	IVE CK	ITTICAL LO	AD INFO	E	(6)	
USE	OWN THRESHOLDS?											
0/ -5-	elevant standard PC ®		Lower: 1%		n/a			nia			(3)	
% 011	elevant standard PC @		NAME OF THE PARTY		n/a			n/a		(-).	-	
			Upper: 0%	•								
			and the second second	487	0000000			245		500	(A)	
% of r	elevant standard PEC 🖲		Lower: 31	1%	n/a			n/a		-11	-	
			Upper: 10	4%								
-00800V			2000	200	=1200			400.91		5-	- (6	
EXCE	EDANCE (2)		Lower: 2.1	1	n/a			n/a			17	
			Upper, 0.1	1								
n .	r M-1						-			200	- 0	
	ct Notes											
Projec												
roje	Larne Harbour SCAIL											



Appendix C Individual Site SCAIL Inputs Manure





Site Information Larne Loug	JII (OI A)	V	W						
Region:		Northern Ire							
Site Name:		Larne Lough	1						
Site Code: ②		UK9020042							
Designation Status: 13		SPA							
Distance from Installation (n	n): 🕲	629							
Receptor Type:		Habitat							
Grid Reference:		340622,401	870.7						
Met Site: 10		PORT							
Run Mode: 🕲		Conservativ	e						
PM ₁₀ Percentile: ®		Average							
Installation Information 2			181		10.4			a.	
No. Name	No. of sources		M ₁₀ NH ₃ /a) (t/a)	Odour (kOu/a)	Conc NH ₃ (µg/m3)	Dep N (kg/ha/yr)	Dep Acid (kEq H+/ha/yr)	PM ₁₀	Conc Odour (Ou/m3
1 Larne Harbour SCAIL	1	1 -	0.012	-	0.01	0.03	0.002	-	-
Total Depositions/Concentra	tions and Exceedance	s (2)							
6 4 6 46	1606-15-2-1-1	NH ₃	N Dep.		Acid Dep.		PM ₁₀	Od	our
Concentrations/Depositions an	d Critical Loads/Levels	(µg/m3)	(kg N/ha/y		(kEq H+/ha	i/yr)	(µg/m3)	(Ot	ı/m3)
Process Contribution (PC) at	receptor edge	0.00519	0.03		0.002		-		
Background concentration at	recentor edge (2)	1.66	15.68		1 29 (N-1	12 S:0.17)	_	-	
Duckground concentration at	16/2 (Bernet Gr. 178)		Lie manifesti			1210.0.11)	0.5	18	
Predicted Environmental Concentration/Deposition (F	dicted Environmental ncentration/Deposition (PEC)		15.71		1.29				
Environmental Assessment Le	evel	Lower: 1 Upper: 3	8.0		maxN: 2.0)4	-	-	
or Childar Eddu / Lever &				A CAMP AND A COLUMN TO SERVICE AND ADDRESS OF THE PARTY O	maxS: 1.6	0			
		(2)	Sterna do (Europe -		minN: 0.4	4			
			breeding)		Sterna do	ugallii			
			1576		(Europe -				
				TIVE CE	RITICAL LO				
			ALTERN	ATTVE CR	TITICAL L	JAD INFO	e e	- 2	
USE OWN THRESHOLDS?									
% of relevant standard PC ®		Lower: 1%	0%		0%		_	2	
		Upper: 0%	E10348						
		Opper. 070	82						
% of relevant standard PEC		Lower: 1679	% 1 96%		63%		_	_	
70 of followard startuard (EO G	7.1.	25101008-0000388668	OH CHARLES	1	0370		5/2	188	
		Upper: 56%					S		
EXCEEDANCE ®		Lower: 0.67	7.71		-0.75		-	-	
		Upper: No exceedance							
D 1 / N /		ACCORDING TO SECURITY							
Project Notes									
The second secon									



Region:		Northern	Irelan	d						
Site Name:		Waterloo	ii etair	u						
Site Code: ®		ASSI084								
Designation Status: ②		ASSI ASSI								
] [] [] [] [] [] [] [] [] [] [1180								
Distance from Installation (m):	Ð	out the same								
Receptor Type:		Habitat		_						
Grid Reference:		341016,40	032/0.	1						
Met Site: ②		PORT								
Run Mode: ③		Conservat	ive							
PM ₁₀ Percentile: ①		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/m3)	Dep N (kg/ha/yr)	Dep Acid (kEq H+/ha/yr)	Conc PM ₁₀ (µg/m3)	Conc Odour (Ou/m3
1 Larne Harbour SCAIL	1	1	.	0.012	-	0	0.01	0.001	-	-
Total Depositions/Concentration	s and Exceedance	S (2)		0					0.00	
Consensations (Demonstrate and Co	disellandallasid	NH ₃		N Dep.		Acid Dep.		PM ₁₀	Od	our
Concentrations/Depositions and Cr	ilical Loads/Levels	(µg/m3)	4	(kg N/ha/yı)	(kEq H+/ha	ı/yr)	(µg/m3)	(0)	ı/m3)
Process Contribution (PC) at rece	ptor edge	0.00278		0.01		0.001		5	71	
Background concentration at rece	ntor edge 💿	1.66		15.68		1 29 (N·1	12 S:0.17)	2	2	
	pioi ougo	1.66				TO THE PERSON NAMED IN	,0.0,			
Predicted Environmental Concentration/Deposition (PEC) ②	1.00		15.69		1.29		-		
vironmental Assessment Level Critical Load / Level 9		Lower: 1 Upper: 3		No sensitive habitat or species at this site			ii <mark>ve habit</mark> at s at this site	Ī.	-	
				ALTERNA	TIVE CR	ITICAL LO	AD INFO			
USE OWN THRESHOLDS?			- 10				78			
% of relevant standard PC 🖲		Lower: 0% Upper: 0%		n/a		n/a		ā	8	
% of relevant standard PEC ®		Lower: 16 Upper: 55	13334	n/a		n/a		2	=	
EXCEEDANCE ③		Lower: 0.6 Upper: No exceedan)	n/a		n/a				
		li.	(3		-				-4	
Project Notes										
Project Notes Larne Harbour SCAIL										



Concentrations/Depositi Process Contribution (F Background concentrat	on ② No. of source	Porr ASS ASS 401 Hab 345 POF Corr Ave	3 bitat 6150,402	2839.4							
Designation Status: Designation Status: Distance from Installa Receptor Type: Grid Reference: Met Site: Run Mode: PM10 Percentile: Installation Information No. Name Larne Harbour Total Depositions/Concentrations/Depositions/Process Contribution (FBackground concentrate)	No. of source	ASS ASS 401 Hab 345 POF Cor Ave	SI177 SI 3 Ditat S150,402 RT Inservati		1						
Designation Status: Distance from Installa Receptor Type: Grid Reference: Met Site: Run Mode: PM10 Percentile: Installation Information No. Name Larne Harbour Total Depositions/Concentrations/Depositions/Process Contribution (FBackground concentrations/Predicted Environment)	No. of source	ASS 401 Hab 345 POF Cor Ave	il 3 bitat 5150,402 RT nservati		1						
Distance from Installa Receptor Type: Grid Reference: Met Site: ® Run Mode: ® PM ₁₀ Percentile: ® Installation Information No. Name Larne Harbour Total Depositions/Concentrations/Deposition Process Contribution (F Background concentrate Predicted Environment	No. of source	401 Hab 345 POF Cor Ave	3 bitat i150,402 RT nservati		1						
Distance from Installa Receptor Type: Grid Reference: Met Site: ® Run Mode: ® PM ₁₀ Percentile: ® Installation Information No. Name Larne Harbour Total Depositions/Concentrations/Deposition Process Contribution (F Background concentrate Predicted Environment	No. of source	Hab 345 POF Corr Ave	oitat 6150,402 RT nservati		1						
Receptor Type: Grid Reference: Met Site: ③ Run Mode: ② PM ₁₀ Percentile: ③ Installation Information No. Name 1 Larne Harbour Total Depositions/Concentrations/Depositions/Process Contribution (FBackground concentrations/Predicted Environment	No. of source	345 POF Con Ave	i 150,402 RT nservati		1						
Grid Reference: Met Site: ③ Run Mode: ③ PM ₁₀ Percentile: ③ Installation Information No. Name 1 Larne Harbour Total Depositions/Concentrations/Depositions/Process Contribution (Fackground concentrated) Predicted Environment	No. of source	345 POF Con Ave	i 150,402 RT nservati		4						
Met Site: ③ Run Mode: ② PM ₁₀ Percentile: ③ Installation Information No. Name 1 Larne Harbour Total Depositions/Concentrations/Depositions/Process Contribution (Fackground concentrations/Predicted Environment	No. of source	POF Con Ave	RT nservati								
Run Mode: ® PM ₁₀ Percentile: ® Installation Information No. Name 1 Larne Harbour Total Depositions/Concentrations/Depositions Process Contribution (F Background concentrate Predicted Environment	No. of source	Con Ave	servati	ve							
PM ₁₀ Percentile: ① Installation Information No. Name 1 Larne Harbour Total Depositions/Concentrations/Depositions Process Contribution (F Background concentrate Predicted Environment	No. of source	Ave	PERSONAL PROPERTY.	ve.							
No. Name Larne Harbour Total Depositions/Concentrations/Depositions Process Contribution (F Background concentrate Predicted Environment	No. of source	No.	rage								
No. Name 1 Larne Harbour Total Depositions/Conc Concentrations/Depositi Process Contribution (F Background concentrat Predicted Environmen	No. of source	s nev									
1 Larne Harbour Total Depositions/Concentrations/Depositions/Process Contribution (Fackground concentrate) Predicted Environment	SCAIL 1	s nev	of I	PM ₁₀	NH ₃	Odour	Conc	Dep N	Dep Acid	Conc	Conc
Total Depositions/Conc Concentrations/Deposition Process Contribution (F Background concentrated Predicted Environment		SOL	2.0	(t/a)	(t/a)	(kOu/a)			(kEq H+/ha/yr)	PM ₁₀ (μg/m3)	Odour (Ou/m
Concentrations/Depositi Process Contribution (F Background concentrat	centrations and Exceed	1	-	- 3	0.012	3	0	0	0	30	ā
Process Contribution (F Background concentrat Predicted Environmer		dances 😢									
Background concentrat	ions and Critical Loads/L	evels NH ₃	3 /m3)		N Dep. kg N/ha/yi		Acid Dep. (kEq H+/ha	/yr)	PM ₁₀ (µg/m3)		our u/m3)
Background concentrat	PC) at receptor edge	0.0	0057		0.00		0.000		-		
Predicted Environme		1.13	2	9	12.46		1.02 (N:0.)	89 S:0.13)	2	3	
	lion at receptor edge w							39 3.0.13)			
		1.13	2	8	12.46		1.02		-	-	
Environmental Assessr or Critical Load / Level	ncentration/Deposition (PEC) ®		Lower: 1 Upper: 3		No sensitive habitat or species at this site		No sensitir or species	ve habitat at this site			
-3					ALTERNA	TIVE CR	ITICAL LO	AD INFO			
USE OWN THRESHOLD	DS?	133		/0							
% of relevant standard	PC ②		ver: 0% per: 0%		n/a		n/a		5.	ŧ	
% of relevant standard	PEC ③		ver: 112 per: 379		n/a		n/a		ii ii	=	
EXCEEDANCE ®		Upp	ver: 0.12 per: No eedanc		n/a		n/a		Ē.		
Project Notes											
(A)											
Larne Harbou											A23



Site Information The Maidens (SAC)	v								
Region:		Northern	Irelan	d						
Site Name:		The Maide	ens							
Site Code: 3		UK003038	4							
Designation Status: 3		SAC								
Distance from Installation (m):	(3)	4315								
Receptor Type:	THE COLUMN TO SERVICE STATE OF THE	Habitat								
Grid Reference:		343678.1,	40564	2						
Met Site: 10		PORT	40304	2						
			1000							
Run Mode: ③		Conservat	ive							
PM ₁₀ Percentile: 1		Average								
Installation Information ②	U-2		DOTE OF							
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 Larne Harbour SCAIL	1	1	28	0.012	29	0	0	0	-	-
Total Depositions/Concentration	ns and Exceedance	s (2)				1000				
Concentrations/Depositions and C	ritical Loads/Levels	NH ₃ (µg/m3)		N Dep. (kg N/ha/yi		Acid Dep. (kEq H+/ha	i/vr)	PM ₁₀ (µg/m3)		our ı/m3)
	ACC • 100 POSS • ACCO		-4	Administration	0			(μgano)	3000	CASE.
Process Contribution (PC) at rece	AFONE VEST A PROPERTY	0.00051		0.00	1	0.000		-	-	
Background concentration at rece	eptor edge 🕲	1.12		12.46		0.00 (N:0.	00 S:0.00)	2		
Desdisted Facility and the		1.12		12.46		0		-		
Predicted Environmental Concentration/Deposition (PEC	C) (1)									
Environmental Assessment Level or Critical Load / Level 3	1	Lower: 1 Upper: 3		No sensiti habitat or species at site	POST		ve habitat at this site	ā	Ţ.	
				ALTERNA	TIVE CR	TTICAL LO	AD INFO			
USE OWN THRESHOLDS?										
% of relevant standard PC 🕲		Lower: 0% Upper: 0%		n/a		n/a		ē	3	
% of relevant standard PEC ③		Lower: 11 Upper: 37	50000	n/a		n/a		-	-	
EXCEEDANCE ®		Lower: 0.1 Upper: No exceedan)	n/a		n/a		15	27	
B 1 1 W 1		3,,0300011	14							
Project Notes										100
Larne Harbour SCAIL										



Region:		Northern	Irelai	nd						
Site Name:		Newlands	5							
Site Code: 3		ASSI241								
Designation Status: ③		ASSI								
Distance from Installation (m): 3		4451								
Receptor Type:		Habitat								
Grid Reference:		341671.8	.3976	80						
Met Site: 3		PORT	,							
Run Mode: ②		Conserva	tive							
PM ₁₀ Percentile: ③		Average	1000							
nstallation Information ②		Average								
No. Name	No. of	No. of	PM ₁₀	NH ₃	Odour	Conc	Dep N	Dep Acid	Conc	Conc
To. Hame	sources	new sources	(t/a)	(t/a)	(kOu/a)		(kg/ha/yr)	(kEq H+/ha/yr)	PM ₁₀ (μg/m3)	Odour (Ou/m:
1 Larne Harbour SCAIL	1	1	2.0	0.012	48	0	0	0	-	-
Total Depositions/Concentrations and	Exceedance	s (2)								
Concentrations/Depositions and Critical	Loads/Levels	NH ₃ (µg/m3)		N Dep. (kg-N/ha/yi		Acid Dep. (kEq H+/ha	ı/yr)	PM ₁₀ (μg/m3)		our ı/m3)
Process Contribution (PC) at receptor e	edge	0.00048		0.00		0.000		-	27	
Background concentration at receptor e	March Control	1.97		18 34		1 45 (N-1	31 S:0.14)	L.	-	
buchground concentration at receptor c	age w	10000 NO.0000		0.0000000000000000000000000000000000000			31 0.0.14)			
Predicted Environmental Concentration/Deposition (PEC) ®		1.97		18.34		1.45		-	-	
		Lower: 1 Upper: 3		No sensitive habitat or species at this site		No sensitive habitat or species at this sit		2	23	
				ALTERN#	TIVE CR	ITICAL LO	AD INFO			
USE OWN THRESHOLDS?										
% of relevant standard PC ③		Lower: 09 Upper: 09		n/a		n/a		ā	ē	
% of relevant standard PEC ②		Lower: 19 Upper: 66		n/a		n/a		-	-8	
EXCEEDANCE ②		Lower: 0. Upper: N exceedar	0	n/a		n/a	*	-	27	
		La Company	-			-	-		- 1	
Project Notes										



	The Gobbins (AS	31)	v		844						
Region:			Northern	Irelan	id						
Site Nam	e:		The Gobb	oins							
Site Code	e: ®		ASSI283								
Designati	ion Status: 🖲		ASSI								
Distance	from Installation (m): 3		5368								
Receptor	Type:		Habitat								
Grid Refe	erence:		346562.3	,40176	59.2						
Met Site:	2		PORT								
Run Mode	e: 🖲		Conserva	tive							
PM ₁₀ Pen	centile: 🕲		Average								
Installatio	n Information 🕲										
No. Na	ame	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/m:
1 La	arne Harbour SCAIL	1	1	-	0.012	-	0	0	0	(pg/ms/	-
	ositions/Concentrations a	7.0	100				1.50				
			NH ₃		N Dep.		Acid Dep.		PM ₁₀	Od	our
Concentrat	tions/Depositions and Critic	al Loads/Levels	(µg/m3)		(kg N/ha/yı	1)	(kEq H+/ha	ı/yr)	(µg/m3)	1000	u/m3)
Process C	contribution (PC) at receptor	or edge	0.00035	,	0.00		0.000				
	nd concentration at recept		1.12		12.46		1.02 (NI-0	89 S:0.13)	## ##	2	
Dackyroui	iu concentration at recepti	n euge 🍛						03 3.0.13)	-	-	
	Environmental ation/Deposition (PEC))	1.12		12.46		1.02			-	
TO 35 19 10 10 10 10 10 10 10 10 10 10 10 10 10	vironmental Assessment Level Critical Load / Level ®		Lower: 1 Upper: 3		No sensiti habitat or species at site	61500 V4865-51	No sensiti or species	ve habitat at this site	ā.	5	
					ALTERNA	TIVE CF	RITICAL LO	AD INFO			
USE OWI	N THRESHOLDS?		425	- 6			8				
% of relev	ant standard PC 🖲		Lower: 09 Upper: 09		n/a		n/a		-	8 9	
% of relev	ant standard PEC ®		Lower: 11 Upper: 37		n/a		n/a		ii i	=	
EXCEEDA	ANCE ®		Lower: 0. Upper: N exceedar	0	n/a		n/a			23	
			la.								
Project No	ntes										
Project No	otes										



Region: Site Name: Site Code: ② Designation Status: ② Distance from Installa Receptor Type: Grid Reference: Met Site: ③			Northern	Irelan	ıd						
Site Code: Designation Status: Distance from Installa Receptor Type: Grid Reference:											
Designation Status: Distance from Installa Receptor Type: Grid Reference:			Kilcoan								
Distance from Installa Receptor Type: Grid Reference:			ASSI360								
Receptor Type: Grid Reference:			ASSI								
Grid Reference:	ition (m): 🗷		5932								
			Habitat								
Mat Sitar (3)			346136.7	,39880	9.7						
MEC SILE: (1)			PORT								
Run Mode: ②			Conserva	tive							
PM ₁₀ Percentile: 🕲			Average								
nstallation Informatio	n (2)										
No. Name		No. of sources	No. of new sources	PM ₁₀ (t/a)	NH ₃ (t/a)	Odour (kOu/a)	The State of the Control of the Cont	Dep N (kg/ha/yr)	Dep Acid (kEq H+/ha/yr)	Conc PM ₁₀ (µg/m3)	Conc Odour (Ou/m:
1 Larne Harbour	SCAIL	1	1	-	0.012	-	(µg/m3)	0	0	- (µg/mə/	-
Total Depositions/Con					3.3,4				100		
		The second state of the second	NH ₃		N Dep.		Acid Dep.		PM ₁₀	0	dour
Concentrations/Deposit	ions and Critica	I Loads/Levels	(µg/m3)		(kg N/ha/y		(kEq H+/ha	/yr)	(µg/m3)		u/m3)
Process Contribution (PC) at receptor	edge	0.00030		0.00		0.000		-		
Background concentra		10000-000	1.58		15.12		4 24 /NH4	0010-0 421	8	55	
sackground concentra	ion at receptor	eage @	5,000		0.0000000000000000000000000000000000000			08 S:0.13)	-	-	
Predicted Environme Concentration/Depos			1.58		15.12		1.21		-		
Environmental Assessi or Critical Load / Level	10-000-0-0-0-0-0		Lower: 1 Upper: 3		No sensiti habitat or species at site	ISSAES	No sensiti or species	ve habitat at this site		ES .	
				93	ALTERN/	TIVE CR	ITICAL LO	AD INFO			
USE OWN THRESHOL	DS?		(*)								
% of relevant standard	PC ②		Lower: 09 Upper: 09		n/a		n/a		-	-3	
% of relevant standard	PEC ③		Lower: 15 Upper: 53		n/a		n/a		2	29	
EXCEEDANCE ③			Lower: 0.	A.W.O	n/a		n/a		8	= 1	
			Upper: No exceedan								
Project Notes											



Region:	Northern I	reland	d						
Site Name:	Knock Dhu	Salla	gh Braes						
Site Code: 3	ASSI391								
Designation Status: ②	ASSI								
Distance from Installation (m): 3	6020								
Receptor Type:	Habitat								
Grid Reference:	335833.3,	40482	3.9						
Met Site: 10	PORT								
Run Mode: ③	Conservat	ive							
PM ₁₀ Percentile: ③	Average								
Installation Information 3									
No. Name No. of sources	No. of new	PM ₁₀ (t/a)	NH ₃ (t/a)	Odour (kOu/a)	Conc NH ₃	Dep N (kg/ha/yr)	Dep Acid (kEq	Conc PM ₁₀	Conc Odour
1 Larne Harbour SCAIL 1	sources	<u>u</u>	0.012	20	(µg/m3)	0	H+/ha/yr)	(µg/m3)	(Ou/m3)
	1	_	0.012	- 11	Tu-	U	U	-	1-
Total Depositions/Concentrations and Exceedance	100000	_	and works	-	000000000000000000000000000000000000000		200	- Control	
Concentrations/Depositions and Critical Loads/Level	s NH ₃ (µg/m3)		N Dep. (kg N/ha/yı)	Acid Dep. (kEq H+/ha	a/yr)	PM ₁₀ (μg/m3)		our ı/m3)
Process Contribution (PC) at receptor edge	0.00029		0.00		0.000		23	128	
Background concentration at receptor edge ③	1.46		15 68		1.26 (N-1	12 S:0.14)	29	229	
Buckground concentration at receptor eage &						12(0.0.14)			
Predicted Environmental Concentration/Deposition (PEC) ③	1.46		15.68		1.26		-3		
Environmental Assessment Level or Critical Load / Level ②	Lower: 1 Upper: 3		No sensiti habitat or species at site	9726		ve <mark>habitat</mark> s at this site	-	153	
			ALTERNA	TIVE CR	HTICAL LO	DAD INFO	ic .		
USE OWN THRESHOLDS?									
% of relevant standard PC [®]	Lower: 0% Upper: 0%		n/a		n/a		=3	-53	
% of relevant standard PEC ®	Lower: 146 Upper: 496	997	n/a		n/a		-8	-	
EXCEEDANCE ®	Lower: 0.4 Upper: No exceedance	Ris Comment	n/a		n/a		29		
Project Notes				- 12					



Region:		Northern	Irelan	d						
Site Name:		Ballygalle	ev Hea	d						
Site Code: (9)		ASSI399	7 K 1 6 9 7 7 7 1							
Designation Status: ②		ASSI								
Distance from Installation (m): ②		6309								
Receptor Type:		Habitat								
Grid Reference:		338143.1	40762	22.2						
Met Site: (3)		PORT	,40702							
Run Mode: ③		Conserva	el							
PM ₁₀ Percentile: ②		NAME OF STREET	tive							
Installation Information ②		Average								
No. Name	No. of	No. of	PM ₁₀	NH ₃	Odour	Conc	Dep N	Dep Acid	Conc	Conc
to. Name	sources	new sources	(t/a)	(t/a)	(kOu/a)			(kEq H+/ha/yr)	PM ₁₀ (μg/m3)	Odour (Ou/m3
1 Larne Harbour SCAIL	1	1	-3	0.012	-	0	0	0	-	2
Total Depositions/Concentrations an	d Exceedance	S (2)								
Concentrations/Depositions and Critica	I Loads/Levels	NH ₃ (µg/m3)		N Dep. (kg N/ha/y	r)	Acid Dep. (kEq H+/ha	a/yr)	PM ₁₀ (μg/m3)		our ı/m3)
Process Contribution (PC) at receptor	edge	0.00027		0.00		0.000	Verile	-		
Background concentration at receptor	210 mg	1.46		15.68		1.26 (N:1.	12 S:0.14)	-	-	
Predicted Environmental Concentration/Deposition (PEC) ®		1.46	-	15.68		1.26		3 0	ā	
Environmental Assessment Level or Critical Load / Level		Lower: 1 Upper: 3		No sensiti habitat or species a site		25 70 70 70 70 70 70	ive habitat s at this site	2	=	
				ALTERNA	ATIVE CE	RITICAL LO	DAD INFO			
USE OWN THRESHOLDS?										
% of relevant standard PC ②		Lower: 09 Upper: 09	925	n/a		n/a			2	
% of relevant standard PEC ③		Lower: 14 Upper: 49		n/a		n/a		•	a	
EXCEEDANCE ③		Lower: 0.	46	n/a		n/a		-	2	
		Upper: Ne exceedar								
Project Notes		<i>0.</i>		18	*				- 44	
7										



Region:			Northern	Irelar	ıd						
Site Name:			Carneal								
Site Code:			ASSI362								
Designation			ASSI								
	om Installation (m)	. (2)	6474								
Receptor T	All the form of the same of th		Habitat								
Grid Refere			338968.1,	2060	20.2						
Met Site: @			PORT	3700	30.2						
Run Mode:			Conservat								
			CHARLES THE COLUMN TO THE	ive							
PM ₁₀ Perce			Average								
nstallation	Information 😃										
No. Nam	ie	No. of	No. of	PM ₁₀	100000	Odour	Conc	Dep N	Dep Acid	Conc	Conc
		sources	new	(t/a)	(t/a)	(kOu/a)	NH ₃ (μg/m3)	(kg/ha/yr)	(kEq H+/ha/yr)	PM ₁₀ (µg/m3)	(Ou/m
1 Larr	ne Harbour SCAIL	1	1		0.012	20	(pg/m3)	0	0	(µg/ilis)	2.3
1,550		5.15	1355 5		10.012		10	U	U	1-	1
lotal Depos	itions/Concentration	ons and Exceedance	5 (2)								
Concentratio	ns/Depositions and	Critical Loads/Levels	NH ₃		N Dep.		Acid Dep.		PM ₁₀		our
	no coposition de la	5,1134, 2014, 2014	(µg/m3)		(kg N/ha/yr	,	(kEq H+/ha	lyr)	(µg/m3)	(Ot	ı/m3)
Process Cor	ntribution (PC) at re	center adae	0.00026		0.00		0.000		el.		
		ACCOUNT OF THE PARTY OF T	Section Control		1400				-		
Background	concentration at re	ceptor edge ②	3.10		25.62		1.98 (N:1.8	33 S:0.15)	-3	-3	
Predicted E	invironmental		3.1		25.62		1.98		81	100	
	ion/Deposition (PE	EC) ②									
AT - DOOR OF TAKEN OF		2		-		- 4					
THE RESERVE OF THE PARTY OF THE	tal Assessment Lev	rel	Lower: 1						29	1 28	
or Critical Lo	oad / Level 🕙		Upper: 3		No sensitiv	/e	No sensitiv	e habitat			
			(3)		habitat or		or species	at this site			
					species at site	this					
					Site						
					ALTERNA	TIVE CR	ITICAL LO	AD INFO			
					0505000	10000000		15 - W. Y			
USE OWN	THRESHOLDS?					Ì					
						-	1				
% of relevan	nt standard PC 🗈		Lower: 0%	6	n/a		n/a		50	128	
			Upper: 0%	6							
				255.			1				
% of relevan	nt standard PEC ®		Lower: 31	0%	n/a		n/a		50	-0	
			Upper: 10								
			Opper, 10	370							
CVCCCDAN	ICE (%)		Laure O	10	e te	1	-1-			D.	
EXCEEDAN	ICE ®		Lower: 2.1		n/a		n/a		-2		
			Upper: 0.1	10							
	5								I.		
roject Not	es										7.



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.

No liability is accepted, or warranty given for; unconfirmed data, third party documents and information supplied to WYG or for the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report. WYG does not purport to provide specialist legal, tax or accounting advice.

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.