Kerry County Council

Waste Licence Ref No. W0072-01

Killarney Civic Amenity Site;
Coolcaslagh;
Killarney;
County Kerry.

Annual Environmental Report.

Reporting Period:
1st January 2016 – 31st December 2016.

Prepared By:
Environmental Services Section,
Kerry County Council,
Maine Street,
Tralee,
Co. Kerry.

March 2017.

1.0 Introduction

Kerry County Council operates a waste transfer and recycling facility at Coolcaslagh, Killarney, Co. Kerry which is located approximately 5 km east of the town of Killarney. The facility is located in the townland of Coolcaslagh on the county road L-2507 and approximately 3 km from Lissyviggeen Cross on the N22.

The principal activity of the Transfer Station is the compaction of solid waste into 30 cubic meter closed containers for subsequent transfer and disposal at North Kerry Landfill in Muingnaminnane, Tralee. From the 12th July 2014, all waste from Coolcaslagh WTS was transferred to KWD Recycling for treatment/disposal as North Kerry Landfill ceased taking waste.

Other activities include the recycling or reclamation of inorganic materials including metals, glass, steel and aluminium cans, car batteries, dry cell batteries, fluorescent tubes, domestic hazardous waste, cardboard, plastic bottles and newspapers.

This Annual Environment Report is prepared in accordance with Condition 2.8 and Schedule B of Waste Licence W0072-01 issued by the Environmental Protection Agency (EPA).

2.0 Reporting Period

The reporting period for this Annual Environmental Report is 1st January 2016 – 31st December 2016.

3.0 Waste Activities carried out at the Facility

Waste disposal activities carried out at Coolcaslagh Transfer Station are in accordance with Part 1 of Waste Licence W0072-01 which outlines the waste disposal activities licensed in accordance with the Third Schedule of the Waste Management Act 1996. Licensed activities include:

Class 12 Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.

Class 13 Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Waste recovery activities carried out at Coolcaslagh Transfer Station are in accordance with Part 1 of Waste Licence W0072-01 which outlines the waste recovery activities licensed in accordance with the Fourth Schedule of the Waste Management Act 1996. Licensed activities include:

Class 1 Solvent reclamation or regeneration.

Class 2 Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).

Class 3 Recycling or reclamation of metals and metal compounds.

Class 4 Recycling or reclamation of other inorganic materials.

Class 13 Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

4.0 Quantity and Composition of Waste Received, Disposed and Recovered: 1st Jan – 31st Dec 2016

The quantity of waste disposed of at Coolcaslagh Transfer Station during 2016 increased by 82.20 tonnes on the previous year (2015) but decreased by 76.58 tonnes on 2014.

Killarney Town Council (refuse collection service) no longer uses Coolcaslagh Waste Transfer Station to dispose of its waste; & 2015 & 2016 waste tonnage figures reflect this.
Waste accepted increased by approximately 5.7% (over 2015 figures) in 2016 and this reflects increasing use of the Transfer Station by the public.

Waste accepted into Coolcaslagh Transfer Station Facility for disposal for the reporting period was 1,527.58 Tonnes and may be further broken down as follows:

Source	*2013*	*2014*	*2015*	*2016*
Killarney Town Council refuse collection	957.18	198.08	0	0
Household waste	1,185.84	1,240.367	1,332.88	1416.56
Small commercial business waste	34.68	32	50.16	42.78
KLA Commercial Waste	10.84	9.02	0	0
KLA Road Sweepings	136.20	36.30	0.5	16.32
Graveyard Waste	15.54	12.94	14.86	15.84
KLA Flytipping / Street Cleaning	80.22	73.69	46.98	36.08
Total	**2,420.60**	**1,604.16**	**1,445.38**	**1527.58**

Table 1 – Waste by Source.

Appendix I contains the breakdown of waste by source for the reporting period.

The quantities of waste sent for recycling increased on the 2015 figures.
670.26 tonnes of material was collected at Coolcaslagh during 2016 in comparison with 610.33 tonnes in 2015, an increase of 59.93 tonnes.

Material type	Suggested EWC codes	Total
Mixed residual waste (Trans Waste out of facility)	20 03 01	1,527.58
Organic waste (food and garden)		0.00
food (compost waste Milltown TS)	*20 01 08*	0.00
garden	*20 02 01*	0.00
Mixed dry recyclables (Ecosence Bags)	15 01 06	16.60
Cardboard, newspaper and other paper		0.00
cardboard packaging	*15 01 01*	95.00
cardboard non-packaging	*20 01 01*	0.00
paper packaging	*15 01 01*	0.00
paper non-packaging	*20 01 01*	0.00
newspaper and magazines	*20 01 01*	147.82
Glass		0.00
glass packaging (bottles)	*15 01 07*	96.1710
glass non-packaging (flat glass)	*20 01 02*	0.0000
Metals		0.0000
aluminium cans (packaging)	*15 01 04*	3.1840
steel cans (packaging)	*15 01 04*	12.6250
other metals (scrap metals)	*20 01 40*	76.44
Plastic		0.00
plastic packaging (bottles)	*15 01 02*	68.30
plastic non-packaging	*20 01 39*	0.00
polystyrene		0.00
Composite packaging (e.g. tetrapaks)	*15 01 05*	0.00
Textiles		0.00
textiles, packaging	15 01 09	0.00
textiles, non-packaging (clothes)	20 01 11	2.18
Wood		0.00
wood packaging	15 01 03	0.00
wood non-packaging	20 01 38	0.00
mixed, uncontaminated wood packaging and non-packaging (collected at An Daingean)	15 01 03; 20 01 38	0.00
wood, treated, hazardous	20 01 37*	0.00
Batteries		0.00
lead acid batteries and accumulators (Car Batteries)	16 06 01*	0.00
Ni-Cd batteries and accumulators	16 06 02*	2.430
Other (e.g. alkaline) batteries and accumulators (Small Batteries)	16 06 04	0.000 0.00
Household Hazardous Waste		
Waste mineral oils (Engine Oil)	13 02 08	2.628
Oil filters (vehicles)	13 08 99	0.00
Oil containers (mineral oil) - plastic + metal	13 08 99	0.05
Waste cooking or vegetable oils	20 01 25	0.20
Waste paint and varnish (including containers)	20 01 27	1.90
Aerosols	14 06 01	0.54
WEEE collected by compliance schemes	*WEEE Ireland and*	0.00
CRT	20 01 36	33.295
SDA - Small Domestic Appliances	20 01 36	45.390
LDA - Large Domestic Appliances	20 01 36	46.161
Cold	20 01 36	19.156
		0.00
		0.00
WEEE taken off-site by charities (e.g. mobile phones)	20 01 35	0.00
Foul Water from Septic Tank Coolcaslagh CA	20 03 04	452.80
Flourscent Tubes	20 01 11	0.194
<other categories not included above>	<enter EWC code>	
<other categories not included above>	<enter EWC code>	
Total Recycling less Mixed Municipal Waste & Foul Water		**670.264**

Table 2.

Overview of waste collected on site and recovered / recycled off site during 2016.

5.0 Projections of the quantities to be accepted and percentages disposed and recycled / recovered for the coming year

It is anticipated that the quantity of household waste disposed of at Coolcaslagh should increase slightly and that the amount of other wastes (recycling wastes of various streams) should also increase slightly in 2017.

The proposed Waste Management (Collection Permit) Regulations 2016 – "pay-by-weight" – were due to come into effect in July 2016. The introduction of these Regulations has, however, been deferred.

If the "pay-by-weight" Regulations are introduced for Civic Amenity Sites / Recycling Centres, they will have an impact on the operation of Coolcaslagh (indeed all of our Civic Amenity Sites / Waste Transfer Stations). We are awaiting clarification from the Department of Communications, Climate Action and Environment in relation to the "pay-by-weight" Regulations so that we can assess its impact on our services.
The Agency shall be informed of any necessary changes to the site layout etc.

6.0 Summary Report on Emissions for the Reporting Period

a) Foul Water Emissions

Foul water from the facility, including the transfer station shed, compactor and the bin transverse area is collected in a holding tank on site and the effluent is tankered to Killarney Wastewater Treatment Plant.

During 2016, **452.80** tonnes of foul effluent and silt / sludge were exported off site from the facility for treatment in Killarney Wastewater Treatment Plant. The foul water effluent is monitored quarterly and the results are sent to the Agency and available at the Coolcaslagh facility and Kerry County Council's offices.

b) Surface Water Emissions

Surface water runoff takes place from site roads and uncontaminated surfaces and discharges via silt traps to the surface water drains. An oil interceptor is fitted on the surface water discharge pipe from the bin marshalling yard.

7.0 Summary of Results and Interpretations of Environmental Monitoring

a) Dust monitoring.

The dust monitoring results for two of three sampling points were within the ELV set down in the licence.

The results for ST1 were outside the Licence ELV's, however the report notes that –

"*This monitoring point is located at the main entrance to the site which is also adjacent to the entrance of the nearby quarry and therefore is impacted by traffic movements associated with both sites.*

The collector gauge contained water and a considerable amount of green particulates and algal growth. The dried dish contained a large amount of grey / brown particulates and algal residue. The ashed dish contained a considerable amount of brown / grey particulates and algal residue. The ashed residue underwent no effervescence on addition of acid indicating the absence of carbonate in the residue."

It is understandable that the dust monitoring results would be affected by the proximity of the gauge to the entrance of a busy quarry.

There were no issues with dust during 2016 and no complaints were received in relation to dust at the facility. The results over the years have shown no significant nuisance from dust at the facility.

It is Kerry County Council's intension to seek a technical amendment in relation to the dust monitoring requirement of Waste Licence W0072 as past monitoring indicates that the site it not causing excessive dust to the surrounding environs.

Appendix III contains the dust monitoring results for the reporting period.

b) Noise monitoring.

A noise survey was undertaken on the 1st March 2016, 10th June 2016 & 26th August 2016 by Southern Scientific Surveys Ltd. (Environmental Consultants). The report forwarded to Kerry County Council is dated 27th January 2017. ***(Please see Appendix IV of this report).***

The site Waste Licence specifies a day-time limit of 55dB (A) L_{Aeq} *(30 min)* at the monitoring locations. It is clear from the results section of the report that this noise limit is frequently breached. However it is also clear that the majority of noise leading to the breach of this limit is from operations carried out at the neighbouring quarry & industrial estate, and also from public road traffic.

It may be worth noting that there is no permanent dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other high amenity facility located within 1km of the Waste Transfer Station.

The report notes that the "*1/3 Octave Frequency Spectra show that there was no prominent tonal noise present when assessed following the criteria in Annex D of ISO 1996 (Part 2), 2007. It is concluded that while the noise limit of 55db (A) is not being achieved at all the monitoring locations, activities at the waste transfer station are not adversely impacting on the noise environment at the nearest noise sensitive location (N6) where monitoring took place. The waste transfer station does not generate noise at night-time when the facility is closed."*

No tones were observed or detected by the sound level meter at any location.

There were no issues with noise during 2016 and no complaints were received in relation to noise at the facility during 2015 or 2016. The results over the years have shown that the facility caused no significant noise nuisance to neighbours.

The waste transfer station does not generate noise at night-time when the facility is closed.

It is Kerry County Council's intension to seek a technical amendment in relation to the noise monitoring requirement of Waste Licence W0072 as past monitoring indicates that the site is not causing excessive noise to the surrounding environs.

c) Monitoring of surface water.

A full report prepared by the Environmental Laboratory of KCC is not included in this document and will be forwarded separately as a licensee return to the Agency. Kerry County Council's laboratory is currently working towards ISO accreditation and as a result the Senior Executive Chemist's time has been taken up with this process. However, verified lab results are provided in **Appendix II of this report.**

d) Biological Monitoring.

A full report prepared by the Environmental Laboratory of KCC is not included in this document and will be forwarded separately as a licensee return to the Agency. Kerry County Council's laboratory is currently working towards ISO accreditation and as a result the Senior Executive Chemist's time has been taken up with this process. However, verified lab results are provided in **Appendix II of this report.**

Kerry County Council carried out a biological assessment of the Woodford River on 18th May, 2011. The results of the biological monitoring indicate high quality water status (Q4/5) both upstream and downstream of the waste transfer station with no evidence of any impact on the biological water quality of the Woodford River from the activities at Coolcaslagh Waste Transfer Station.

There were no complaints in relation to the water quality of the Woodford River as a result of activities at the facility during 2016.

e) Foul Water

All the foul water from the facility has been transported off site to Killarney Wastewater Treatment Plant since February 2001. It is treated at Killarney Wastewater Treatment Plant. Records of the dates of removal, volumes removed etc are available.

452.80 tonnes of waste water was removed from Coolcaslagh during 2016, an increase on the 2015 figure of 410.32 tonnes.

There were no incidents and / or spillages recorded during the transportation of the foul water.

The foul water was removed by Mr. Maurice Somers – WCP reference – WCP LK 09 207 03. Mr. Somers has died and the WCP has lapsed. Irish Drain Services will perform this service in 2017 – WCP reference – NWCPO 15 11588 01.

8.0 Resource and Energy Consumption Summary

The following is the energy consumption for Coolcaslagh Transfer Station for the reporting period.

8.1 Diesel

The diesel usage for Coolcaslagh Transfer Station for the reporting period 2016 was 1521 litres. This is a slight decrease on the 2015 consumption of 1775 litres.

8.2 Electricity

Year	Average Electricity Usage kWh/day
2016	25.56
2015	24.3
2014	23.6
2013	24.8
2012	40.6
2011	38.9

The primary energy consumer on site is a 3 phase waste compactor. Power is also required for the office computer and lighting, storage heating, cardboard baler, CCTV and public lighting on the site.

8.3 Water

Water supply to the site is via a connection to the mains water supply. Water usage for the facility during the reporting period was 42 m^3.

Water is mainly used on site for site office facilities, power washing yards, transfer station apron and hopper. No surface water or ground water is abstracted.

9.0 Report on Development Works Undertaken during the Reporting Period

A digitised *(topographical)* site survey was completed during 2016.

A pilot project for signage (in conjunction with the Southern Regional Office) was completed in 2016.

A number of skips were repainted & fitted with new covers in 2016.

10.0 Proposed Development Works For Forthcoming Year

Should “pay-by-weight” legislation be introduced substantial development works will probably be required to facilitate it.

A revised traffic management plan – & associated traffic delineation lines and regulatory signs – is proposed in 2017.

11.0 Report Targets and Environmental Objectives and Targets for 2017.

Target Area	2016 - Objective	2017 – Expected Outcome to Indicate achievement of target
Odour Management	Continue to ensure that the waste facility does not cause a nuisance in terms of odour through good housekeeping practices on site.	No odour complaints received due to onsite/offsite odour.
Waste Storage Practices	Ensure good housekeeping on site so that waste is stored and collected in a timely fashion so as not to cause a nuisance on site or to the surrounding areas. It remains an objective to construct / purchase secure sheds on site for the storage of WEEE and baled cardboard.	No wind blown litter on site or on the public road adjacent to our site. No overflowing bins on site. Proper segregation of cardboard and WEEE on site which will also give additional security for WEEE material.
Incident Prevention	Continue with daily inspection and record keeping of emergency 'STOP' controls on site. Look at Fire Preventative and Emergency Response Procedure for the site.	Staff will strive to ensure no incidents occur on site by being vigilant and act on notifiable incidents immediately or in so far as is practicable.
Waste acceptance, Classification and records	Continue to record and document all waste types entering and leaving the site with monthly verifiable reports being produced.	Monthly reports on waste streams produced and verified
Proposed Household Waste Regulations	It is anticipated that the proposed Household Waste Regulations *("pay-by-weight"))* will have an impact on the operation and layout of the Waste Transfer Station. Once the Regulations are brought into force it is Kerry County Council's intention to assess the impact of these Regulations and adapt the site as necessary to meet the new requirements.	Household Waste Regulations have yet to be put on the Statute Book .We will strive to ensure full compliance with the proposed "pay-by-weight" Regulations.

12.0 Summary of Procedures Developed by the Licensee

The following procedures were developed during the reporting period:

- Revised Safe Working Procedures for the site supervisor relating to the loading / unloading and reversing of vehicles within the confines of the Waste Transfer Station.

13.0 Reported Incidents and Complaints

No incidents were reported during 2016.

14.0 Report on Financial Provision

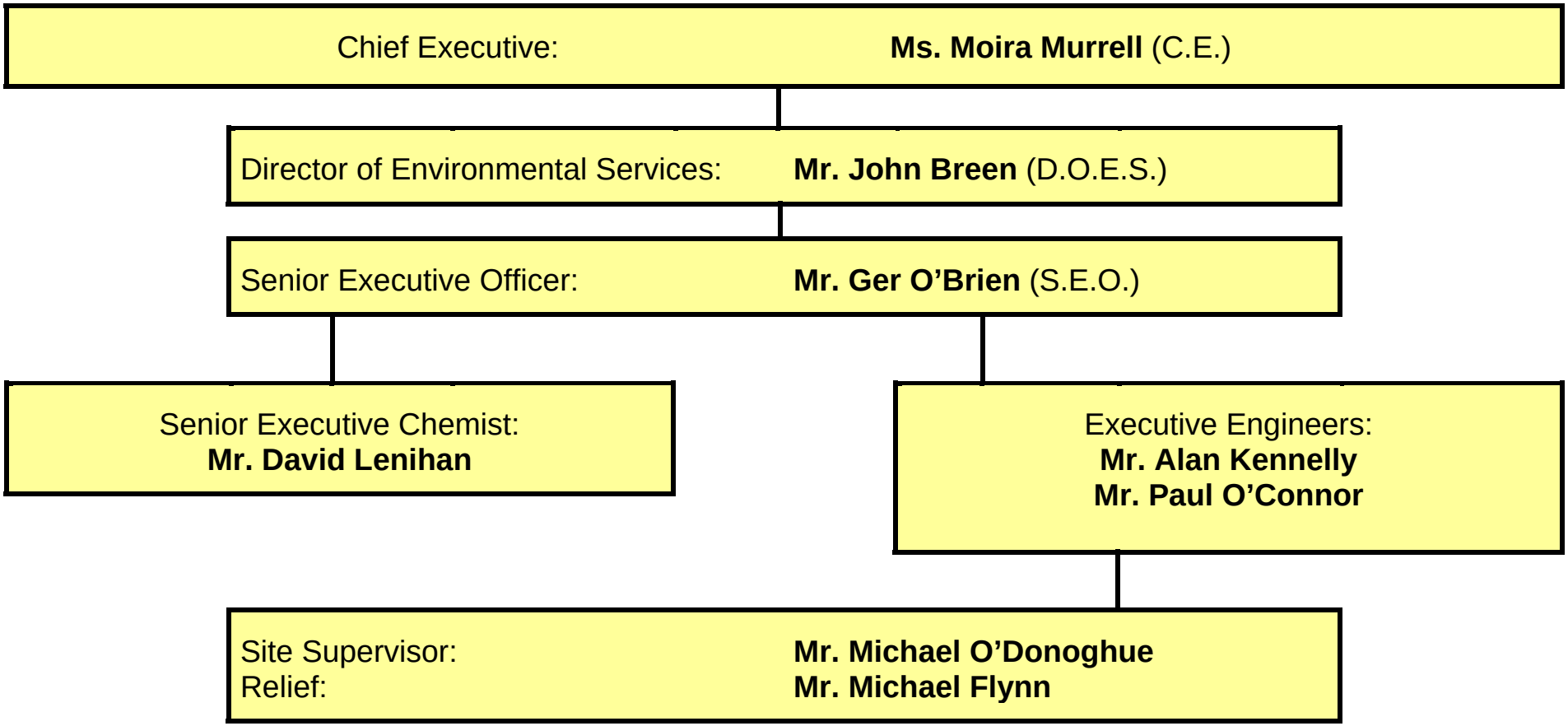
a) Statement of Costs for Waste Operations at Killarney (Coolcaslagh) Facility, 2016

Statement of Costs for Waste Operations - Killarney, Coolcaslagh 2016		
Accelem	Account Element	Total €
60030	Wages	€ 23,708
60040	Salaries	€ 6,507
60100	ER PRSI	€ 4,669
60200	Overtime	€ 13,443
60400	Sick Pay	€ 805
60500	Annual Leave	€ 3,689
60510	Bank Holiday Leave	€ 1,065
60600	Travel/Subsistence	€ 2,912
61990	Other Allowances	€ 837
65500	Minor Contracts- Trade Services & other works	€ 135,213
65700	Transfer to Fixed Assets/Capitalisation-Assets	€ 6,350
65965	Transfer to/from Cap/Rev (Exp)	€ -
66500	Non-Capital Equip Purchase - Fire Services	€ 10
67500	Non-Capital Equip Purchase - Computers	€ 2,257
68500	Non-Capital Equip Purchase - Other	€ 17
69000	Hire (Ext) - Plant/Transport/Machinery & Equipment	€ 88
69200	Repairs & Maint - Plant	€ 106
69260	Repairs & Maint - Other Equip	€ 1,594
69400	Transfers from Machinery Yard	€ 7,542
69600	Other Vehicle Expenses	€ -
70000	Materials	€ 1,484
70990	Issues from Stores	€ 184
70991	Returns to Stores	-€ 17
71000	Insurance	€ 323
73400	Staff Travelling & Subsistence Expenses	€ 3,041
76000	Communication Expenses	€ 601
77100	Courier	€ 30
77200	Security - Property	€ 760
78000	Training	€ -
79900	Consultancy/Professional Fees and Expenses	€ -
81000	Printing & Office Consumables	€ -
82100	Statutory Contributions to Other Bodies	€ 8,483
85100	Rates & Other LA Charges	€ 1,665
86000	Energy / Utilities	€ 4,664
	Total	€ 232,030

b) Statement of Costs for Recycling Operations at Killarney (Coolcaslagh) Facility, 2016

Statement of Costs for Recycling Operations - Killarney, Coolcashlagh 2016			
Accelem	Account Element		Total €
60030	Wages	€	25,428
60040	Salaries	€	12,890
60100	ER PRSI	€	5,446
60200	Overtime	€	14,385
60400	Sick Pay	€	134
60500	Annual Leave	€	3,191
60510	Bank Holiday Leave	€	609
60600	Travel/Subsistence	€	3,096
61990	Other Allowances	€	1,032
65500	Minor Contracts- Trade Services & other works	€	7,748
66500	Non-Capital Equip Purchase - Fire Services	€	3
69200	Repairs & Maint - Plant	€	303
69260	Repairs & Maint - Other Equip	€	4
69400	Transfers from Machinery Yard	€	-
70000	Materials	€	1,988
70990	Issues from Stores	€	4,375
73400	Staff Travelling & Subsistence Expenses	€	2,648
76000	Communication Expenses	€	520
77100	Courier	€	-
77200	Security - Property	€	69
78000	Training	€	-
80000	Advertising	€	-
82100	Statutory Contributions to Other Bodies	€	-
85100	Rates & Other LA Charges	€	88
86000	Energy / Utilities	€	136
	Total	€	84,093

15.0 **Killarney *(Coolcaslagh)* Waste Transfer Station:**
Management & Staffing Structure at the facility – as at December 2016.



16.0 Programme of Public Information

The following files are available for inspection on site by members of the public:

- AER of previous reporting years;
- All correspondence with the Agency;
- Surface Water Monitoring Results;
- Incident/Complaints Register;
- Tonnage of waste accepted on site;
- Characterisation of waste accepted on site;
- Operational Procedure Manual;
- Waste Acceptance Procedure;
- Information on Recycling Initiatives e.g. leaflets;
- Environmental Management System.

Appendix I - Waste Collected at Coolcaslagh Transfer Station and Recovered / Recycled offsite during reporting period.

Coolcaslagh Transfer Station Residual Waste - Tonnage Period 01/01/16 to 31/12/16

	Levied Waste					Non Levied Waste					Totals		
	Public Waste												
Month	Public Household & Commercial	* Non Weighed Waste Inclusive of Tickets	Account Holders Vat Inclusive	KCC - Levied Waste	Total Levied Waste	KCC Roadsweeping & Streetcleaning	KCC Clean Ups / F'tipping	Clean Ups/ F'tipping Charged to Env - Invs Raised to Environment	Graveyard Waste	Total Non - levied	Total of Waste Over Weighbridge	Total Waste Out of Facility - Including Ticket Waste	No. Loads Out of TS
January 2016	44.58	89.66	3.04	0.00	137.28	0	0	4.5	0	4.5	52.12	141.78	11
January 2015	44.42	52.4	3.28	0.42	100.52	0	0	3.86	1.24	5.10	53.22	105.62	8
February 2016	41.3	84.12	5.82	0	131.24	0	0	2.16	1.3	3.46	50.58	134.70	11
February 2015	42.02	54.94	4.20	0.22	101.38	0	0	1.12	0	1.12	47.56	102.50	8
March 2016	47.92	78.08	2.78	0.04	128.82	16.32	0	3.68	1.1	21.1	71.84	149.92	11
March 2015	44.34	78.26	3.24	0.58	126.42	0	0.04	2.84	1.5	4.38	52.54	130.80	10
April 2016	52.14	58.7	5.3	0	116.14	0	0	4.56	1.36	5.92	63.36	122.06	10
April 2015	49.88	59.7	3.52	2.1	115.20	0	0.26	6.92	1.16	8.34	63.84	123.54	11
May 2016	55.1	72.26	2.66	0	130.02	0	0	1.86	2.34	4.2	61.96	134.22	10
May 2015	45.48	53.78	2.78	0	102.04	0	0	7.6	1.5	9.1	57.36	111.14	9
June 2016	71.58	49.28	3.2	0.82	124.88	0	0	2.5	3.18	5.68	81.28	130.56	10
June 2015	45.5	91.84	4	0	141.34	0	0	2.66	1.98	4.64	54.14	145.98	12
July 2016	68.76	50.78	3.1	0	122.64	0	0	2.7	1.24	3.94	75.80	126.58	11
July 2015	52.30	64.54	5.52	1.84	124.20	0.00	0.00	3.68	2.92	6.60	66.26	130.80	12
August 2016	73.96	68.56	4.32	0	146.84	0	0	2.76	1.3	4.06	82.34	150.90	13
August 2015	53.42	71.44	4.86	0.32	130.04	0.5	0	2.52	0	3.02	61.62	133.06	11
September 2016	53.66	61.36	3.36	0.14	118.52	0	0	1.82	1.14	2.96	60.12	121.48	10
September 2015	37.24	79.04	4.42	0	120.70	0	0	4.9	1.14	6.04	47.70	126.74	11
October 2016	47.82	44.5	1.5	0	93.82	0	0	1.58	0	1.58	50.90	95.40	8
October 2015	47.08	50.56	3.1	0.08	100.82	0	0	3.5	0	3.5	53.76	104.32	9
November 2016	43.7	73.94	4.68	0	122.32	0	3.42	1.76	1	6.18	54.56	128.50	10
November 2015	39.38	74.18	2.02	0	115.58	0	0	3.14	1.82	4.96	46.36	120.54	10
December 2016	46.12	38.68	1.8	0.22	86.82	0	0.28	2.5	1.88	4.66	52.80	91.48	7
December 2015	45.98	55.16	3.66	0	104.80	0	0	3.94	1.6	5.54	55.18	110.34	9
Total Tonnage 2016	646.64	769.92	41.56	1.22	1459.34	16.32	3.70	32.38	15.84	68.24	757.66	1527.58	122
Total Tonnage 2015	547.04	785.84	44.60	5.56	1383.04	0.50	0.30	46.68	14.86	62.34	659.54	1445.38	120

KCC Levied Waste: Killarney Municipal District 0.22
Environment Non Levied: Bottle Banks 0.16, Litter Warden North 0.02, Litter Warden South 0.46,Coolcaslagh Clean Up 1.7, Public Precleared (Barraduff and Lissivigeen) 0.16
KCC Clean Ups/Fly tipping: Castleisland Area Office (Fly tipping): 0.28,
Account Holders : Rentokill 0.12, Killarney National Park 0.86, St. Vincent De Paul 0.66, Forest Oaks 0.16

Household Waste Deposited at Cuncarlagh Civic Amenity Site in 2016														
Material type	Suggested EWC code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Mixed residual waste (Trans Waste out of facility)	200301	141.78	134.70	149.92	122.06	134.22	130.56	126.58	150.90	121.48	95.40	128.50	91.48	1,527.58
Organic waste (food and garden)														0.00
food (compost waste Millhouse TS)	200108													0.00
garden	200201													0.00
Mixed dry recyclables (Ecurance Bags)	150106	2.18	1.92	0.00	2.28	1.82	1.82	0.00	1.94	2.12	0.00	2.52	0.00	16.60
Cardboard, newspaper and other paper														0.00
cardboard packaging	150101	13.10	6.38	6.280	7.42	6.24	7.50	6.68	12.28	7.44	5.30	6.52	3.86	35.00
cardboard non-packaging	200101													0.00
paper packaging	150101													0.00
paper non-packaging	200101													0.00
newspaper and magazines	200101	12.10	11.70	14.08	10.76	10.72	15.38	13.84	11.58	13.46	10.56	9.36	13.68	147.82
Glass														0.00
glass packaging (bottles)	150107	9.3500	8.3510	6.9800	7.2070	8.7590	8.3460	8.1630	9.8740	6.8840	6.7770	8.5400	6.9340	96.1710
glass non-packaging (flat glass)	200102													0.0000
Metals														0.0000
aluminium cans (packaging)	150104	0.3000	0.3220	0.2500	0.2560	0.2730	0.2950	0.2410	0.3570	0.2190	0.1970	0.2330	0.2410	3.1840
steel cans (packaging)	150104	0.9150	1.2440	0.9440	1.0130	1.4100	0.9830	1.0030	1.2290	0.8420	0.8950	1.0700	1.0770	12.6250
other metals (scrap metals)	200140	5.66	5.40	7.46	6.32	6.18	7.00	4.82	9.80	5.34	4.68	6.10	6.48	76.44
Plastic														0.00
plastic packaging (bottles)	150102	6.74	5.80	7.54	6.32	7.26	5.92	4.86	5.48	6.10	3.86	3.56	4.86	68.30
plastic non-packaging	200139													0.00
polystyrene														0.00
Composite packaging (e.g. tetrapaks)	150105													0.00
Textiles														0.00
textiles, packaging	150109													0.00
textiles, non-packaging (clothes)	200111	0.00	0.32	0.22	0.00	0.22	0.24	0.22	0.16	0.38	0.00	0.42	0.00	2.18
Wood														0.00
wood packaging	150103													0.00
wood non-packaging	200138													0.00
mixed, uncontaminated wood packaging and non-packaging (collected at An Daingean)	150103; 200138													0.00
wood, treated, hazardous	200137*													0.00
Batteries														0.00
lead acid batteries and accumulators (Car	160601*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ni-Cd batteries and accumulators	160602*	0.651	0.000	0.000	0.627	0.000	0.000	0.582	0.000	0.000	0.000	0.000	0.570	2.430
Other (e.g. alkaline) batteries and accumulators (Small Batteries)	160604													0.000 0.00
Household Hazardous Waste														
Waste mineral oils (Engine Oil)	130208	1.638	0.00	0.000	0.00	0.00	0.99	0.00	0.000	0.00	0.00	0.00	0.00	2.628
Oil filters (vehicles)	130899	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oil containers (mineral oil) - plastic + metal	130899	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Waste cooking or vegetable oils	200125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.20
Waste paint and varnish (including containers)	200127	0.00	0.48	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.80	0.00	0.00	1.90
Aerosols	1406 01	0.00	0.04	0.00	0.00	0.00	0.10	0.16	0.00	0.00	0.24	0.00	0.00	0.54
WEEE collected by compliance schemes	WEEE Ireland and													0.00
CRT	20 01 36	3.404	3.859	2.245	2.292	3.694	3.236	2.184	2.114	2.258	1.924	2.881	3.204	33.295
SDA - Small Domestic Appliances	20 01 36	3.673	4.906	3.512	3.962	5.879	4.010	1.952	3.570	3.276	3.118	4.016	3.516	45.390
LDA - Large Domestic Appliances	20 01 36	3.134	0.000	6.420	0.000	11.070	0.000	6.300	0.000	7.420	0.000	5.817	0.000	46.161
Cold	20 01 36	3.596	0.000	3.326	0.000	1.380	0.000	3.959	0.000	3.055	0.000	3.240	0.000	18.156
														0.00
														0.00
WEEE taken off-site by charities (e.g. mobile phones)	200135													0.00
Foul Water from Septic Tank Cuncarlagh C	200304	32.06	22.92	56.22	34.46	23.34	0.00	21.38	0.00	31.58	43.72	11.32	48.60	452.80
Flourscent Tubes	200111	0.00	0.00	0.00	0.14		0.06							0.194
<other category not included above>	<enter EWC code>													
<other category not included above>	<enter EWC code>													
Total Recycling less Mixed Municipal Waste & Foul Water		72.441	50.722	59.857	63.66	64.905	55.925	55.59	58.384	59.394	38.351	55.077	50.422	670.264

Appendix II - Results of Foul and Surface Water Monitoring.

Kerry County Council - All Laboratory Results Report (Environment)

Please note that in accordance with Quality assurance procedures some of this data may be provisional and may be subject to further revision. This data is not validated until issued in report form signed by Senior Executive Chemist or another approved signatory

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Product	Product Version	Project	SAMPLING POINT	Sampling Point	SP EPA Code	X-Coordinate	Y-Cordinate	Consumer	Sample No.	COA Link	Sampled Date	Sampled Time	Sampled By	Sample Type	Test List	Comments	Sample Status	Certificate of Authorisation
GRD_WATER	1	Coolcaslagh	COOLCASLAGH_BH1	Coolcaslagh BH1					2016/1159	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1159_v2.pdf	12-Apr-16	11:30	DB	LANDFILL	131_TRANSFER_BH		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1159_v2.pdf
				Coolcaslagh BH1					2016/1161QA	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1161QA_v2.pdf	12-Apr-16	11:30	DB	LANDFILL	131_TRANSFER_BH		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1161QA_v2.pdf
			COOLCASLAGH_BH4	Coolcaslagh BH4					2016/3033	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3033_v2.pdf	27-Sep-16	15:55	TS	LANDFILL	130_NKL_GRD_ANNUAL		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3033_v2.pdf
				Coolcaslagh BH4					2016/3034QA	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3034QA_v2.pdf	27-Sep-16	15:58	TS	LANDFILL	130_NKL_GRD_ANNUAL		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3034QA_v2.pdf
			COOLCASLAGH_BH5	Coolcaslagh BH5					2016/1160	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1160_v2.pdf	12-Apr-16	11:10	DB	LANDFILL	131_TRANSFER_BH		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1160_v2.pdf
LEACHATE	1	Coolcaslagh	COOLCASLAGH_L2	Coolcaslagh L2					2016/2857	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-2857_v2.pdf	08-Sep-16	14:15	DB	LANDFILL	130_NKL_LEC_ANNUAL		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-2857_v2.pdf
SURF_WATER	1	Coolcaslagh	COOLCASLAGH_SW1A	Coolcaslagh Sw1A (New Site)					2016/0097	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0097_v1.pdf	14-Jan-16	12:35	TS	LANDFILL	130_NKL_SURF_QUART		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0097_v1.pdf
				Coolcaslagh Sw1A (New Site)					2016/1163	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1163_v1.pdf	12-Apr-16	11:00	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1163_v1.pdf
				Coolcaslagh Sw1A (New Site)					2016/2851	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2851_v1.pdf	08-Sep-16	13:20	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2851_v1.pdf
				Coolcaslagh Sw1A (New Site)					2016/2858QA	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2858QA_v1.pdf	08-Sep-16	13:20	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2858QA_v1.pdf
				Coolcaslagh Sw1A (New Site)					2016/3156	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3156_v1.pdf	05-Oct-16	11:30	TOS	LANDFILL	131_TRANSFER_ST_SURF	No SW 1 Sign: Good Flow	Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3156_v1.pdf
			COOLCASLAGH_SW3A	Coolcaslagh Sw3A					2016/0098	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0098_v1.pdf	14-Jan-16	12:50	TS	LANDFILL	130_NKL_SURF_QUART		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0098_v1.pdf
				Coolcaslagh Sw3A					2016/1164	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1164_v1.pdf	12-Apr-16	12:10	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1164_v1.pdf
				Coolcaslagh Sw3A					2016/2852	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2852_v1.pdf	08-Sep-16	13:35	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2852_v1.pdf
				Coolcaslagh Sw3A					2016/3157	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3157_v1.pdf	05-Oct-16	12:15	TOS	LANDFILL	131_TRANSFER_ST_SURF	Good Flow	Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3157_v1.pdf
			COOLCASLAGH_SW6	Coolcaslagh Sw6					2016/0101	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0101_v1.pdf	14-Jan-16	11:50	TS	LANDFILL	130_NKL_SURF_QUART		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0101_v1.pdf
				Coolcaslagh Sw6					2016/1167	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1167_v1.pdf	12-Apr-16	10:45	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1167_v1.pdf
				Coolcaslagh Sw6					2016/2855	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2855_v1.pdf	08-Sep-16	13:05	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2855_v1.pdf
				Coolcaslagh Sw6					2016/3160	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3160_v1.pdf	05-Oct-16	11:15	TOS	LANDFILL	131_TRANSFER_ST_SURF	Good Flow	Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3160_v1.pdf
WAST_WATER	5	Coolcaslagh	COOLCASLAGH_FE1	Coolcaslagh FE1					2016/0103	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-0103_v3.pdf	14-Jan-16	12:20	TS	LANDFILL	131_TRANSFER_ST_FOUL		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-0103_v3.pdf
				Coolcaslagh FE1					2016/1169	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-1169_v2.pdf	12-Apr-16	11:50	DB	LANDFILL	131_TRANSFER_ST_FOUL		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-1169_v2.pdf
				Coolcaslagh FE1					2016/3162	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3162_v1.pdf	05-Oct-16	13:00	TOS	LANDFILL	131_TRANSFER_ST_FOUL		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3162_v1.pdf

Analysis	001_COLOUR	002_TURBIDITY	003_ODOUR	005A_TEMP_FIELD	006_PH		007A_CONDUCTIVITY20C	011_TOTAL_HARDNESS	013C_BOD	014_COD	015_TOC	016_FLUORIDE_ISE	022K_AMMONIA		025_PHOSPHATE_SRP	027_FOG	028K_CHLORIDE	028K_SULPHATE	031_SOLIDS_WW	033K_TON	036_DO_MG_L
Parameter	Colour	Turbidity	Odour	Temperature	pH		Conductivity	Total Hardness	B.O.D.	C.O.D.	TOC	Fluoride	Ammonia		Phosphorus (MRP)	Total OFG	Chloride	Sulphate	Total Solids	TON	Dissolved Oxygen
Reported Name																					
Min. Value						6.0								0.0							
Max Value						9.0								0.0							
Units	HAZEN	NTU	NONE	DEG_C	PH	PH	USCM	MGCACO3L	BOD	MGL	MGL	MGL_F	MGLN	MGLN	MGL	MGL	MGL	MGL	MGL	MGLN	MGL
2016/1159			Not Detected	10.2	4.9		88	26.0			2.2		<0.05		0.01		19.8	5.1	74	<0.5	4.7
2016/1161QA			Not Detected	10.2	4.9		89	29.0			2.2		<0.05		0.01		19.8	5.5	70	<0.5	4.7
2016/3033	162	83.00	Normal	13.2	6.7		261	73.0			<1.0	0.1	<0.05		<0.005		39.3	16.0		<0.5	8.3
2016/3034QA	194	137.00	Normal	13.2	6.6		255	77.0			<1.0	0.1	<0.05		<0.005		36.2	13.5		<0.5	8.3
2016/1160			Not Detected	10.7	6.6		249	106.0			2.2		<0.05		0.01		24.7	15.7	162	<0.5	8.5
2016/2857			Leachate	16.0	6.5		944		2125	5790	886.9		42.69		0.50		36.3	<5		<0.5	
2016/0097				4.5		6.9	82		1.4	40				0.17			15.4				11.7
2016/1163			Not Detected	9.2		5.0	105		<1.3	17				<0.05			17.9				10.4
2016/2851				14.7		7.1	125		<1.3	29				<0.05			17.5				9.3
2016/2858QA				14.7		7.2	125		<1.3	33				<0.05			17.3				9.3
2016/3156				12.5		7.1	108		<1.3	37				<0.05			16.6				9.8
2016/0098				4.6		6.8	87		1.3	34				0.06			15.5				11.8
2016/1164			Not Detected	9.5		6.8	115		<1.3	32				<0.05			18.2				10.1
2016/2852				14.7		7.0	131		<1.3	27				<0.05			17.8				8.8
2016/3157				12.5		7.0	111		<1.3	39				<0.05			17.2				9.9
2016/0101				4.9		7.0	91		<1.3	38				0.06			15.5				12.1
2016/1167			Not Detected	8.3		7.3	115		<1.3	18				<0.05			18.3				10.8
2016/2855				14.7		7.5	148		<1.3	22				<0.05			17.8				9.5
2016/3160				12.5		7.2	115		<1.3	43				<0.05			17.7				10.4
2016/0103			Oily	6.6	6.2		298		151	391			5.30			9.0					
2016/1169			Not Detected	12.5	6.5		407		163	278			7.12			<5.0					
2016/3162			Oily		6.8				121	572			4.06			20.0					

Analysis	037_SUSPENDED_SOLIDS	052_TOTAL_NITROGEN	057_SOLIDS_TOTAL_DISS	065_ALKANITY_TOTAL	082_VIS_INSPECTION	290E_COLI_ECOLI_LARGE		ICP_HG_HG	ICP_MS_HM													ICP_MS_MIN			
Parameter	Suspended Solids	Total Nitrogen	Total Dissolved Solids (180°C)	Alkalinity	Visual Inspection	Coliforms	E. coli	Hg	As	B	Ba	Cd	Cr	Cu	Fe	Mn	Ni	Pb	Sb	Se	Zn	Ca	K	Mg	Na
Units	MGL	MGLN	MGL	MGCACO3L	NONE	MPN_100ML	MPN_100ML	UGL	UGL	MGL	MGL	UGL	UGL	MGL	UGL	UGL	UGL	UGL	UGL	UGL	UGL	MGL	MGL	MGL	MGL
2016/1159	4			7	Clear			<0.2	<1	0.005	0.010	<1	<1	0.004	97	52.9	<10	<1	<0.5	1.1	8	3.1	0.5	1.8	10.6
2016/1161QA	4			6	Clear			<0.2	<1	0.005	0.010	<1	<1	0.003	109	54.1	<10	<1	<0.5	1.1	9	3.2	0.5	1.8	10.6
2016/3033			147	72	Sl. coloured				1.0	0.009	0.064	<1	2.6	0.006	1676	174.5	<10	1.5	<0.5	1.1	7	22.7	1.0	4.3	27.8
2016/3034QA			146	73	Sl. coloured			<0.2	<1	0.008	0.057	<1	2.0	0.003	1413	181.6	<10	1.1	<0.5	1.1	4	22.8	1.0	4.2	26.3
2016/1160	4			89	Clear			<0.2	<1	0.008	0.011	<1	<1	0.003	41	22.8	<10	<1	<0.5	<1	13	36.7	0.8	2.4	14.1
2016/2857	182390	264.19	322		Black				17.1	0.129	0.121	<1	6.1	0.016	55482	1078.5	<10	11.9	0.6	1.7	278	59.2	29.6	10.4	53.7
2016/0097	4																								
2016/1163	1				Clear																				
2016/2851	3																								
2016/2858QA	11																								
2016/3156	<1					>2420	147																		
2016/0098	<1																								
2016/1164	<1				Clear																				
2016/2852	2																								
2016/3157	16					>2420	613																		
2016/0101	2																								
2016/1167	<1				Clear																				
2016/2855	3																								
2016/3160	3					>2420	548																		
2016/0103	30				Brownish/Dirty																				
2016/1169	45				Clear																				
2016/3162	99																								

Irish National Accreditation Board

Accreditation Certificate

Kerry County Council

Áras an Chontae, Rathass, Tralee, Co. Kerry

Testing Laboratory

Registration number: **340T**

is accredited by the Irish National Accreditation Board (INAB) to undertake testing as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard **ISO/IEC 17025:2005 2nd Edition**

"General Requirements for the Competence of Testing and Calibration Laboratories"

(This Certificate must be read in conjunction with the Annexed Schedule of Accreditation)

Date of award of accreditation: **08:12:2015**

Date of last renewal of accreditation: **n/a**

Expiry date of this certificate of accreditation: **08:12:2020**

This Accreditation shall remain in force until further notice subject to continuing compliance with INAB accreditation criteria, ISO/IEC 17025 and any further requirements specified by the Irish National Accreditation Board.

Manager: _____ **Chairperson:** _____

Dr Adrienne Duff Mr Tom O'Neill

Issued on 08 December 2015

Organisations are subject to annual surveillance and are re-assessed every five years. The renewal date on this Certificate confirms the latest date of renewal of accreditation. To confirm the validity of this Certificate, please contact the Irish National Accreditation Board.

INAB is a signatory of the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement, for Testing.

The Metropolitan Building, James Joyce Street, Dublin 1, Ireland Tel 1890 289 389 E-mail inab@inab.ie Web inab@inab.ie

Schedule of Accreditation

(Annex to Accreditation Certificate)

Permanent Laboratory:

Category A

KERRY COUNTY COUNCIL LABORATORY

Chemical and BiologicaL Testing Laboratory

Initial Registration Date :	**08-December-2015**
Postal Address:	Áras an Chontae,
(Address of other locations	Rathass,
as they apply)	Tralee,
	Co. Kerry.
Telephone:	+353 (66) 7183592
Fax:	+353 (66) 7161819
E-mail:	dlenihan@kerrycoco.ie
Contact Name:	David Lenihan
Facilities:	Normally not available for Public testing

Schedule of Accreditation

Permanent Laboratory:
Category A

THE IRISH NATIONAL ACCREDITATION BOARD (INAB) is the Irish body for the accreditation of organisations including laboratories.

Laboratory accreditation is available to testing and calibration facilities operated by manufacturing organisations, government departments, educational institutions and commercial testing/calibration services. Indeed, any organisation involved in testing, measurement or calibration in any area of technology can seek accreditation for the work it is undertaking.

Each accredited laboratory has been assessed by skilled specialist assessors and found to meet criteria which are in compliance with ISO/IEC 17025 or ISO/IEC 15189 (medical laboratories). Frequent audits, together with periodic inter-laboratory test programmes, ensure that these standards of operation are maintained.

Testing and Calibration Categories:

Category A: Permanent laboratory calibration and testing where the laboratory is erected on a fixed location for a period expected to be greater than three years.

Category B: Site calibration and testing that is performed by staff sent out on site by a permanent laboratory that is accredited by the Irish National Accreditation Board.

Category C: Site calibration and testing that is performed in a site/mobile laboratory or by staff sent out by such a laboratory, the operation of which is the responsibility of a permanent laboratory accredited by the Irish National Accreditation Board.

Category D: Site calibration and testing that is performed on site by individuals and organisations that do not have a permanent calibration/testing laboratory. Testing may be performed using

(a) portable test equipment

(b) a site laboratory

(c) a mobile laboratory or

(d) equipment from a mobile or site laboratory

Standard Specification or Test Procedure Used:

The standard specification or test procedure that is accredited is the issue that is current on the date of the most recent visit, unless otherwise stated.

Glossary of Terms

Facilities:

Public calibration/testing service:	Commercial operations which actively seek work from others.
Conditionally available for public calibration/testing:	Established for another primary purpose but, more commonly than not, is available for outside work.
Normally not available for public calibration/testing:	Unavailable for public calibration/testing more often than not.

Laboratory users wishing to obtain assurance that calibration or test results are reliable and carried out to the Irish National Accreditation Board criteria should insist on receiving an accredited calibration certificate or test report. Users should contact the laboratory directly to ensure that this scope of accreditation is current. INAB will, on request, verify the status and scope.

Scope of Accreditation

Kerry County Council Laboratory

Permanent Laboratory:

Category A

Chemical Testing Laboratory

INAB Classification number (P9) Materials/products tested		Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766	**Waters**		Documented in-house methods based on AQKM based on HMSO-1981
.01	Waters for potable and domestic purposes	Ammonia 0.05-1 mg/L as N	541-P-004
		Chloride 5-80 mg/L Cl	541-P-006
.99	Other waters - surface waters	Total Oxidised Nitrogen 0.5-10 mg/L as N	541-P-016
		Sulphate 5-100 mg/L SO4	541-P-024
		Nitrite 0.05 - 1 mg/L as N	541-P-018
		pH 4-10	Documented in-house method based on Standard Methods for the Examination of Water and Wastewater 22nd Edition 2012 4500-H 541-P-020
		Conductivity 15-2500 µS/cm	Documented in-house method based on Standard Methods for the Examination of Water and Wastewater 22nd Edition 2012 2510-B 541-P-011

Scope of Accreditation

Kerry County Council Laboratory

Chemical Testing Laboratory

Permanent Laboratory:

Category A

INAB Classification number (P9) Materials/products tested		Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766	**Waters**		
.01	Waters for potable and domestic purposes	Turbidity by nephlometric method 0.25-10 NTU	Documented in-house method based on Standard Methods for the Examination of Water and Wastewater 22nd Edition 2012 2130-B 541-P-029
		Fluoride by Ion Selective Electrode 0.1-2. mg/L F	Documented in-house method based on Standard Methods for the Examination of Water and Wastewater 22nd Edition 2012 4500-F 541-P-012
.01	Waters for potable and domestic purposes	Colour 5-100 Hazen units	Hach Method 8025 541-P-010
.99	Other waters - surface waters		
		Major Ions by ICP-MS Calcium 1-100mg/L Ca	Documented in-house method based on USEPA Method 200.8 (1999) 541-P-038

Scope of Accreditation

Kerry County Council Laboratory

Permanent Laboratory:

Category A

Chemical Testing Laboratory

INAB Classification number (P9) Materials/products tested		Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766	**Waters**	Metals by ICP-MS	Documented in-house method based on USEPA Method 200.8 (1999) 541-P-030
.01	Waters for potable and domestic purposes	Arsenic 1-500µg/L As Chromium 1-500µg/L Cr Iron 20-1000µg/L Fe	
.99	Other waters - surface waters	Manganese 1-500µg/L Mn Nickel 10-500µg/L Ni Cadmium 1-500µg/L Cd Lead 1-300µg/L Pb Selenium 1-500µg/L Se Copper 0.002-1.0mg/L Cu	

Scope of Accreditation

Kerry County Council Laboratory

Permanent Laboratory:

Category A

Biological Testing Laboratory

INAB Classification number (P9) Materials/products tested		Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
870	**Waters, including effluents**		Documented in-house method based on
.11	Bacteriological condition of potable waters	Enumeration of Coliforms & E.coli by Idexx (Colilert 18) Quanti Tray	MPN by IDEXX Colilert 18 ISO standard 9308-2:2012 541-P-031

Appendix III – Results of Dust Monitoring.

ANALYSIS REPORT

CUSTOMER:	**KERRY COUNTY COUNCIL COOLCASLAGH TRANSFER STATION**	**SAMPLE TYPE:**	**BERGERHOFF DEPOSIT GAUGE**
ADDRESS:	-	**CONDITION OF SAMPLE ON RECEIPT:**	Satisfactory
		DATE SAMPLED:	20 September – 18 October 2016
REPORT TO:	**PAUL O CONNOR**	**DATE RECEIVED:**	18 October 2016
SAMPLED BY:	Danny O Leary, Southern Scientific Services Ltd	**DATE ANALYSED:**	20 October – 02 November 2016
SAMPLING PT:	**COOLCASLAGH TRANSFER STATION**	**DATE REPORTED:**	07 November 2016
PROPOSAL REF:	-	**WORK NO:**	**36335 C | 16P-063 |**

TABLE OF RESULTS – DUST ANALYSIS (F)

Method:	**Lab Ref:**	**Your Ref:**	TOTAL PARTICULATES mg /m^2 / day	INORGANICPARTICULATES mg /m^2 / day	**Limit mg/m^2/day** *(Supplied by Customer)*
SCP 039	C16-Oct 972	ST 1	526	245	**350**
SCP 039	C16-Oct 973	ST 2	265	59	**350**
SCP 039	C16-Oct 974	ST 3	114	85	**350**

Dr Conor Murphy
Deputy Chemistry Laboratory Manager

Index to symbols used:

*	Analysis is not INAB accredited.
(F)	Analysis carried out at our Farranfore Laboratory.

- **The results relate only to the items tested.**
- **Opinions and interpretations expressed herein are outside the scope of INAB accreditation.**
- **The analysis report shall not be reproduced except in full without written approval of the laboratory.**
- **Sampling time is outside the scope of this test. This time is used to calculate the results.**

COMMENT

ST 1 – C16-Oct 972

This monitoring point is located at the main entrance to the site which is also adjacent to the entrance of the nearby quarry and therefore is impacted by traffic movements associated with both sites.

The collector gauge contained water and a considerable amount of green particulates and algal growth. The dried dish contained a large amount of grey / brown particulates and algal residue. The ashed dish contained a considerable amount of brown / grey particulates and algal residue. The ashed residue underwent no effervescence on addition of acid indicating the absence of carbonate in the residue.

Appendix IV – Results of Noise Monitoring 2016.

southern scientific services ltd

ENVIRONMENTAL NOISE SURVEY 2016

COOLCASLAGH WASTE TRANSFER STATION

COOLCASLAGH

KILLARNEY

CO. KERRY

W0072-01

Requested By:	P. O' Connor Kerry County Council
Prepared By:	Sinead Fagan Southern Scientific Services Ltd
Date Reported:	27th January 2017
Our Reference:	15P 150

Issue Date	Revision	Checked By	Comment
27/01/17	00	P. Byrne (B.Sc; Ph.D) Cert. Env. Noise (IOA)	Final report

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email: info@southernscientificireland.com

Registered in Ireland No. 323196 VAT Reg. No. IE 6343196 M

Table of Contents

1. Introduction

Southern Scientific Services Ltd was commissioned by Kerry County Council to conduct a daytime environmental noise survey at Coolcaslagh Waste Transfer Station, Coolcaslagh, Killarney, Co. Kerry. The waste transfer station is located approximately 5km east of Killarney town in a rural setting. The site is bounded by a mixture of agricultural land, forestry and a quarry.

Noise monitoring is prescribed in Schedule E.2 of the EPA Waste Licence (W0072-01) for the site and requires annual noise monitoring to be undertaken at site boundary locations and noise sensitive locations. Schedule F.2 of the licence stipulates a daytime noise limit of 55dB(A) at the monitoring locations, measured over a 30 minute period. This noise survey was undertaken to fulfill and assess compliance with these licence conditions. As the facility is closed at night-time, and there are no sources of noise from within the site when closed, a night-time noise survey was not undertaken.

2. Site Location and Activities

The Waste Transfer Station is located at Coolcaslagh, Killarney, Co. Kerry. The facility operates between 08:30 – 17:00 on Monday – Friday, and between 08:30 – 13:00 on Saturdays. Sources of noise within the site include machinery, vehicle movements, loading and unloading activities, and recycling activities. The facility is closed at night-time and there are no sources of noise from within the site during this period.

3. Survey Details and Methodology

3.1 Survey Details

The noise surveys were undertaken on the 1st of March, 10th of June, and 26th of August 2016 to assess the noise levels at predetermined locations (N1, N3, N4, N5, N6) provided by Kerry County Council. The monitoring locations are described in Table 1 and illustrated in Figure 1. A thirty-minute survey was conducted at each location.

Table 1: Noise Monitoring Stations

I.D.	Location
N1	North boundary at entrance to facility
N3	Boundary location at rear of Transfer Station
N4	Boundary location adjacent to sand quarry
N5	North east of transfer station adjacent to industrial estate
N6	Noise sensitive location north west of transfer station

Figure 1: Map showing monitoring locations N1 – N6

3.2 Equipment

Instrument: Brüel & Kjaer (Type 2250-L with Type 4950 microphone).
Instrument Serial No: 2654679
Instrument Last Calibrated: 16/11/2015
This instrument conforms to the following standards:
IEC 61672-1, Class 1
IEC 61260 1/3 Oct. Band Class 0
IEC 60651, Type 1
IEC 60804, Type 1
Sound Calibrator: Brüel & Kjaer Type 4231
Sound Calibrator Serial No.: 3001116
Sound Calibrator Calibration Date: 09/11/2015
Utility Software: BZ – 5298 Version 4.5

3.3 Monitoring Methodology

Noise monitoring was carried out in accordance with:

- International Standard ISO 1996 – Acoustics – Description, measurement and assessment of environmental noise
- Guidance Note for Noise (NG 4) – EPA, 2016

Briefly, these standards recommend calibration of instruments before and after the survey (this was undertaken on-site using the Bruel & Kjaer Type 4231 acoustic calibrator detailed above); measurement at least 3.5m from any reflecting structure (other than the ground) and 1.2m - 1.5m above ground level. The microphone was fitted with a windshield (Brüel & Kjaer Type UA-0237). Tonal analysis was undertaken following Annex D of ISO 1996 (Part 2), 2007. In this method, a prominent discrete tone is identified as present when the sound pressure level in the one-third-octave band of interest exceeds the sound pressure levels of both adjacent one-third-octave bands as follows:

1. 15 dB in the low frequency one-third-octave bands (25Hz – 125Hz)
2. 8dB in the middle frequency bands (160Hz – 400Hz)
3. 5dB in the high frequency bands (500Hz – 10, 000Hz)

3.4 Measurement Parameters/Terminology

A-weighted:	The adjustment applied to sound level recordings to approximate the non-linear frequency response of the human ear. The A-weighting is denoted by the suffix A in the parameters listed below such as L_{Aeq}, L_{A10}.
Decibel (dB):	The scale in which sound pressure level is expressed, which is based on a logarithmic scale.
Impulsive Noise:	A noise that is of short duration (typically less than one second), the sound pressure level of which is significantly higher than the background.
Tonal Noise:	Noise caused by the dominance of one or more frequencies which may result in increased noise nuisance.
Interval:	The time period, t, over which noise monitoring is carried out.

$L_{Aeq\ t}$: The equivalent continuous sound level during a measurement interval, effectively representing the average A-weighted noise level.

L_{AF10}: The A-weighted sound level with Fast time weighting (F) which is exceeded for 10% of the measurement interval, usually used to quantify traffic noise.

L_{AF90}: The A-weighted sound level with Fast time weighting (F) which is exceeded for 90% of the measurement interval, usually used to quantify background noise.

1/3 Octave Band Analysis: Frequency Analysis of sound such that the frequency spectrum is subdivided into bands of one-third of an octave each. An octave is taken to be a frequency interval, the upper limit of which is twice the lower limit.

4. Results

Results are presented in Sections 4.1 – 4.6 below.

4.1 Environmental Conditions on March 1st 2016

Cloud Cover	Precipitation	Wind Direction	Av. wind speed @2m	Av. temperature	Atmospheric Pressure
95%	0mm	W	0.5 – 4.5m/s	9ºC	981hPa

4.2 Environmental Conditions on June 10th 2016

Cloud Cover	Precipitation	Wind Direction	Av. wind speed @2m	Av. temperature	Atmospheric Pressure
100%	0mm	SSW	0.0 – 0.5m/s	17ºC	993hPa

4.3 Environmental Conditions on August 26th 2016

Cloud Cover	Precipitation	Wind Direction	Av. wind speed @2m	Av. temperature	Atmospheric Pressure
50%	0mm	SW	0.0 – 3.0m/s	19ºC	1013hPa

4.4 Noise Survey Results on March 1st 2016

I.D.	Time	$L_{Aeq\ (30\ mins)}$ dB	$L_{AF10\ (30\ mins)}$ dB	$L_{AF90\ (30\ mins)}$ dB
N1	10:54 – 11:24	57.7	58.0	47.0
Noise Sources: Site and road traffic was the dominant noise source at this monitoring location. A count of local road traffic included 2No. Cars; 1No. 4x4 and 4No. Vans. A count of site traffic included 8No. Cars; 1No. Van and 1No. Car & Trailer entering the site and 8No. Cars exiting the site. Quarry traffic included 4No. Trucks entering and 3 No. Trucks exiting. Occasionally the compressor could be heard as well as recycling activity. Warning sirens, rustling vegetation and quarry traffic could be heard. Car radios and the gate banging against the fence were also noted.				
N3	09:38 – 10:08	50.8	53.4	44.5
Noise Sources: Customers, internal site traffic, rubbish crashing out of trailers were sources of noise noted at this monitoring location. Activity at the quarry included traffic and warning sirens, 4No. Trucks were active in the quarry. Birdsong, rustling vegetation, and crows were heard in the background. Local road traffic was also a source of noise and included 2No. Cars & Trailers; 2No. Vans and 2No. Cars. Radios from stopped cars with open doors were also a source of noise, as well as traffic activity within industrial units.				
N4	10:13 – 10:43	50.3	54.0	42.0
Noise Sources: Site traffic at the recycling centre was noted at this location. Quarry traffic included 7No. Trucks. Warning sirens could also be heard. Activity in the recycling centre of bottles breaking, metal dropping and car radios were heard. Birdsong could be heard in the background. Crows noted also. Paper and plastic blowing around the site and local road traffic were also a source of noise at this location.				
N5	13:53 – 14:23	58.3	59.8	46.6
Noise Sources: Local road traffic, quarry traffic and on site traffic were all sources of noise at this monitoring location. Forklifts rattling up the road were also noted. Opening of roller shutters and warning sirens could be heard. People chatting and walking past were heard. Loading trucks and crows were audible at this location also. Industrial estate traffic included 1No. Truck; 2No. Vans; 2No. Forklifts and 2No. Cars. Transfer station traffic included 14No. Cars and 4No. Vans. Local road traffic included 11No. Cars; 12No. Quarry Trucks; 1No. Truck; 1No. Car & Trailer; 1 No. Tractor; 2No. 4x4s and 5No. Vans.				
N6	12:03 – 12:33	64.0	58.6	54.9
Noise Sources: Running water was constant and the most dominant noise source at this monitoring location. Quarry activity of warning sirens and internal site traffic could be heard also. Birdsong, a breeze through the woodland and the occasional dog barking were rural sounds noted during the survey. A survey of local road traffic included 14No. Cars; 3No. Vans; 7No. Trucks; 1No. Car and trailer and 3No. 4x4s.				

4.5 Noise Survey Results on June 10th 2016

I.D.	Time	$L_{Aeq\ (30\ mins)}$ dB	$L_{AF10\ (30\ mins)}$ dB	$L_{AF90\ (30\ mins)}$ dB
N1	10:12 – 10:42	58.1	60.8	37.0
Noise Sources: Site and road traffic was the dominant noise source at this monitoring location. A survey of local road traffic included 9No. Cars; 2No. 4x4s; 1No. Truck and 1No. Van. A survey of site traffic included 8No. Cars; 2No. Vans and 1No. 4x4 entering the site and 7No. Cars; 1No. Van and 3No. 4x4s exiting the site. Quarry traffic included 7No. Trucks and 1No. 4x4 entering and 6No. Trucks and 1No. 4x4 exiting. Warning sirens and metals dropping could be heard from the industrial estate. Birdsong, recycling activity, customers shouting, engines idling and doors banging could all be heard in the background. Local road traffic and quarry traffic also provided a source of noise at this monitoring location.				
N3	09:06 – 09:36	44.6	46.5	36.4
Noise Sources: Hammering, banging of metal and warning sirens from the adjacent industrial site were a source of noise at this monitoring location. Within the facility the cardboard compressor could be heard occasionally, as well as noise from recycling activity. Local road traffic, quarry traffic and birdsong could all be heard in the background. Internal site traffic, the skip compressor, rubbish being dumped into metal skips, glass breaking and car radios were additional sources of noise noted at this monitoring location. 8No. Cars and 1No. Van passed the monitor at this location. Quarry traffic included 5No. Trucks.				
N4	09:38 – 10:08	48.9	50.6	37.8
Noise Sources: Noise from the quarry was clear at this monitoring location and included warning sirens, 7No. Trucks, excavations and hammering. Facility traffic was the dominant noise source at this location. Recycling activity of glass breaking, waste thrown into the skip and occasionally the compressor were also audible. Birdsong and local road traffic could be heard in the background. A survey of facility traffic included 1No. Van; 17No. Cars; 2No. Trucks and 2No. 4x4s.				
N5	10:48 – 11:18	59.2	58.4	44.4
Noise Sources: Activity within the industrial estate was especially loud at this monitoring location and was the most dominant source of noise. Warning sirens and forklifts at work moving steel, loading/unloading and dropping steel. Local road traffic, quarry traffic and transfer station traffic were also sources of noise at this location. Birdsong could be heard in the background. Industrial estate traffic included 4No. Trucks; 1No. Van; 2No. 4x4s and 4No. Cars. Transfer station traffic included 13No. Cars and 8No. Vans. Local road traffic included 7No. Cars; 4No. Trucks; 3No. 4x4s; 2No. Vans and 3No. Pedestrians. Quarry traffic consisted of 7No. Trucks.				
N6	11:24 – 11:54	64.7	60.1	42.6
Noise Sources: Road traffic was the most dominant source of noise at this monitoring location. During lulls in traffic, birdsong, the river, and a low hum from possibly a generator could be heard. 2No. Airplanes passed overhead at 11:31 and 11:49. No sound from the waste facility could be determined at this location. A survey of road traffic included 24No. Cars; 8No. Vans; 9No. Trucks and 5No. 4x4s.				

4.6 Noise Survey Results on August 26th 2016

I.D.	Time	L_{Aeq} (30 mins) dB	L_{AF10} (30 mins) dB	L_{AF90} (30 mins) dB
N1	14:43 – 15:13	56.1	58.6	39.9
Noise Sources: Site traffic was the dominant noise source at this monitoring location. Local road traffic and quarry traffic also provided a source of noise at this monitoring location. A survey of local road traffic included 9No. Cars; 4No. 4x4s; 5No. Trucks and 4No. Vans. A survey of site traffic included 4No. Cars; 1No. Vans and 2No. 4x4s entering the site and 8No. Cars; 2No. Vans and 1No. 4x4 exiting the site. Quarry traffic included 4No. Trucks and 1No. Van entering and 6No. Trucks exiting. Warning sirens and metals dropping could be heard from the industrial estate. Birdsong, recycling activity, customers shouting, engines idling and doors banging could all be heard in the background.				
N3	13:35 – 14:05	60.2	59.9	45.1
Noise Sources: Hammering, banging of metal and warning sirens from the adjacent industrial site were a source of noise at this monitoring location. Within the facility the cardboard compressor could be heard occasionally, as well as noise from recycling activity. Local road traffic, quarry traffic and birdsong could all be heard in the background. Internal site traffic, the skip compressor, rubbish being dumped into metal skips, glass breaking and car radios were additional sources of noise noted at this monitoring location. 6No. Cars; 3No. 4x4s; 2No. Diggers and 5No. Vans passed the monitor at this location. Quarry traffic included 5No. Trucks.				
N4	14:07 – 14:41	56.9	58.4	42.1
Noise Sources: Facility traffic was the dominant noise source at this location. Noise from the quarry was also clear at this monitoring location and included warning sirens, 9No. Trucks, excavations and hammering. Recycling activity of glass breaking, waste thrown into the skip and occasionally the compressor were also audible. Birdsong and local road traffic could be heard in the background. A survey of facility traffic included 3No. Vans; 12No. Cars and 3No. 4x4s.				
N5	15:16 – 15:46	55.8	56.4	41.8
Noise Sources: Industrial estate activity the most dominant noise source at this location. Metal hammering, warning sirens, forklifts at work moving steel, loading/unloading and dropping steel. Industrial estate traffic included 1No. Truck; 3No. Van and 4No. Cars. Transfer station traffic included 12No. Cars and 1No. 4x4. Local road traffic included 14No. Cars; 1No. Truck; 1No. 4x4; 5No. Vans and 1No. Bicycle. Quarry traffic consisted of 11No. Trucks and 1No. Van.				
N6	15:48 – 16:18	64.8	58.9	48.1
Noise Sources: Road traffic was the most dominant source of noise at this monitoring location. During lulls in traffic, birdsong, the river, and a low hum from possibly a generator could be heard. No sound from the facility could be determined at this location. A survey of road traffic included 7No. Cars; 8No. Vans; 9No. Trucks and 7No. 4x4s.				

5. Discussion & Conclusion

The L_{AF10} & L_{AF90} noise parameters along with the audible noise sources recorded during the survey assist in providing an understanding of the sources and nature of the noise in the area. The L_{A10} is the A-weighted sound level, which is exceeded for 10% of the measurement interval and is usually used to quantify traffic noise or other short duration/passing events. In contrast, the L_{A90} is the A-weighted sound level that is exceeded for 90% of the measurement interval and is usually used to quantify background noise. The L_{Aeq} is the equivalent continuous sound level during a measurement interval, effectively representing the average A-weighted noise level. The site Waste Licence specifies a day-time limit of 55dB (A) $L_{Aeq\ (30\ min)}$ at the monitoring locations. A night-time survey was not undertaken as the transfer station does not operate during night-time hours and there is no source of noise within the site during this period.

The noise survey results demonstrate that the 55dB (A) $L_{Aeq\ (30\ min)}$ limit was consistently not achieved at three of the five monitoring locations (N1, N5 & N6). The elevated noise levels at N1 are primarily attributable to traffic movements which include public road traffic, traffic entering and exiting the adjacent quarry, and traffic entering and exiting the waste transfer station itself. Similarly, noise levels at N5 are significantly influenced by traffic movements on the public road, traffic entering and exiting the industrial estate, and traffic entering and exiting the waste transfer site. Activities within the industrial estate were also noted as sources of noise at this location. At N6 noise from the waste transfer station was not audible. Background noise at this location was influenced by flowing water in the adjacent river. Again traffic movements on the public road impacted on the noise levels detected at this location (L_{A10} ranged from 59-60 dB (A)). The elevated noise levels on site are mainly attributable to intermittent noise sources such as vehicles entering and exiting the site, on site machinery and plant, and customers depositing waste materials in receptacles (bottles most notable). The elevated noise level measured at N6 was attributable to flowing water in the nearby river, and this location was further impacted by traffic on the local road. With the exception of the survey on August 26th the noise results at both site boundary locations (N3 & N4) were within the 55 dB (A) limit. The elevated results on August 26th were due to a combination of on-site and off-site noise sources on the day. 1/3 Octave Frequency Spectra show that there was no prominent tonal noise present when assessed following the criteria in Annex D of ISO 1996 (Part 2), 2007. It is concluded that while the noise limit of 55db (A) is not being achieved at all the monitoring locations, activities at the waste transfer station are not adversely impacting on the noise environment at the nearest noise sensitive location (N6) where monitoring took place. The waste transfer station does not generate noise at night-time when the facility is closed.

Appendix 1

1/3 Octave Frequency Spectra

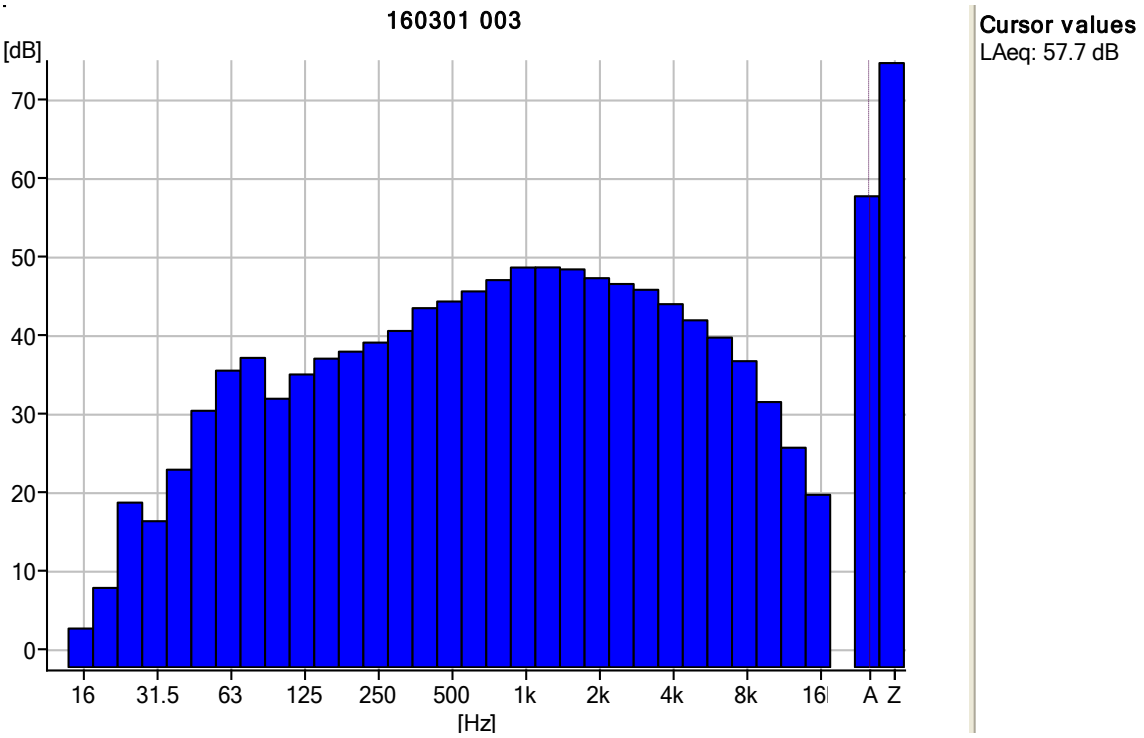

Figure A.1: 1/3 Octave Frequency Graph for N 1 on March 1st

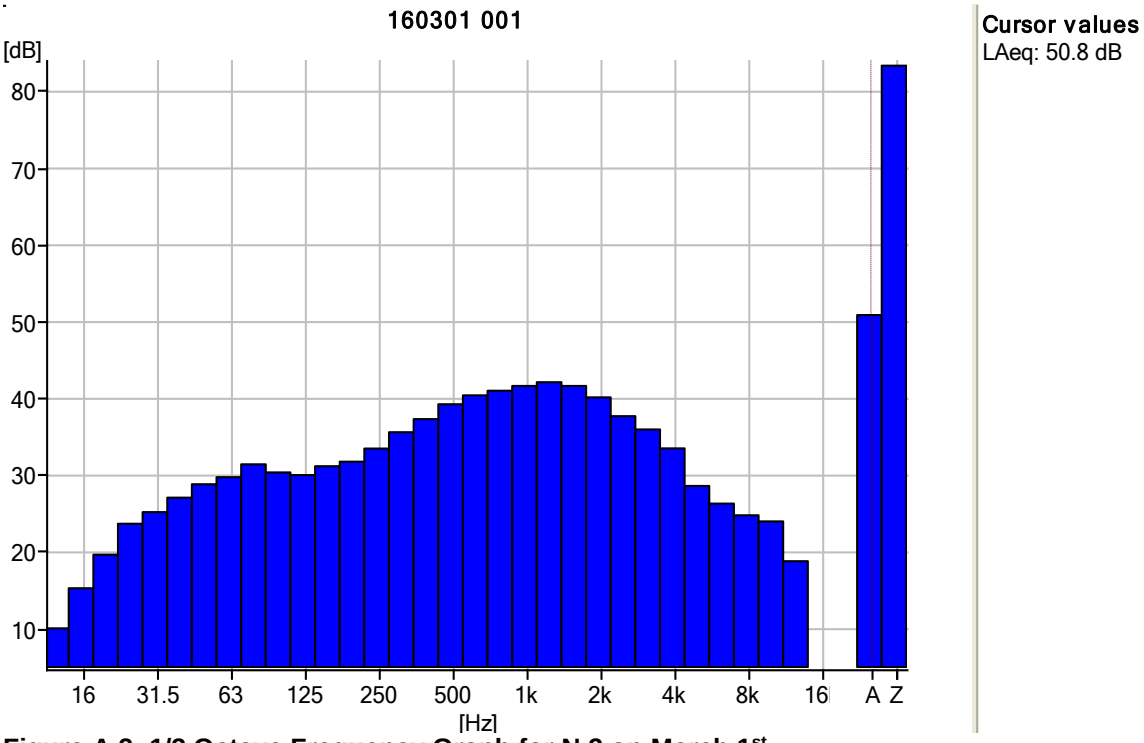

Figure A.2: 1/3 Octave Frequency Graph for N 3 on March 1st

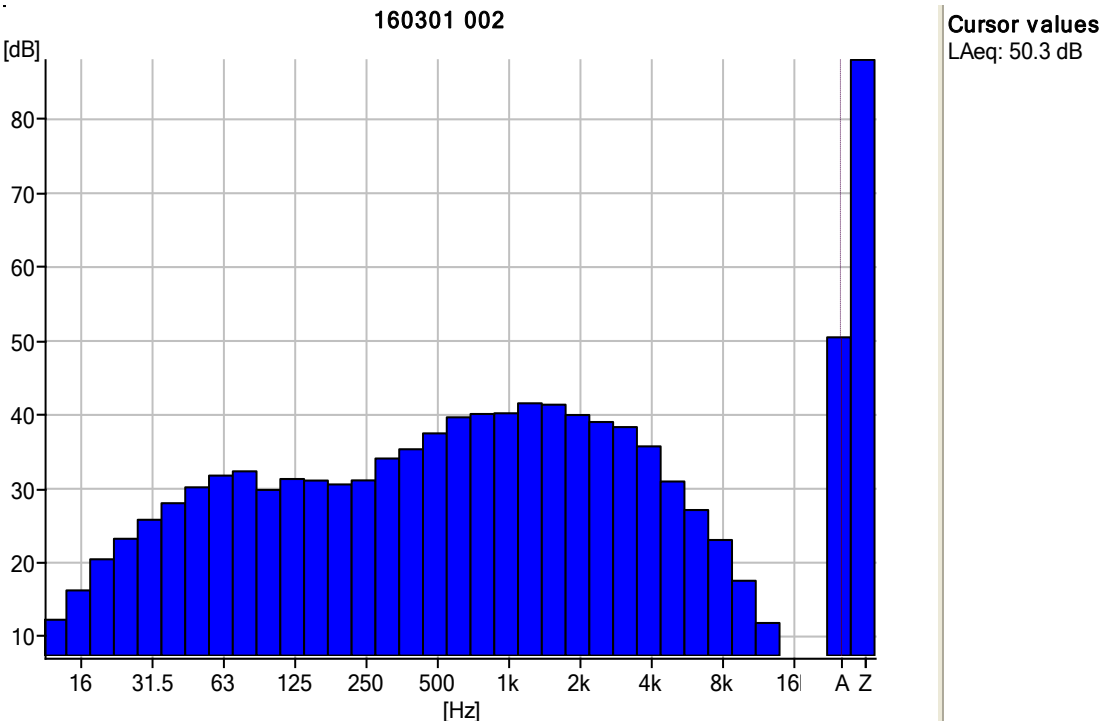

Figure A.3: 1/3 Octave Frequency Graph for N 4 on March 1st

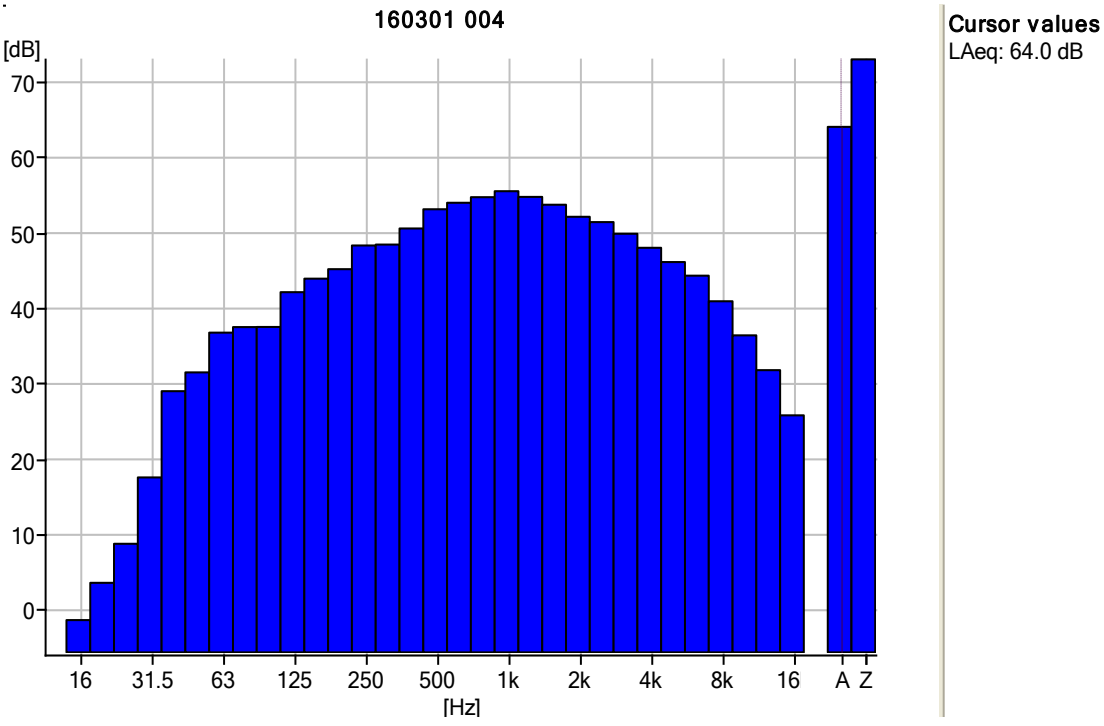

Figure A.4: 1/3 Octave Frequency Graph for N 5 on March 1st

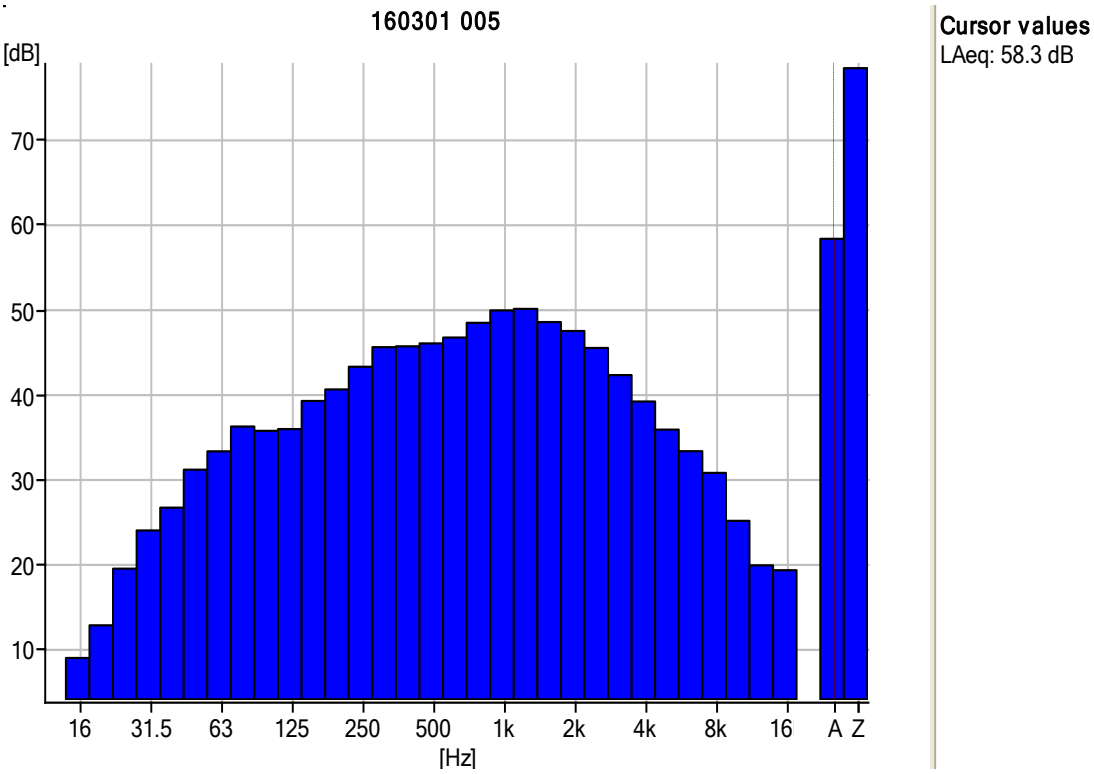

Figure A.2: 1/3 Octave Frequency Graph for N 6 on March 1st

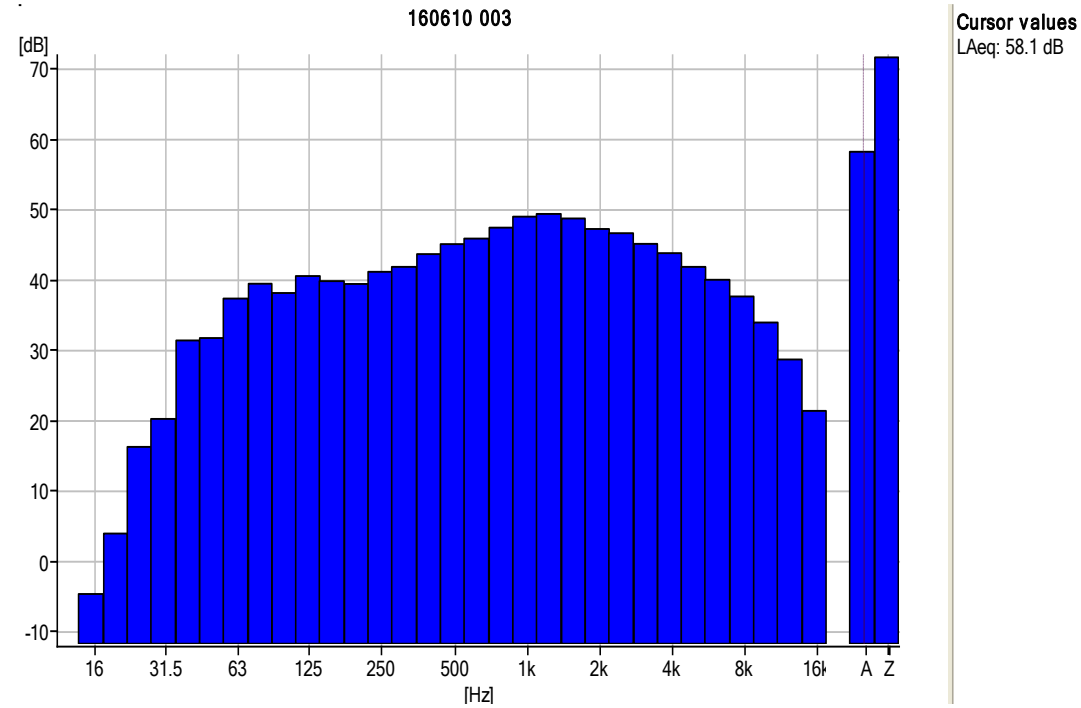

Figure A.1: 1/3 Octave Frequency Graph for N 1 on 10th June

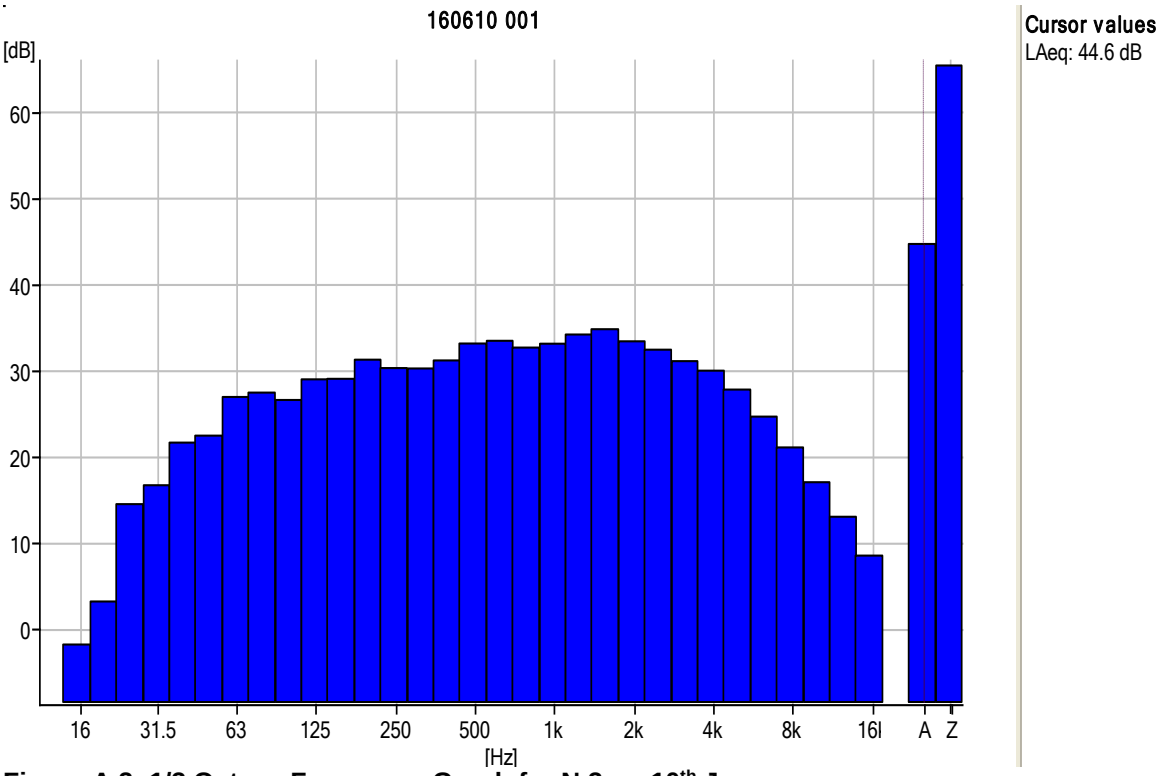

Figure A.2: 1/3 Octave Frequency Graph for N 3 on 10th June

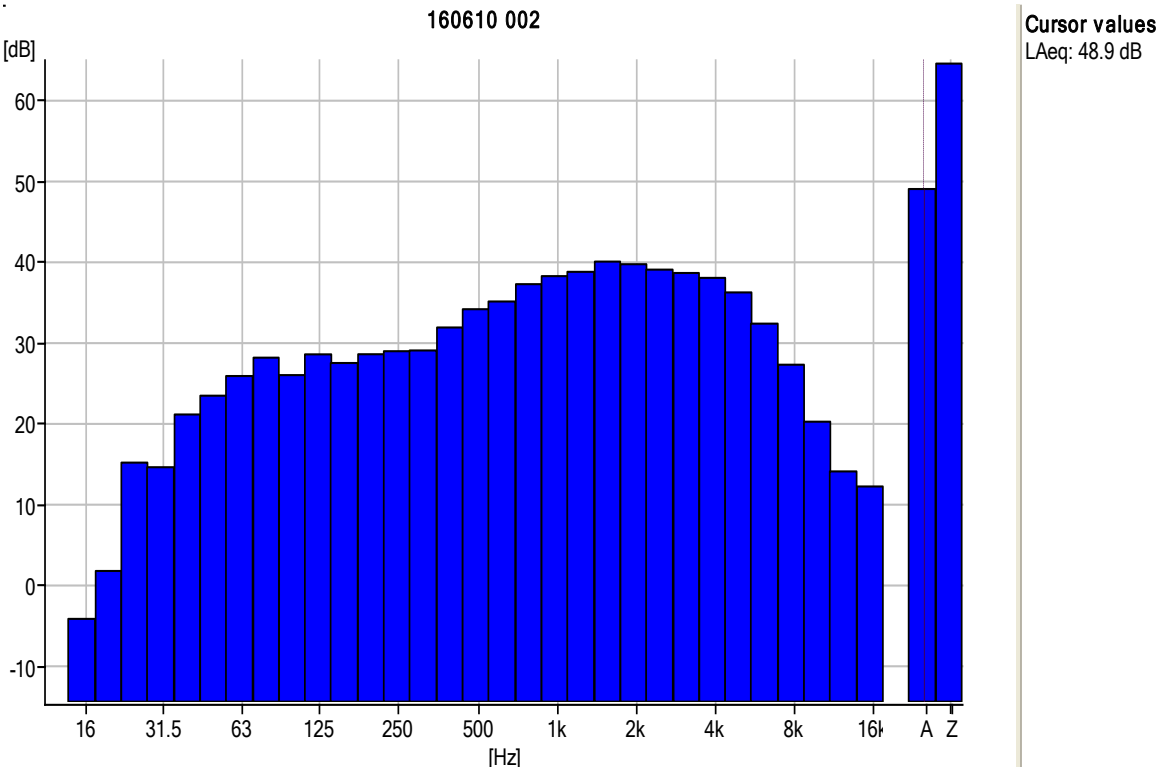

Figure A.3: 1/3 Octave Frequency Graph for N 4 on 10th June

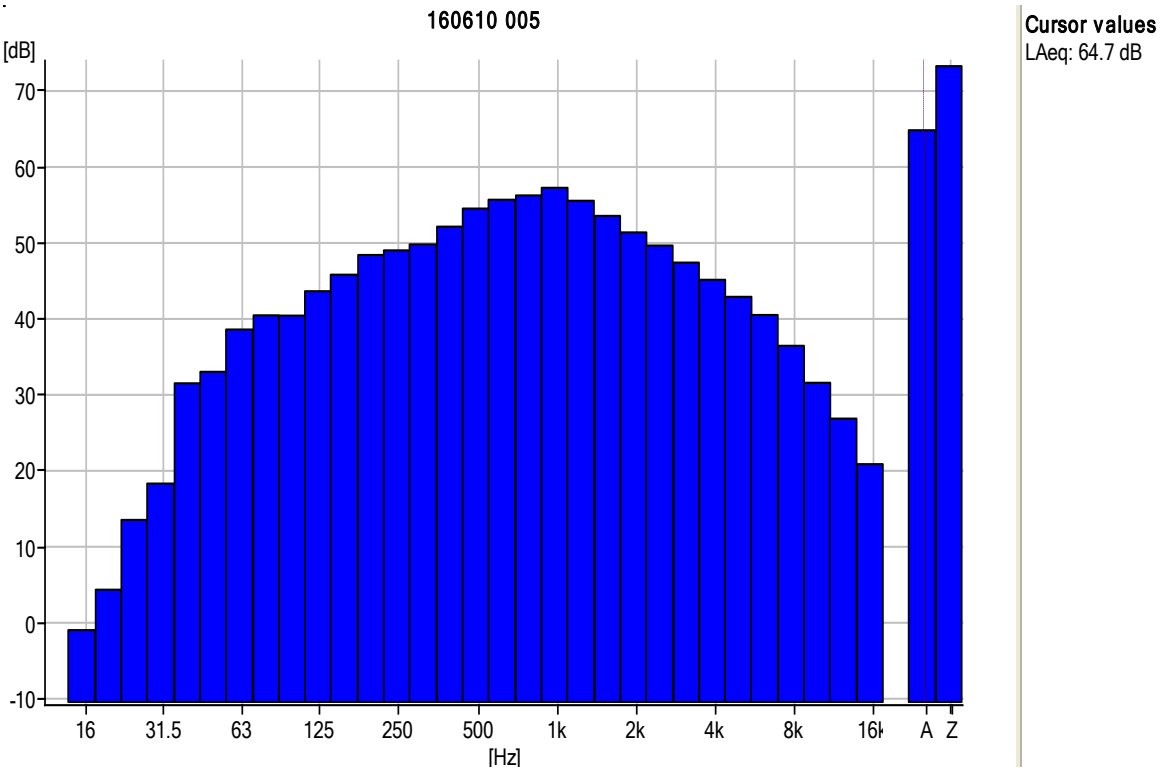

Figure A.4: 1/3 Octave Frequency Graph for N 5 on 10th June

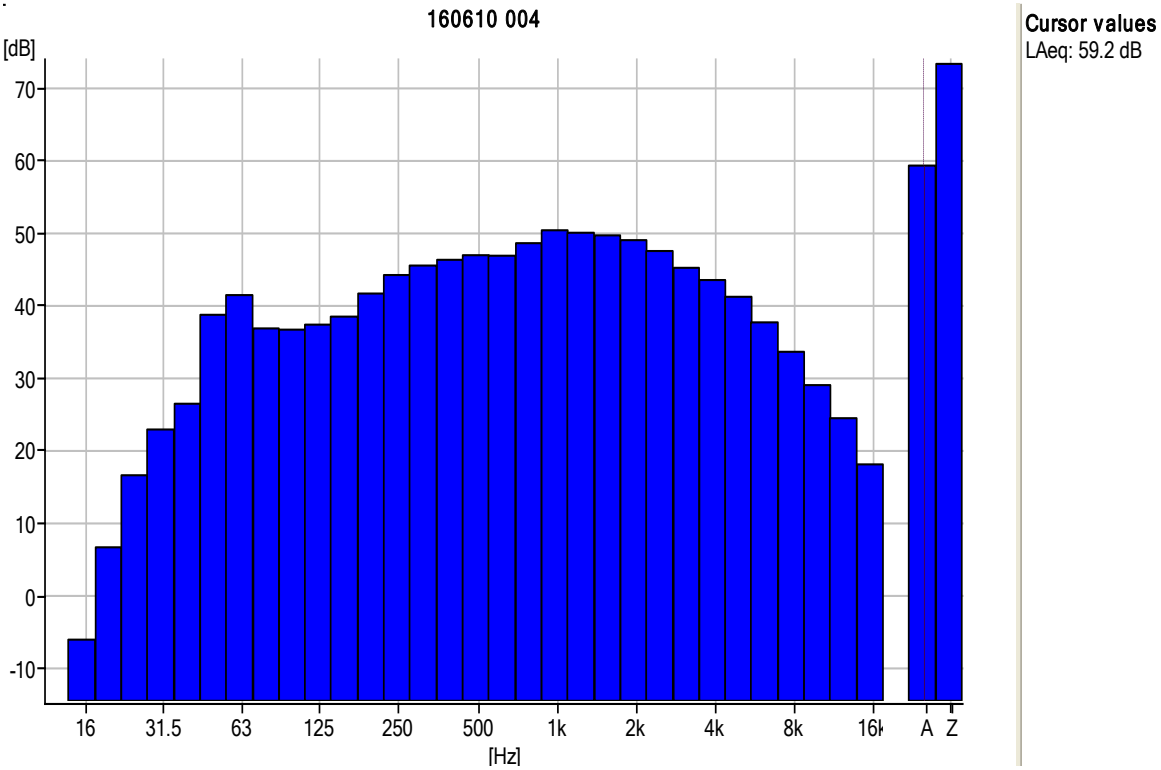

Figure A.2: 1/3 Octave Frequency Graph for N 6 on 10th June

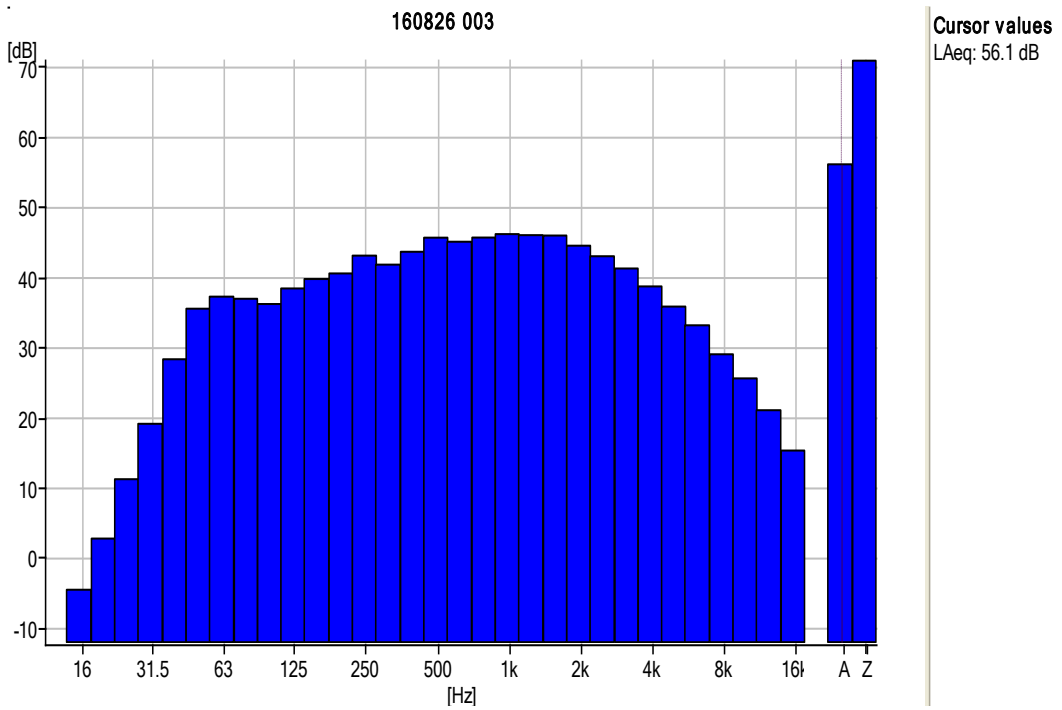

Figure A.1: 1/3 Octave Frequency Graph for N 1 on August 26th

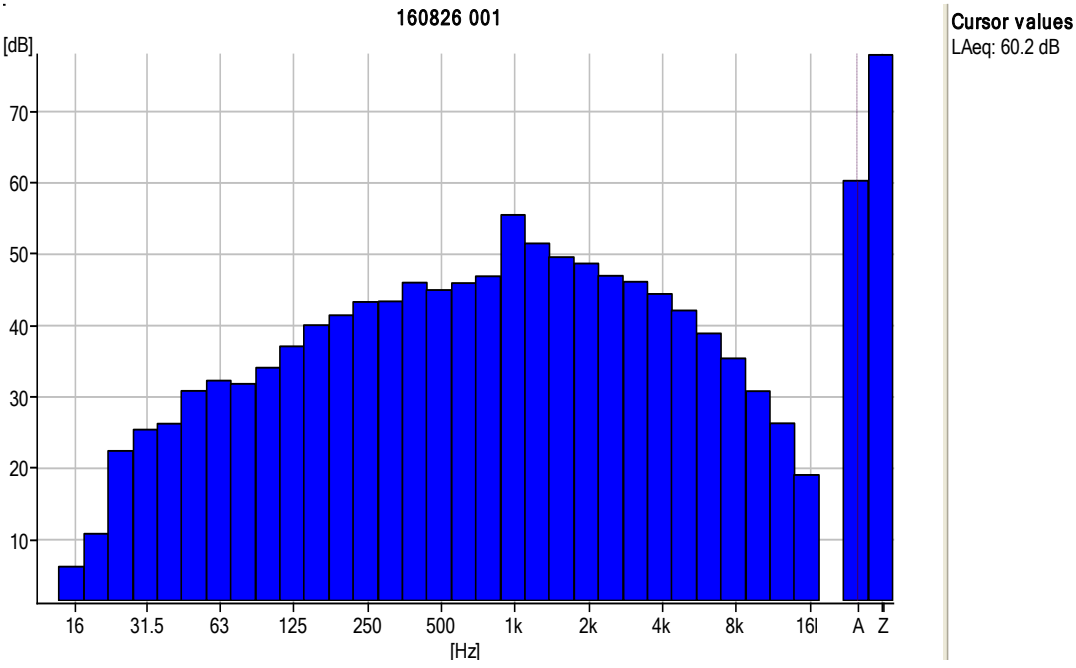

Figure A.2: 1/3 Octave Frequency Graph for N 3 on August 26th

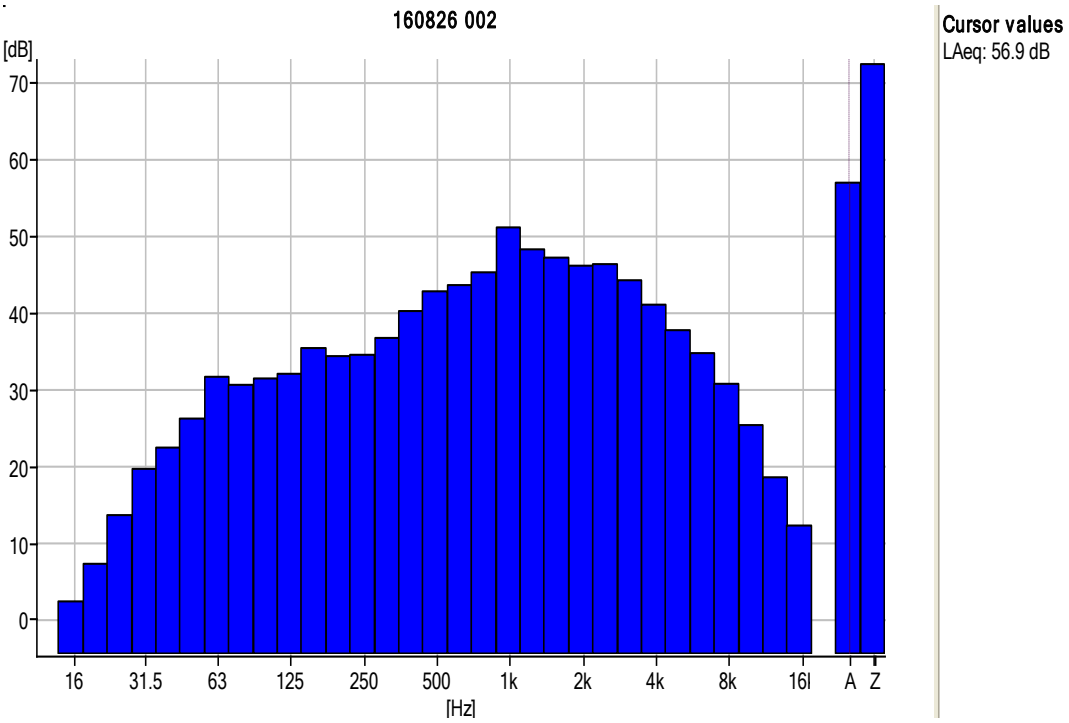

Figure A.3: 1/3 Octave Frequency Graph for N 4 on August 26th

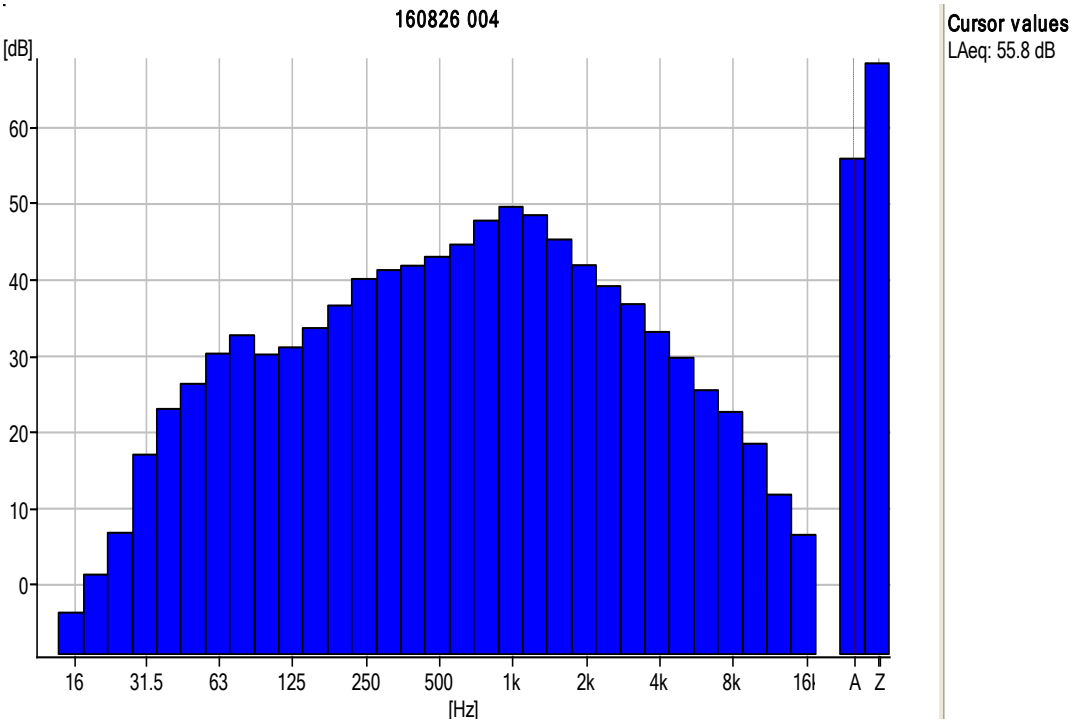

Figure A.4: 1/3 Octave Frequency Graph for N 5 on August 26th

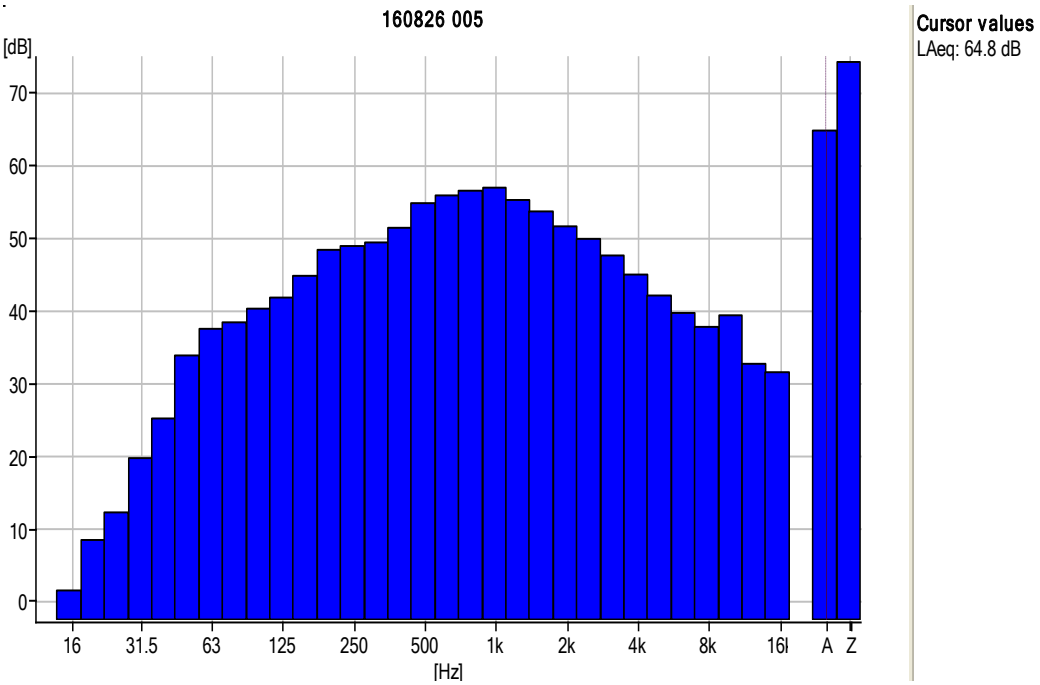

Figure A.2: 1/3 Octave Frequency Graph for N 6 on August 26th

Appendix 2

Calibration Certificates

Brüel & Kjær

The Calibration Laboratory
Skodsborgvej 307, DK-2850 Nærum, Denmark

ilac-MRA DANAK CAL Reg.No. 307 Member of EA MLA

CERTIFICATE OF CALIBRATION

No: CDK1508295 Page 1 of 10

CALIBRATION OF

Sound Level Meter:	Brüel & Kjær Type 2250 Light	No: 2654679	Id: -
Microphone:	Brüel & Kjær Type 4950	No: 2652929	
Preamplifier:	Brüel & Kjær Type ZC-0032	No: 23415	
Supplied Calibrator:	Brüel & Kjær Type 4231	No: 3006120	
Software version:	BZ7130 Version 2.4	Pattern Approval:	PTB1.63-4061063
Instruction manual:	BE1853-11		

CUSTOMER

Southern Scientific Services Ltd
Dunrine
, Killarney
Kerry, Ireland

CALIBRATION CONDITIONS

Preconditioning: 4 hours at 23°C ± 3°C

Environment conditions: *See actual values in **Environmental conditions** sections.*

SPECIFICATIONS

The Sound Level Meter Brüel & Kjær Type 2250 Light has been calibrated in accordance with the requirements as specified in IEC61672-1:2002 class 1. Procedures from IEC 61672-3:2006 were used to perform the periodic tests. The accreditation assures the traceability to the international units system SI.

PROCEDURE

The measurements have been performed with the assistance of Brüel & Kjær Sound Level Meter Calibration System 3630 with application software type 7763 (version 5.1 - DB: 5.10) by using procedure B&K proc 2250-L-4950 (IEC61672).

RESULTS

Calibration Mode: **Calibration after repair/adjustment.**

The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$ providing a level of confidence of approximately 95 %. The uncertainty evaluation has been carried out in accordance with EA-4/02 from elements originating from the standards, calibration method, effect of environmental conditions and any short time contribution from the device under calibration.

Date of calibration: 2015-11-16

Date of issue: 2015-11-16

Lene Petersen
Calibration Technician

Jonas Johannessen
Approved Signatory

Brüel & Kjær

The Calibration Laboratory
Skodsborgvej 307, DK-2850 Nærum, Denmark

ilac-MRA DANAK
CAL Reg.No. 307
Member of EA MLA

CERTIFICATE OF CALIBRATION

No: CDK1508125 Page 1 of 4

CALIBRATION OF

Calibrator:	Brüel & Kjær Type 4231	No: 3006120 Id: -
½ Inch adaptor:	Brüel & Kjær Type UC-0210	
Pattern Approval:	PTB-1.61-4057176	

CUSTOMER

Southern Scientific Services Ltd
Dunrine
, Killarney
Kerry, Ireland

CALIBRATION CONDITIONS

Preconditioning:	4 hours at 23°C ± 3°C
Environment conditions:	Pressure: 100.57 kPa. Humidity: 44 % RH. Temperature: 22.8 °C.

SPECIFICATIONS

The Calibrator Brüel & Kjær Type 4231 has been calibrated in accordance with the requirements as specified in IEC60942:2003 Annex B Class 1. The accreditation assures the traceability to the international units system SI.

PROCEDURE

The measurements have been performed with the assistance of Brüel & Kjær acoustic calibrator calibration application software Type 7794 (version 2.5) by using procedure P_4231_D07.

RESULTS

Calibration Mode: **Calibration after repair/adjustment.**

The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$ providing a level of confidence of approximately 95 %. The uncertainty evaluation has been carried out in accordance with EA-4/02 from elements originating from the standards, calibration method, effect of environmental conditions and any short time contribution from the device under calibration.

Date of calibration: 2015-11-09

Susanne Nygaard
Calibration Technician

Date of issue: 2015-11-09

Susanne Jørgensen
Approved Signatory

Environmental Protection Agency

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2016

1. FACILITY IDENTIFICATION

Parent Company Name	Kerry County Council
Facility Name	Coolcaslagh Transfer Station
PRTR Identification Number	W0072
Licence Number	W0072-01

Classes of Activity

No.	**class_name**
-	Refer to PRTR class activities below

Address 1	Coolcaslagh
Address 2	Killarney
Address 3	
Address 4	
	Kerry
Country	Ireland
Coordinates of Location	-9.43193 52.0657
River Basin District	IESW
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Alan Kennelly
AER Returns Contact Email Address	alan.kennelly@kerrycoco.ie
AER Returns Contact Position	EE
AER Returns Contact Telephone Number	0667162014
AER Returns Contact Mobile Phone Number	0879088205
AER Returns Contact Fax Number	0667162001
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	3 employees between Milltown & Coolcashlagh WWTW for treatment. 452.80 Tonnes of foul water removed from septic tank & taken to Killarney Waste cooking oil (EWC 20 01 25) - 0.2 Tonnes collected Waste paint & varnish (EWC 20 01 27) - 1.90 tonnes collected Waste aerosols (EWC 14 06 01) - 0.54 tonnes collected
Web Address	www.kerrycoco.ie

2. PRTR CLASS ACTIVITIES

Activity Number	**Activity Name**
5(c)	Installations for the disposal of non-hazardous waste
5(c) 50.1	Installations for the disposal of non-hazardous waste General

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	

This question is only applicable if you are an IPPC or Quarry site

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

RELEASES TO AIR					Please enter all quantities in this section in KGs					
POLLUTANT		METHOD						QUANTITY		
			Method Used							
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
210	**Dust**	M	ALT	Bergerhoff Instruments	384.0	193.0	83.0	660.0	0.0	0.0
					0.0	0.0	0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Coolcaslagh Transfer Station

Please enter summary data on the quantities of methane flared and / or utilised	**T (Total) kg/Year**	**M/C/E**	**Method Used**		**Facility Total Capacity m3 per hour**	
			Method Code	**Designation or Description**		
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	13 02 08	Yes	2.628	other engine, gear and lubricating oils	R1	M	Weighed	Offsite in Ireland	Enva,W0184-1	Clonminam Industrial Estate,.,Portlaoise,County Laois,Ireland	ENVA Ireland,W0184,Clonmainam, Portlaoise,Co Laois,.,Ireland	Clonmainam,Portlaoise,Co Laois,.,Ireland
Within the Country	**15 01 01**	**No**	95.0	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,.,Tralee,County Kerry,Ireland		
Within the Country	15 01 02	No	68.3	plastic packaging	R3	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,.,Tralee,County Kerry,Ireland		
Within the Country	15 01 04	No	15.809	metallic packaging	R4	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,.,Tralee,County Kerry,Ireland		
Within the Country	15 01 06	No	16.6	mixed packaging	R3	M	Weighed	Offsite in Ireland	Killarney Waste Disposal,W0217-01	Aughacureen,.,Killarney ,County Kerry,Ireland		
Within the Country	15 01 07	No	96.171	glass packaging	R5	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,.,Tralee,County Kerry,Ireland		
To Other Countries	16 02 11	Yes	19.156	discarded equipment containing chlorofluorocarbons, HCFC, HFC	R4	M	Weighed	Abroad	Eletrical Waste Management,WFP-DS-11-0014-04	Jordanstown Drive,Greenogue Estate,Rathcoole,Dublin,Ireland	European Metal Recycling ,WML101767,Alexander Dock 1,Boole,Liverpool,L201BX,United Kingdom	Alexander Dock 1,Boole,Liverpool,L201BX,United Kingdom
To Other Countries	16 02 14	No	46.161	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	R4	M	Weighed	Abroad	Eletrical Waste Management,WFP-DS-11-0014-04	Jordanstown Drive,Greenogue Estate,Rathcoole,Dublin,Ireland		
Within the Country	19 07 03	No	452.8	landfill leachate other than those mentioned in 19 07 02	D8	M	Weighed	Offsite in Ireland	Irish Water Killarney WWTP,D0037-01	Ross Road,Killarney,.,.,Ireland		
Within the Country	20 01 01	No	147.82	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,.,Tralee,County Kerry,Ireland		
Within the Country	20 01 11	No	2.18	textiles	R3	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,WPR 014/2	Belgard Road,Tallaght,Dublin,24,Ireland		
To Other Countries	20 01 21	Yes	0.194	fluorescent tubes and other mercury-containing waste	R5	M	Weighed	Abroad	KMK Metals,W0113-01	Cappincur Industrial Estate,.,Tullamore,County Offaly,Ireland	Alba Service GmbH & Co KG,E56657020,Kanalstrasse 64,.,Rheine,48432,Germany	Kanalstrasse 64,.,Rheine,48432,Germany
Within the Country	20 01 34	No	2.43	batteries and accumulators other than those mentioned in 20 01 33	R4	M	Weighed	Offsite in Ireland	Enva,W0184-1	Clonminam Industrial Estate,.,Portlaoise,County Laois,Ireland		
Within the Country	20 01 35	Yes	45.39	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and and 20 01 23 containing hazardous components	R4	M	Weighed	Offsite in Ireland	Eletrical Waste Management,WFP-DS-11-0014-04	Jordanstown Drive,Greenogue Estate,Rathcoole,Dublin,Ireland	The recycling Village,WFP/MH/11/0005/01, Unit 21 Duleek Business Park,Commons,Duleek,County Meath,Ireland	Unit 21 Duleek Business Park,Commons,Duleek,County Meath,Ireland
To Other Countries	20 01 35	Yes	33.295	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and and 20 01 23 containing hazardous components	R4	M	Weighed	Abroad	Eletrical Waste Management,WFP-DS-11-0014-04	Jordanstown Drive,Greenogue Estate,Rathcoole,Dublin,Ireland	European Metal Recycling ,WML101767,Alexander Dock 1,Boole,Liverpool,L201BX,United Kingdom	Alexander Dock 1,Boole,Liverpool,L201BX,United Kingdom
Within the Country	20 01 40	No	76.44	metals	R4	M	Weighed	Offsite in Ireland	United Metals,WFP-LK-2013-147A-R1	Eastway Business Pk,Ballysimon Road,Limerick,.,Ireland		
Within the Country	20 03 01	No	1527.58	mixed municipal waste	R12	M	Weighed	Offsite in Ireland	Killarney Waste Disposal,W0217-01	Aughacureen,.,Killarney ,County Kerry,Ireland		

* Select a row by double-clicking the Description of Waste then click the delete button

Link to previous years waste data
Link to previous years waste summary data & percentage change
Link to Waste Guidance