Kerry County Council

Waste Licence Ref No. W0086-01

Kenmare Transfer Station
Annual Environmental Report

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

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

March 2017

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1.0 Introduction

Kerry County Council operates a waste transfer and recycling facility located in the townland of Claddanure West, approximately 1 km off the main Killarney/Kenmare Road, approximately 4.7 km north west of the town of Kenmare, Co. Kerry. The site is located at the western end of the county road L-7820.

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 Muingnaminane, Tralee.

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 W0086-01 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

Waste disposal activities carried out at Kenmare Transfer Station are in accordance with Part 1 of Waste Licence W0086-01 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 Kenmare Transfer Station are in accordance with Part 1 of Waste Licence W0086-01 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 total waste disposed of at Kenmare Civic Amenity site in 2016 was 837.83 tonnes. This represents an increase of 52.28 tonnes on the 2015 figures as per Table 1.

Waste Category/Source	*2013*	*2014*	*2015*	*2016*
Household Waste	608.50	631.00	595.25	652.39
Commercial Waste	187.02	172.58	176.58	175.24
Road Sweeping	0	0	0	0
Flytipping	21.28	16.38	13.72	10.20
Total Tonnes	**816.80**	**819.96**	**785.55**	**837.83**

Table 1 Waste Stream Break down for reporting Period.

The quantity of waste sent for recycling in 2016 was **382.206 tonnes** which is an increase of 23.826 tonnes from the previous year. Waste sent for recycling during the reporting period compared with previous years is outlined in Table 2.

Waste for Recycling & Recovery	EWC	2012	2013	2014	2015	2016
Metals	20 01 40	32.64	40.56	49.70	55.22	77.18
Steel Cans	15 01 04	2.62	6.29	5.372	6.1840	6.173
Glass (including Commercial Glass)	15 01 07	44.86	64.26	63.653	71.073	69.95
Aluminium	15 01 04	1.10	1.66	1.673	1.8940	1.966
Batteries (lead acid and NiCd)	16 06 02*	0.13	1.63	2.916	2.752	1.329
Newspapers and Magazines	20 01 01	81.18	79.28	88.12	79.20	65.64
Cardboard	15 01 01	11.06	12.26	22.48	23.68	32.86
Fluorescent Tubes	20 01 21	0.14	0.5	0.355	0.369	0.174
Plastic Bottles	15 01 02	32.75	33.20	42.325	37.880	35.56
WEEE	20 01 36	76.22	80.29	71.743	63.071	68.442
Mixed Packaging	20 03 01	5.76	7.64	11.48	14.00	18.10
Waste Mineral Oil	13 02 08	0.10	1.08	0.36	0.89	1.76
Waste paint and varnish (including containers)	20 01 27				1.87	1.23
Textiles	20 01 11	0	0	0.54	0.30	1.26
Waste Cooking or vegetable oil	20 01 27	0.10	0	0.38	0	0.20
Aerosols	14 06 01	0	0	0	0	0.38
Total for Recycling/Recovery	**Tonnes**	**288.56**	**328.65**	**360.72**	**358.38**	**382.204**

Table 2 Waste collected on site and recovered/recycled off site during the reporting period

Appendix I contains: the breakdown of waste by source which is repackaged for disposal off site during the reporting period

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 Kenmare CAS 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 Kenmare (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.

6.0 Summary Report on Emissions for the Reporting Period

a) Foul Water Emissions

A Puraflow Wastewater Treatment Unit is installed at the facility to treat all foul waters from the site including discharges from the transfer station shed, compactor and bin loading area. Foul water is treated in the Puraflow unit and discharged to the surface water drains.

The foul water discharge is monitored quarterly. The results are sent to the EPA and are also available at the Kenmare facility.

b) Surface Water Emissions

Surface water runoff from site roads and uncontaminated surfaces discharges via silt traps to the surface water drains.

7.0 Summary of Results and Interpretations of Environmental Monitoring

a) Dust monitoring

Dust monitoring was undertaken by Southern Scientific Services Ltd took place during 2016.

ST 1 – C16-Oct 975

This monitoring point is located under trees close to the site entrance. The collector gauge contained water and a considerable amount of vegetation, brown particulates and algae residue. The dried dish contained a considerable amount of brown particulates. The ashed dish contained a considerable amount of brown / grey particulates and residue. The ashed residue underwent effervescence on addition of acid indicating the presence of carbonate in the residue.

ST 4 – C16-Oct 978

This monitoring point is located under trees. The collector gauge contained water and some vegetation, and a considerable amount of brown / yellow particulates and algal residue. The dried dish contained a considerable amount of brown particulates and algal residue. The ashed dish contained a considerable amount of brown particulates.

PROPOSED Works: Trim back overgrown trees at sampling location in 2017.

It is Kerry County Council's intension to seek a technical amendment in relation to the dust monitoring requirement of Waste Licence W0086 as past monitoring indicates that the site it not causing excessive dust to the surrounding environs.

The Annual Environmental Dust survey (2016) is attached in Appendix IV.

b) Noise monitoring.

A noise survey to EPA NG4 was undertaken by Southern Scientific Services Ltd in 2016.
The waste transfer station does not generate noise at night-time when the facility is closed.

The noise survey results demonstrate that the 55dB (A) L_{Aeq} (30 min) limit is achieved at the noise sensitive location (B4). At both N2 and N3 the noise level detected was marginally above 55dB (A) during one survey. At both locations this was predominantly associated with traffic, on-site traffic in the case of N2, and public road traffic in the case of N3. The background noise levels (L_{AF90}) at the transfer station boundary locations

(B1, B2, B3) and at the noise sensitive location (B4) are generally typical of a rural area. 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 the noise limit prescribed in the waste licence is being complied with and that activities at the Waste Transfer Station are not adversely impacting on the noise environment at the nearest noise sensitive location.

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 W0086 as past monitoring indicates that the site it not causing excessive noise to the surrounding environs.

The Annual Environmental Noise survey (2016) is attached in Appendix III

c) Monitoring of surface water.

The surface water monitoring results are attached in Appendix II.

d) Bund and Tank Integrity Test

The Bund and tank integrity test was carried out in 2016. The next test is to be carried out 2016.

e) Kerry County Council's Laboratory Reporting

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 laboratory results are provided in Appendix II.

8.0 Resource and Energy Consumption Summary

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

8.1 Diesel

The diesel usage for Kenmare Transfer Station for the reporting period 2016 was 1,797 litres. In 2015 it was 500 litres. The primary usage of diesel is for the rubber tyre excavator on site, waste compactor and the oil burner in the steam washer.

8.2 Electricity

The trends for electricity usage for Kenmare are as follows:

Year	Kenmare average kWh/Day electricity consumption
2016	24.9
2015	17.5
2014	12.5
2013	13.8
2012	13.9

Power is required for the office computer and lighting, weighbridge, waste compactor, storage heating, water pumping, cardboard baler, CCTV, and public lighting on the site.

8.3 Water

Water supply for the recycling centre is from a groundwater well/ borehole. While the borehole is not metered, usage for the facility during the reporting period would be similar to other transfer centres of similar size, approximately was 24 m^3.

The water is mainly used for the office toilet/sinks as well as power washing the yards, transfer station apron/hopper and washing of trucks and bins.

9.0 Report on Development Works Undertaken during the Reporting Period

No development works were undertaken at the facility during the reporting period.

The Kerry County Council Municipal District installed a salt storage facility for winter maintenance.

10.0 Timescale for Proposed Development Works for Forthcoming Year

On the 31st August 2015 the Government introduced a new legislative framework to give effect to previously flagged commitments around the management of household waste by amending the Waste Management Act 1996 through the Environment (Miscellaneous Provisions) Act 2015.An introduction of 'Pay by Weight' charging for *household kerbside waste collections* is to be in place by 1st July 2016 however the introduction of 'Pay by Weight' to the various recycling /civic amenity sites has yet to be enacted.

It is forecasted that the proposed Household Waste regulations will have an impact on the operation and site layout of the Kenmare Recycling & Transfer Station. Once the regulations are brought into statute, it is Kerry County Council's intension to assess the impact of these regulations and adapt the site where necessary to meet the new requirements. The Agency shall be informed of any changes to the site layout etc.

11.0 Environmental Management System

There is an Environmental Management System (EMS) for the Kenmare Recycling centres. However, the proposed Household Waste Regulations once implemented will have an effect on the current EMS .This impact will be assessed and the EMS updated accordingly. The EPA will be notified of any changes to the Environmental Management System.

12.0 Report Targets and Environmental Objectives and Targets for 2017.

Target Area	2017 - 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. Construction/placement of secure sheds on site for the storage of WEEE and bailed cardboard.	No windblown 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.
Incident Prevention	Continue with daily inspection and record keeping of emergency 'STOP' controls on site as well as the 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 reasonably practicable.
Infrastructure integrity and drainage	An Integrity test was completed on the diesel bund in January 2016 and it is Kerry County Council's intension for its Technical staff to carry out the integrity test every 3 years as per Schedule C of Waste Licence W0086-01.	Compliance with Bund and tank integrity assessment.
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 forecasted that the proposed Household Waste Regulations will have an impact on the operation and site layout of the Kenmare Recycling/Waste Transfer Station. Once the regulations are brought into force for the 'recycling/transfer station', it is Kerry County Council's intension to assess their impact and adapt the site where necessary to meet the new requirements.	Household Waste Regulations have yet to be enacted at the various Recycling/transfer centres. We will strive to ensure full compliance with the proposed 'pay by weight' regulations.

13.0 Summary of Procedures Developed by the Licensee

The following procedures were developed during the reporting period:

- Revised Operational Procedures for the site supervisor which included a daily inspection checklist of 'Emergency Stops' within the confines of the Transfer/ Recycling centre.
- Revised Risk Assessments and Safe Working Procedures for all work activities on the Transfer Station.

14.0 Reported Incidents and Complaints

No incidences or complaints were reported in relation to the operation of the facility during the reporting period.

15.0 Report on Financial Provision

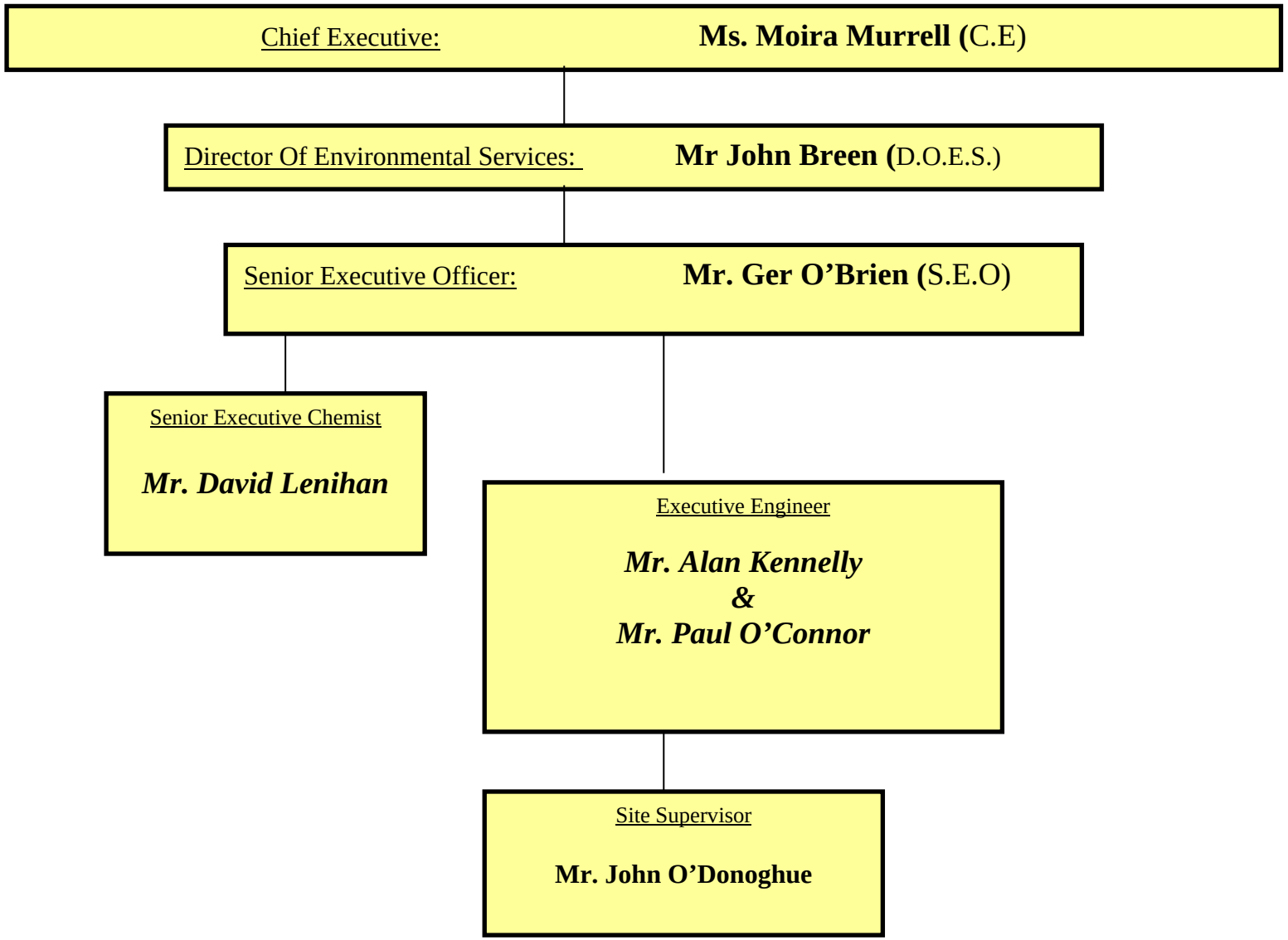
(a) Statement of Costs for Waste Operations - Kenmare 2016

Accelem	Account Element	Euro €
60030	Wages	€ 24,069.00
60040	Salaries	€ 12,890.00
60100	ER PRSI	€ 4,032.00
60200	Overtime	€ 3,746.00
60500	Annual Leave	€ 1,645.00
60510	Bank Holiday Leave	€ 436.00
60600	Travel/Subsistence	€ 2,468.00
65500	Minor Contracts- Trade Services & other works	€ 75,631.00
65965	Transfer to/from Cap/Rev (Exp)	€ -
66500	Non-Capital Equip Purchase - Fire Services	€ 20.00
67500	Non-Capital Equip Purchase - Computers	€ 287.00
68500	Non-Capital Equip Purchase - Other	€ 20.00
69000	Hire (Ext) - Plant/Transport/Machinery & Equipment	€ 88.00
69200	Repairs & Maint - Plant	€ -
69260	Repairs & Maint - Other Equip	€ 810.00
69400	Transfers from Machinery Yard	€ 5,726.00
69600	Other Vehicle Expenses	€ 125.00
70000	Materials	€ 243.00
70990	Issues from Stores	€ 6,101.00
70991	Returns to Stores	-€ 617.00
71000	Insurance	€ 323.00
73400	Staff Travelling & Subsistence Expenses	€ 2,401.00
76000	Communication Expenses	€ 386.00
76100	Postage	€ 22.00
77100	Courier	€ -
77200	Security - Property	€ 330.00
78000	Training	€ -
79900	Consultancy/Professional Fees and Expenses	€ -
81000	Printing & Office Consumables	€ 38.00
82100	Statutory Contributions to Other Bodies	€ 21,929.00
85100	Rates & Other LA Charges	€ 72.00
86000	Energy / Utilities	€ 2,166.00
	Total	**€165,387.00**

(b) Statement of Costs for Recycling Operations 2016

Accelem	Account Element	Euro €
60030	Wages	€ 20,978.00
60040	Salaries	€ 12,890.00
60100	ER PRSI	€ 3,970.00
60200	Overtime	€ 4,503.00
60500	Annual Leave	€ 3,078.00
60510	Bank Holiday Leave	€ 455.00
60600	Travel/Subsistence	€ 2,136.00
65500	Minor Contracts- Trade Services & other works	€ 8,967.00
66500	Non-Capital Equip Purchase - Fire Services	€ 60.00
69200	Repairs & Maint - Plant	€ 303.00
69260	Repairs & Maint - Other Equip	€ 90.00
69400	Transfers from Machinery Yard	€ -
70000	Materials	€ 1,770.00
70990	Issues from Stores	€ 324.00
73400	Staff Travelling & Subsistence Expenses	€ 3,146.00
76000	Communication Expenses	€ 139.00
77100	Courier	€ 13.00
77200	Security - Property	€ -
78000	Training	€ -
80000	Advertising	€ -
82100	Statutory Contributions to Other Bodies	€ -
85100	Rates & Other LA Charges	€ -
86000	Energy / Utilities	€ 174.00
	Total	**€ 62,996.00**

16.0 Management and Staffing Structure at the Facility December 2016



17.0 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 Kenmare Transfer Station and Recovered/Recycled offsite during reporting period 2016

Kenmare Transfer Station Residual Waste - Tonnage Period 01/01/16 to 31/12/2016

Levied Waste						Non Levied Waste					Totals		
Month	Public Car Household	* Non weighed waste inclusive of tickets	Account Holders VAT Inclusive	KCC Levied Waste	Total Levied Waste	KCC Road Sweeping & Streetcleaning	Graveyard Waste	KCC Clean Ups / F'tipping	Environment Clean Ups/ F'tipping - Invs Raised to Environment	Total Non - levied	Total of Waste Over Weighbridge	Total Waste Out of Facility - Including Ticket Waste	No. Loads out of TS
January 2016	20.06	39.98	6.34	0	66.38	0	0	0	0.12	0.12	26.52	66.50	7
January 2015	19.04	35.24	11.46	0	65.74	0	0	0.14	0.4	0.54	31.04	66.28	7
February 2016	17.66	32.78	14.62	0	65.06	0	0	0	0.5	0.5	32.78	65.56	7
February 2015	13.1	21.92	10.56	0	45.58	0	0	0	0.34	0.34	24.00	45.92	5
March 2016	17.9	37.52	15.64	0.00	71.06	0	0	0.86	0.58	1.44	34.98	72.50	8
March 2015	16.04	22.92	10.28	0	49.24	0	0	0.3	1.52	1.82	28.14	51.06	6
April 2016	19.72	23.72	12.04	0	55.48	0	0	0	1.84	1.84	33.60	57.32	6
April 2015	21.82	34.8	17.8	0	74.42	0	0	0	3.02	3.02	42.64	77.44	8
May 2016	23.46	39.33	16.36	0.06	79.21	0	0	0	0.76	0.76	40.64	79.97	8
May 2015	18.66	18.51	13.14	1.42	51.73	0	0	0	0.56	0.56	33.78	52.29	6
June 2016	19.54	37.82	13.70	1.64	72.7	0	0	0.12	1.18	1.3	36.18	74.00	8
June 2015	25.4	38.36	13.58	0	77.34	0	1.18	0	0.74	1.92	40.90	79.26	9
July 2016	21.08	31.44	16.38	2.16	71.06	0	0	0.14	0.5	0.64	40.26	71.70	8
July 2015	23.14	29.9	21.38	0	74.42	0	0	0.2	1.74	1.94	46.46	76.36	9
August 2016	28.5	40.22	16.48	0	85.2	0	0	0.78	0.68	1.46	46.44	86.66	9
August 2015	26.28	38.42	17.92	1.78	84.4	0	0	1.14	0.46	1.6	47.58	86.00	10
September 2016	18.74	35.3	18.02	2.1	74.16	0	0	0	0.64	0.64	39.50	74.80	8
September 2015	19.76	32.94	21.36	0	74.06	0	0	0	0.52	0.52	41.64	74.58	8
October 2016	18.48	29.04	10.92	0	58.44	0	0	0	0.52	0.52	29.92	58.96	6
October 2015	18.18	29.88	13.56	0	61.62	0	0	0.16	0.22	0.38	32.12	62.00	7
November 2016	15.94	38.44	16.12	0.32	70.82	0	0	0.12	0.42	0.54	32.92	71.36	7
November 2015	22.46	21.96	11.58	0	56.00	0	0	0	0.56	0.56	34.60	56.56	6
December 2016	17.92	27.8	12.34	0	58.06	0	0.00	0	0.44	0.44	30.70	58.50	6
December 2015	19.42	27.1	10.76	0	57.28	0	0	0.28	0.24	0.52	30.70	57.80	6
Total Tonnage 2016	239.00	413.39	168.96	6.28	827.63	0.00	0.00	2.02	8.18	10.20	424.44	837.83	88
Total Tonnage 2015	243.30	351.95	173.38	3.20	771.83	0.00	1.18	2.22	10.32	13.72	433.60	785.55	87
Grand Total			827.63					10.20					

Environment Non Levied: Litter Warden South 0.12, Precleared flytipping 0.14 , Kenmare Tidy Up 0.18
A/C Customers: Kenmare Bay Hotel: 2.2; Michael Healy: 6.16; Park Hotel: 1.62; McSwiney & Sons: 0.18; Kenmare Plant Hire 1.02, Sheen Falls Lodge: 1.16;

Signed by: _____

Date: _____

Household Waste Deposited at Kenmare Civic Amentity Sites in 2016

Material type	Suggested EWC codes	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Mixed residual waste (Trans Waste out of facility)	20 03 01	66.50	65.56	72.50	57.32	79.97	74.00	71.70	86.66	74.80	58.96	71.36	58.50	837.83
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	1.54	1.34	1.76	1.34	1.56	1.56	1.58	2.08	1.50	1.48	1.02	1.34	18.10
Cardboard, newspaper and other paper														0.00
cardboard packaging	*15 01 01*	6.02	1.36	3.06	1.84	2.30	2.12	2.56	4.28	2.02	3.46	2.32	1.52	32.86
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*	6.80	6.00	6.92	4.48	4.34	6.68	5.26	4.76	6.26	5.10	3.90	5.14	65.64
Glass														0.00
glass packaging (bottles)	*15 01 07*	5.0600	5.9550	2.2460	4.7640	6.8080	7.1800	5.3870	9.2610	5.4030	4.8970	4.0290	5.1820	66.1720
glass non-packaging (flat glass)	*20 01 02*													0.0000
Metals														0.0000
aluminium cans (packaging)	*15 01 04*	0.1540	0.1730	0.0820	0.1620	0.2520	0.1450	0.1280	0.2470	0.1560	0.1280	0.1650	0.1740	1.9660
steel cans (packaging)	*15 01 04*	0.3120	0.7600	0.2560	0.4370	0.6900	0.4810	0.4570	0.6890	0.5720	0.3900	0.4910	0.6380	6.1730
other metals (scrap metals)	*20 01 40*	4.94	6.92	7.96	9.08	5.42	5.30	6.40	7.54	2.74	10.20	5.70	4.98	77.18
Plastic														0.00
plastic packaging (bottles)	*15 01 02*	2.90	2.48	3.06	2.54	3.080	3.880	3.040	3.340	3.640	2.580	2.480	2.54	35.560
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	0.00	0.00	0.00	0.18	0.00	0.26	0.16	0.32	0.00	0.00	0.00	0.34	1.26
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	*Portable batteries*													0.00
lead acid batteries and accumulators (Car Batteries)	16 06 01*	0.00	0.00	0.00	0.286	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.286
Ni-Cd batteries and accumulators	16 06 02*	0.000	0.000	0.000	0.286	0.000	0.000	0.000	0.000	0.000	0.757	0.000	0.000	1.043
Other (e.g. alkaline) batteries and accumulators (Small Batteries)	16 06 04													0.00
														0.00
Household Hazardous Waste														0.00
Waste mineral oils	13 02 08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	0.00	1.76
Oil filters (vehicles)	13 08 99	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	13 08 99	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
Waste cooking or vegetable oils	20 01 25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
Waste paint and varnish (including containers)	20 01 27	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	1.23
Aerosols	14 06 01	0.00	0.04	0.00	0.06	0.00	0.00	0.10	0.00	0.18	0.00	0.00	0.00	0.38
WEEE collected by compliance schemes														0.00
CRT	20 01 36	2.133	1.427	0.818	1.634	1.093	1.109	0.540	3.209	1.460	0.000	1.462	0.510	15.395
SDA - Small Domestic Appliances	20 01 36	2.720	2.230	3.351	2.477	1.936	2.430	1.160	3.365	1.956	0.000	3.138	1.836	26.599
LDA - Large Domestic Appliances	20 01 36	3.340	0.880	0.413	2.710	1.170	0.000	1.900	1.950	1.660	1.660	0.000	2.270	17.953
Cold	20 01 36	1.740	0.000	0.000	1.386	0.479	0.751	0.904	0.735	0.000	2.160	0.000	0.340	8.495
														0.00
														0.00
WEEE taken off-site by charities (e.g. mobile phones)	20 01 35													0.00
Commercial Glass (Kenmare TS only)	15 01 07	0.00	0.80	0.00	0.00	0.00	1.24	0.00	1.02	0.00	0.00	0.72	0.00	3.78
Fluorscent Tubes	20 01 21	0.00	0.00	0.00	0.118	0.00	0.00	0.00	0.056	0.00	0.00	0.00	0.00	0.174
Sludge	<enter EWC code>													0.00
Foul Water Septic Tanks	20 03 04													0.00
Totals excl Mixed Municipal Waste & Foul Water		**35.526**	**29.688**	**29.108**	**32.146**	**28.035**	**32.027**	**29.036**	**39.643**	**26.567**	**32.812**	**25.723**	**26.500**	**382.206**

*** Lead Acid Batteries - tonnage by KMK Metals**

Appendix II – Surface Water, Foul and Ground Water

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*

Run By KERRY_DOMAIN\david.donegan on

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	Kenmare	KENMARE_MW1	Kenmare MW1					2016/1174	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1174_v2.pdf	12-Apr-16	13:55	DB	LANDFILL	131_TRANSFER_BH		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1174_v2.pdf
			KENMARE_MW2	Kenmare MW2					2016/1175	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1175_v2.pdf	12-Apr-16	14:30	DB	LANDFILL	131_TRANSFER_BH		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1175_v2.pdf
			KENMARE_MW3	Kenmare MW3					2016/1176	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1176_v2.pdf	12-Apr-16	14:50	DB	LANDFILL	131_TRANSFER_BH		Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-1176_v2.pdf
LEACHATE	1	Kenmare	KENMARE_L1	Kenmare L1					2016/2849	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-2849_v1.pdf	08-Sep-16	12:00	DB	LANDFILL	130_NKL_LEC_ANNUAL	Sample at weir adjacent to Road before SW3	Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-2849_v1.pdf
			KENMARE_SE1	Kenmare Se1					2016/0301	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-0301_v2.pdf	01-Feb-16	12:30	TS	LANDFILL	131_TRANSFER_ST_FOUL		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-0301_v2.pdf
				Kenmare Se1					2016/1554	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-1554_v2.pdf	16-May-16	11:25	DB	LANDFILL	131_TRANSFER_ST_FOUL	bottles left on 12/04/2016	Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-1554_v2.pdf
				Kenmare Se1					2016/2850	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-2850_v1.pdf	08-Sep-16	10:50	DB	LANDFILL	131_TRANSFER_ST_FOUL		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Oct\2016-2850_v1.pdf
				Kenmare Se1					2016/3435	\\doc_server\coa\KCC_ENVIRON\2016\Dec\2016-3435_v1.pdf	25-Oct-16	11:00	TS	LANDFILL	131_TRANSFER_ST_FOUL		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Dec\2016-3435_v1.pdf
SURF_WATER	1	Kenmare	KENMARE_SW1	Kenmare Sw1					2016/1170	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1170_v1.pdf	12-Apr-16	14:20	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1170_v1.pdf
				Kenmare Sw1					2016/2702	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2702_v1.pdf	01-Sep-16	13:45	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2702_v1.pdf
				Kenmare Sw1					2016/3163	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3163_v1.pdf	05-Oct-16	14:30	TOS	LANDFILL	131_TRANSFER_ST_SURF	Slow Flow	Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3163_v1.pdf
			KENMARE_SW2	Kenmare Sw2					2016/0105	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0105_v1.pdf	14-Jan-16	15:00	TS	LANDFILL	130_NKL_SURF_QUART		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0105_v1.pdf
				Kenmare Sw2					2016/1171	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1171_v1.pdf	12-Apr-16	13:50	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1171_v1.pdf
				Kenmare Sw2					2016/2703	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2703_v1.pdf	01-Sep-16	14:00	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2703_v1.pdf
				Kenmare Sw2					2016/3164	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3164_v1.pdf	05-Oct-16	13:55	TOS	LANDFILL	131_TRANSFER_ST_SURF	Slow Flow	Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3164_v1.pdf
				Kenmare Sw2					2016/3950	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3950_v1.pdf	14-Dec-16	16:30	EX_OWNER	LANDFILL	131_TRANSFER_ST_SURF	Paul O' Connor	Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3950_v1.pdf
			KENMARE_SW3	Kenmare Sw3					2016/0106	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0106_v1.pdf	14-Jan-16	14:30	TS	LANDFILL	130_NKL_SURF_QUART		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0106_v1.pdf
				Kenmare Sw3					2016/0107QA	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0107QA_v1.pdf	14-Jan-16	14:30	TS	LANDFILL	130_NKL_SURF_QUART	Dup sample	Authorised	\\doc_server\coa\KCC_ENVIRON\2016\May\2016-0107QA_v1.pdf
				Kenmare Sw3					2016/1172	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1172_v1.pdf	12-Apr-16	14:10	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1172_v1.pdf
				Kenmare Sw3					2016/1173QA	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1173QA_v1.pdf	12-Apr-16	14:10	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Apr\2016-1173QA_v1.pdf
				Kenmare Sw3					2016/2704	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2704_v1.pdf	01-Sep-16	13:20	DB	LANDFILL	131_TRANSFER_ST_SURF		Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-2704_v1.pdf
				Kenmare Sw3					2016/3165	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3165_v1.pdf	05-Oct-16	14:15	TOS	LANDFILL	131_TRANSFER_ST_SURF	Stagant	Authorised	\\doc_server\coa\KCC_ENVIRON\2016\Nov\2016-3165_v1.pdf
				Kenmare Sw3					2016/3951	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3951_v1.pdf	14-Dec-16	16:45	EX_OWNER	LANDFILL	131_TRANSFER_ST_SURF	Paul O' Connor	Authorised	\\doc_server\coa\KCC_ENVIRON\2017\Jan\2016-3951_v1.pdf

Analysis	003_ODOUR	005A_TEMP_FIELD	006_PH		007A_CONDUCTIVITY20C	011_TOTAL_HARDNESS	013C_BOD	013C_BOD_ATU	014_COD	015_TOC	022K_AMMONIA		025_PHOSPHATE_SRP	027_FOG	028K_CHLORIDE	028K_SULPHATE	031_SOLIDS_WW	033K_TON	036_DO_MG_L	037_SUSPENDED_SOLIDS	052_TOTAL_NITROGEN	057_SOLIDS_TOTAL_DISS
Parameter	Odour	Temperature	pH		Conductivity	Total Hardness	B.O.D.	B.O.D.	C.O.D.	TOC	Ammonia		Phosphorus (MRP)	Total OFG	Chloride	Sulphate	Total Solids	TON	Dissolved Oxygen	Suspended Solids	Total Nitrogen	Total Dissolved Solids (180°C)
Reported Name																						
Min. Value				6.0								0.0										
Max Value				9.0								0.0										
Units	NONE	DEG_C	PH	PH	USCM	MGCACO3L	BOD	BOD	MGL	MGL	MGLN	MGLN	MGL	MGL	MGL	MGL	MGL	MGLN	MGL	MGL	MGLN	MGL
2016/1174	Not Detected	14.3	6.9		421	87.0				4.8	0.08		0.01		14.6	<5	280	<0.5	5.7	3		
2016/1175	Earthy	10.8	5.6		98	68.0				46.2	0.78		0.16		12.2	<5	1173	<0.5	1.4	818		
2016/1176	Earthy	10.4	5.6		120	100.0				47.6	2.34		0.24		23.7	<5	272	<0.5	1.9	186		
2016/2849	Normal	15.3	7.2		85		1.3		64	19.0	<0.05		<0.005		13.2	<5		<0.5		4	1.03	95
2016/0301	Normal	9.8	6.9		124			2.8	45		0.06			<1						16		
2016/1554	Not Detected		7.2				19		70		2.36			<1	17.9					6		
2016/2850	Not Detected		6.8		199		2.7		84		0.25			<1						3		
2016/3435	Normal	10.1	7.4		167		<1.3		76		0.07			<1						5		
2016/1170	Not Detected	10.7		6.7	137		1.6		16			1.08			18.9				7.9	<1		
2016/2702		16.8		6.7	137		2.1		<10			1.14			18.4				8.1	12		
2016/3163		13.0		6.6	118		<1.3		33			0.49			13.5				7.0	4		
2016/0105		4.6		6.0	46		2.2		20			<0.05			11.8				9.8	1		
2016/1171	Not Detected	13.2		6.9	61		<1.3		18			<0.05			15.3				9.3	<1		
2016/2703		16.5		6.2	57		1.9		23			0.07			13.4				9.2	24		
2016/3164		12.5		6.3	46		<1.3		26			0.05			9.5				7.3	2		
2016/3950				5.8	58		<1.3		10			<0.05			15.2					1		
2016/0106		4.7		6.4	65		1.7		26			0.40			11.9				10.9	<1		
2016/0107QA		4.7		6.4	65		1.8		26			0.39			12.0				11.0	<1		
2016/1172	Not Detected	9.6		6.7	104		1.3		24			0.60			17.9				8.5	<1		
2016/1173QA	Not Detected	9.6		6.7	102		1.3		24			0.60			17.8				8.5	<1		
2016/2704		13.7		6.4	161		2.4		20			1.38			17.8				6.5	10		
2016/3165		12.5		6.5	74		<1.3		41			0.27			10.8				8.3	4		
2016/3951				6.1	80		<1.3		22			0.21			16.8					1		

Analysis	065_ALKANITY_TOTAL	082_VIS_INSPECTION	ICP_HG_HG	ICP_MS_HM													ICP_MS_MIN			
Parameter	Alkalinity	Visual Inspection	Hg	As	B	Ba	Cd	Cr	Cu	Fe	Mn	Ni	Pb	Sb	Se	Zn	Ca	K	Mg	Na
Units	MGCACO3L	NONE	UGL	UGL	MGL	MGL	UGL	UGL	MGL	UGL	UGL	UGL	UGL	UGL	UGL	UGL	MGL	MGL	MGL	MGL
2016/1174	230	Clear	<0.2	<1	0.004	0.024	<1	<1	0.013	698	3514.2	<10	1.0	<0.5	<1	15	68.1	0.8	8.8	11.6
2016/1175	80	Silty	<0.2	10.4	0.003	0.017	<1	2.3	0.004	13769	795.7	<10	3.1	<0.5	1.5	8	7.3	0.8	2.4	8.3
2016/1176	80	Silty	<0.2	2.5	0.007	0.013	<1	1.2	0.014	5503	193.9	<10	3.7	<0.5	<1	19	2.5	7.2	1.9	13.5
2016/2849	22	Clear. Riverlike		<1	0.006	0.003	<1	<1	0.002	264	5.3	<10	<1	<0.5	<1	10	9.1	0.7	1.6	8.0
2016/0301		Clear/small bit of sediment																		
2016/1554																				
2016/2850																				
2016/3435																				
2016/1170		Clear																		
2016/2702																				
2016/3163																				
2016/0105																				
2016/1171		Clear																		
2016/2703																				
2016/3164																				
2016/3950																				8.7
2016/0106																				
2016/0107QA																				
2016/1172		Clear																		
2016/1173QA		Clear																		
2016/2704																				
2016/3165																				
2016/3951																				9.9

Appendix III – Noise Report

southern scientific services ltd

ENVIRONMENTAL NOISE SURVEY 2016

KENMARE WASTE TRANSFER STATION

CLADDANURE WEST

KENMARE

CO. KERRY

W0086-01

Requested By:	P. O' Connor Kerry County Council
Prepared By:	Sinead Fagan Southern Scientific Services Ltd
Date Reported:	16th January 2017
Our Reference:	15P 150

Issue Date	Revision	Checked By	Comment
16/01/17	00	P. Byrne (B.Sc; Ph.D) Cert. Env. Noise (IOA)	Final report

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Table of Contents

1. Introduction

Southern Scientific Services Ltd was commissioned by Kerry County Council to conduct a daytime environmental noise survey at Kenmare Waste Transfer Station, Claddanure West, Kenmare, Co. Kerry. The waste transfer station is located approximately 3km north-west of Kenmare town in a rural setting. The site is bounded by a mixture of agricultural land and forestry with a public road to the north boundary.

Noise monitoring is prescribed in Schedule E.2 of the EPA Waste Licence (W0086-01) for the site and requires annual noise monitoring to be undertaken at three site boundary locations and one off-site location (nearest noise sensitive receptor). Schedule F.3 of the licence stipulates a daytime noise limit of 55dB(A) at the noise sensitive location (monitoring point B4) 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 Claddanure West, Kenmare, Co. Kerry. The facility operates between 08:30 – 17:00 Monday to 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 4th of March, 19th of May, and 20th of July 2016 to assess the noise levels at predetermined locations (B1 – B4) 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
B1	Boundary location to the west of the transfer station
B2	East boundary adjacent to the weighbridge
B3	Off site at the forestry gate/entrance
B4	Nearest dwelling approximately 1km north east of the transfer station

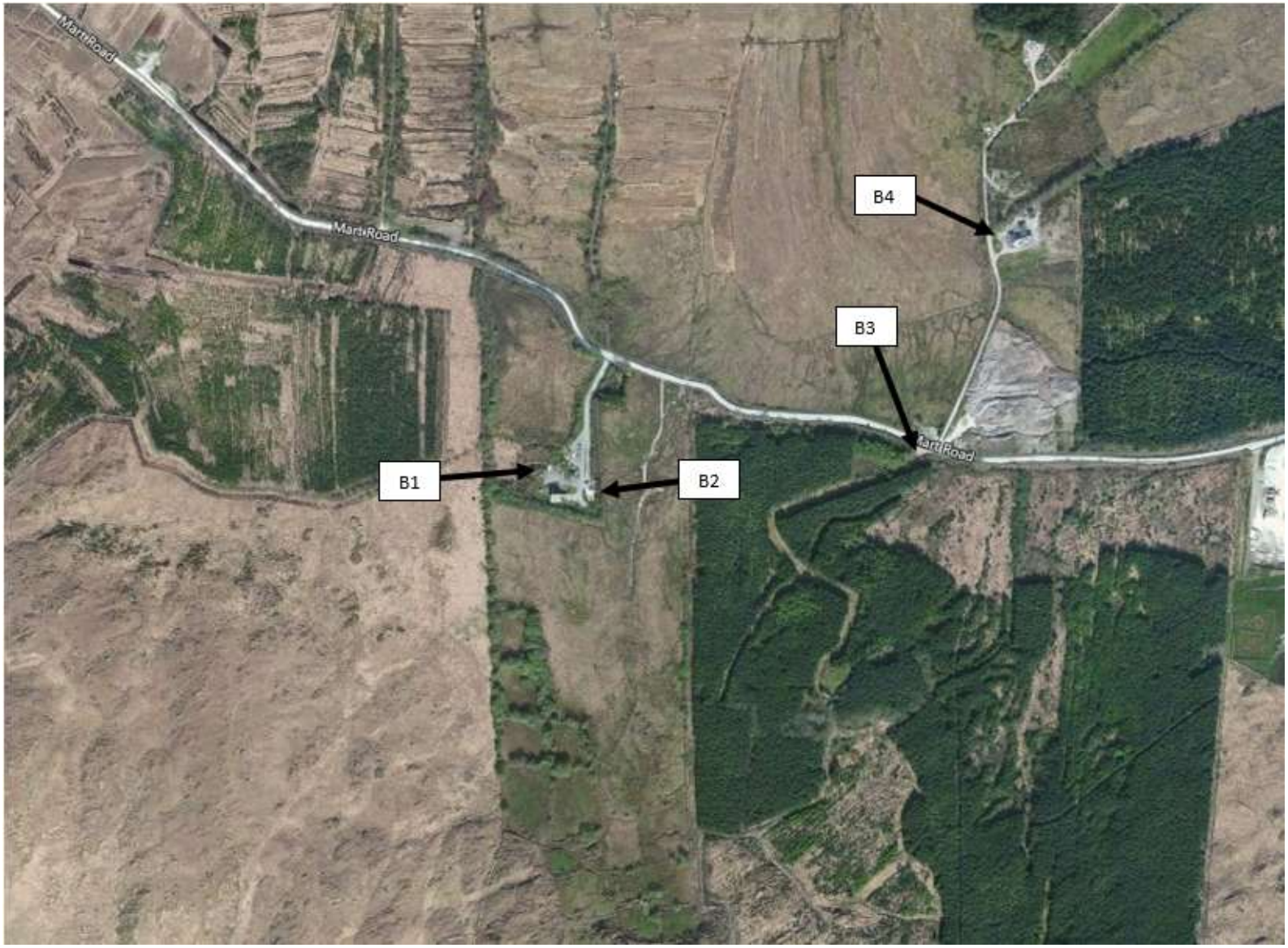

Figure 1: Site layout showing monitoring positions B1 – B4

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:	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 4th

Cloud Cover	Precipitation	Wind Direction	Av. wind speed @2m	Temperature	Atmospheric Pressure
75%	Dry	NW	0.0 – 4.5m/s	7ºC	973hPa

4.2 Environmental Conditions on May 19th

Cloud Cover	Precipitation	Wind Direction	Av. wind speed @2m	Temperature	Atmospheric Pressure
90%	Dry	WSW	0.0 – 2.5m/s	15ºC	1013hPa

4.3 Environmental Conditions on July 20th

Cloud Cover	Precipitation	Wind Direction	Av. wind speed @2m	Temperature	Atmospheric Pressure
70%	Dry	WSW	0.5 – 4.0m/s	19ºC	991hPa

4.4 Noise Survey Results on March 4th

I.D.	Time	$L_{Aeq\ (30\ mins)}$ dB	$L_{AF10\ (30\ mins)}$ dB	$L_{AF90\ (30\ mins)}$ dB
B1	11:05 – 11:35	52.5	56.7	44.2
Noise Sources: The cardboard compressor and rubbish compactor could be heard occasionally. Vehicles at the recycling bins, engines idling, radios, glass breaking and staff chatting with customers all formed part of the noise generated at this monitoring location. Birdsong and rustling vegetation could be heard in the background. Local road traffic was occasional.				
B2	10:33 – 11:03	48.9	49.7	36.6
Noise Sources: Local road traffic and site traffic were audible at this location. Recycling activity of glass breaking, engines idling and radios on were also noted. Background noise included birdsong and rustling vegetation. A survey of site traffic counted 1No. Car and 1No. Van entering the site and 2No. Cars and 1No. Van exiting the site.				
B3	11:39 – 12:09	55.8	57.4	45.9
Noise Sources: Wind in the forestry and the occasional warning siren could be heard at this location. Local road traffic was the main contributor to the noise and included 1No. 4x4; 9No. Cars; 2No. Trucks and 3No. Vans.				
B4	13:18 – 13:48	50.4	53.8	42.4
Noise Sources: Traffic passing on the public road (8No. cars; 1No. 4x4 and 2No. Vans). Background noise included birdsong and rustling vegetation. A dog could be heard barking occasionally. Car from the residence at the nearest noise sensitive receptor started engine and drove directly passed the monitor.				

4.5 Noise Survey Results on May 19th

I.D.	Time	$L_{Aeq\ (30\ mins)}$ dB	$L_{AF10\ (30\ mins)}$ dB	$L_{AF90\ (30\ mins)}$ dB
B1	10:24 – 10:54	47.8	51.9	36.7
Noise Sources: Internal site traffic, cardboard compressor, recycling activity and glass breaking could all be heard at this monitoring location. Birdsong and rustling vegetation could be heard in the background. Staff and customers chatting, dog barking occasionally, car boots banging and the large skip compressor also contributed to the noise. Traffic passing the monitor included 6No. Cars and 2No. 4x4s.				
B2	09:49 – 10:19	56.3	52.7	39.9
Noise Sources: A truck was on the weighbridge with engine running for 6 minutes. Recycling activity of glass breaking, engines idling and radios on were also noted. Background noise included birdsong and rustling vegetation. A survey of site traffic counted 2No. Cars; 3No. 4x4s; 1No. Truck and 1No. Van entering the site and 1No. Car; 1No. 4x4 and 1No. Truck exiting the site.				
B3	10:57 – 11:27	48.1	48.7	31.8
Noise Sources: Birdsong, cattle at the nearby mart, bees and rustling vegetation were audible at this monitoring location. Local road traffic included 3No. 4x4s; 13No. Cars and 1No. Van. No transfer station activity was noted.				
B4	11:32 – 12:02	50.7	54.8	38.6
Noise Sources: Birdsong, bees, cattle at the nearby mart, rustling vegetation and a puppy in a nearby residence barking occasionally were heard at this monitoring location. Local road traffic included 1No. Van; 6No. 4x4s and 3No. Cars. Facility traffic included 3No. 4x4s and 6No. Cars. Activity from the transfer station was not audible at this location.				

4.6 Noise Survey Results on July 20th

I.D.	Time	$L_{Aeq\ (30\ mins)}$ dB	$L_{AF10\ (30\ mins)}$ dB	$L_{AF90\ (30\ mins)}$ dB
B1	11:01 – 11:31	52.5	56.4	35.0
Noise Sources: Internal site traffic, cardboard compressor, recycling activity and glass breaking could all be heard at this monitoring location. Staff and customers chatting, dog barking occasionally, car boots banging and the large skip compressor also contributed to the noise. Traffic passing the monitor included 12No. Cars and 1No. Van. Local road network traffic could also be occasionally heard. Birdsong, bees and rustling vegetation could be heard in the background.				
B2	10:29 – 10:59	49.3	48.9	33.4
Noise Sources: Recycling activity of glass breaking, engines idling, doors banging and radios on were clearly noted at this location. Cardboard compressor and the large skip compressor also contributed to the noise at this point. Background noise included birdsong, local road network traffic and rustling vegetation. A survey of site traffic counted 6No. Cars and 2No. 4x4s entering the site and 4No. Car and 2No. 4x4s exiting the site.				
B3	11:35 – 12:05	47.9	44.6	30.3
Noise Sources: Birdsong, bees and rustling vegetation in adjacent forestry were audible at this monitoring location. Local road traffic included 3No. 4x4s; 17No. Cars and 3No. Van. An airplane was noted overheard at 11:37. No transfer station activity was noted.				
B4	13:01 – 13:31	36.2	39.2	27.7
Noise Sources: Birdsong, bees and rustling vegetation were clearly heard at this monitoring location. Local road traffic included 1No. Van; 2No. 4x4s and 13No. Cars. Activity from the transfer station was occasionally audible at this location and included banging sounds and recycling noises such as breaking glass and site traffic.				

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 nearest noise sensitive location. 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 is achieved at the noise sensitive location (B4). At both N2 and N3 the noise level detected was marginally above 55dB (A) during one survey. At both locations this was predominantly associated with traffic, on-site traffic in the case of N2, and public road traffic in the case of N3. The background noise levels (L_{AF90}) at the transfer station boundary locations (B1, B2, B3) and at the noise sensitive location (B4) are generally typical of a rural area. 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 the noise limit prescribed in the waste licence is being complied with and that activities at the Waste Transfer Station are not adversely impacting on the noise environment at the nearest noise sensitive location. The Waste Transfer Station does not generate noise at night-time when the facility is closed.

Appendix 1

1/3 Octave Frequency Spectra

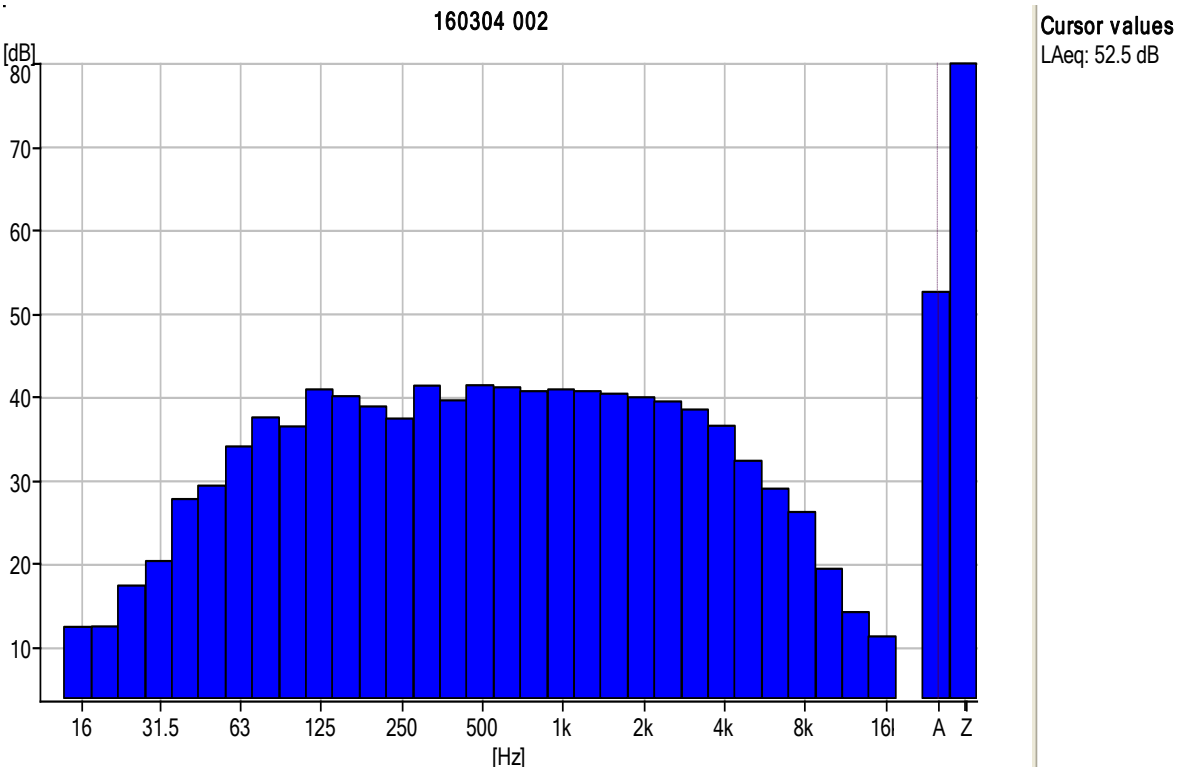

Figure A.1: 1/3 Octave Frequency Graph for B 1 on March 4th

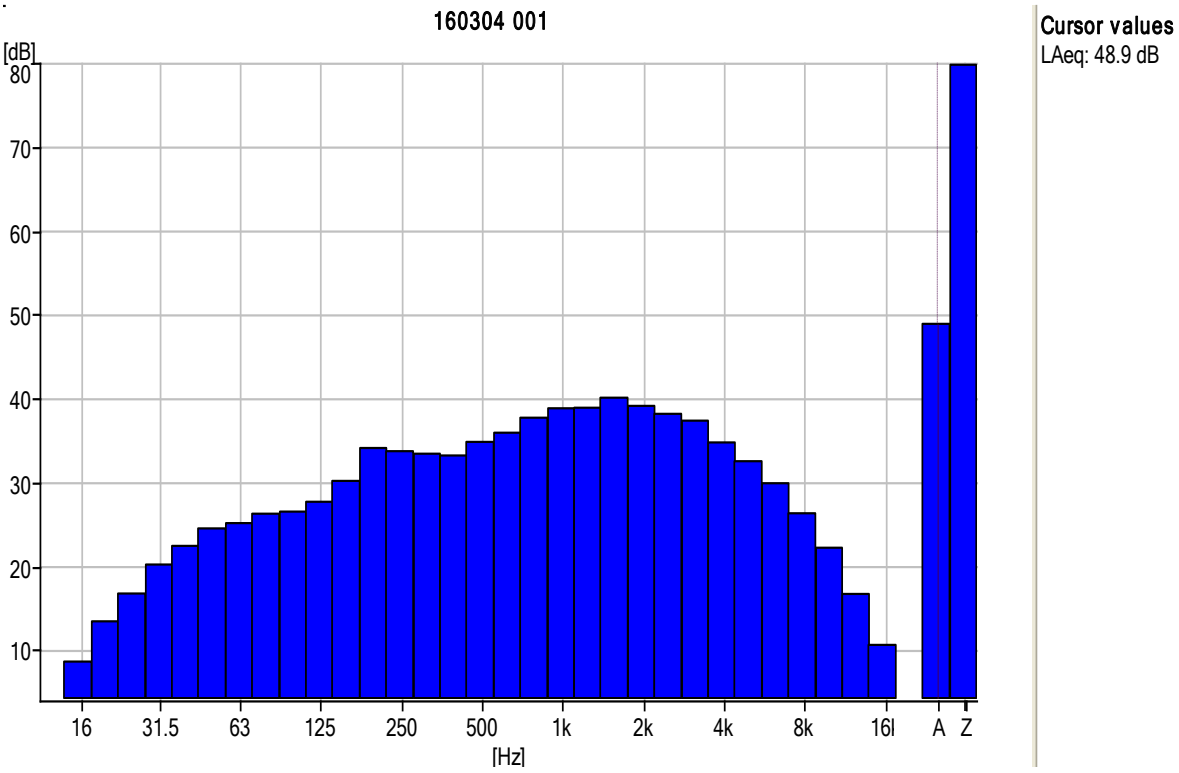

Figure A.2: 1/3 Octave Frequency Graph for B 2 on March 4th

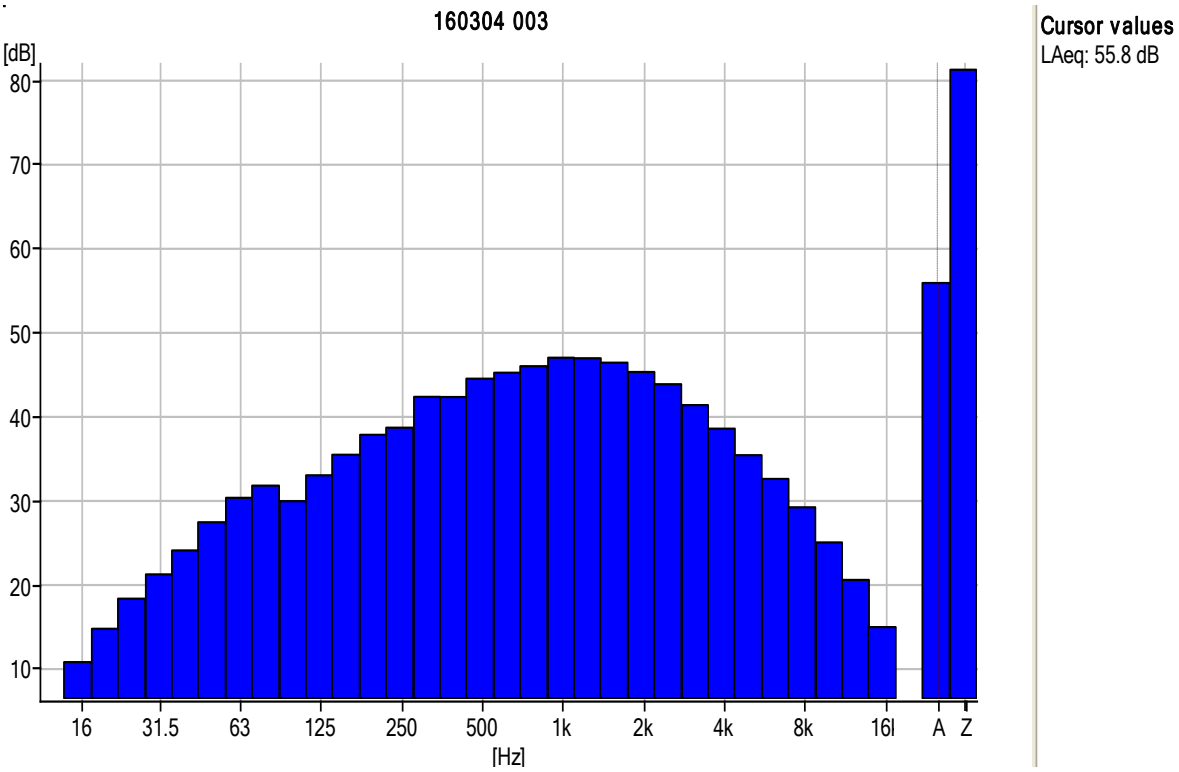

Figure A.3: 1/3 Octave Frequency Graph for B 3 on March 4th

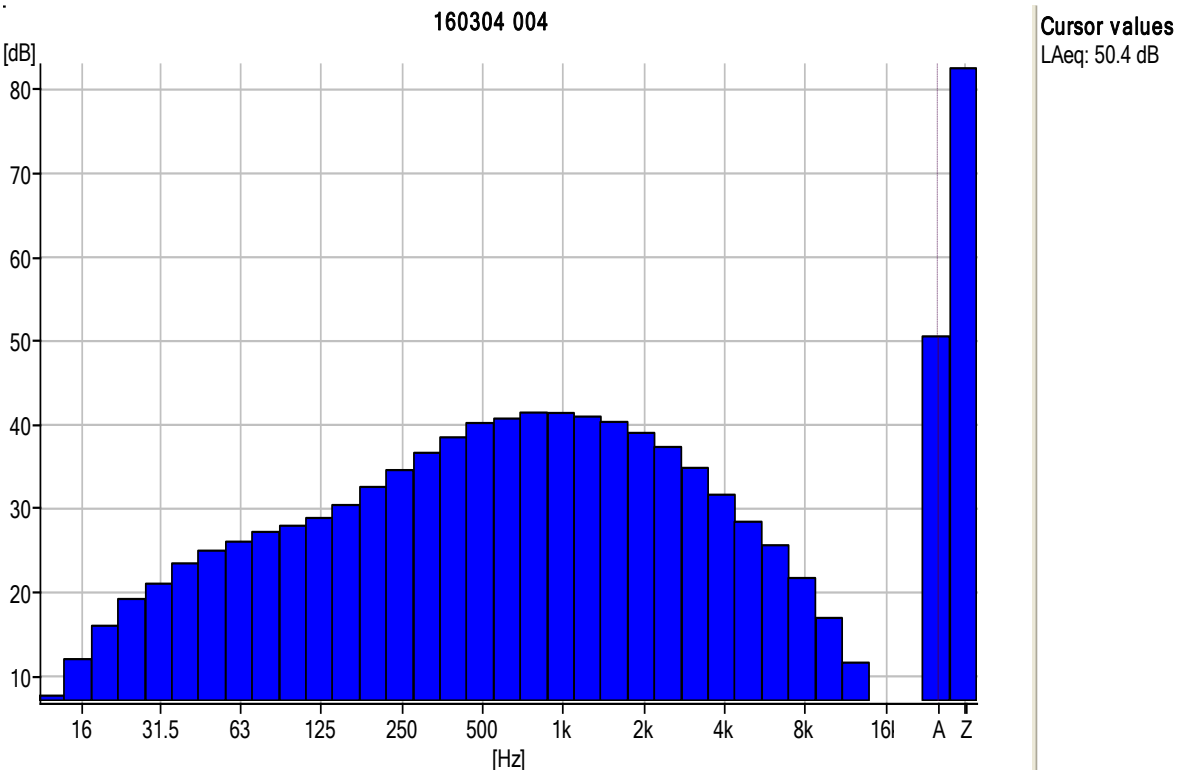

Figure A.4: 1/3 Octave Frequency Graph for B 4 on March 4th

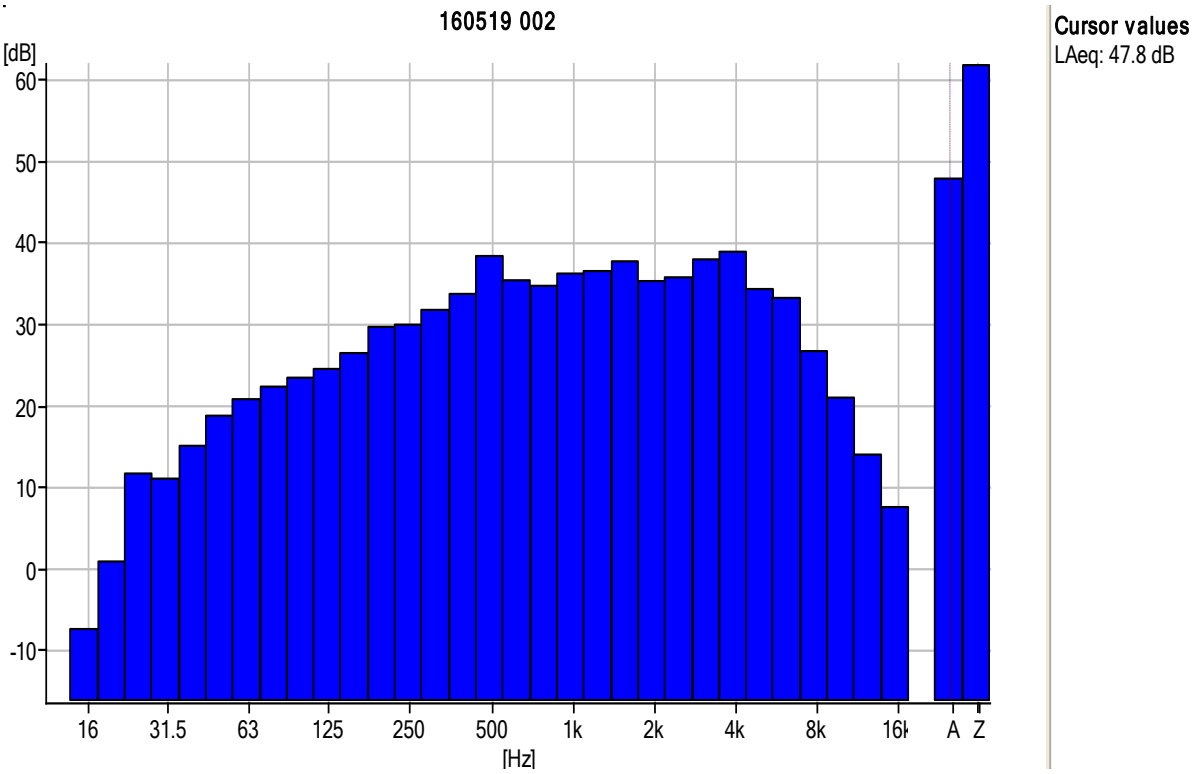

Figure A.1: 1/3 Octave Frequency Graph for B 1 on May 19th

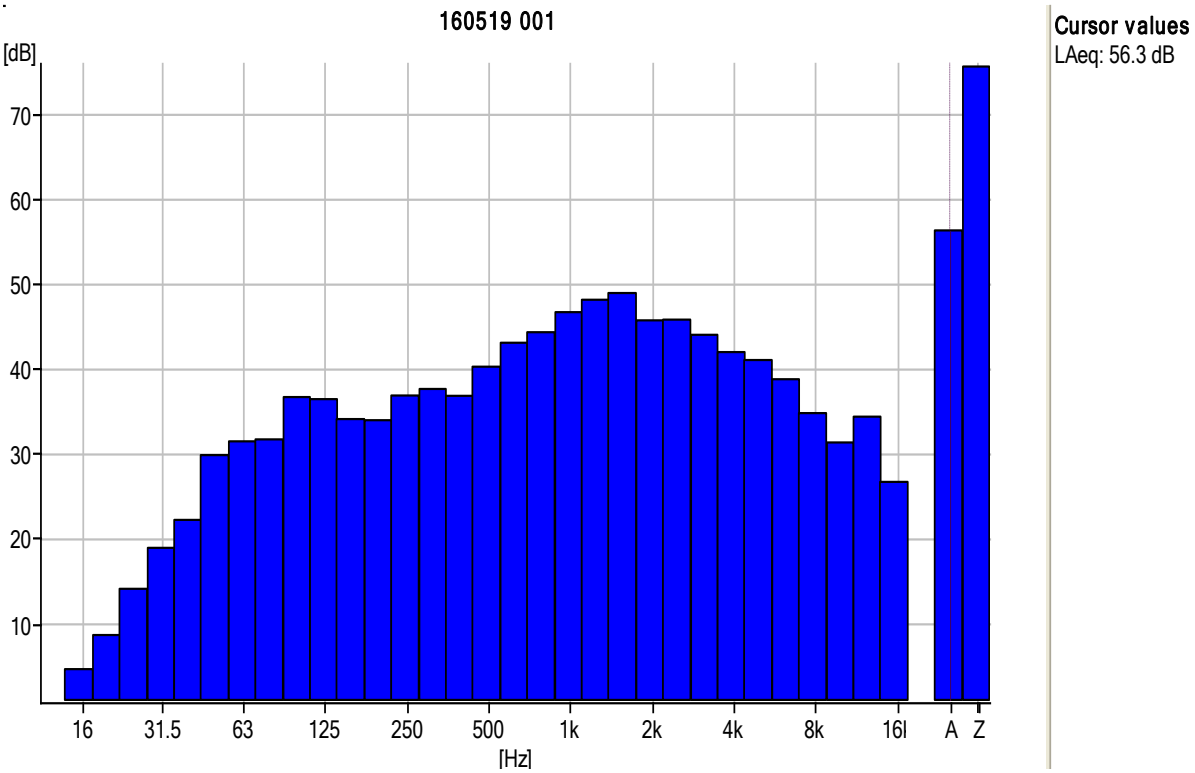

Figure A.2: 1/3 Octave Frequency Graph for B 2 on May 19th

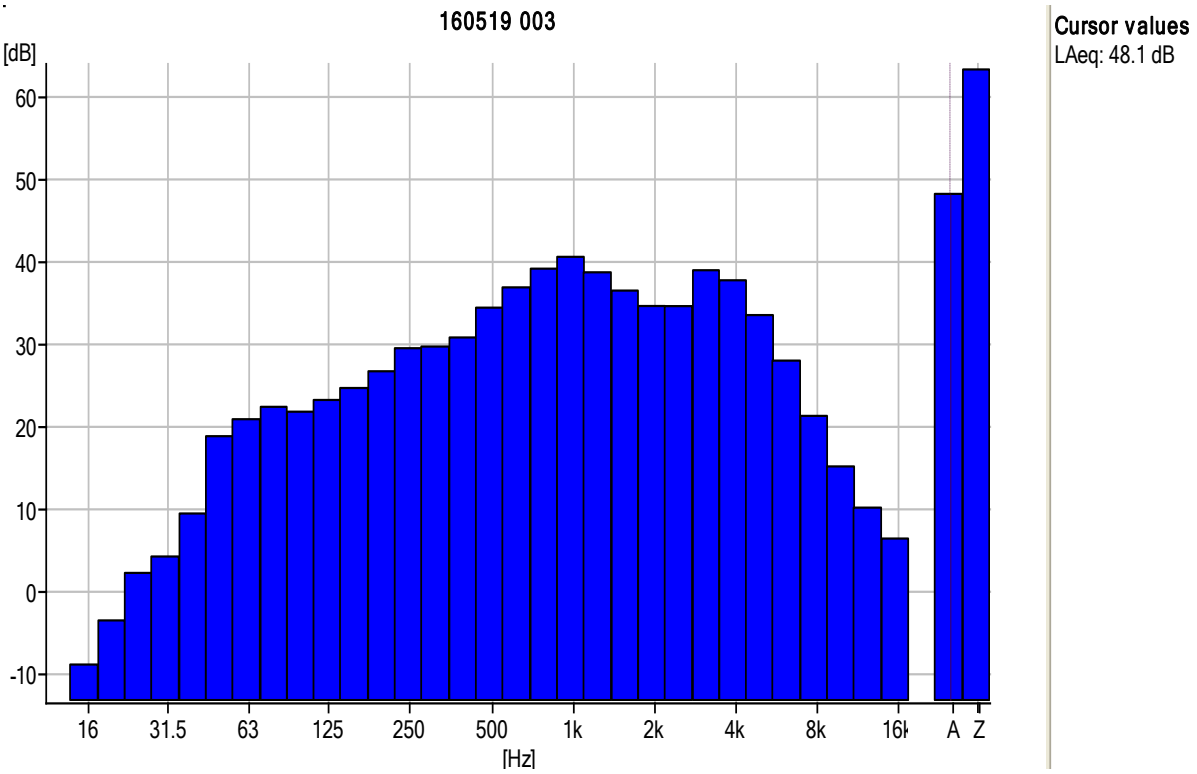

Figure A.3: 1/3 Octave Frequency Graph for B 3 on May 19th

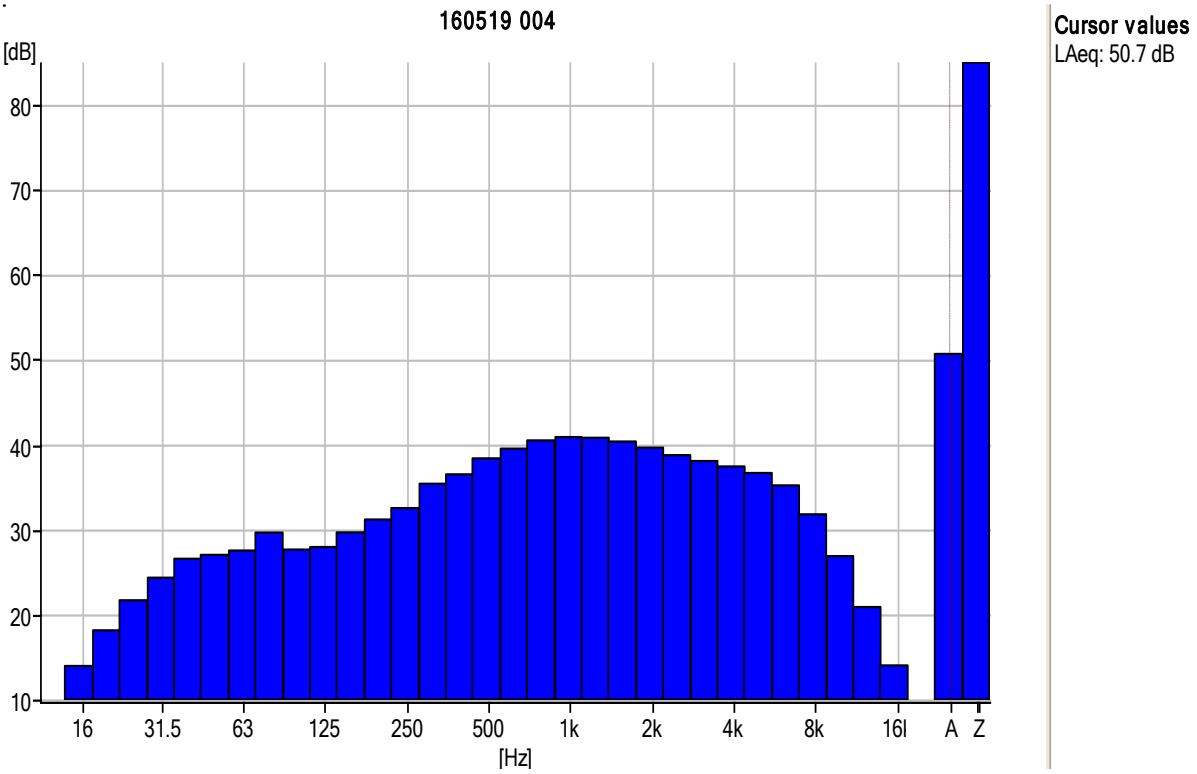

Figure A.4: 1/3 Octave Frequency Graph for B 4 on May 19th

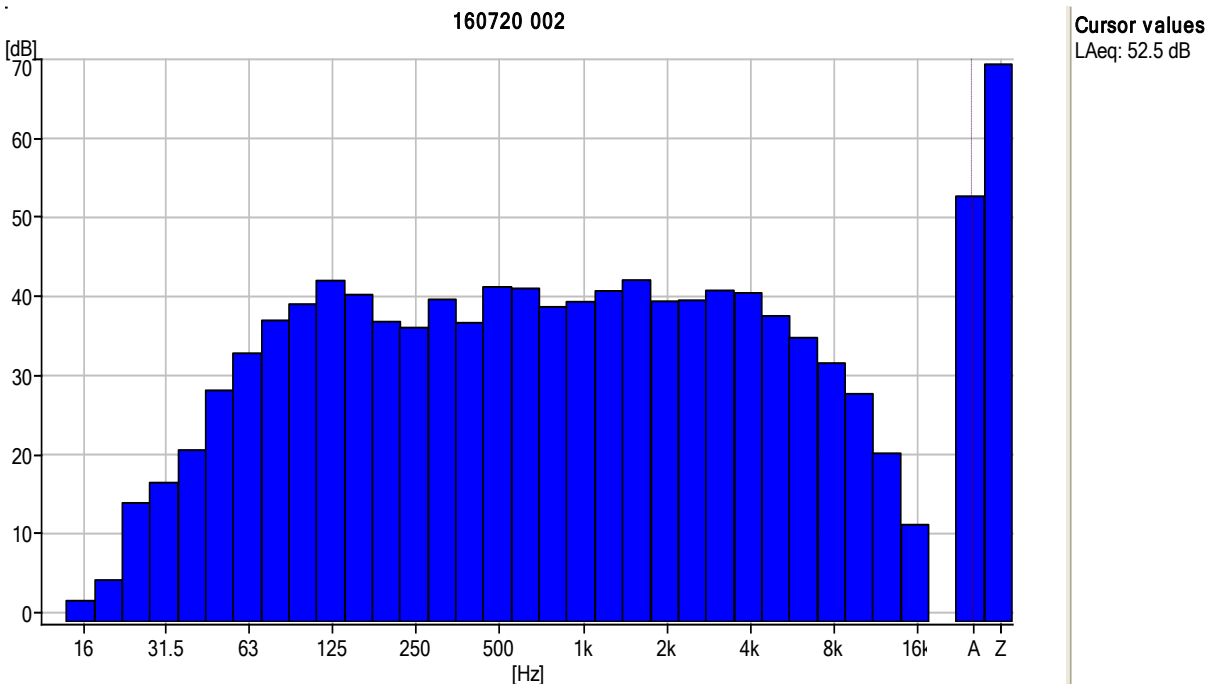

Figure A.1: 1/3 Octave Frequency Graph for B 1 on July 20th

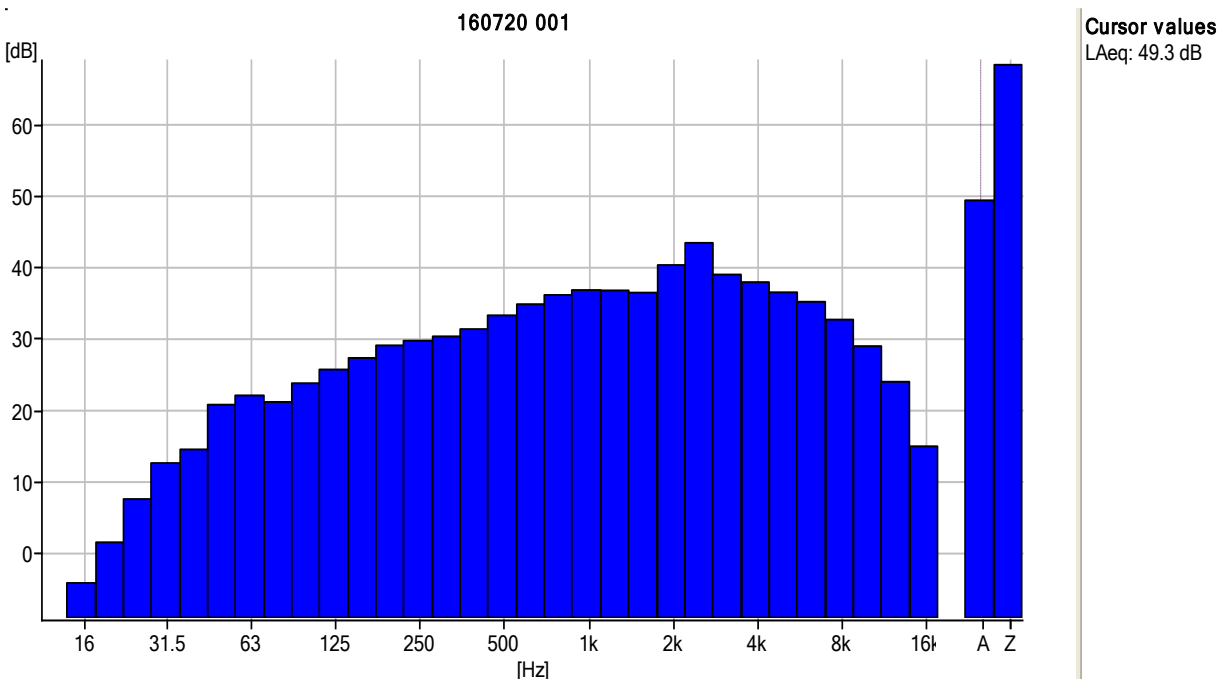

Figure A.2: 1/3 Octave Frequency Graph for B 2 on July 20th

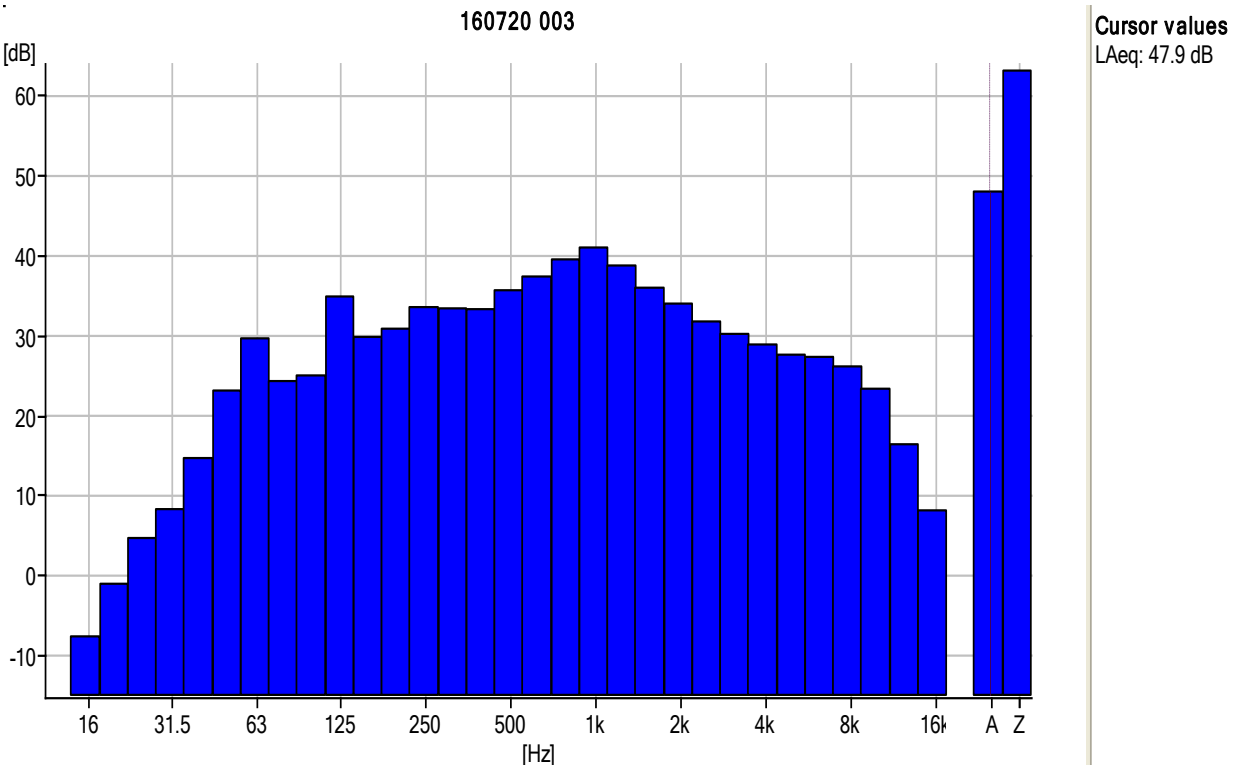

Figure A.3: 1/3 Octave Frequency Graph for B 3 on July 20th

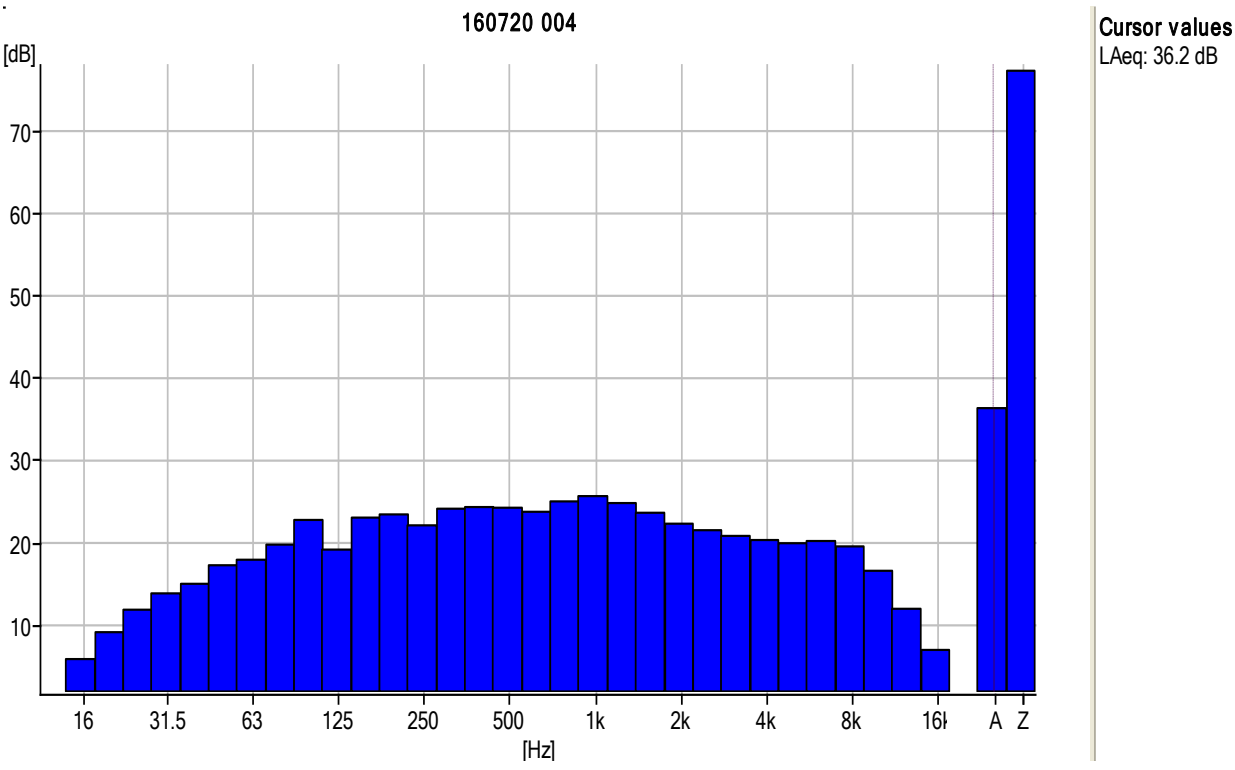

Figure A.4: 1/3 Octave Frequency Graph for B 4 on July 20th

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

Appendix IV – Dust Report

ANALYSIS REPORT

CUSTOMER:	**KERRY COUNTY COUNCIL KENMARE CIVIC AMENITY SITE**	**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:**	24 October – 08 November 2016
SAMPLING PT:	**KENMARE CIVIC AMENITY SITE**	**DATE REPORTED:**	16 November 2016
PROPOSAL REF:	-	**WORK NO:**	**36336C | 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 975	ST 1	1595	301	**350**
SCP 039	-	ST 2	Note 7	Note 7	**-**
SCP 039	C16-Oct 977	ST 3	320	65	**350**
SCP 039	C16-Oct 978	ST 4	618	118	**350**
SCP 039	C16-Oct 979	ST 5	147	82	**350**

Ruth Murphy
Deputy Chemistry Laboratory Manager

Index to symbols used:

*	Analysis is not INAB accredited.
(F)	Analysis carried out at our Farranfore Laboratory.
Note 7	Collector gauge deemed contaminated on receipt to the laboratory. Construction works were ongoing at the time, this may account for the contamination.

- **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 975

This monitoring point is located under trees close to the site entrance. The collector gauge contained water and a considerable amount of vegetation, brown particulates and algae residue. The dried dish contained a considerable amount of brown particulates. The ashed dish contained a considerable amount of brown / grey particulates and residue. The ashed residue underwent effervescence on addition of acid indicating the presence of carbonate in the residue.

COMMENT

ST 4 – C16-Oct 978

This monitoring point is located under trees. The collector gauge contained water and some vegetation, and a considerable amount of brown / yellow particulates and algal residue. The dried dish contained a considerable amount of brown particulates and algal residue. The ashed dish contained a considerable amount of brown particulates and algal residue. The ashed residue underwent no effervescence on addition of acid indicating the absence of carbonate in the residue.

Appendix V – AER/PRTR Return

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	Kenmare Transfer Station
PRTR Identification Number	W0086
Licence Number	W0086-01

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Claddanure West
Address 2	Kenmare
Address 3	
Address 4	
	Kerry
Country	Ireland
Coordinates of Location	-9.6227 51.9012
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	1
User Feedback/Comments	Waste cooking oil (EWC 20 01 25) - 0.2 Tonnes collected Waste paint & varnish (EWC 20 01 27) - 1.23 tonnes collected Waste aerosols (EWC 14 06 01) - 0.38 tonnes collected Commercial Glass (EWC 15 01 07) - 3.78 tonnes collected
Web Address	www.kerrycoco.ie

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
50.1	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

4.1 RELEASES TO AIR

Link to previous years emissions data

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	Emission Point 4	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
210	**Dust**	M	ALT	Bergerhoff Instruments	713.0	143.0	276.0	66.0	1198.0	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: Kenmare Transfer Station

Please enter summary data on the quantities of methane flared and / or utilised	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
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	0.0	other engine, gear and lubricating oils	R1	M	Weighed	Offsite in Ireland	Enva,W0184-1	Clonminam Industrial Estate,,,Portlaoise,County Laois,Ireland	ENVA Ireland,W0184-01,Clonmainam,Portlaoise,Co Laois,,Ireland	Clonmainam,Portlaoise,Co Laois,,Ireland
Within the Country	15 01 01	No	32.86	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kerries,,,Tralee,County Kerry,Ireland		
Within the Country	15 01 02	No	35.56	plastic packaging	R3	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kerries,,,Tralee,County Kerry,Ireland		
Within the Country	15 01 04	No	8.139	metallic packaging	R4	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kerries,,,Tralee,County Kerry,Ireland		
Within the Country	15 01 06	No	18.1	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	66.172	glass packaging	R5	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kerries,,,Tralee,County Kerry,Ireland		
To Other Countries	16 02 11	Yes	8.495	discarded equipment containing chlorofluorocarbons, HCFC, HFC	R4	M	Weighed	Abroad	Eletrical Waste Management,WFP-DS-11-0014-04	Block 648,Jordanstown Drive,Greenogue Ind Est,Dublin,Ireland	European Metal Recycling,WML 101767,Alexander Dock 1,Bootle ,Liverpool,L201BX,United Kingdom	Alexander Dock 1,Bootle ,Liverpool,L201BX,United Kingdom
To Other Countries	16 02 14	No	17.953	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	Block 648,Jordanstown Drive,Greenogue Ind Est,Dublin,Ireland		
Within the Country	19 07 03	No	0.0	landfill leachate other than those mentioned in 19 07 02	D8	M	Weighed	Offsite in Ireland	Kenmare Waste Water Treatement Plant,Irish Water	Kenmare Waste Water Treatement Plant,Kenmare,Co Kerry,,,Ireland		
Within the Country	20 01 01	No	65.64	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kerries,,,Tralee,County Kerry,Ireland		
Within the Country	20 01 11	No	1.26	textiles	R3	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,WFP-014/2	Belgard Road,Tallagh,Dublin24,,,Ireland		
To Other Countries	20 01 21	Yes	0.174	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	1.329	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	26.599	discarded electrical and electronic equipmen 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	Block 648,Jordanstown Drive,Greenogue Ind Est,Dublin,Ireland	The Recycling Village,WFP/LH/10/W010/01 ,,,,Monasterboise,County Louth,Ireland	,,,Monasterboise,County Louth,Ireland
To Other Countries	20 01 35	Yes	15.395	discarded electrical and electronic equipmen 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	Block 648,Jordanstown Drive,Greenogue Ind Est,Dublin,Ireland	European Metal Recycling,WML 101767,Alexander Dock 1,Bootle ,Liverpool,L201BX,United Kingdom	Alexander Dock 1,Bootle ,Liverpool,L201BX,United Kingdom
Within the Country	20 01 40	No	77.18	metals	R4	M	Weighed	Offsite in Ireland	United Metals,WFP-LK-2013-147A-R1	Eastway Business Pk,Ballysimon Rd,Limerick,,,Ireland		
Within the Country	20 03 01	No	837.83	mixed municipal waste	R3	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