

Kerry County Council



Waste Licence Ref No. W0086-01

REPORT TITLE

**Kenmare Transfer Station
Annual Environmental Report**

Reporting Period:

January – December 2014

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

March 2015

1.0	Introduction.....	4
2.0	Reporting Period.....	4
3.0	Waste Activities	4
4.0	Quantity and Composition of Waste Received, Disposed and Recovered: 1 st Jan – 31 st Dec 2014	6
5.0	Projections of the quantities to be accepted and percentages disposed and recycled/recovered for the coming year	7
6.0	Summary Report on Emissions for the Reporting Period.....	7
7.0	Summary of Results and Interpretations of Environmental Monitoring.....	7
8.0	Resource and Energy Consumption Summary.....	11
9.0	Report on Development Works Undertaken during the Reporting Period....	11
10.0	Timescale for Proposed Development Works For Forthcoming Year	11
11.0	Environmental Management System	12
12.0	Report Targets and Environmental Objectives and Targets for 2015.	13
13.0	Summary of Procedures Developed by the Licensee	14
14.0	Reported Incidents and Complaints	14
15.0	Report on Financial Provision.....	14
16.0	Management and Staffing Structure at Facility 2014.....	16
17.0	Programme of Public Information.....	17
	Appendix I - Waste Collected at Kenmare Transfer Station and Recovered/Recycled offsite during reporting period.....	18
	Appendix II - Results of Foul and Surface Water Monitoring	20
	Appendix III - Landfill Gas Summary	28
	Appendix IV – Dust Monitoring Results	29
	Appendix V – Noise Report	31
	Appendix VI - AER/PRTR Return 2014	47

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 L782.

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– 31st December 2014.

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 2014

Waste tonnage disposed of at Kenmare Transfer Station during the reporting year (2014) was unchanged on the previous year (2013). However, there was an increase of 22.5 tonne of household waste disposed at the site.

The weight of the waste accepted into Kenmare Transfer Station Facility for disposal for the reporting period was 819.96 Tonnes. This comprises of the following breakdown:

<i>Waste Category/Source</i>	2012	2013	2014
Household Waste	689.16	608.50	631.00
Commercial Waste	196.62	187.02	172.58
Road Sweeping	4.5	0	0
Flytipping	13.86	21.28	16.38
Total	904.14	816.80	819.96

Table 1 Waste Stream Break down for reporting Period.

The quantity of waste sent for recycling in 2014 was 360.717 tonnes this is an increase of 32 tonnes on 2013 figure. 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
Metals	20 01 40	32.64	40.56	49.70
Steel Cans	15 01 04	2.62	6.29	5.372
Glass	15 01 07	44.86	64.26	63.653
Aluminium	15 01 04	1.1	1.66	1.673
Batteries	20 01 34	0.13	1.63	2.916
Newspapers and Magazines	20 01 01	81.18	79.28	88.12
Cardboard	15 01 01	11.06	12.26	22.48
Fluorescent Tubes	20 01 21	0.14	0.5	0.355
Plastic Bottles	15 01 02	32.75	33.20	42.325
WEEE	Various	76.22	80.29	71.743
Mixed Packaging	15 01 06	5.76	7.64	11.48
Waste Mineral Oil	20 01 25	0.1	1.08	0.36
Textiles	20 01 11	0	0	0.54
Total for Recycling/Recovery	tonnes	288.56	328.65	360.717

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 expected that waste disposal rates at Milltown Transfer Station will remain unchanged for the next reporting period. However, the WEEE tonnage for 2015 should decrease with the change in the manner in which WEEE is collected from shops. The proposed Household Waste Regulations due to come into effect in July 2015 we estimate that this will have an impact on the total waste being disposed at this facility however, we are awaiting clarification from the Department of the Environment in relation to this in order assess the impact of this 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 carried out at the facility at Stations 1-5 in September/October 2014. The dust monitoring results for the reporting period were higher than the total emission

limit for total particulates for 3 of the five samples however the total inorganic particulates was under the limit of 350 mg/m²/day . There were no issues with dust during 2014 and no complaints were received in relation to dust at the facility.

Licence Ref	Site Ref	Total Particles mg/m ² /day	Inorganic Particles mg/m ² /day	Licenced Limit mg/m ² /day
B1	Station 1	535	123	350
B2	Station 2	571	151	350
B3	Station 3	100	<10	350
B4	Station 4	909	179	350
B5	Station 5	39	14	350

b) Noise monitoring.

An analysis of the results, combined with on site observations indicates that the Kenmare Waste Transfer Station is not a noise nuisance and complies with the noise limit criteria set out in the waste licence.

The main contributing noise sources off site at the nearest dwelling in particular were not associated with the waste transfer station.

c) Monitoring of surface water.

The surface water monitoring results are attached in Appendix II.

d) Foul Water

The foul water emission monitoring results are attached in Appendix II.

The foul water is discharged via a Puraflow Wastewater Treatment Unit and is monitored quarterly. The results are sent to the EPA via six monthly reports and are also available at the Kenmare facility and Environmental Services Office.

Cleaning out and a service of the wastewater treatment system was carried out in March 2014. 2.42 tonnes of sludge and foul water was removed from the system.

e) Bund and Tank Integrity Test

No bund and tank testing was carried out in 2014, Kerry County Council is committed to carrying out this in 2015 and the result of same will be forwarded to the Agency for its consideration.

f) Landfill gas

The levels of methane gas and carbon dioxide recorded have reduced significantly (2014 average **CH₄**– 0.3% v/v & **CO₂**– 0.1% v/v) compared to previous years. The landfill gas monitoring results are attached in Appendix III.

Table 3 Daytime Noise Monitoring Results Milltown Waste Transfer Station 2014.

Location	Date and Time	L _{Aeq} dB	L _{A10} dB	L _{A90} dB	Tones	Description of Noise Sources
B1 (boundary location, west)	14:07-14:37	55	52	31	No	The main contributing noise sources at this location included customers using facility, the tipping shed in operation and the cardboard compactor.
	14:37-15:07	58	61	38		
	15:07-15:37	49	49	37		
B2 (at weighbridge)	11:30-12:00	54	55	37	No	The main contributing noise sources at this location included customers using facility, the tipping shed in operation and occasional customer's cars. HGVs passing on the adjacent local road also contributed.
	12:00-12:30	48	52	38		
	12:30-13:00	50	53	33		
B3 (off site at forestry gates)	13:00:13:30	51	48	34	No	No noise from the waste transfer station was audible at this location. Local traffic on the adjacent third class road and birdsong were the main contributors to the noise level at this location.
	13:30-14:00	53	50	35		
	14:00-14:30	51	48	32		
B4 (entrance to nearest dwelling north east of the facility)	14:35-15:05	50	46	33	No	No noise from the waste transfer station was audible at this location with the exception of faint breaking glass noise from bottle bank. Wind borne noise and background traffic noise from the local third class road were the main contributing noise sources at this location.
	15:05 – 15:35	51	46	35		
	15:35 -16:05	49	47	36		

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 2014 was 896 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 electricity usage for the facility during the reporting period was 2,968 kWh. Power is required for the office computer and lighting, weighbridge, waste compactor, storage heating, water pumping, cardboard baler and public lighting on the site.

8.3 Water

Water supply is from a groundwater borehole on site. While water consumption was not metered during the reporting period water is mainly used on site for power washing yards, office toilets and sinks, transfer station apron/hopper and washing of trucks and bins when required.

9.0 Report on Development Works Undertaken during the Reporting Period

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

10.0 Timescale for Proposed Development Works For Forthcoming Year

There is plan to carry out a minor upgrade of Kenmare Waste Transfer Station in terms of signage and layout for the public. Once this is complete we will revert to the Agency with an update report.

11.0 Environmental Management System

There is an Environmental Management System on site. This document is due for renewal however, this revised document is not being released until sight of the proposed Household Waste Regulations has been seen and their impact on the EMS has been assessed.

12.0 Report Targets and Environmental Objectives and Targets for 2015.

Target Area	2015 - Objective	2015 – 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 odour.
		No odour complaints received due to off site odour
Waste Storage Practices	Ensure good housekeeping on site to ensure that waste is stored corrected and collected in a timely fashion so not to cause nuisance to the surrounding areas and on site	No wind blown litter on site No overflowing bins on site Proper segregation of waste
Incident Prevention	Look at Fire Preventative and Emergency Response Procedure for the site	Revised procedures to be put in place mindful of EPA guidance document
Infrastructure integrity and drainage	Carry out integrity testing on site	Integrity testing carried out on site
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	Look at the proposed household waste regulations and implement the same on site in a timely manner	Draft Household Regs. implemented on site.

13.0 Summary of Procedures Developed by the Licensee

The following procedures were developed during the reporting period:

- Revised Operational Procedures for Facility Manager
- Revised Health & Safety Procedures

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

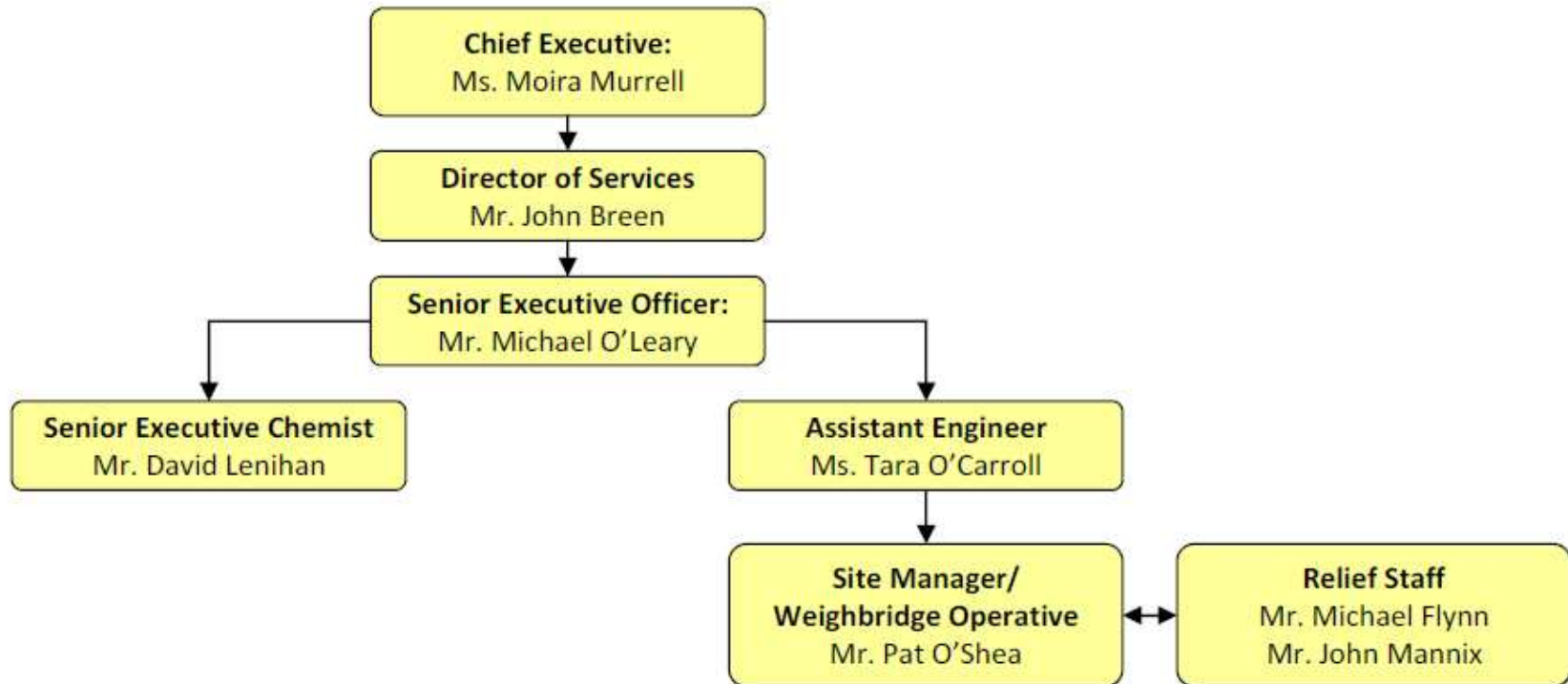
a) Statement of Costs for Waste Operations at Facility 2014

Accelem	Accelem (T)	Total Charge Euro
60030	Wages	25,757.68
60040	Salaries	5,052.14
60100	ER PRSI	4,619.81
60200	Overtime	9,937.55
60400	Sick Pay	385.68
60500	Annual Leave	1,643.34
60510	Bank Holiday Leave	751.24
60600	Travel/Subsistence	2,602.16
61990	Other Allowances	1,519.40
65500	Minor Contracts- Trade Services & other works	42,969.51
68000	Non-Capital Equip Purchase - Office Equip/Furn	199.00
69000	Hire (Ext) - Plant/Transport/Machinery & Equipme	65.04
69200	Repairs & Maint - Plant	150.83
69260	Repairs & Maint - Other Equip	36.40
69400	Transfers from Machinery Yard	3,377.50
69600	Other Vehicle Expenses	102.00
70000	Materials	268.90
70990	Issues from Stores	3,294.39
70991	Returns to Stores	-276.16
71000	Insurance	486.60
73400	Staff Travelling & Subsistence Expenses	465.60
76000	Communication Expenses	163.22
76100	Postage	41.59
77100	Courier	1.97
77200	Security - Property	0.00
78000	Training	0.00
79900	Consultancy/Professional Fees and Expenses	0.00
80000	Advertising	42.00
81000	Printing & Office Consumables	131.82
82100	Statutory Contributions to Other Bodies	5,287.98
85100	Rates & Other LA Charges	0.00
86000	Energy	1,316.94
	Total Cost Residual Waste Operations	110,394.13

b) Statement of Costs for Recycling Operations at Facility 2014

Accelem	Accelem(T)	Total Charge Euro
60030	Wages	9,018.57
60040	Salaries	5,052.14
60100	ER PRSI	2,300.04
60200	Overtime	4,517.84
60500	Annual Leave	3,095.44
60510	Bank Holiday Leave	481.26
60600	Travel/Subsistence	922.69
61990	Other Allowances	348.10
65500	Minor Contracts- Trade Services & other wo	7,387.52
69200	Repairs & Maint - Plant	0.00
69260	Repairs & Maint - Other Equip	9.10
69400	Transfers from Machinery Yard	275.00
70000	Materials	783.44
70990	Issues from Stores	517.24
73400	Staff Travelling & Subsistence Expenses	464.23
76000	Communication Expenses	117.83
77100	Courier	5.10
77200	Security - Property	11.50
78000	Training	0.00
80000	Advertising	42.00
81000	Printing & Office Consumables	13.00
82100	Statutory Contributions to Other Bodies	5,287.98
85100	Rates & Other LA Charges	0.00
86000	Energy	348.48
	Total Recycling Operations	40,998.50

16.0 Management and Staffing Structure at Facility 2014



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

Kenmare Transfer Station Residual Waste - Tonnage Period 01/01/14 to 31/12/2014

							Non Levied Waste					Total of Waste Over Weighbridge Excluding Ticket Waste	Total Waste Out	No. Loads out of TS	Waste In @ NKL	No. Loads into NKL	Variance	Average Variance per Load
	Public Car Household	* Non weighed waste inclusive of tickets	A/C Holders (VAT Inclusive)	A/C Holders (VAT Exempt)	KCC Internal Depts	Total Levied Waste	Road Sweeping & Streetcleaning	Graveyard Waste	KCC Clean Ups / F'tipping	Clean Ups / F'tipping No Charge	Total Non levied							
January 2014	16.22	37.04	11.04	0	0	64.30	0	0	0	1.34	1.34	28.60	65.18	6	65.64	6	0.46	0.08
January 2013	16.40	29.33	15.92	0	0.48	62.13	0	0	0.24	0.43	0.67	33.47	62.46	6	62.80	6	0.34	0.06
February 2014	16.18	25.44	12.76	0	0	54.38	0	0	0	0.92	0.92	29.86	55.00	5	55.3	5	0.30	0.06
February 2013	10.46	32.6	11.46	0	0.14	54.66	0	0	0.68	1.44	2.12	24.18	55.88	5	56.78	5	0.90	0.18
March 2014	18.08	36.36	14.34	0	0.00	68.78	0	0	0.2	0.76	0.96	33.38	69.58	7	69.74	7	0.16	0.02
March 2013	12.38	41.96	12.64	0	0	66.98	0	0	1.86	0.6	2.46	27.48	69.80	7	69.44	7	-0.36	-0.05
April 2014	16.76	33.24	17.9	0	0	67.9	0	0	0	2.32	2.32	36.98	69.96	7	70.22	7	0.26	0.04
April 2013	16.68	18.28	11.86	0	0	46.82	0	0	0	2.84	2.84	31.38	60.18	6	49.66	5	-10.52	-2.10
May 2014	17.64	28.30	15.14	0	0	61.08	0	0	0.56	1.8	2.36	35.14	63.30	6	63.44	6	0.14	0.02
May 2013	21.76	38.6	20.46	0	0	80.82	0	0	0	4.56	4.56	46.78	74.84	7	85.38	8	10.54	1.32
June 2014	24.84	40.52	8.92	0	1.94	76.22	0	0	0.02	0.94	0.96	36.66	76.84	8	77.18	8	0.34	0.04
June 2013	17.64	37.82	16.56	0	0	72.02	0	0	0.16	0.94	1.1	35.30	73.1	7	73.12	7	0.02	0.00
1st - 11th July 2014	6.92	22.06	9.68	0	0	38.66	0	0	0	0.48	0.48	17.08	39.16	4	39.14	4	-0.02	0.00
12th - 31st July 2014	13.72	18.98	12.8	0	2.46	47.96	0	0	0.5	0.92	1.42	30.40	49.38	5	0.00	0.00	0.00	0.00
July 2014	20.64	41.04	22.48	0	2.46	86.62	0	0	0.5	1.4	1.9	47.48	88.54	9	39.14	4	-0.02	0.00
July 2013	22.64	37.98	21.3	0	0.04	81.96	0	0	0.38	0.94	1.32	45.30	83.02	8	83.28	8	0.26	0.03
August 2014	18.4	51.60	17.72	0	0	87.72	0	0	1.32	0.66	1.98	38.10	89.70	8				
August 2013	20.1	46.16	23.98	0	0	90.24	0	0	0	0.54	0.54	44.62	90.44	9	90.78	9	0.34	0.04
September 2014	14.48	36.48	12.88	0.00	0	63.84	0	0	0.66	0.76	1.42	28.78	65.26	6				
September 2013	12.54	33.42	14.64	0	0	60.60	0	0	0	1.06	1.06	28.24	61.58	6	61.66	6	0.08	0.01
October 2014	15.00	26.84	14.38	0	0.06	56.28	0	0	0	0.54	0.54	29.98	56.82	5				
October 2013	14.06	32.06	15.76	0	0	61.88	0	0	0	2.34	2.34	32.16	64.4	6	64.22	6	-0.18	-0.03
November 2014	10.86	31.76	10.3	0	0	52.92	0	0	0	1.06	1.06	22.22	53.98	5				
November 2013	9.4	37.55	11.08	0	0	58.03	0	0	0.42	1.23	1.65	22.13	59.5	6	59.68	6	0.18	0.03
December 2014	13.12	40.16	10.26	0.00	0	63.54	0	0.00	0	0.62	0.62	24.00	64.16	6				
December 2013	11.52	37.16	10.6	0	0.1	59.38	0	0	0	0.62	0.62	22.84	59.74	6	60.00	6	0.26	0.04
Total Tonnage 2014	202.22	428.78	168.12	0.00	4.46	803.58	0.00	0.00	3.26	13.12	16.38	391.18	818.32	78	440.66	43	1.64	
Total Tonnage 2013	185.58	422.92	186.26	0.00	0.76	795.52	0.00	0.00	3.74	17.54	21.28	393.88	814.94	79	816.80	79	1.86	
Grand Total									16.38			Overall Total Average Variance Per Load 1st Jan - 11th July 2014				0.04		

Household Waste Deposited at Kenmare Civic Amenity Sites in 2014

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Material type	Suggested EWC codes													
Mixed residual waste (Waste into NKL from TS)	20 03 01	65.64	55.30	69.74	70.22	63.44	77.18	88.52	89.70	65.26	56.82	53.98	64.16	819.96
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)	20 03 01	1.18	0.74	0.82	1.10	0.80	0.92	1.00	1.12	1.28	1.00	0.82	0.70	11.48
Cardboard, newspaper and other paper														0.00
cardboard packaging	15 01 01	6.48	1.80				2.04	4.26	1.46	1.28	1.32	1.74	2.10	22.48
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	10.54	7.40	6.00	6.00	8.02	6.02	8.02	6.16	5.72	8.18	7.62	8.44	88.12
Glass														0.00
glass packaging (bottles)	15 01 07	5.9090	3.8870	2.9780	4.5260	4.0790	7.5970	5.7490	5.5750	4.3910	1.6190	3.2450	5.6380	55.1930
glass non-packaging (flat glass)	20 01 02													0.0000
Metals														0.0000
aluminium cans (packaging)	15 01 04	0.1370	0.1650	0.1300	0.1450	0.1260	0.1990	0.1470	0.1330	0.1310	0.0710	0.0980	0.1910	1.6730
steel cans (packaging)	15 01 04	0.4880	0.4870	0.2380	0.3910	0.5470	0.6190	0.5340	0.3580	0.5460	0.2260	0.3920	0.5460	5.3720
other metals (scrap metals)	20 01 40	2.84	4.14	3.14	6.34	5.92	3.60	5.98	2.64	4.96	2.38	2.88	4.88	49.70
Plastic														0.00
plastic packaging (bottles)	15 01 02	3.48	2.28	2.50	2.35	3.280	2.720	4.020	9.140	2.920	3.480	3.020	3.14	42.325
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						0.54							0.54
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
Ni-Cd batteries and accumulators	16 06 02*	0.000	0.562	0.000	0.660	0.169	0.000	0.000	0.000	0.825	0.000	0.000	0.700	2.916
Other (e.g. alkaline) batteries and accumulators (Small Batteries)	16 06 04													0.00
Household Hazardous Waste														0.00
Waste mineral oils	13 02 08						0.36							0.36
Oil filters (vehicles)	13 08 99													0.00
Oil containers (mineral oil) - plastic + metal	13 08 99													0.00
Waste cooking or vegetable oils	20 01 25													0.00
Waste paint and varnish (including containers)	20 01 27													0.00
Aerosols	14 06 01													0.00
WEEE collected by compliance schemes														0.00
CRT	20 01 36	2.060	1.250	0.866	1.098	1.538	1.202	0.986	1.556	1.690	0.657	1.438	0.525	14.866
SDA - Small Domestic Appliances	20 01 36	2.910	1.380	1.240	2.000	2.020	2.590	2.475	2.475	2.310	1.362	1.650	2.050	24.187
LDA - Large Domestic Appliances	20 01 36	0.000	5.440	1.800	1.700	1.507	0.000	4.400	0.000	4.100	0.218	0.000	2.170	21.335
Cold	20 01 36	0.000	1.167	0.685	0.000	2.540	0.854	0.999	0.000	1.446	0.000	0.753	2.911	11.355
														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	0.72			1.70		1.48		1.76	1.76		1.04		8.46
Fluorescent Tubes	20 01 21		0.12					0.125					0.11	0.355
Sludge	<enter EWC code>													0.00
Foul Water Septic Tanks	19 07 03									2.42				2.42

Introduction:

Due to on-going concerns of ammonium spikes at Kenmare Transfer Station surface water sites, biological monitoring was requested on the Finnihy River at Sahaleen Bridge. This was to determine the overall quality of the river downstream of the transfer station. The Finnihy was also sampled upstream at Geran Bridge and between Geran Bridge and Sahaleen Bridge at N of Reenacallee. A tributary which enters the river Finnihy upstream of Sahaleen was sampled at two points downstream of Kenmare Transfer Station (SE Reenacallee) and upstream of confluence. (See map for sample site locations.)

Biological Q Rating:

The samples were classified using the Biological Quality Rating System for Rivers (Q Rating System) as outlined by the Environmental Protection Agency (EPA). The Biological Quality Rating System for Rivers (Q ratings) goes from Q1 to Q5 where a Q5 denotes a pristine river and Q1 indicates serious pollution. From the point of view of the Water Framework Directive all rivers and streams must be at least Good status i.e. Q4. High status river stations are not allowed to deteriorate. There are different classifications for depositing and eroding substrates. The Q system is aimed particularly at larger streams and rivers and is carried out between May and September. Three-minute kick samples are carried out at each station accompanied by stone examinations and weed sweeps. The abundance chart is shown in Appendix 1.

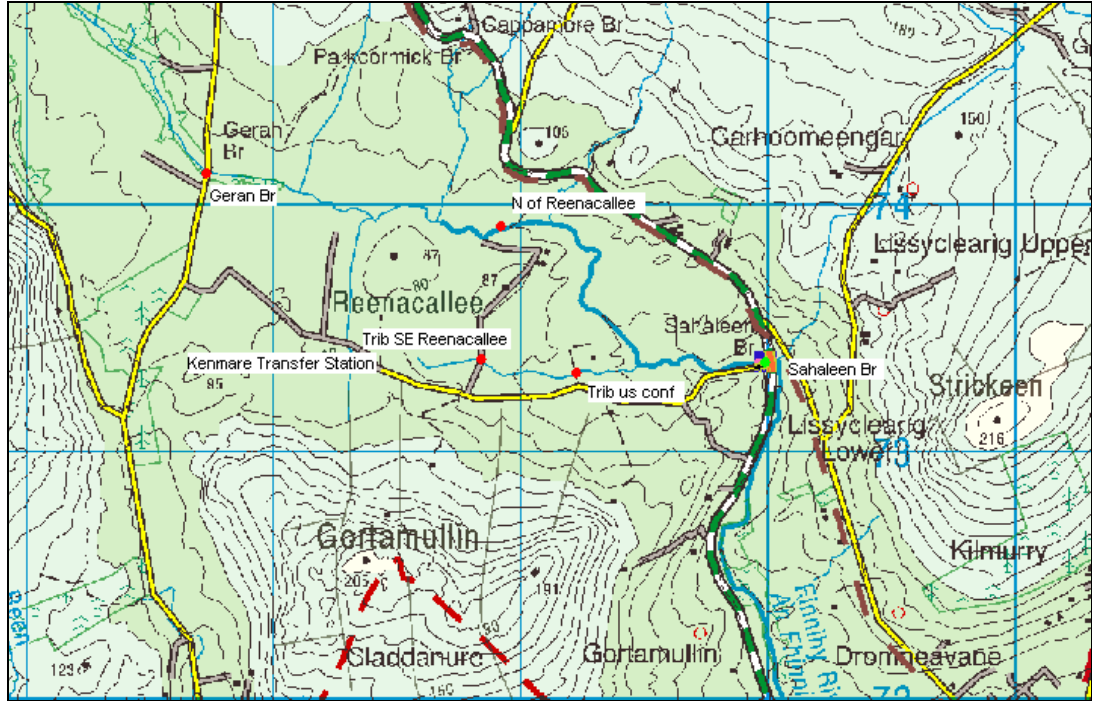
Discussion:

In September 2012 a biological assessment was carried out at Sahaleen Bridge and a Q rating of 3 (moderate pollution) obtained. There is an absence of A group Ephemeroptera and Plecoptera. This result represents a drop from a Q 4 (unpolluted) at this site in an EPA survey of 2005. As a result of this poor quality further biological assessment was carried out upstream.

At Geran bridge a Q rating of 4 was obtained with Plecoptera and Ephemeroptera both represented. Downstream of Geran Bridge at site North of Reenacallee a Q of 4-5 was scored (denoting unpolluted – pristine conditions). Four different species of the highly sensitive A group were found in good numbers. The tributary stream at SE Reenacallee scores a Q rating of 3 (moderate pollution). The same tributary is assessed upstream of its confluence with the Finnihy and scores a Q rating of 1-2 (heavy pollution) with the most tolerant E group superabundant and an abundance of algal growth on stones.

Conclusion:

There is deterioration in the river Finnihy between N of Reenacallee and Sahaleen Br from very clean unpolluted conditions to moderately polluted. The tributary entering the Finnihy just upstream of Sahaleen bridge has deteriorated in status along its length from moderately polluted at SE Reenacallee to heavily polluted just upstream of the confluence. Further investigation is needed to identify the source of pollution.



Map of Sampling Station

Table of Results

			MRP	SS	TON	Colour	NH4	Nitrite
			P		N	Hz	N	N
			--	--	--	20	--	--
			--	--	--	--	--	--
			--	--	--	--	--	--
Location	Lab Ref no	Date	mg/l	mg/l	mg/l	Hazen	mg/l	mg/l
Sahaleen Bridge	2012/4216	03-Sep-12	< 0.005	1	0.07	81	0.02	< 0.001
R Finnihy N of Reenacallee	2012/4259	04-Sep-12	< 0.005	< 1	0.06	70	0.04	
Geran Bridge	2012/4258	04-Sep-12	< 0.005	< 1	0.05	55	0.03	
Trib to Finnihy u/s of confl	2012/4260	04-Sep-12	0.029	3	0.08	135	0.02	
Trib to Finnihy SE of Reenacallee	2012/4385	11-Sep-12	0.012		< 0.01	178	0.02	< 0.001

			pH	Cond	DO	%DO	Temp	Q
					O2			
			9	--	15	150	--	--
			--	--	--	--	--	--
			6	--	5	50	--	4
			pH units	μS/cm	mg/l	% O2	° C	Rating
Sahaleen Bridge	2012/4216	03-Sep-12	7.1	68	9.3	100	19.1	3
R Finnihy N of Reenacallee	2012/4259	04-Sep-12	6.7	58	8.8	97	21.1	4.5
Geran Bridge	2012/4258	04-Sep-12	6.7	60	8.6	94	20.2	4
Trib to Finnihy u/s of confl	2012/4260	04-Sep-12	7	114	8	88	20.3	1.5
Trib to Finnihy SE of Reenacallee	2012/4385	11-Sep-12	6.1	55	8.1	78	14.1	3

Surface Water Monitoring Results

Parameter	Ammonium	pH	BOD (5da)	Conductivity	Chemical O	Chloride	Dissolved	Suspended	Temperature	Appearance	Odour	Oils/Fats & Solids						
	NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem		Physchem	OFG						
Max	Varies	Varies	--	Varies	--	Varies	Varies	--	--	--	--	--						
Target	--	--	--	--	--	--	--	--	--	--	--	--						
Min	--	Varies	--	--	--	--	Varies	--	--	--	--	--						
Project	Location	Location E	Location N	Sample Ref	Sample Date	Comments	mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	Degrees C	Descriptive	Descriptive	mg/l	
Kenmare	Sw1	88320	73367	2014/0334	29-Jan-14		0.23	6.6	1.5	165	12	47.3	11.4	< 1	6.3	Clear	ND	
Kenmare	Se1	88375.1	73303.8	2014/0476	11-Feb-14		0.05	6.9	2.7	145	55		41				ND	< 0.5
Kenmare	Sw1	88320	73367	2014/1309	01-Apr-14		1.58	6.3	1.8	142	21	26.3	7.2	< 1	9.5	Clear	N.D	

SAMPLING POINT	Sampling Point	Sample No.	Sampled Date	Sampled Time	Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	C.O.D.	Ammonia	Chloride	Dissolved Oxvaen	Suspended Solids	Visual Inspection
						<i>NONE</i>	<i>DEG_C</i>	<i>PH</i>	<i>USCM</i>	<i>BOD</i>	<i>MGL</i>	<i>MGLN</i>	<i>MGL</i>	<i>MGL</i>	<i>MGL</i>	<i>MGL</i>
KENMARE_SW1	Kenmare Sw1	2014/2964	23-Jul-14	14:50	Reported Name			6.0				0.0				
					Value Min.			9.0				0.0				
					Value Max											
					Value Units	<i>NONE</i>	<i>DEG_C</i>	<i>PH</i>	<i>USCM</i>	<i>BOD</i>	<i>MGL</i>	<i>MGLN</i>	<i>MGL</i>	<i>MGL</i>	<i>MGL</i>	<i>NONE</i>
						Normal	20.5	6.2	106	2.5	20	0.66	14.7		4	Clear

Parameter	Ammonia	pH	D.O. (g/L)	Conductivity	Phosphate	Chloride	Dissolved	Sulphate	Temperature	Appearance	Colour	Odour			
Max	Varies	Varies	--	Varies	--	Varies	Varies	--	--	--	--	--			
Target	--	--	--	--	--	--	--	--	--	--	--	--			
Min	--	Varies	--	--	--	--	Varies	--	--	--	--	--			
Comment	mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	Descriptive	Descriptive	mg/l			
Kenmare Sw2	88309	73232.4	2014/0337	29-Jan-14	0.02	5.7	< 1	162	11	49	11.3	< 1	6.2	Clear	ND
Kenmare Sw2	88309	73232.4	2014/1312	01-Apr-14	0.02	6.6	< 1	98	18	24.5	9.9	< 1	9.2	Clear	N.D
Kenmare Sw2	88309	73232.4	2014/1310	01-Apr-14	0.06	6.5	< 1	98	16	24.7	9.9	< 1	9.2	Clear	N.D

SAMPLING POINT	Sampling Point	Sample No.	Sampled Date	Sampled Time	Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	C.O.D.	Ammonia	Chloride	Dissolved Oxvaen	Suspended Solids	Visual Inspection				
					Reported Name															
					Min. Value			6.0			0.0									
					Max Value			9.0			0.0									
					Units	NONE	DEG_C	PH	USCM	BOD	MGL	MGLN	MGL	MGL	MGL	MGL	NONE			
KENMARE_SW2	Kenmare Sw2	2014/2965	23-Jul-14	15:40		Normal	19.5	6.5	70	<1.0	26	0.08	11.8		5	Clear				
	Kenmare Sw2	2014/4489	05-Nov-14	13:50		Normal	9.9	6.0	57	<1.0	23	0.03	14.5	10.6	<1	Clear				

Project	Location	Location ID	Latitude	Longitude	Sample ID	Sample Date	Comment	Parameter	Ammonium	pH	BOD/COD	Conductiv	Chemical	Chloride	Dissolved	Suspended	Temperature	Appearance	Color	Oil/Fats
									NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem		Physchem	OFG
								Max	Varies	Varies	--	Varies	--	Varies	Varies	--	--	--	--	--
								Target	--	--	--	--	--	--	--	--	--	--	--	--
								Min	--	Varies	--	--	--	--	Varies	--	--	--	--	--
									mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	Descriptive	Descriptive	mg/l
Kenmare	Sw3	88301	73462.5	2014/1311	01-Apr-14	Stagant		1.57	6.9	1.2	154	28	25.9	8	< 1	9.1	River Like	N.D		

SAMPLING POINT	Sampling Point	Sample No.	Sampled Date	Sampled Time	Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	C.O.D.	Ammonia	Chloride	Dissolved Oxygen	Suspended Solids	Visual Inspection			
						Reported Name	Min. Value	Max Value	Units										
								6.0				0.0							
								9.0				0.0							
						<i>NONE</i>	<i>DEG_C</i>	<i>PH</i>	<i>USCM</i>	<i>BOD</i>	<i>MGL</i>	<i>MGLN</i>	<i>MGL</i>	<i>MGL</i>	<i>MGL</i>	<i>NONE</i>			
KENMARE_SW3	Kenmare Sw3	2014/2966	23-Jul-14	15:15		Normal	19.8	6.1	106	1.3	37	0.86	14.2		4	Clear			
	Kenmare Sw3	2014/4488	05-Nov-14	13:50		Normal	9.9	6.3	77	<1.0	27	0.18	15.8	9.6	<1	Clear			
	Kenmare Sw3	2014/4490	05-Nov-14	14:20		Normal	10.0	6.1	81	<1.0	39	0.31	15.3	8.9	1	Clear			
	Kenmare Sw3	2014/4491QA	06-Nov-14	14:20		Normal	10.0	6.1	81	<1.0	40		15.7	8.9	<1	Clear			

Foul Water Monitoring Results

Category	Project	Location	Location ID	Location Name	Sample ID	Sample Date	Parameter	Ammonium	pH	BOD (5da)	Conductivity	Chemical O2	Chloride	Dissolved O2	Suspended	Temperature	Appearance	Odour
								NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem		Physchem
							Max	Varies	Varies	--	Varies	--	Varies	Varies	--	--	--	--
							Target	--	--	--	--	--	--	--	--	--	--	--
							Min	--	Varies	--	--	--	--	Varies	--	--	--	--
							Comment	mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	Descriptive	Descriptive
Landfill	Kenmare	Se1	88375.1	73303.8	2014/1863	12-May-14		0.8	6.5	3.1	95	60		25	14.5	Clear	ND	

Product	Product Version	Project	SAMPLING POINT	Sampling Point	Sample No.	Sample Date	Sample Time	Analysis Parameter	003_OD OUR	005A_TEMP_FIED	006_PH	007A_CONDUCTIVITY20	013C_BOD_ATU	014_COD	022K_AMMONIA	027_FOG	037_SUSPENDED SOLIDS	082_VISUAL INSPECTION
								Reported Name										
								Min. Value										
								Max Value										
								Units	NONE	DEG_C	PH	USCM	BOD	MGL	MGLN	MGL	MGL	NONE
LEACHATE		1 Kenmare	KENMARE_SE1	Kenmare Se1	2014/319	12-Aug-14	14:10		Normal	17.0	6.8	199	4.6	77	0.61	<1	10	Clear
				Kenmare Se1	2014/485	24-Nov-14	13:00		Normal	10.8	7.1	120	7.1	72	0.43	<1	8	Clear, Coloured.

Appendix III - Landfill Gas Summary

Kenmare Waste Transfer Station

Monitoring of Landfill Gas Levels

Date	Ref.	CH₄ % v/v	CO₂ % v/v	O₂ % v/v	Atm. Pressure Mbar	Temperature Degrees Celsius
14/10/08	L1	52.3	28.5	1.1	1002	14
20/5/09	L1	48.7	29.3	2.4	998	16
10/12/09	L1	50.9	27.4	1.6	1004	8
14/4/10	L1	0.3	0.2	20.5	1012	13
7/10/11	L1	0.3	0.3	19.9	1021	15
11/11/11	L1	0.2	5.6	18.1	990	13
20/06/12	L1	0.4	4.8	17.1	1005	18
22/11/12	L1	0.3	0.2	20.3	988	8
18/09/13	L1	0.3	0.2	20.3	1009	8
31/10/13	L1	0.3	0	19.7	1001	9
22/11/13	L1	0.2	0.1	19.1	1004	8

Appendix IV – Dust Monitoring Results



OUR REF: RP 2014 | KERRY COUNTY COUNCIL – KENMARE | 01 – 02

PAGE 01 | 02

ANALYSIS REPORT

CUSTOMER:	KERRY COUNTY COUNCIL	SAMPLE TYPE:	DUST
ADDRESS:	Environment Section, Main Street, Tralee, County Kerry	CONDITION OF SAMPLE ON RECEIPT:	Satisfactory
REPORT TO:	TARA MC CARTHY	DATE SAMPLED:	30 Days
SAMPLED BY:	John Mannix, Kerry County Council	DATE RECEIVED:	20 October 2014
SAMPLING PT:	KENMARE TRANSFER STATION	DATE ANALYSED:	05 – 10 November 2014
ORDER NO:		DATE REPORTED:	11 November 2014
		WORK NO.:	31488 C 12P-101

TABLE OF RESULTS

Method:	Lab Ref:	Your Ref:	Unit	TOTAL PARTICULATES	INORGANIC PARTICULATES
SCP 039	C14-Oct 395	Station 1	mg/m ³ /day	535	123
SCP 039	C14-Oct 396	Station 2	mg/m ³ /day	571	151
SCP 039	C14-Oct 397	Station 3	mg/m ³ /day	100	<10
SCP 039	C14-Oct 398	Station 4	mg/m ³ /day	909	179
SCP 039	C14-Oct 399	Station 5	mg/m ³ /day	39	14

Jennifer Keane
 Jennifer Keane
 Chemistry Laboratory Manager

- The results relate only to the items tested.
- The analysis report shall not be reproduced except in full without written approval of the laboratory.

(registered office)
 dunrine | killarney | county kerry | ireland | telephone +353 (0)64 6633922 | fax +353 (0)64 6639022
 web site www.southernscientificireland.com | e-mail info@southernscientificireland.com

directors: K. Murphy, M. Murphy & C. Murphy
 registered in ireland no 323196 | vat reg no IE 6343196 M

COMMENT:

C12-NOV 491 – STATION 1

Prior to analysis a large amount of leaves were removed from collector gauge.
The collector gauge contained brown coloured water and a small amount of brown particulates. The dried dish contained a large amount of brown particulates and brown fine powder residue. The ashed dish contained a large amount of brown particulates and white fine powder residue. The ashed residue underwent no effervescence on addition of acid indicating the absence of carbonate in the residue.

C12-NOV 492 – STATION 2

Prior to analysis a large amount of leaves were removed from collector gauge.
The collector gauge contained brown coloured water and a large amount of brown particulates. The dried dish contained a large amount of brown particulates and brown fine powder residue. The ashed dish contained a large amount of brown particulates and white fine powder residue. The ashed residue underwent no effervescence on addition of acid indicating the absence of carbonate in the residue.

C12-NOV 493 – STATION 3

Prior to analysis a large amount of leaves were removed from collector gauge.
The collector gauge contained brown coloured water and a small amount of brown-black particulates. The dried dish contained a large amount of brown particulates and brown fine powder residue. The ashed dish contained a large amount of grey particulates and orange fine powder residue. The ashed residue underwent no effervescence on addition of acid indicating the presence of carbonate in the residue.

C12-NOV 494 – STATION 4

Prior to analysis a large amount of leaves were removed from collector gauge.
The collector gauge contained brown coloured water. The dried dish contained a large amount of brown particulates and brown fine powder residue. The ashed dish contained a large amount of brown particulates and grey fine powder residue. The ashed residue underwent no effervescence on addition of acid indicating the absence of carbonate in the residue.

In accordance to standard laboratory practice a blank sample and a QC standard were analysed with the batch of samples.

Appendix V – Noise Report



Noise Survey 2014
Kenmare Waste Transfer Station



www.mwp.ie

ISSUE FORM	
Project number	16490
Document number	6003
Document revision	A
Document title	Noise Survey
Document status	Draft
Document prepared by	Peter Barry
Document checked by	MR (MWP) / 2016-02-16

Table of contents

1	INTRODUCTION	1
2	METHODOLOGY.....	1
2.1	Monitoring periods	1
2.2	Monitoring Locations	1
2.2.1	Noise Monitoring Location Photographs	2
2.3	Survey Equipment.....	2
2.4	Measurement Parameters.....	3
2.5	Meteorological Conditions	3
3	NOISE SOURCES	3
4	RESULTS	4
5	CONCLUSION	5

List of appendices

Appendix 1	Calibration Certificates
Appendix 2	Glossary of Noise Related Terms

1 INTRODUCTION

Kerry County Council operates a waste transfer station in Claddanure West, near Kenmare. The facility operates within the conditions set out in the waster licence register number W0086-1. Under the terms of this licence the facility is required to carry out an annual environmental noise survey. The results of this survey are described below.

2 METHODOLOGY

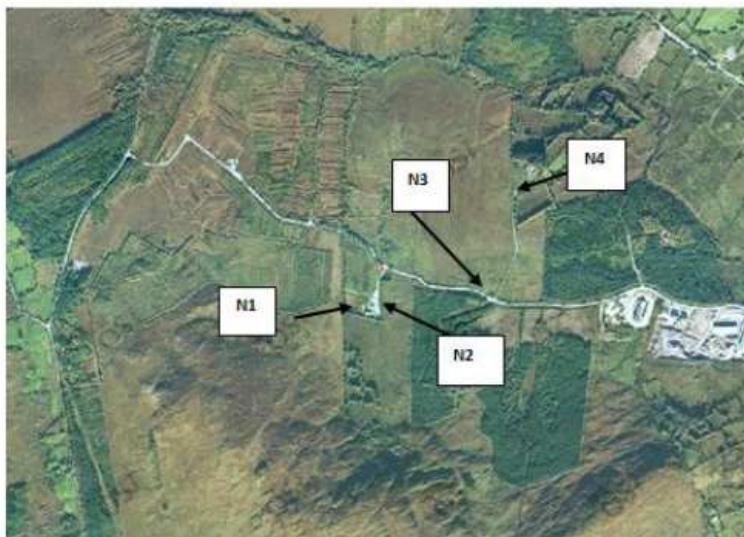
2.1 MONITORING PERIODS

The survey was carried out in accordance with the EPA guidance document, EPA guidance note 4- Guidance Note for Noise: Licence Applications, Surveys and Assessments in relation to Scheduled Activities. In accordance with the guidance note the noise surveys were carried out over three monitoring periods during the normal daytime operating times. Monitoring was undertaken for 30 minutes at each location. Noise monitoring was undertaken by Peter Barry (AMIOA) of Malachy Walsh and Partners on the 20th January 2015.

2.2 MONITORING LOCATIONS

Monitoring was undertaken at N1, N2, N3 and N4. The locations are shown on Figure 1.

Figure1: NOISE MONITORING LOCATIONS



2.2.1 Noise Monitoring Location Photographs



2.3 SURVEY EQUIPMENT

The measurements were made using a Bruel & Kjaer type 2250 Light and a Larson Davis 820 Logging integrating Sound Level Meter. These are Type 1 instruments in accordance with IEC 651 regulations. The Time Weighting used was Fast and the Frequency Weighting was A-weighted as per IEC 651. The sound level meters (SLM) were mounted on a tripod at 1.5m above ground level and at least 2m away from any sound reflecting objects. A windshield was placed on the microphone to reduce any wind interference during measurements.

Factory calibration certificates for the noise level meter and acoustic calibrator, detailing equipment serial numbers, calibration traceability and re-calibration dates are attached as Appendix A.

2.4 MEASUREMENT PARAMETERS

In order to be able to interpret the noise levels correctly several parameters were measured. These include the;

- L_{Aeq} Time-averaged A weighted noise level.
- L_{A90} Noise level exceeded for 90 % of measurement period (steady underlying noise level).
- L_{A10} Noise level exceeded for 10 % of measurement period.

A subjective analysis for the presence of tones and impulsive noise was also undertaken at each location.

2.5 METEOROLOGICAL CONDITIONS

Meteorological conditions were noted as showery, cold, with light winds generally not exceeding 5 meters per second (ms^{-1}). It is recommended that outdoor noise monitoring is not undertaken in adverse weather conditions as the wind or rain can elevate the readings. Ideally there should be no rain and wind speeds should generally not exceed $5 ms^{-1}$.

3 NOISE SOURCES

The main noise sources at this facility include:

- A tipping shed where costumers tip rubbish from cars and trailers. The rubbish is deposited into a compaction area and is compacted and a container filled for removal off site. This tipping shed has a motor which operates the compactor. The tipping shed is not in continuous operation, rather infrequently as needed.
- A cardboard compactor.
- Customer's vehicles entering and exiting the facility.
- Customers using the various recycling and waste skips and areas.

4 RESULTS

Table 1. Noise Monitoring Results

Location	Date and Time	L _{eq} dB	L _{A10} dB	L _{A90} dB	Tones	Description of Noise Sources
B1 (boundary location, west)	14:07-14:37	55	52	31	No	The main contributing noise sources at this location included customers using facility, the tipping shed in operation and the cardboard compactor.
	14:37-15:07	58	61	38		
	15:07-15:37	49	49	37		
B2 (at weighbridge)	11:30-12:00	54	55	37	No	The main contributing noise sources at this location included customers using facility, the tipping shed in operation and occasional customer's cars. HGVs passing on the adjacent local road also contributed.
	12:00-12:30	48	52	38		
	12:30-13:00	50	53	33		
B3 (off site at forestry gates)	13:00-13:30	51	48	34	No	No noise from the waste transfer station was audible at this location. Local traffic on the adjacent third class road and birdsong were the main contributors to the noise level at this location.
	13:30-14:00	53	50	35		
	14:00-14:30	51	48	32		
B4 (entrance to nearest dwelling north east of the facility)	14:35-15:05	50	46	33	No	No noise from the waste transfer station was audible at this location with the exception of faint breaking glass noise from bottle bank. Wind borne noise and background traffic noise from the local third class road were the main contributing noise sources at this location.
	15:05-15:35	51	46	35		
	15:35-16:05	49	47	36		

It was not possible to get a full 30 minutes monitoring per rotation at B3 and B4, the measurements averaged approximately 15 minutes per rotation, due to frequent heavy showers. However a subjective analysis of the ambient noise during the survey period indicated with confidence that noise levels would not have changed significantly over a 30 minute period and that noise from the waste transfer station did not contribute significantly to the ambient noise levels at these locations.

5 CONCLUSION

An analysis of the results, combined with on site observations indicates that the Kenmare Waste Transfer Station is not a noise nuisance and complies with the noise limit criteria set out in the waste licence. The background noise level ranged from 31 to 38 L_{90} dB (A) which demonstrates the quiet rural nature of the area. The measured noise level of L_{day} 49 dB to L_{night} 53 dB is below the noise limit of 55dB(A) at the off site locations. A noise level of 58dB (A) was measured at B1. This can be attributed to vehicles idling at the nearby recycling area.

No distinct tones were noted at any location. At the boundary locations there were occasional impact noises from waste material being dropped into skips and bins, however this impulsive noise would not cause disturbance or annoyance at any off site location and does not warrant a penalty. No tones or significant impact noise were audible off site.

Kenmare Waste Transfer Station is operating within the waste licence noise emission criteria.

Appendix 1

Calibration Certificates



Certificate of Calibration and Conformance

Certificate Number 2014-189699

Instrument Model PRM828, Serial Number 2952, was calibrated on 16 Apr 2014. The instrument meets factory specifications per Procedure D0001.8135.

New Instrument

Date Calibrated: 16 Apr 2014

Calibration due:

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Agilent Technologies	34401A	MY41044529	12 Months	4 Feb 2015	6396720
Larsen Davis	LDSigGn/2209	0277 / 0109	12 Months	12 Mar 2015	2014-187602

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 23 ° Centigrade

Relative Humidity: 50 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

Signed: 

Technician: Ron Harris

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified



Certificate of Calibration and Conformance

Certificate Number 2014-189710

Instrument Model 820, Serial Number 1915, was calibrated on 16 Apr 2014. The instrument meets factory specifications per Procedure D0001.8160, ANSI S1.4 1983, IEC 651-Type 1 1979, and IEC 804-Type 1 1985.

New Instrument
Date Calibrated: 16 Apr 2014
Calibration due:

Calibration Standards Used

MANUFACTURER	MODEL	SERIAL NUMBER	INTERVAL	CAL. DUE	TRACEABILITY NO.
Larson Davis	LDSigGnv2209	0277 / 0109	12 Months	12 Mar 2015	2014-107602

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 23 ° Centigrade

Relative Humidity: 50 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturer's specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Provo Engineering & Manufacturing Center. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

Tested with PRM828-2952

Signed: 
Technician: Ron Harris

Page 1 of 1

Provo Engineering and Manufacturing Center, 1681 West 820 North, Provo, Utah 84601
Toll Free: 888.258.3222 Telephone: 716.926.8243 Fax: 716.926.8215
ISO 9001-2008 Certified



NSAI

National Metrology Laboratory

Certificate of Calibration

Issued to Malachy Walsh & Partners
Reen Point
Blennerville
Tralee, Co Kerry

Attention of Peter Barry

Certificate Number	E13011B
Item Calibrated	Bruel & Kjaer Type 2250 "Light" Sound Level Meter and 4950 Microphone
Serial Number	2654709 and 2657422 (microphone)
Client ID Number	-----
Order Number	MWP130108
Date Received	09 Jan 2013
NML Procedure Number	AP-NM-09

Method The above sound level meter was allowed to stabilise for a suitable period in laboratory conditions. The verification checks performed are those outlined in BS7580-Pt 1 (1997). *Specification for the verification of sound level meters*. This British Standard specifies a procedure for the periodic verification of conformance of a sound level meter or integrating-averaging meter to IEC60651 (1994) and IEC60804 (2000), respectively. Prior to calibration the instrument was tested, and its overall sensitivity adjusted in accordance with Clause 5.4 of BS 7580. Pt 1 using its associated sound level calibrator.

Calibration Standards Norsonic 1504A Calibration System incorporating:
SR D5360 Signal Generator, No. 0735, [Cal. Due Date: 17 Jul 2013]
Agilent 34401A Digital Multimeter, No. 0736 [Cal Due Date: 11 Jul 2013]
B&K 4134 Measuring Microphone, No. 0743 [Cal Due Date: 17 Apr 2014]
B&K 4228 Pistonphone, No. 0740 [Cal. Due Date: 08 Aug 2014]
B&K 4226 Acoustical Calibrator, No. 0150, [Cal. Due Date: 30 Oct 2013]

Calibrated by 
Oliver Power

Approved by 
Paul Hetherington

Date of Calibration 16 Jan 2013

Date of Issue 16 Jan 2013



This certificate is consistent with Calibration and Measurement Capabilities (CMCs) that are included in Appendix C of the Mutual Recognition Arrangement (MRA) drawn up by the International Committee for Weights and Measures. Under the MRA, all participating institutes recognize the validity of each other's calibration certificates and measurement reports for quantities, ranges and measurement uncertainties specified in Appendix C. (for details see www.bipm.org)



NSAI

National Metrology Laboratory

Certificate of Calibration

Issued to **Calmet Limited**
1E Three Rock Road
Sandyford Industrial Estate
Dublin 18

Attention of **Gerry Segrave**

Certificate Number **E14202**
Item Calibrated **Bruel & Kjaer Type 4231 Sound Level Calibrator**
Serial Number **2665058**
Client ID Number **-----**
Order Number **71135**
Date Received **10 Apr 2014**
NML Procedure Number **AP-NM-13**

Method **The above calibrator was allowed to stabilize for a suitable period in laboratory conditions. It was then calibrated by measuring the sound pressure level generated in its measuring cavity (half-inch configuration). The calibrator's operating frequency was also measured.**

Calibration Standards **Norsonic 1504A Calibration System incorporating:
Agilent 34401A Multimeter, No. 0736 [Cal due date: 10 Jul 2014]
B & K 4134 Measuring Microphone, No. 0743 [Cal due date: 23 Jan 2015]
B & K 4228 Pistonphone, No. 0740 [Cal due: 23 Jan 2015]**

Calibrated by *Sam Boles*
Sam Boles

Approved by *P. Hetherington*
Paul Hetherington

Date of Calibration **14 Apr 2014**

Date of Issue **22 Apr 2014**



This certificate is consistent with Calibration and Measurement Capabilities (CMC's) that are included in Appendix C of the Mutual Recognition Arrangement (MRA) drawn up by the International Committee for Weights and Measures. Under the MRA, all participating institutes recognize the validity of each other's calibration certificates and measurement reports for quantities, ranges and measurement uncertainties specified in Appendix C. (For details see www.bipm.org)

Appendix 2

Glossary of Noise Related Terms

Ambient Noise

Totally encompassing sound in a given situation at a given time usually composed of a sound from many sources near and far.

Background noise level

The A-weighted sound pressure level of the residual noise at the assessment position that is exceeded for 90% of a given time interval, T measured using time weighting F, and quoted to the nearest whole number of decibels.

EPA**Day:**

0800 hrs to 2200 hrs

Night:

2200 hrs to 0800 hrs

Decibel (dB)

The unit of sound pressure level, calculated as a logarithm of the intensity of sound. 0 dB is the threshold of hearing, 140 dB is the threshold of pain. A change of 1 dB is detectable only under laboratory conditions. A change of 10 dB corresponds approximately to halving or doubling the loudness of sound.

dB(A)

Decibels measured on a sound level meter incorporating a frequency weighting (A weighting) which differentiates between sound of different frequency (pitch) in a similar way to the human ear. Measurements in dB(A) broadly agree with peoples assessment of loudness.

Hertz (Hz)

Unit of frequency (pitch) of a sound

Impulsive Noise

A noise which is of short duration (typically less than one second), the sound pressure level of which is significantly higher than the background

1/3 Octave band analysis

Frequency analysis of sound such that the frequency spectrum is sub divided into bands of one third of an octave each. An octave is taken to be the frequency interval, the upper limit of which is twice the lower limit (in Hertz).

LAeq

Equivalent Continuous A-weighted Sound Level. The continuous steady noise level, which would have the same total A-weighted acoustic energy as the real fluctuating noise measured over the same period of time.

L(A)₁₀

The noise level that is equaled or exceeded for 10% of the measurement period

L(A)₉₀

The noise level that is equaled or exceeded for 90% of the measurement period

Noise

Unwanted sound. Any sound which has the potential to cause disturbance, discomfort or psychological stress to a subject exposed to it, or any sound which has the potential to cause actual physiological harm to a subject exposed to it or physical damage to any structure exposed to it, is known as noise

Noise Sensitive Receptor

A noise sensitive receptor is regarded as any dwelling house, hotel or hostel, health building, educational establishment, places of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels

Rating level L_{Aeq}

The specific noise level plus any adjustment for the characteristic features of the noise

Residual Noise

The ambient noise remaining at a given position in a given situation when the specific noise source is suppressed to a degree such that it does not contribute to the ambient noise

Sound Power

The energy output from a source. It is measured in Watts (W)

Specific Noise Source

The noise source under investigation for assessing the likelihood of complaints

Tone

A noise with a narrow frequency composition

Appendix VI - AER/PRTR Return 2014

Sheet : Facility ID Activities

AER Returns Workbook

18/2/2015 17:19



Environmental Protection Agency

| PRTR#: W0086 | Facility Name : Kenmare Transfer Station | Filename : W0086_2014 (1).xls | Return Year : 2014 |

[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR|2014

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	
Country	Kerry
Country	Ireland
Coordinates of Location	-8.6227 51.9012
River Basin District	IESW
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Tara O'Carroll
AER Returns Contact Email Address	tara.ocarroll@kerrycoco.ie
AER Returns Contact Position	Assistant Engineer
AER Returns Contact Telephone Number	0667162000
AER Returns Contact Mobile Phone Number	0879128535
AER Returns Contact Fax Number	0667162001
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	2184
Number of Employees	1
User Feedback/Comments	20 03 01 is split between NKL W0001 disposal and KWD recycling W0217. recovery Cardboard divided between Greenstar Jan - June and Dillon Waste July - Dec. Comparison to 2013 return 13.02.04 -0.9t
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)?	
---	--

| PRTR#: W0086 | Facility Name : Kenmare Transfer Station | Filename : W0086_2014 (1).xls | Return Year : 2014 |

Page 1 of 1

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE | PRTR#: W0086 | Facility Name : Kenmare Transfer Station | Filename : W0086_2014 v2 27.02.205.xlsm | Return Year : 2014 |

27/02/2015 13:12

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	Haz Waste - Address of Next Destination Facility	Name and Licence / Permit No. and Address of Final Recycler / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination (i.e. Final Recovery / Disposal Site) (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Haz Waste - Name and Licence/Permit No of Recycler/Disposer	Haz Waste - Address of Recycler/Disposer		
Within the Country	20 03 01	No	440.66	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	North Kerry Landfill ,W001-04	Mungnaminnane, ,Tralee,Co unty Kerry,Ireland		
Within the Country	20 03 01	No	379.3	mixed municipal waste	R3	M	Weighed	Offsite in Ireland	Killarney Waste Disposal,W0217-01	Aughacureen, ,Killarney,County Kerry,Ireland		
Within the Country	15 01 08	No	11.48	mixed packaging	R3	M	Weighed	Offsite in Ireland	Killarney Waste Disposal,W0217-01	Aughacureen, ,Killarney,County Kerry,Ireland		
Within the Country	15 01 01	No	10.32	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Greenstar,WFP-CK-10-0047-02	Sarsfield Court Industrial Estate, ,Glannire,County Cork,Ireland		
Within the Country	15 01 01	No	12.16	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kermies, ,Tralee,County Kerry,Ireland		
Within the Country	20 01 01	No	88.12	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kermies, ,Tralee,County Kerry,Ireland		
Within the Country	15 01 07	No	63.653	glass packaging	R5	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kermies, ,Tralee,County Kerry,Ireland		
Within the Country	15 01 04	No	7.045	metallic packaging	R4	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kermies, ,Tralee,County Kerry,Ireland		
Within the Country	20 01 40	No	49.7	metals	R4	M	Weighed	Offsite in Ireland	United Metals,WFP-LK-2013-147A-R1	Px,Ballysimon Rd,Limerick, ,Ireland		
Within the Country	15 01 02	No	42.325	plastic packaging	R3	M	Weighed	Offsite in Ireland	Dillon Waste,WFP/KY/10/0001/01	The Kermies, ,Tralee,County Kerry,Ireland		
Within the Country	20 01 11	No	0.54	textiles	R3	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,WFP-014/2	Road,Tallagh,Dublin24, ,Ireland		
Within the Country	20 01 34	No	2.916	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	ENVA Ireland,W0184-01,Clonminam,Portlaoise,Co Laois, ,Ireland	Clonminam,Portlaoise,Co Laois, ,Ireland
Within the Country	13 02 08	Yes	0.36	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,Clonminam,Portlaoise,Co Laois, ,Ireland	Clonminam,Portlaoise,Co Laois, ,Ireland
To Other Countries	20 01 21	Yes	0.355	fluorescent tubes and other mercury-containing waste	R5	M	Weighed	Abroad	KMK Metals,W0113-01	Cappinour Industrial estate, ,Tullamore,County Offaly,Ireland	Alba Service GmbH & Co KG,E55057023,Kanalstrasse 84, ,Rheine,49432,Germany	Kanalstrasse 84, ,Rheine,49432,Germany
Within the Country	20 01 35	Yes	14.866	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	R4	M	Weighed	Offsite in Ireland	Electrical Waste Management,WFP-DS-11-0014-04	Block 648,Jordanstown Drive,Greenogue Ind Est,Dublin,Ireland	The Recycling Village,WFP/LH/10/W01001, ,Monasterboise,County Louth,Ireland	Monasterboise,County Louth,Ireland
To Other Countries	20 01 35	Yes	24.187	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	R4	M	Weighed	Abroad	Electrical 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,L20 1BX,United Kingdom	Alexander Dock 1,Bootle ,Liverpool,L20 1BX,United Kingdom
To Other Countries	16 02 14	No	21.335	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	R4	M	Weighed	Abroad	Electrical 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,L20 1BX,United Kingdom	Alexander Dock 1,Bootle ,Liverpool,L20 1BX,United Kingdom
To Other Countries	16 02 11	Yes	11.355	discarded equipment containing chlorofluorocarbons, HCFC, HFC	R4	M	Weighed	Abroad	Electrical 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,L20 1BX,United Kingdom	Alexander Dock 1,Bootle ,Liverpool,L20 1BX,United Kingdom
Within the Country	19 07 03	No	2.42	landfill leachate other than those mentioned in 19 07 02	D8	M	Weighed	Offsite in Ireland	Kenmare Waste Water Treatment Plant,Irish Water	Kenmare,Co Kerry, ,Ireland		