Kerry County Council

Waste Licence Ref No. W0072-01

Coolcaslagh Transfer Station, Killarney
Annual Environmental Report

Reporting Period:

1st January – 31st December 2015

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

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1.0 Introduction

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

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

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

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

2.0 Reporting Period

The reporting period for this Annual Environmental Report is 1st January – 31st December 2015.

3.0 Waste Activities carried out at the Facility

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

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

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

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

Class 1 Solvent reclamation or regeneration.

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

Class 3 Recycling or reclamation of metals and metal compounds.

Class 4 Recycling or reclamation of other inorganic materials.

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

4.0 Quantity and Composition of Waste Received, Disposed and Recovered: 1st Jan – 31st Dec 2014

The quantity of waste disposed of at Coolcaslagh Transfer Station during 2015 decreased by 158.78 tonnes on the previous year (2014) and by 975.22 tonnes on 2013.
This reduction is as a result of Killarney Town Councils Refuse collection service no longer using Coolcaslagh Waste transfer station to dispose of its waste.

Waste accepted into Coolcaslagh Transfer Station Facility for disposal for the reporting period was 1,445.38 Tonnes and comprises of the following:

Source	***2012***	***2013***	***2014***	***2015***
Killarney Town Council refuse collection	967.94	957.18	198.08	0
Household waste	1,173.98	1,185.84	1,240.367	**1,332.88**
Small commercial business waste	35.16	34.68	32	50.16
KLA Commercial Waste	24.66	10.84	9.02	0
KLA Road Sweepings	127.62	136.20	36.30	0.5
Graveyard Waste	14.72	15.54	12.94	14.86
KLA Flytipping/Street Cleaning	65.06	80.22	73.69	46.98
Total	**2,409.14**	**2,420.60**	**1,604.16**	**1,445.38**

Table 1 – Waste by Source.

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

The quantities of waste sent for recycling decreased slightly on the 2014 figures.
610.33 tonnes of material was collected at Coolcaslagh during 2015 in comparison with 626.47 tonnes in 2014.

Household Recycling Material Deposited at Coolcaslagh ,Killarney in 2015		
Material type	Suggested EWC codes	Coolcaslagh CA
Organic waste (food and garden)		
food (compost waste Milltown TS)	20 01 08	0.00
Mixed dry recyclables (Ecosence Bags)	15 01 06	15.64
Cardboard, newspaper and other paper		
cardboard packaging	15 01 01	71.720
newspaper and magazines	20 01 01	153.04
Glass		
glass packaging (bottles)	15 01 07	97.22700
glass non-packaging (flat glass) - Dingle CAS	20 01 02	
Commercial Glass (Kenmare TS only)	15 01 07	
Metals		
aluminium cans (packaging)	15 01 04	3.36400
steel cans (packaging)	15 01 04	10.61700
Total Metallic Packaging (Al Cans + Steel Cans)		13.98100
Totals of Glass Bottles, Al & Steel Cans		111.20800
other metals (scrap metals)	20 01 40	55.52
Plastic		
plastic packaging (bottles)	15 01 02	76.28
plastic non-packaging	20 01 39	
polystyrene		
Composite packaging (e.g. tetrapaks)	15 01 05	
Textiles		
textiles, non-packaging (clothes)	20 01 11	0.24
Batteries		
lead acid batteries and accumulators (Car Batteries)	16 06 01*	0.00
Ni-Cd batteries and accumulators	16 06 02*	1.498
Other (e.g. alkaline) batteries and accumulators (Small Batteries)	16 06 04	0.00
Household Hazardous Waste		
Waste mineral oils litres	13 02 08	1.584
Oil filters (vehicles) litres Oil containers (mineral oil) - plastic + metal Litres	16 01 07 15 01 10	
Waste cooking or vegetable oils	20 01 25	
Waste paint and varnish (including containers) litres	08 01 11	
Aerosols litres Fluorscent Tubes	16 05 04 20 01 21	0.427
Total Household Hazardous Waste as per Enva		2.011
WEEE collected by compliance schemes		
CRT	20 01 35	32.172
SDA - Small Domestic Appliances	20 01 36	40.253
LDA - Large Domestic Appliances	20 01 36	35.334
Cold	16 02 11	15.411
Total CRT, SDA, LDA, COLD		123.1700
Grand Totals		610.327

Table 2 – Overview of waste collected on site and recovered/recycled off site during 2015.

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

It is anticipated that the quantity of Household waste disposed of at Coolcaslagh should remain steady and the WEEE tonnage for 2016 should decrease with the change in the manner in which WEEE is collected from shops as per Waste Management WEEE Regulations 2014. (Shops who have exchanged fridges, freezers, TV's etc. from customers are not permitted to dispose the old goods at our recycling centres)

The proposed Waste Management (Collection Permit) Regulations 2016 are due to come into effect in July 2016 with the introduction of 'pay by weight' charging for household kerbside collections however 'Pay by weight' has yet to be introduced for the various 'Recycling centres' .The proposed regulations will have an impact on the operation of Coolcaslagh and is forecasted to give rise to an increase in the number of customers using this facility.

We are awaiting clarification from the Department of the Environment in relation to the 'pay by weight' so that we can assess its impact on our services.

6.0 Summary Report on Emissions for the Reporting Period

a) Foul Water Emissions

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

During 2015, **410.32** tonnes of foul effluent and silt/sludge were exported off site from the facility for treatment in Killarney Wastewater Treatment Plant. The foul water effluent is monitored quarterly and the results are sent to the Agency and available at the Coolcaslagh facility and Kerry County Council's offices.

b) Surface Water Emissions

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

7.0 Summary of Results and Interpretations of Environmental Monitoring

a) Dust monitoring.

No dust monitoring was carried out during 2015 however the dust monitoring results of 2014 were within the ELV set down in the licence. There were no issues with dust during 2014 and no complaints were received in relation to dust at the facility during either 2014 or 2015.

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

b) Noise monitoring.

Noise survey was carried out on the 6th January 2015 by Malachy Walsh & Partners (Environmental Consultants). There are no permanent dwellings within 1km of the waste transfer station. The facility was observed not to be contributing significantly to the ambient noise environment beyond the site boundary. The facility is not a noise nuisance to neighboring premises. An analysis of the noise results in particular the LA90 indicates that the compliance noise limit is not exceeded at any location. The L90 ranged from 35 to 48 dB(A). This facility operates within the noise limit criteria set out in the waste licence.

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

There were no issues with noise during 2014 and no complaints were received in relation to noise at the facility during 2014 or 2015. The results over the years have shown that the facility caused no significant noise nuisance to neighbours.

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

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

Location Reference	Date and Time	L_{Aeq} dB	L_{A10} dB	L_{A90} dB	Tones	Description of Noise Sources
N1 (facility entrance)	11:42-12:42	53	54	41	No	Cars and HGV's entering and exiting the facility was the main contributing noise source. HGVs passing location into quarry. The waste transfer station was not the main contributing noise source.
	12:12-12:42	51	53	42		
	12:42-13:12	44	48	37		
N3 (boundary location, rear of facility)	13:10-13:40	51	49	35	No	The tipping shed in operation was the main contributing noise source at this location.
	13:40-14:10	54	59	40		
	14:10-14:40	49	50	41		
N4 (boundary location, near lake)	13:12-13:42	46	48	39	No	The tipping shed in operation was the main contributing noise source at this location. Other contributing noise sources included customers using various wastes centres at the facility.
	13:42-14:12	47	49	40		
	14:12-14:42	50	52	42		
N5 (nearest noise sensitive receptor, north)	10:05-10:35	55	55	41	No	Local road traffic, birdsong and windborne noise were the main contributing noise sources at this location.
	10:37-11:07	56	55	42		
	11:15-11:45	54	53	43		
N6 (nearest noise sensitive receptor, south, Coolmore Wildlife Park)	10:00-10:30	59	61	45	No	Local road traffic, including HGV's, birdsong and windborne noise and a river were the main contributing noise sources at this location. Dogs barking almost continuously from nearby wildlife park. The waste transfer station was not the main contributing noise source.
	10:30-11:00	60	62	48		
	11:00-11:30	60	61	46		

c) Monitoring of surface water

The surface water monitoring results are attached in Appendix II.

d) Biological Monitoring.

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

There were no complaints in relation to the water quality of the Woodford River as a result of activities at the facility during 2015.

e) Foul Water

The foul water emission results are attached in Appendix II. All the foul water from the facility has been transported off site to Killarney Wastewater Treatment Plant since February 2001.

410.32 tonnes of waste water was removed from Coolcaslagh during 2015 which is less than the 2014 figure of 438.88 tonnes.

8.0 Resource and Energy Consumption Summary

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

8.1 Diesel

The diesel usage for Coolcaslagh Transfer Station for the reporting period 2015 was 1775 litres.

8.2 Electricity

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

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

8.3 Water

Water supply to the site is via a connection to the mains water supply. Water usage for the facility during the reporting period was 106 m^3. Water is mainly used on site for site office facilities, power washing yards, transfer station apron and hopper. No surface water or ground water is abstracted.

9.0 Report on Development Works Undertaken during the Reporting Period

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

10.0 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 put on statute.

It is anticipated that the proposed Household Waste regulations will have an impact on the operation of Coolcaslagh and will give rise to an increase in the number of customers using this facility. As part of our forward planning for this event, a digitised site survey is to be carried out by Kerry Council Road Design staff during 2016.This survey will assist in the implementation of a revised traffic management plan for the recycling centre in conjunction with the 'Pay by Weight' household regulations which have yet to be established at the recycling/transfer centres.

11.0 Report Targets and Environmental Objectives and Targets for 2016.

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

12.0 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.

13.0 Reported Incidents and Complaints

This site was inspected by a HSA inspector on the 20th October 2015.

A 'Report of Inspection' under SHWW Act 2005 was issued to Kerry County Council in relation to a number of maintenance/housekeeping issues i.e. ensuring gates were locked along boundary of transfer site, check light beam on gate interlock mechanism to ensure gates were shut when compactor was in use and a query in relation to the compactor 'bin & rail system.'

All these items were addressed and a full report was furnished to the Health & Safety Authority by our Senior Engineer responsible for Operations, Health & Safety.

No other incidents were reported during 2015.

14.0 Report on Financial Provision

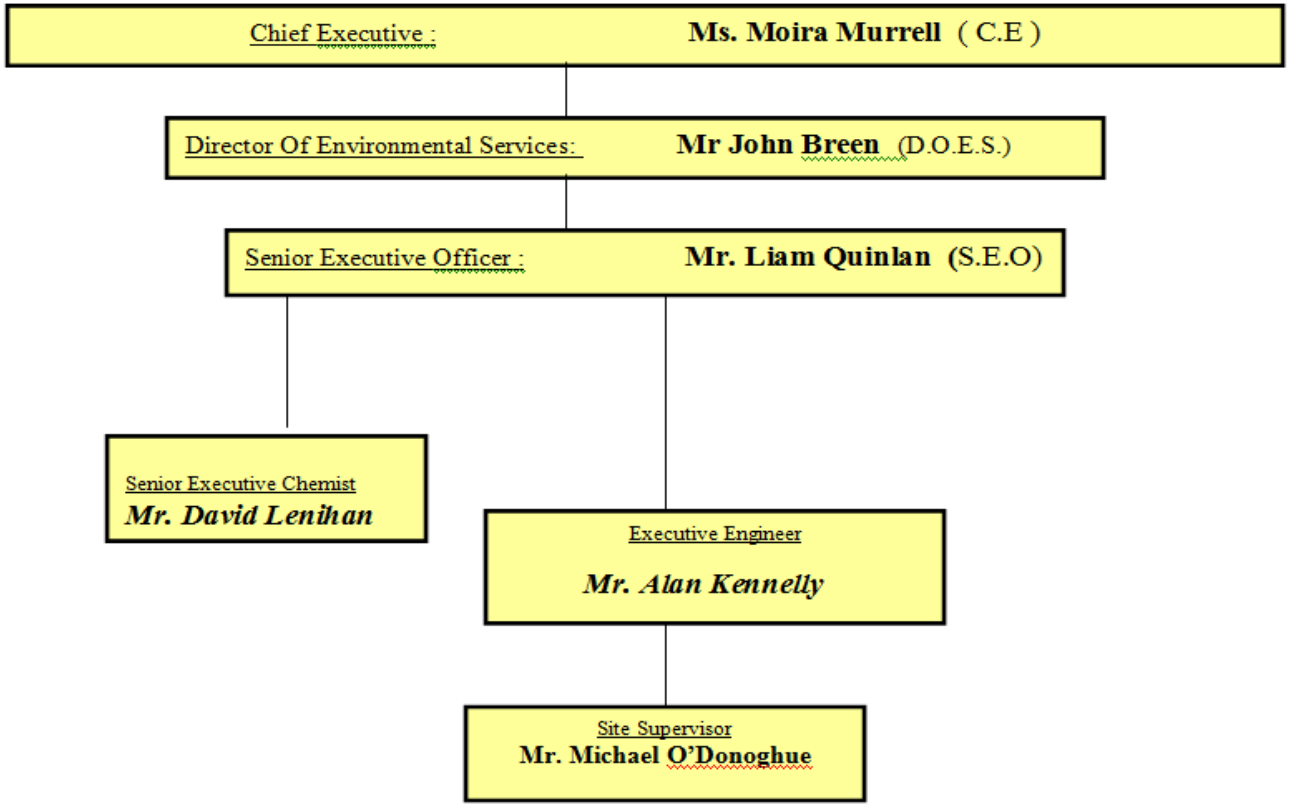
a) Statement of Costs for Waste Operations at Coolcaslagh Facility, 2015

Accelem	Accelem (Text)	Total Charge (€)
60030	Wages	€24,660.97
60040	Salaries	€4,425.07
60100	ER PRSI	€5,020.89
60200	Overtime	€13,606.04
60300	Arrears	€25.65
60400	Sick Pay	€3,789.73
60500	Annual Leave	€1,593.89
60510	Bank Holiday Leave	€1,483.07
60600	Travel/Subsistence	€2,887.33
60700	Eating on site allowance	€1.90
61990	Other Allowances	€873.99
65500	Minor Contracts- Trade Services & other works	€144,967.39
66500	Non-Capital Equip Purchase - Fire Services	€32.00
67500	Non-Capital Equip Purchase - Computers	€253.50
68000	Non-Capital Equip Purchase - Office Equip/Furn	€209.00
68500	Non-Capital Equip Purchase - Other	€39.84
69000	Hire (Ext) - Plant/Transport/Machinery & Equipment	€0.00
69200	Repairs & Maint - Plant	€738.44
69260	Repairs & Maint - Other Equip	€494.83
69400	Transfers from Machinery Yard	€5,579.00
69600	Other Vehicle Expenses	€0.00
70000	Materials	€323.48
70990	Issues from Stores	€4,108.44
70991	Returns to Stores	-€242.98
71000	Insurance	€405.51
73400	Staff Travelling & Subsistence Expenses	€2,899.58
76000	Communication Expenses	€588.64
77100	Courier	€11.35
77200	Security - Property	€760.00
78000	Training	€0.00
79900	Consultancy/Professional Fees and Expenses	€880.00
81000	Printing & Office Consumables	€118.37
82100	Statutory Contributions to Other Bodies	€8,521.56
85100	Rates & Other LA Charges	€2,380.31
86000	Energy / Utilities	€2,875.79
	TOTAL	€234,312.58

b) <u>Statement of Costs for Recycling Operations at Coolcaslagh Facility, 2015</u>

Accelem	Accelem (Text)	Total Charge (€)
60030	Wages	€20,641.92
60040	Salaries	€4,826.95
60100	ER PRSI	€4,351.28
60200	Overtime	€12,685.60
60300	Arrears	€25.65
60400	Sick Pay	€2,079.32
60500	Annual Leave	€2,608.33
60510	Bank Holiday Leave	€345.89
60600	Travel/Subsistence	€2,554.17
61990	Other Allowances	€796.30
65500	Minor Contracts- Trade Services & other works	€12,240.90
66500	Non-Capital Equip Purchase - Fire Services	€8.00
69200	Repairs & Maint - Plant	€0.00
69260	Repairs & Maint - Other Equip	€481.82
69400	Transfers from Machinery Yard	€2,997.50
70000	Materials	€734.87
70990	Issues from Stores	€2,134.03
71000	Insurance	€0.00
73400	Staff Travelling & Subsistence Expenses	€2,059.40
76000	Communication Expenses	€525.68
77200	Security - Property	€0.00
78000	Training	€0.00
80000	Advertising	€0.00
81000	Printing & Office Consumables	€46.00
82100	Statutory Contributions to Other Bodies	€0.00
85100	Rates & Other LA Charges	€46.09
86000	Energy / Utilities	€116.42
	TOTAL	€72,306.12

15.0 Management and Staffing Structure at the Facility December 2015



16. Programme of Public Information

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

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

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

Coolcaslagh Transfer Station Residual Waste - Tonnage Period 01/01/15 to 31/12/15

	Levied Waste					Non Levied Waste					Totals		
	Public Waste												
Month	Public Household & Commercial	* Non Weighed Waste Inclusive of Tickets	Account Holders Vat Inclusive	KCC - Levied Waste (2014 Tonnage Includes KTC Levied Waste)	Total Levied Waste	KCC Roadsweeping & Streetcleaning (2014 Tonnage includes KTC)	KCC Clean Ups / F'tipping (2014 Tonnage includes KTC)	Clean Ups/ F'tipping Charged to Env - Invs Raised to Environment (In 2014 no invoices raised)	Graveyard Waste	Total Non - levied	Total of Waste Over Weighbridge	Total Waste Out of Facility - Including Ticket Waste (Jan - 11th July 2014 = waste into NKL)	No. Loads Out of TS
March 2014	53.90	47.46	1.64	2.02	105.02	1.6	0.26	13.2	1.1	16.16	73.72	121.18	9
April 2015	49.88	59.7	3.52	2.1	115.20	0	0.26	6.92	1.16	8.34	63.84	123.54	11
April 2014	46.357	60.46	2.66	0	109.48	0	0	9.92	1.18	11.1	60.12	120.58	9
May 2015	45.48	53.78	2.78	0	102.04	0	0	7.6	1.50	9.1	57.36	111.14	9
May 2014	47.02	45.33	2.24	0.16	94.75	0	0	9.01	1.48	10.49	59.91	105.24	8
June 2015	45.5	91.84	4	0	141.34	0	0	2.66	1.98	4.64	54.14	145.98	12
June 2014	52.62	68.16	5.82	3.76	130.36	0	0.12	6.16	1.7	7.98	70.18	138.34	10
July 2015	52.3	64.54	5.52	1.84	124.20	0	0	3.68	2.92	6.6	66.26	130.80	12
Total July 2014	44.38	55.40	4.24	1.24	105.26	0.00	0.16	5.84	2.84	8.84	58.70	114.10	9
August 2015	53.42	71.44	4.86	0.32	130.04	0.5	0	2.52	0	3.02	61.62	133.06	11
August 2014	50.82	61.06	3.6	1.24	116.72	0.4	0	2.84	0	3.24	58.90	119.96	9
September 2015	37.24	79.04	4.42	0	120.70	0	0	4.9	1.14	6.04	47.70	126.74	11
September 2014	42.66	60.06	3.04	0.08	105.84	0.56	0.22	4.46	1.26	6.5	52.28	112.34	9
October 2015	47.08	50.56	3.1	0.08	100.82	0	0	3.5	0	3.5	53.76	104.32	9
October 2014	48.84	58.44	2.08	0	109.36	0	0.12	2.6	0	2.72	53.64	112.08	9
November 2015	39.38	74.18	2.02	0	115.58	0	0	3.14	1.82	4.96	46.36	120.54	10
November 2014	48.36	35.32	1.28	0.2	85.16	5.6	0	2.1	0	7.7	57.54	92.86	7
December 2015	45.98	55.16	3.66	0	104.80	0	0	3.94	1.6	5.54	55.18	110.34	9
December 2014	49.94	70.24	2.52	0	122.70	2.02	0.28	2.92	1.52	6.74	59.20	129.44	9
Total Tonnage 2015	547.04	785.84	44.60	5.56	1383.04	0.50	0.30	46.68	14.86	62.34	659.54	1445.38	120
Total Tonnage 2014	576.717	663.65	32.00	207.10	1479.47	36.30	2.50	72.53	12.94	124.27	940.09	1603.74	120

Household Waste Deposited at Coolcaslagh Civic Amenity Sites in 2015

Material type	Suggested EWC codes	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
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 (bocavence Bags)	20 03 01	0.00	1.74	2.04	1.28	1.08	2.06	0.00	2.10	2.52	0.00	0.00	2.82	15.64
Cardboard, newspaper and other paper														0.00
cardboard packaging	15 01 01	7.22	5.52	5.880	1.50	6.66	6.52	4.56	9.68	4.90	8.12	6.68	4.48	71.72
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	12.98	11.20	11.92	14.28	10.74	12.66	15.76	11.76	10.78	13.76	11.16	16.04	153.04
Glass														0.00
glass packaging (bottles)	15 01 07	8.2940	7.4030	8.4350	7.3490	7.0150	10.1580	8.6470	11.2240	4.8310	7.4280	8.1300	8.3130	97.2270
glass non-packaging (flat glass)	20 01 02													0.0000
Metals														0.0000
aluminium cans (tracksdrink)	15 01 04	0.2670	0.2430	0.2670	0.2380	0.2640	0.3830	0.3020	0.3670	0.1630	0.2920	0.2950	0.2830	3.3640
steel cans (packaging)	15 01 04	0.8590	0.8600	0.9770	0.7820	0.7930	1.0730	0.9070	0.9760	0.5470	0.8490	1.0160	0.9780	10.6170
other metals (scrap metals)	20 01 40	1.88	2.48	7.60	3.64	3.36	5.84	4.52	5.96	5.32	6.12	3.32	5.48	55.52
Plastic														0.00
plastic packaging (bottles)	15 01 02	6.74	4.84	4.34	6.84	6.16	6.14	8.10	6.70	6.16	7.24	5.76	7.26	76.28
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												0.24	0.24
Wood														0.00
wood packaging	15 01 03													0.00
wood non-packaging	20 01 38													0.00
mixed, uncontaminated wood packaging and non-packaging (collected at An Daingean)	15 01 03, 20 01 38													0.00
wood, treated, hazardous	20 01 37*													0.00
Batteries														0.00
lead acid batteries and accumulators (Car Batteries)	16 06 01*													0.00
Ni-Cd batteries and accumulators	16 06 02*	0.000	0.000	0.465	0.000	0.000	0.433	0.000	0.000	0.000	0.600	0.000	0.000	1.498
Other (e.g. alkaline) batteries and accumulators (Small Batteries)	16 06 04													0.00
														0.00
Household Hazardous Waste														
Waste mineral oils (Engine Oil)	13 02 05	0.000	0.00	1.584	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	0.00	1.584
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	0.00	0.00
Waste paint and varnish (including containers)	20 01 27	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
Aerosols	14 06 01	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
WEEE collected by compliance schemes														0.00
CRT	20 01 36	3.060	2.396	4.181	3.280	2.333	3.031	2.136	2.577	2.211	2.407	3.445	1.136	32.172
SDA - Small Domestic Appliances	20 01 36	2.848	3.289	4.328	2.764	2.940	4.414	3.659	3.372	3.226	3.259	4.807	1.347	40.253
LDA - Large Domestic Appliances	20 01 36	0.000	8.241	5.900	0.000	5.309	0.000	5.565	0.000	5.532	4.787	0.000	0.000	35.334
Cold	20 01 36	0.000	2.376	2.052	0.000	2.608	0.000	2.315	0.000	3.718	2.342	0.000	0.000	15.411
														0.00
														0.00
WEEE taken off-site by charities (e.g. mobile phones)	20 01 35													0.00
Foul Water from Septic Tank Coolcaslagh CA	19 07 02	58.34	11.54	8.98	8.90	33.70	41.90	0.00	23.14	34.68	10.94	68.42	109.78	410.32
Flourscent Tubes	20 01 11	0.00	0.00	0.00	0.00	0.00	0.00	0.078	0.00	0.14	0.00	0.209	0.00	0.427
other categories not included above	*enter EWC code*													
other categories not included above	*enter EWC code*													

Appendix II - Results of Foul and Surface Water Monitoring

	Project	Location	Location Easting	Location Northing	Sample Reference	Sample Date	Sample Ti	Comment	Ammonium	pH	BOD (5day	Conductiv	Chemical	Chloride	Dissolved	Suspended	Temperatu	Faecal coli	Total Coliff	Appearanc	Odour
									NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem	FC marine			
								Max.	Varies	Varies	--	Varies	--	Varies	Varies	--	--	1	1	--	--
								Target	--	--	--	--	--	--	--	--	--	--	--	--	--
								Min.	--	Varies	--	--	--	--	Varies	--	--	--	--	--	--
									mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	no./100mls	no./100mls	Descriptive	Descriptive
	Coolcaslagh	Sw1A (New Site)	102224	91786	2014/0327	29-Jan-14	12:11		0.04	6.7	< 1	134	16	30.8	11.2	2	6.7	***1396***	***1785***	Clear	ND
	Coolcaslagh	Sw1A (New Site)	102224	91786	2014/1313	01-Apr-14	14:31		0.04	7.1	< 1	125	25	24.1	10.9	< 1	10.3			ghtly colour	N.D

Sampling Point	Sample No.	Sampled Date	Sampled Time	Sampled By	Analysis	003_ODOUR	005A_TEMP_FIELD	006_PH	007A_CONDUCTIVITY20	013C_BOD	014_COD	022K_AMMONIA	028K_CHLORIDE	036_DO_MG_L	037_SUSPENDED SOLIDS	082_VIS_INSPECTION
					Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	C.O.D.	Ammonia	Chloride	Dissolved Oxygen	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*	*NONE*
Coolcaslagh Sw1A (New Site)	2014/2958	23-Jul-14	12:20	NOC		Normal	18.6	7.5	138	1.2	32	0.04	19.3	9.1	7	Clear
Coolcaslagh Sw1A (New Site)	2014/2967	23-Jul-14	15:15	NOC		Normal	18.6	7.3	139	1.3	26	0.06	19.4	9.1	6	Clear
Coolcaslagh Sw1A (New Site)	2014/4481	05-Nov-14	11:40	MOS		Normal	9.3	6.9	115	1.0	33	0.02	20.7	10.6	2	Clear
Coolcaslagh Sw1A (New Site)	2015/0350	28-Jan-15	10:43	MOS		Normal	5.6	6.9	113	1.1	<10	0.08	20.5	11.6	6	Clear

							Parameter	Ammonium	pH	BOD (5da	Conductivi	Chemical (	Chloride	Dissolved	Suspended	Temperatu	Faecal coli	Total Colif	Appearanc	Odour
								NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem	FC marine			Physchem
							Max.	Varies	Varies	--	Varies	--	Varies	Varies	--	--	1	1	--	--
							Target	--	--	--	--	--	--	--	--	--	--	--	--	--
							Min.	--	Varies	--	--	--	--	Varies	--	--	--	--	--	--
	Project	Location	Location Easting	Location Northing	Sample Reference	Sample Date	Sample Ti	Comments	mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	no./100mls	no./100mls	Descriptive	Descriptive
	Coolcaslagh	Sw3	101859.3	91642.2	2014/0328	29-Jan-14	11:35		0.07	6.8	< 1	144	12	31.8	11.2	2	6.2	*663*	*1842*	Clear	ND
	Coolcaslagh	Sw3A	101840.8	91649	2014/1314	01-Apr-14	14:46		0.05	7.2	< 1	130	32	25	10.8	1	10			ghtly colour	N.D

Sampling Point	Sample No.	Sampled Date	Sampled Time	Sampled By	Analysis	003_ODOUR	005A_TEMP_FIELD	006_PH	007A_CONDUCTIVITY20	013C_BOD	014_COD	022K_AMMONIA	028K_CHLORIDE	036_DO_MG_L	037_SUSPENDED SOLIDS	082_VIS_INSPECTION
					Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	C.O.D.	Ammonia	Chloride	Dissolved Oxygen	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*	*NONE*
Coolcaslagh Sw3A	2014/4482	05-Nov-14	12:00	MOS		Normal	9.0	6.8	119	1.3	36	0.03	21.2	10.7	2	Clear

							Parameter	Ammonium	pH	BOD (5day	Conductivi	Chemical (	Chloride	Dissolved	Suspended	Temperatu	Faecal coli	Total Colif	Appearanc	Odour
								NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem	FC marine			Physchem
							Max.	Varies	Varies	--	Varies	--	Varies	Varies	--	--	1	1	--	--
							Target	--	--	--	--	--	--	--	--	--	--	--	--	--
							Min.	--	Varies	--	--	--	--	Varies	--	--	--	--	--	--
	Project	Location	Location Easting	Location Northing	Sample Reference	Sample Date	Sample Ti	Comment	mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	no./100mls	no./100mls	Descriptive	Descriptive
	Coolcaslagh	SW4A @ manhole	101927	91604	2014/0329	29-Jan-14	11:15		0.64	7.1	< 1	210	21	41.4	11.3	23	6	*61*	*743*	Cloudy	ND
	Coolcaslagh	SW4A @ manhole	101927	91604	2014/1315	01-Apr-14	14:30		12.24	8	1.4	520	68	33.6	10.6	6	8.6			ghtly colour	N.D

Sampling Point	Sample No.	Sampled Date	Sampled Time	Sampled By	Analysis	003_ODOUR	005A_TEMP_FIELD	006_PH	007A_CONDUCTIVITY20	013C_BOD	014_COD	022K_AMMONIA	028K_CHLORIDE	036_DO_MG_L	037_SUSPENDED SOLIDS	082_VIS_INSPECTION
					Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	C.O.D.	Ammonia	Chloride	Dissolved Oxygen	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*	*NONE*
Coolcaslagh Sw4	2015/0352	28-Jan-15	10:35	MOS		Normal	7.5	7.1	406	1.1	<10	0.87	71.6	10.6	5	Clear

							Parameter	Ammonium	pH	BOD (5da	Conductivi	Chemical	Chloride	Dissolved	Suspended	Temperatu	Faecal coli	Total Colif	Appearanc	Odour
								NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem	FC marine			Physchem
							Max.	Varies	Varies	--	Varies	--	Varies	Varies	--	--	1	1	--	--
							Target	--	--	--	--	--	--	--	--	--	--	--	--	--
							Min.	--	Varies	--	--	--	--	Varies	--	--	--	--	--	--
Project	Location	Location Easting	Location Northing	Sample Reference	Sample Date	Sample Ti	Comments	mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	no./100mls	no./100mls	Descriptive	Descriptive
Coolcaslagh	Sw5	101794.7	91628.4	2014/0330	29-Jan-14	11:40		0.05	7.3	< 1	140	16	30.8	11.3	1	6.3	*1455*	*2851*	Clear	ND
Coolcaslagh	Sw5	101794.7	91628.4	2014/1316	01-Apr-14	14:50		0.15	7.4	< 1	130	28	25.4	10.8	2	9.9			ghtly colour	N.D

Sampling Point	Sample No.	Sampled Date	Sampled Time	Sampled By	Analysis	003_ODOUR	005A_TEMP_FIELD	006_PH	007A_CONDUCTIVITY20	013C_BOD	014_COD	022K_AMMONIA	028K_CHLORIDE	036_DO_MG_L	037_SUSPENDED SOLIDS	082_VIS_INSPECTION
					Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	C.O.D.	Ammonia	Chloride	Dissolved Oxygen	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*	*NONE*
Coolcaslagh Sw5	2014/4484	05-Nov-14	12:08	MOS		Normal	9.1	6.9	119	1.1	34	0.03	20.8	10.7	2	Clear
Coolcaslagh Sw5	2015/0353	28-Jan-15	11:03	MOS		Normal	6.0	7.2	119	1.4	<10	0.04	20.9	11.3	5	Clear

	Project	Location	Location Easting	Location Northing	Sample Reference	Sample Date	Sample Ti	Comments	Parameter	Ammonium	pH	BOD (5da	Conductivi	Chemical	Chloride	Dissolved	Suspended	Temperatu	Faecal coli	Total Colif	Appearanc	Odour
										NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem	FC marine			Physchem
									Max.	Varies	Varies	--	Varies	--	Varies	Varies	--	--	1	1	--	--
									Target	--	--	--	--	--	--	--	--	--	--	--	--	--
									Min.	--	Varies	--	--	--	--	Varies	--	--	--	--	--	--
										mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	no./100mls	no./100mls	Descriptive	Descriptive
	Coolcaslagh	Sw6	100842.9	91303.3	2014/0331	29-Jan-14	12:25			0.02	7	< 1	136	11	26.8	10.5	2	6.3	***41***	***576***	Clear	ND
	Coolcaslagh	Sw6	100842.9	91303.3	2014/1317	01-Apr-14	14:10			0.07	7.6	< 1	141	30	24.6	11.1	< 1	9.2			Clear	N.D

Sampling Point	Sample No.	Sampled Date	Sampled Time	Sampled By	Analysis	003_ODOUR	005A_TEMP_FIELD	006_PH	007A_CONDUCTIVITY20	013C_BOD	014_COD	022K_AMMONIA	028K_CHLORIDE	036_DO_MG_L	037_SUSPENDED SOLIDS	082_VIS_INSPECTION
					Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	C.O.D.	Ammonia	Chloride	Dissolved Oxygen	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*	*NONE*
Coolcaslagh Sw6	2014/2961	23-Jul-14	11:50	NOC		Normal	19.0	7.7	156	<1.0	20	0.04	20.0	9.5	1	Clear
Coolcaslagh Sw6	2014/4485	05-Nov-14	11:20	MOS		Normal	8.8	6.9	121	<1.0	70	0.03	20.2	11.2	2	Clear
Coolcaslagh Sw6	2015/0354	28-Jan-15	10:10	MOS		Normal	6.7	7.2	122	1.0	<10	0.06	20.5	11.7	5	Clear
Coolcaslagh Sw6	2015/0356QA	28-Jan-15	10:10	MOS		Normal	6.7	7.3	123	<1.0	<10	0.06	20.0	11.7	3	Clear

							Parameter	Ammonium	pH	BOD (5day	Conductiv	Chemical	Chloride	Dissolved	Suspended	Temperatu	Faecal coli	Total Colif	Appearanc	Odour
								NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem	FC marine			Physchem
							Max.	Varies	Varies	--	Varies	--	Varies	Varies	--	--	1	1	--	--
							Target	--	--	--	--	--	--	--	--	--	--	--	--	--
							Min.	--	Varies	--	--	--	--	Varies	--	--	--	--	--	--
	Project	Location	Location Easting	Location Northing	Sample Reference	Sample Date	Sample Ti	Comment	mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	no./100mls	no./100mls	Descriptive	Descriptive
	Coolcaslagh	Sw7	99256.5	90467.4	2014/0332	29-Jan-14	10:40		0.04	7.3	< 1	149	15	30.7	11.4	2	6.9	***759***	***1541***	Clear	ND
	Coolcaslagh	Sw7	99256.5	90467.4	2014/1319	01-Apr-14	15:50		0.07	7.6	< 1	145	28	24.3	11	< 1	9.6			ghtly colour	Earthy
	Coolcaslagh	Sw7	99256.5	90467.4	2014/1318	01-Apr-14	15:50		0.06	7.5	< 1	145	24	25	11	< 1	9.6			ghtly colour	Earthy

Sampling Point	Sample No.	Sampled Date	Sampled Time	Sampled By	Analysis	003_ODOUR	005A_TEMP_FIELD	006_PH	007A_CONDUCTIVITY20	013C_BOD	014_COD	022K_AMMONIA	028K_CHLORIDE	036_DO_MG_L	037_SUSPENDED SOLIDS	082_VIS_INSPECTION
					Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	C.O.D.	Ammonia	Chloride	Dissolved Oxygen	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*	*NONE*
Coolcaslagh Sw7	2014/2962	23-Jul-14	11:20	NOC		Normal	18.6	6.4	163	1.4	23	0.06	20.5	9.3	26	Clear
Coolcaslagh Sw7	2014/4486	05-Nov-14	11:10	MOS		Normal	9.1	6.8	124	1.0	33	0.06	20.4	11.2	1	Clear
Coolcaslagh Sw7	2015/0355	28-Jan-15	9:56	MOS		Normal	7.3	7.4	128	<1.0	<10	0.02	20.5	11.5	5	Clear

							Parameter	Ammonium	pH	BOD (5day	Conductivi	Chemical O	Chloride	Dissolved O	Suspended	Temperatu	Faecal coli	Total Colifo	Appearanc	Odour
								NH4	Physchem	O2	Physchem	O2	Cl	O2	Physchem	Physchem	FC marine			Physchem
							Max	Varies	Varies	--	Varies	--	Varies	Varies	--	--	1	1	--	--
							Target	--	--	--	--	--	--	--	--	--	--	--	--	--
							Min.	--	Varies	--	--	--	--	Varies	--	--	--	--	--	--
	Project	Location	Location Easting	Location Northing	Sample Reference	Sample Date	Sample Ti	Comments	mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	no./100mls	no./100mls	Descriptive	Descriptive
	Coolcaslagh	FE1	101931.1	91545.6	2014/0333	29-Jan-14	11:05		3.21	6.4	86	395	233			36	6				Septic
	Coolcaslagh	FE1	101931.1	91545.6	2014/1320	01-Apr-14	15:10		9.44	6.8	128.1	2010	314			55	8			Cloudy	ent Sewage

						Parameter	Odour	Temperature	pH	Conductivity	B.O.D.	B.O.D.	C.O.D.	Ammonia	Total OFG	Dissolved Oxygen	Suspended Solids	Visual Inspection
						Min. Value			6.0									
						Max Value			9.0									
						Units	*NONE*	*DEG_C*	*PH*	*USCM*	*BOD*	*BOD*	*MGL*	*MGLN*	*MGL*	*MGL*	*MGL*	*NONE*
Coolcaslagh	Coolcaslagh FE1	2014/2963	23-Jul-14	13:15	NOC		Normal	17.0	6.8	3500	493		530	34.59	2.9		148	Black colour
	Coolcaslagh FE1	2014/4487	05-Nov-14	12:28	MOS		Leachate	11.0	6.6	1492	188		485	12.07	10.8	<2.0	182	Cloudy/Grey
	Coolcaslagh FE1	2015/0357	28-Jan-15	10:20	MOS		Leachate	6.5	6.7	859	71		176	5.25			41	Clear

Appendix III – Results of Dust Monitoring

southern scientific services ltd.

OUR REF: RP 2013 | KERRY COUNTY COUNCIL – COOLCASLAGH | 01 PAGE 01 | 01

ANALYSIS REPORT

CUSTOMER:	KERRY COUNTY COUNCIL	SAMPLE TYPE:	DUST
ADDRESS:	Environment Section, Main Street, Tralee, County Kerry	CONDITION OF SAMPLE ON RECEIPT:	Satisfactory
		DATE SAMPLED:	30 Days
REPORT TO:	TARA O CARROLL	DATE RECEIVED:	01 November 2013
SAMPLED BY:	John Mannix, Kerry County Council	DATE ANALYSED:	06 – 19 November 2013
SAMPLING PT:	Coolcaslagh Transfer Station	DATE REPORTED:	20 November 2013
ORDER NO:	400 327 048	WORK NO.:	29254 C | 12P-101 |

TABLE OF RESULTS

METHOD:	LAB REF:	YOUR REF:	TOTAL PARTICULATES $mg/m^2/day$	INORGANIC PARTICULATES $mg/m^2/day$
SCP 039	C13-Nov 007	Station 1	113	79
SCP 039	C13-Nov 008	Station 2	166	109
SCP 039	C13-Nov 009	Station 3	134	76

Karen Lavery
Chemistry Laboratory

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

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Appendix IV – Results of Noise Monitoring 2015

ISSUE FORM	
Project number	16490
Document number	6004
Document revision	A
Document title	Noise Survey
Document status	Draft
Document prepared by	Peter Barry
Document checked by	MR (MWP) / 2015-02-16

Table of contents

List of appendices

1 INTRODUCTION

Kerry County Council operates a waste transfer station in Coolcaslagh, near Killarney. The facility operates within the conditions set out in the waster licence register number W072-01. 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

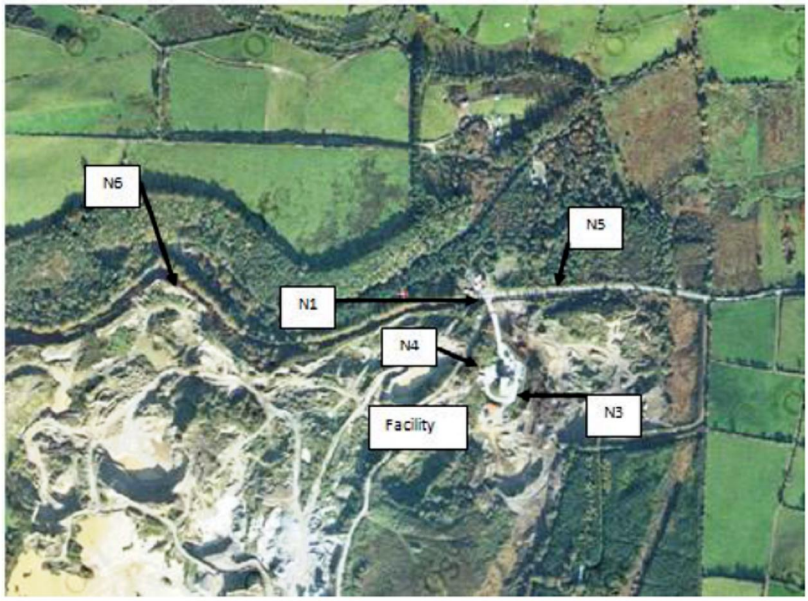
2.1 MONITORING PERIODS

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 6th January 2015.

2.2 MONITORING LOCATIONS

Monitoring was undertaken at locations N1, N2, N3, N4 and N5). The locations are shown on Figure 1.

Figure 1: NOISE MONITORING LOCATIONS



2.2.1 Photographs of Noise Monitoring Locations

Location N1	Location N3
	
Location N4	**Location N5**
	
Location N6	
	

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 dry, cold with light winds 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 as needed.
- Customers vehicles entering and existing the facility
- Customers using the various recycling and waste skips and areas.

4 RESULTS

Table 1. Noise Monitoring Results

Location Reference	Date and Time	L_{Aeq} dB	L_{A10} dB	L_{A90} dB	Tones	Description of Noise Sources
N1 (facility entrance)	11:42-12:42	53	54	41	No	Cars and HGV's entering and exiting the facility was the main contributing noise source. HGVs passing location into quarry. The waste transfer station was not the main contributing noise source.
	12:12-12:42	51	53	42		
	12:42-13:12	44	48	37		
N3 (boundary location, rear of facility)	13:10-13:40	51	49	35	No	The tipping shed in operation was the main contributing noise source at this location.
	13:40-14:10	54	59	40		
	14:10-14:40	49	50	41		
N4 (boundary location, near lake)	13:12-13:42	46	48	39	No	The tipping shed in operation was the main contributing noise source at this location. Other contributing noise sources included customers using various wastes centres at the facility.
	13:42-14:12	47	49	40		
	14:12-14:42	50	52	42		
N5 (nearest noise sensitive receptor, north)	10:05-10:35	55	55	41	No	Local road traffic, birdsong and windborne noise were the main contributing noise sources at this location.
	10:37-11:07	56	55	42		
	11:15-11:45	54	53	43		
N6 (nearest noise sensitive receptor, south, Coolmore Wildlife Park)	10:00-10:30	59	61	45	No	Local road traffic, including HGV's, birdsong and windborne noise and a river were the main contributing noise sources at this location. Dogs barking almost continuously from nearby wildlife park. The waste transfer station was not the main contributing noise source.
	10:30-11:00	60	62	48		
	11:00-11:30	60	61	46		

5 CONCLUSION

There are no dwellings within 1km of the proposed waste transfer station. The facility was observed not to be contributing significantly to the ambient noise environment beyond the site boundary. The facility is not a noise nuisance to neighbouring premises. An analysis of the noise results in particular the LA90 indicates that the compliance noise limit is not exceeded at any location. The L_{90} ranged from 35 to 48 dB(A). The limit was exceeded at N5 and N6 however the main contributor to the ambient noise at these locations were not related to the waste transfer station.

No clearly audible 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.

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

Appendix 1

Calibration Certificates

PCB PIEZOTRONICS
A PCB GROUP COMPANY

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
Larson 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: Ron Harris

Technician: Ron Harris

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

PCB PIEZOTRONICS
A PCB GROUP COMPANY

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	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.

Tested with PRM828-2952

Signed: Ron Harris
Technician: Ron Harris

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 DS360 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

CIPM MRA

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)

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Glasnevin | Dublin 11 | Ireland T+ 353 1 808 2609 | F+353 1 808 2603 | NSAI.ie

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	**Approved by**	Paul Hetherington
Date of Calibration	14 Apr 2014	**Date of Issue**	22 Apr 2014

CIPM MRA

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)

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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:	**Night:**
0800 hrs to 2200 hrs	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 equalled or exceeded for 10% of the measurement period

$L(A)_{90}$

The noise level that is equalled 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_{ArTr}

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 V - AER/PRTR Return 2015

| PRTR# : W0072 | Facility Name : Cooleasleigh Transfer Station | Filename : W0072_2015.xls | Return Year : 2015 |

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2015

1. FACILITY IDENTIFICATION

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

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Cooleasleigh
Address 2	Killarney
Address 3	
Address 4	
	Kerry
Country	Ireland
Coordinates of Location	-9.43193 52.06657
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	2
User Feedback/Comments	3 employees between Milltown & Cooleasleigh 410.32 Tonnes of foul water removed from septic tank
Web Address	www.kerrycoco.ie

2. PRTR CLASS ACTIVITIES

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

3. SOLVENT 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

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	**5. ONSITE TREATMENT & OFFSITE TRANSFERS OF W**				|PRTR# : W0072 | Facility Name : Coolcarlagh Transfer Station | Filename : W0072_2015.xls | Return Year : 2015 |								31/03/2016 17:
2				Please enter all quantities on this sheet in Tonnes									
3				Quantity (Tonnes per Year)			Method Used			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 Recover / Disposal Site (HAZARDOUS WASTE ONLY)
4	Transfer Destination	European Waste Code	Hazardous		Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment				
5	Within the Country	13 02 08	Yes	1.584	other engine, gear and lubricating oils	R1	M	Weighed	Offsite in Ireland	Enva,W0184-1	Clonminam Industrial Estate,,Portlaoise,County Laois,Ireland	ENVA Ireland,W0184,Clonmainam, Portlaoise,Co Laois,,Ireland	Clonmainam,Portlaoise,Co Laois,,Ireland
6	Within the Country	15 01 01	No	71.72	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,,Tralee,County Kerry,Ireland		
7	Within the Country	15 01 02	No	76.28	plastic packaging	R3	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,,Tralee,County Kerry,Ireland		
8	Within the Country	15 01 04	No	13.981	metallic packaging	R4	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,,Tralee,County Kerry,Ireland		
9	Within the Country	15 01 06	No	15.64	mixed packaging	R3	M	Weighed	Offsite in Ireland	Killarney Waste Disposal,W0217-01	Aughacureen,,Killarney ,County Kerry,Ireland		
10	Within the Country	15 01 07	No	97.227	glass packaging	R5	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,,Tralee,County Kerry,Ireland		
11	To Other Countries	16 02 11	Yes	15.411	discarded equipment containing chlorofluorocarbons, HCFC, HFC	R4	M	Weighed	Abroad	Eletrical Waste Management,WFP- DS-11-0014-04	Jordanstown Drive,Greenogue Estate,Rathcoole,Dublin,Ireland	European Metal Recycling ,WML101767,Alexander Dock 1,Boole,Liverpool,L201BX, United Kingdom	Alexander Dock 1,Boole,Liverpool,L201BX United Kingdom
12	To Other Countries	16 02 14	No	35.334	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	R4	M	Weighed	Abroad	Eletrical Waste Management,WFP- DS-11-0014-04	Jordanstown Drive,Greenogue Estate,Rathcoole,Dublin,Ireland		
13	Within the Country	19 07 03	No	410.32	landfill leachate other than those mentioned in 19 07 02	D8	M	Weighed	Offsite in Ireland	Irish Water Killarney WWTP,D0037-01	Ross Road,Killarney,,,,Ireland		
14	Within the Country	20 01 01	No	153.04	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Dillon Waste Ltd,WFP-KY-10-001	The Kerries,,Tralee,County Kerry,Ireland		
15	Within the Country	20 01 11	No	0.24	textiles	R3	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,WPR 014/2	Belgard Road,Tallaght,Dublin,24,Ireland		
16	To Other Countries	20 01 21	Yes	0.427	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,Germar
17	Within the Country	20 01 34	No	1.498	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		
18	Within the Country	20 01 35	Yes	40.253	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and and 20 01 23 containing hazardous components	R4	M	Weighed	Offsite in Ireland	Eletrical Waste Management,WFP- DS-11-0014-04	Jordanstown Drive,Greenogue Estate,Rathcoole,Dublin,Ireland	The recycling Village,WFP/MH/11/0005/01,Unit 21 Duleek Business Park,Commons,Duleek,County Meath,Ireland	Unit 21 Duleek Business Park,Commons,Duleek,County Meath,Ireland
19	To Other Countries	20 01 35	Yes	32.172	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and and 20 01 23 containing hazardous components	R4	M	Weighed	Abroad	Eletrical Waste Management,WFP- DS-11-0014-04	Jordanstown Drive,Greenogue Estate,Rathcoole,Dublin,Ireland	European Metal Recycling ,WML101767,Alexander Dock 1,Boole,Liverpool,L201BX, United Kingdom	Alexander Dock 1,Boole,Liverpool,L201BX United Kingdom
20	Within the Country	20 01 40	No	55.52	metals	R4	M	Weighed	Offsite in Ireland	United Metals,WFP-LK-2013-147A-R1	Eastway Business Pk,Ballysimon Road,Limerick,,Ireland		
21	**Within the Coun**	**20 03 01**	**No**	1445.38	mixed municipal waste	R12	M	Weighed	Offsite in Ireland	Killarney Waste Disposal,W0217-01	Aughacureen,,Killarney ,County Kerry,Ireland		