	Kerry County Council	
	Catherin Constant	
v	Vaste Licence Ref No. W0087-01	
	REPORT TITLE	
	Caherciveen Transfer Station Annual Environmental Report	
	Reporting Period:	
	January 2012 – December 2012	
Prepared By: Environmental Service Section, Kerry County Council, Maine Street, Tralee Co. Kerry.		

March 2013

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# 1.0 Introduction

Kerry County Council operates a waste transfer and recycling facility located in the townland of Inchamacteige, approximately 3 km south east of the town of Caherciveen, Co. Kerry. The site is accessed via a small access road branching off the county road L7006 which intersects with the N70 approximately 2 km to the north of the site.

The principal activity of the Transfer Station is the compaction of solid waste into 30 cubic metre 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. Small quantities of organic waste are also collected for transfer to North Kerry Landfill for composting.

This Annual Environment Report is prepared in accordance with Condition 2.8 and Schedule B of Waste Licence W0087-01 issued by the Environmental Protection Agency (EPA).

# 2.0 <u>Reporting Period</u>

The reporting period for this Annual Environmental Report is 1<sup>st</sup> January 2012– 31<sup>st</sup> December 2012.

### 3.0 <u>Waste Activities Carried out at the Facility</u>

Waste disposal activities carried out at Caherciveen Transfer Station are in accordance with Part 1 of Waste Licence W0087-01 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 Caherciveen Transfer Station are in accordance with Part 1 of Waste Licence W0087-01 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 <u>Quantity and Composition of Waste Received, Disposed and</u> <u>Recovered: 1<sup>st</sup> Jan – 31<sup>st</sup> Dec 2012</u>

Waste tonnage disposed of at Caherciveen Transfer Station during the reporting year (2012) decreased by 46% on the previous year (2011). This is primarily due the selling of Kerry County Council's Refuse Collection Service in November 2011 (370.06 tonnes) there has also been a 61% (223.82 tonnes) reduction in the quantity of waste being disposed of by members of the public, this is due to the economic downturn. The quantity of construction and demolition waste delivered directly to the facility has significantly reduced.

The weight of the waste accepted into Caherciveen Transfer Station Facility for disposal for the reporting period was 557.46 tonnes. This comprises of the following breakdown:

Waste for Disposal	Tonnes
	2012
Municipal waste collected by Local	0
Authority & Private Contractors	
Commercial & Industrial	37.64
Road Sweepings & Graveyard Waste	30.86
Flytipping	16.4
Public Domestic	472.86
Total for Disposal	557.46

 Table 1 Waste Stream Breakdown for reporting Period.

Overall the quantities of waste sent for recycling is comparable to last year. Waste sent for recycling during the reporting period compared with previous years is outlined in Table 2 below.

Waste for Recycling & Recovery	Tonnes 2012
Metals	20
Glass	23.48
Aluminium and Steel	3.64
Cans	
Batteries	0.03
Newspapers	52.88
Cardboard	10.26
Fluorescent Tubes	0.28
Plastic Bottles	11.58
Waste Engine Oil	0.98
WEEE	61.65
Dry Recyclables	12.68
Textiles	1
Total for	198.46
Recycling/Recovery	

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

Appendix I contains a breakdown of waste by classification collected on site and recovered/recycled off site during the reporting period.

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

It is expected that waste disposal rates and recycling/recovery rates at Caherciveen Transfer Station will continue to decrease in the next reporting period mainly due to the weak economic environment and the increasingly competitive waste industry.

# 6.0 <u>Summary Report on Emissions for the Reporting Period</u>

### a) Foul Water Emissions

The foul water discharge is monitored quarterly. The results are sent to the EPA and are also available at the Caherciveen facility. No significant exceedances of limits were noted during this reporting period. A Puraflow Wastewater Treatment Unit is installed at the facility to treat all foul waters from the site.

### b) Surface Water Emissions

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

### c) Waste from Silt Traps and Interceptors

A total of 5.44 Tonnes of silt/sludge and wastewater were removed from the silt trap and the foul water treatment unit during the reporting period and disposed of at Tralee Wastewater Treatment Plant.

# 7.0 <u>Summary of Results and Interpretations of Environmental</u> <u>Monitoring</u>

### a) Dust monitoring

Dust Monitoring was carried out at the facility in September/October 2012. The dust monitoring results were within the emission limit value specified in the licence.

There were no issues with dust during 2012 and no complaints were received in relation to dust at the facility. The results over the years have shown no significant nuisance from dust at the facility.

It is Kerry County Council's intension to seek a technical amendment in relation to the dust monitoring requirement of Waste Licence W0087 as past monitoring indicates that the site it not causing excessive dust to the surrounding environs.

### b) Noise monitoring.

Caherciveen waste transfer station is not a significant contributor to the ambient noise environment in the area. There were no steady or continuous noise emissions from the facility. The facility does not constitute a nuisance for the nearest noise sensitive receptors. The measured LA90 or background noise levels, which excludes noise from traffic and aircraft, were well below the 55dB(A) noise limit, ranging between L90 22dB(A) to 32dB(A), reflecting the quiet and rural nature of the location.

There were no issues with noise during 2012 and no complaints were received in relation to noise at the facility. 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 W0087 as past monitoring indicates that the site it not causing excessive noise to the surrounding environs.

### c) Monitoring of surface water.

The surface water monitoring results are attached in Appendix II. Significant deterioration in status at SW5 was noted in recent years by high level of Ammonia. This has been borne out by recent measurements

An examination of discharge from transfer station since 2003 i.e. <u>Se1</u> shows **an** effluent of acceptable quality.

The contamination at SW5 would therefore seem to indicate that elevated levels (**8.69 mg/L NH4**, on 10<sup>th</sup> Oct last) are due to legacy or old landfill activities

As indicated in earlier reports the nearest point on Carhan downstream of landfill/transfer station still denotes a *Q* **value =4** which denotes a water of good quality.

The point on stream which is a tributary of Carhan stream , just downstream of transfer station also scores quiet highly on SSRS investigation. A summary of Biological report from 2010 is included with this report

However the impact from transfer station or old legacy landfill activities while they may not yet be evident on surface water quality does not eliminate possibility of a future impact. An investigation into impact on groundwater from closed landfills, including Cahersiveen, is currently underway. We intend to submit a report on this before July 2013.

### d) Foul Water

The foul water emissions results are attached in Appendix II. The results of samples from the foul water emissions show an effluent of acceptable quality during the reporting period.

### e) Landfill gas

The levels of methane gas and carbon dioxide recorded have reduced significantly (2012 average  $CH_4 - 0.8 \% v/v$ , &  $CO_2 - 0.4\% v/v$ ) compared to 2008 and 2009. The landfill gas monitoring results are attached in Appendix III.

# 8.0 <u>Resource and Energy Consumption Summary</u>

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

### 8.1 Diesel

The diesel usage for Caherciveen Transfer Station for the reporting period 2012 was 1,696 litres. The primary usage of diesel is for the rubber tyred 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 4,900 kilowatt hours. This is a reduction of 1,287 kWh on the previous year

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. Water usage for the facility during the reporting period was estimated to be 80,000 litres. Water is mainly used on site for power washing yards, transfer station apron and hopper and washing of trucks where required.

# 9.0 <u>Resource and Energy Consumption Summary</u>

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

# 10.0 <u>Timescale for Proposed Development Works For Forthcoming</u> <u>Year</u>

No development works are proposed at the facility for 2013.

# 11.0 <u>Schedule of Environmental Objectives and Targets for the</u> <u>Forthcoming Year</u>

Target Area	Objective	Works Required
Surface Water Emissions	Keep Surface Water	Regular inspection of surface
	Emissions within	water drains.
	agreed limits	Regular monitoring of results
		from Surface Water
		Monitoring Points.
Litter – On public roads to	Reduction in the	Regular inspections and clean
facility	number of bags of	up of approach roads.
	waste/litter lost from	Quick response to clean up
	trailers on the way to	any reported waste on the
	the facility	approach roads to the facility
Energy Resources	Reduce the quantity of	Avail of night rate tariffs for
	diesel and electricity	electricity
	used on site	
Waste Records		Introduction of new computer
		system on site to record
		waste transactions with
		connection to KCC network

# 12.0 <u>Report on Progress towards achievement of the 2012</u> <u>Environmental Objectives and Targets</u>

Objective	Target	Progress
Keep Surface Water	Regular monitoring &	Ongoing
Emissions within limits	Inspections	
Reduction in Litter on	Regular inspection &	Reducing & Ongoing
Public Roads to facility	clean up of roads	
Reduction in use of	Reduce quantity of	Decreasing & Ongoing
Energy Resources	diesel and electricity	
	used on site	
Increase collection of	Increase promotion &	Ongoing
Cardboard and Textiles	marketing	
Purchase lands to facilitate	Reach agreement with	Ongoing
widening of access road to	landowner by	
site	December 2011	

# 13.0 <u>Summary of Procedures Developed by the Licensee</u>

The following procedures were developed during the reporting period:

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

# 14.0 <u>Reported Incidents and Complaints</u>

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

Accelem	Accelem(T)	Total Charge Euro
60030	Wages	28,046.24
60040	Salaries	8,170.19
60100	ER PRSI	5,444.14
60200	Overtime	11,821.00
60500	Annual Leave	3,269.90
60510	Bank Holiday Leave	939.05
60600	Travel/Subsistence	2,947.65
61990	Other Allowances	1,643.40
65500	Minor Contracts- Trade Services & other works	17,448.24
65965	Transfer to/ from Cap/ Rev (Exp)	0.00
66500	Non-Capital Equip Purchase - Fire Services	78.40
67500	Non-Capital Equip Purchase - Computers	9.90
69000	Hire (Ext) - Plant/ Transport/ Machinery & Equipment	210.00
69200	Repairs & Maint - Plant	1,275.71
69250	Repairs & Maint -Computer Equip	0.00
69260	Repairs & Maint - Other Equip	22.40
69400	Transfers from Machinery Yard	2,632.50
69600	Other Vehicle Expenses	95.00
70000	Materials	329.55
70990	Issues from Stores	5,050.44
70991	Returns to Stores	-315.19
71000	Insurance	146.75
73400	Staff Travelling & Subsistence Expenses	2,072.89
75000	Computer Software and Maintenance Fees	-2,264.00
76000	Communication Expenses	587.32
77200	Security - Property	350.00
78000	Training	42.11
79900	Consultancy/ Professional Fees and Expenses	296.80
80000	Advertising	0.00
81000	Printing & Office Consumables	152.02
82100	Statutory Contributions to Other Bodies	5,153.20
85100	Rates & Other LA Charges	0.00
86000	Energy	2,035.15
	Total Waste Operational Cost 2012	97,690.76

# b) Statement of Costs for Recycling Operations at Facility

Accelem	Accelem(T)	Total Charge Euro
60030	Wages	6,311.29
60040	Salaries	2,350.20
60100	ER PRSI	1,353.19
60200	Overtime	2,880.52
60500	Annual Leave	1,039.66
60510	Bank Holiday Leave	402.45
60600	Travel/Subsistence	685.50
61990	Other Allowances	336.15
65500	Minor Contracts- Trade Services & other works	2,461.41
66500	Non-Capital Equip Purchase - Fire Services	19.60
67500	Non-Capital Equip Purchase - Computers	426.19
69200	Repairs & Maint - Plant	113.66
69250	Repairs & Maint -Computer Equip	0.00
69260	Repairs & Maint - Other Equip	5.60
70000	Materials	72.00
70990	Issues from Stores	0.00
73400	Staff Travelling & Subsistence Expenses	1,169.08
76000	Communication Expenses	192.56
77200	Security - Property	150.00
78000	Training	0.00
79900	Consultancy/ Professional Fees and Expenses	127.20
80000	Advertising	0.00
81000	Printing & Office Consumables	0.00
82100	Statutory Contributions to Other Bodies	2,208.52
85100	Rates & Other LA Charges	0.00
86000	Energy	386.40
	Total Recycling Operational cost 2012	22,691.18

# 16.0 Management and Staffing Structure at Facility 2012



# 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.

	KCC Refuse	KTC Refuse	Public Car Household	Public Commerical	* Non weighed waste inclusive of tickets	A/C Holders (VAT Inclusive)	A/C Holders (VAT Exempt)	KCC Internal Depts	Total Levied Waste	Road Sweeping/S treet Cleaning	Graveyard Waste	Clean Ups / F'tipping	Total Non - levied	Total of Waste Over Weighbridge	Total Waste Out
January 2012	0	0	30.72	0	18.84	3.54	2.36	0	55.46	1.86	1.10	1.24	4.2	40.82	59.82
January 2011	48.96	0	39.28	0	22.36	4.24	0	0.54	115.38	4.02	0	2.68	6.7	99.72	122.08
February 2012	0	0	18.82	0	14.34	1.46	0	0	34.62	2.32	0	1.16	3.48	23.76	38.02
February 2011	24.3	0	25.58	0	0	6.5	0	0.48	56.86	1.78	0	1.8	3.58	60.44	59.38
March 2012	0	0	20.18	0	8.00	2.54	0.88	3.48	35.08	1.26	0	0.38	1.64	28.72	35.74
March 2011	27.78	0	29.78	0	34.44	3.42	0	0.44	95.86	2.06	0	2.44	4.50	65.92	100.36
April 2012	0	0	26.92	0	12.64	2.72	0	0.14	42.42	3.08	0	1.14	4.22	34.00	47.24
April 2011	19.68	0	32.22	0	17.14	2.82	0	0	71.86	2.18	0.32	5.76	8.26	62.98	80.12
May 2012	0.00	0	24.50	0	20.38	1.80	0.00	0.52	47.20	1.56	0.00	0.82	2.38	29.20	49.68
May 2011	33.6	0	26.64	0	13.22	2.42	0	0.72	76.60	1.32	0.52	2.84	4.68	68.06	81.28
June 2012	0	0	23	0	21.38	1.32	1.76	0	47.46	2.6	0	1.62	4.22	30.30	52.42
June 2011	28.1	0	33.04	0	2.54	6.92	0	0.54	71.14	1.96	0	3.58	5.54	74.14	76.68
July 2012	0	0	31.38	0	11.36	3.04	0	0	45.78	1.88	0	3.68	5.56	39.98	50.06
July 2011	40.96	0	35.48	0	25.66	4.8	0	0	106.90	3.06	0	5.26	8.32	89.56	115.22
August 2012	0	0	32.92	0	19.5	3.84	0	0	56.26	4.96	0	2.78	7.74	44.50	64.2
August 2011	62.58	0	43.28	0	10.36	10.08	0	0	126.3	3.42	0.18	4.84	8.44	124.38	134.74
September 2012	0	0	25.48	0	8.92	0.94	0	0	35.34	1.84	0	1.6	3.44	29.86	38.84
September 2011	30.24	0	24.1	0	22.36	6.98	0	0	83.68	3	0	2.16	5.16	66.48	88.84
October 2012	0	0	18.1	0	14.00	1.34	1.66	0	35.1	1.94	0	0.66	2.6	23.70	37.72
October 2011	24.54	0	22.94	0	13.48	2.24	0	0	63.2	2.34	0	1.38	3.72	53.44	66.92
November 2012	0	0	18.04	0	13.64	1.2	0	0	32.88	3.48	0	0.56	4.04	23.28	37.1
November 2011	29.32	0	27.18	0	7.86	2.54	0	0	66.90	3.14	0	1	4.14	63.18	71.04
December 2012	0	0	20.34	0	19.46	1.52	1.54	0.04	42.90	2.1	0.88	0.76	3.74	27.18	46.62
December 2011	0	0	25.72	0	4.92	2.52	0	0.38	33.54	1.56	0	0.62	2.18	30.8	35.72
Total Tonnage 2012	0.00	0.00	290.40	0.00	182.46	25.26	8.20	4.18	510.50	28.88	1.98	16.40	47.26	375.30	557.46
Total Tonnage 2011	370.06	0.00	365.24	0.00	174.34	55.48	0.00	3.10	968.22	29.84	1.02	34.36	65.22	859.10	1032.38

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

### Appendix II - Results of Foul and Surface Water Monitoring

# Attn: Tara O'Carroll EE Waste Management06 March 2013Re:LABORATORY Results for Cahersiveen Transfer stations: to Dec 2012

Enclosed are results (2003 – date) of monitoring of designated Surface water points and Foul emission point sampled as set out in EPA licence conditions for *CAHERSIVEEN Transfer station* The latest results are for Jul 2012– Dec 2012. Refer also to *app 1: details of sample locations and APP 2 -Invertebrate monitoring report on Carhan stream 2010* 

Significant deterioration in status at SW5 was noted in recent years by high level of Ammonia. This has been borne out by recent measurements An examination of discharge from transfer station since 2003 i.e. <u>Se1</u> shows an effluent of acceptable quality.

The contamination at SW5 would therefore seem to indicate that elevated levels (8.69 mg/L NH4, on 10<sup>th</sup> Oct last) are due to legacy or old landfill activities

As indicated in earlier reports the nearest point on Carhan downstream of landfill/transfer station still denotes a Q value =4 which denotes a water of good quality.

The point on stream which is a tributary of Carhan stream, just downstream of transfer station also scores quiet highly on SSRS investigation. A summary of Biological report from 2010 is included with this report

However the impact from transfer station or old legacy landfill activities while they may not yet be evident on surface water quality does not eliminate possibility of a future impact. An investigation into impact on groundwater from closed landfills, including Cahersiveen, is currently underway. We intend to submit a report on this before July 2013.

David Lenihan MSc Senior Executive Chemist

<u>Location</u>	<u>comments</u>	old or alternative name	Location Easting	Location Northing
Surface water				
Off site sampling pts				
Sw1	Stream upstream of Landfill		50364.7	78554.9
SW6	Point on carhan river u/s of impact from landfill		50828.1	79458.5
SW7	Point on carhan river u/s of impact from landfill		49666	79781.7
On site sampling pts				
Sw3	Drain half way along northern perimeter fence		50057.4	78929.6
SW4	At Drain inside wirefence opposite weighbridge (u/s Landfill)		50061	78733
SW5	Drain downstream of I SW3 at corner of landfill		50055	79046
Leachate				
Outlet from treatment plant				
SE 1			50105	78767

#### Appendix1: Details Sampling points referred to in report

# APP 2 Invertebrate Monitoring Report : Carhan Stream

### SSRS and Q index Monitoring of Carhan stream 19 July 2010

A request was made by the Environment Department to check if old landfill activities at Cahersiveen Transfer Station were having an effect on the River Carhan. It was decided that biological sampling was the only method which would give a full picture of the water quality in the area.

The Biological Quality Rating System for Rivers (Q ratings) as outlined by the Environmental Protection Agency (EPA) is carried out on rivers. The rating system goes from Q1 to Q5 where a Q5 denotes a pristine river and Q1 indicates serious pollution. This system is based on the differing tolerances of invertebrates to pollution. Three-minute kick samples are carried out at each station accompanied by stone examinations and weed sweeps which are generally done from May to September. It is important to note there are different classifications for depositing and eroding substrates.

First of all an SSRS study was carried out on the tributaries upstream of the transfer station as they are too small for Biological Quality Rating System described above. One of the tributaries was also sampled downstream of the transfer station. The Small Streams Risk Score (SSRS) is a relatively new biological risk assessment system for detecting potential sources of pollution in rivers and is usually carried out on first and second order streams from October to April. It was developed by the Environmental Protection Agency (EPA) in association with Western River Basin District (WRBD). The SSRS is of particular value in detecting hard to find diffuse sources of pollution within catchments. The basic principle of the SSRS is similar, i.e. that aquatic insects and other invertebrates living in streams have varying sensitivities to pollution and therefore, can be used as continuous monitors of water quality. This method was devised to describe the status of a stream with the score indicating the probability of risk as follows:

### SSRS Scores: >8 Probably not at risk 6.5-8 Probably at risk <6.5 At risk

A further explanation of the SSRS tool will help in understanding the results. It is divided into 5 groups of invertebrates, the mayflies, stoneflies, caseless and cased caddis flies, the GOLD species which consist of snails and worms and Asellus. It is important to note that the SSRS tool has been statistically designed to give more weight greater abundance of the pollution sensitive groups (i.e. mayflies and stoneflies). On the other hand the converse is true for the GOLD species and Asellus, which are more tolerant to pollution.

The SSRS tool was carried out on three tributaries while a Q rating was done on the main river upstream and downstream of the transfer station. One of the tributaries north (downstream) of the footbridge was unsuitable for sampling. All sites sampled are shown in the map at the end of the report. A results table shows results obtained at all these sites and corresponding biological ratings also. An adjoining file shows the species identified and other information for both the SSRS sites and the Q rating sites. Three of the four SSRS sites scored well indicating they are 'probably not at risk'. However, the Gurteen stream upstream of the transfer station only scored 6.4 deeming it 'at risk'. It should be noted that this stream flowed through bog which may be a factor. It had recovered downstream gaining a score of 9.6. The main difference in the two sites was the absence of mayflies and the abundance of the GOLD group which were plentiful upstream.

The Q rating upstream of the transfer station was Q3 - 4. This site at the Footbridge E of Inchimacteige is also sampled by the EPA. In 2007 they obtained a Q rating of 3-4 also. However, when previously done in 2004 it scored a Q4 so there has been some deterioration over the last few years. It is difficult to see where the source of the problem is as the tributaries upstream all had good SSRS scores.

The Q rating downstream was carried out northeast of Chiclog where access was gained at the end of a track. The river had improved here scoring a Q4.

It would appear that any old landfill activities or the transfer station itself are not causing any deterioration in the river.

			Parameter	Ammonium	Colour	Conductivity	MRP	TON	D.O.	D.O.	Temp	рН	SSRS	Q Rating
				NH4	Hz	at 20 degC	Р	NO3	02	% sat			Score	
			Max.		20		0.03		15	150		9		
			Target											
			Min.						5	50		6	6.5	
Location	Lab Ref	Date	Time	mg/l	Hazen	µS/cm	mg/l	mg/l	mg/l	% O2	DegC	pH units	Score	Rating
Carhan River (Main							<							
tribuatary) Turnamucka	2010/0354	27.1.10	12:30	< 0.02	57	85	0.005 <	1.09	12.5	95	5.1	7	9.6	
Tributary Gurteen	2010/0353	27.1.10	11:15	< 0.02	79	89	0.005	0.67	13.1	100	5	6.9	8.8	
Tributary (SW1) u/s							<							
Transfer St. Gurteen	2010/1490	8.4.10	11:07	< 0.02	91	92	0.005	0.97	11.5	96	8.1	6.6	6.4	
Tributary d/s Transfer														
Station End of path	2010/1491	8.4.10	14:25	< 0.02	94	98	0.008	1	11.3	101	10.7	6.6	9.6	
NE Chiclog	2010/2643	16.6.10	14:00	< 0.02	64	204	0.005	0.35	10	107	16.2	7.4		4
East Of	0040/00/0	10.0.10	40.50	0.00	70	440	<			400	45.0	7.0		o =
inchimacteige	2010/2642	16.6.10	10:50	< 0.02	72	113	0.005	0.6	11	109	15.6	1.3	_	3.5

Chemical Results & Biological Scores

# **Map of Sampling Points**



Landfill	Location	Eastings	Northings	Sample Reference	Sample Date	Sample Time	Ammonium (NH4)	Ϋ́	BOD (O2)	Conductivity @ 20 oC	Chemical Oxygen Demand (O2)	Chloride (Cl)	Dissolved Oxygen (O2)	Suspended Solids	Temperature
							mg/l	pH units	mg/l	μS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C
Caherciveen	Sw 1	50364.7	78554.9	2012/0454	25-Jan-12	13.15	< 0.02	5.5	< 1	125	34	33	10.5	16	9.1
Caherciveen	Sw 1	50364.7	78554.9	2012/1891	18-Apr-12	12:35	0.03	6	1.3	110	45	27.8	11	2	9.5
Caherciveen	Sw 1	50364.7	78554.9	2012/3076	04-Jul-12	14:25	0.04	6.1	1	97	66	23.2	10.1	- 5	14.6
Caherciveen	Sw 1	50364.7	78554.9	2012/4952	10-Oct-12	14:00	0.05	6.8	< 1	102	63	24	9.8	1.2	15
Caherciveen	SW3	50057.4	78929.6	2012/0455	25-Jan-12	13:25	0.24	6.7	1.5	168	32	43	11.3	10	8.7
Caherciveen	SW3	50057.4	78929.6	2012/1892	18-Apr-12	11:30	0.03	6.7	2.4	179	44	39.9	10.7	14	8.5
Caherciveen	SW3	50057.4	78929.6	2012/3077	04-Jul-12	13:38	0.04	7	< 1	132	65	26.5	10	4	15.1
Caherciveen	SW3	50057.4	78929.6	2012/4953	10-Oct-12	14:33	0.03	7	< 1	126	59	24.6	9.6	8	16.2
Caherciveen	Sw 4	50061.3	78733.3	2012/0456	25-Jan-12	14:20	0.03	6.1	1.4	98	80	25	11.3	26	8.5
Caherciveen	Sw 4	50061.3	78733.3	2012/1893	18-Apr-12	11:10	0.03	6.8	7.7	122	90	27.4	10.7	60	10
Caherciveen	Sw 4	50061.3	78733.3	2012/3078	04-Jul-12	13:30	0.02	4.8	< 1	103	31	23.6	8.8	3	15
Caherciveen	Sw 4	50061.3	78733.3	2012/4954	10-Oct-12	14:20	0.02	5.6	1	99	58	22.9	8	10.4	15
Caherciveen	Sw 5	50054.6	79046.1	2012/0457	25-Jan-12	13:35	0.93	6.7	4.5	144	45	32	11.2	32	8.8
Caherciveen	Sw 5	50054.6	79046.1	2012/1894	18-Apr-12	11:40	13	6.7	4	199	48	34.3	10.4	10	8.7
Caherciveen	Sw 5	50054.6	79046.1	2012/3079	04-Jul-12	13:50	1.9	6.5	2.3	154	81	25.2	9.7	13	14.6
Caherciveen	Sw 5	50054.6	79046.1	2012/4955	10-Oct-12	14:40	8.69	6.8	< 1	275	63	27.3	9.2	2.4	14.9
Caherciveen	Sw7	49666	79781.7	2012/4782	02-Oct-12	13:15	< 0.02	6.7	1	87			10.8	3	12.5

# Surface Water Monitoring Results 2012

Landfill	Location	Sam ple Reference	Sam ple Date	Sample Time	Ammonium (NH4)	Hď	BOD (02)	Conductivity @ 20 oC	Chemical Oxygen Demand (O2)	Suspended Solids	Temperature	Oils/Fats & Grease	Oils/Fats & Grease
					mg/l	pH units	mg/l	μS/cm	mg/l	mg/l	Degre es C	mg/l	Descriptive
Cabaraiyaan	Co1	2012/0459	05 lon 10	12:10	4	67	10.0	FOF	101	FF	0		Ne vieuel evidence
Carierciveen	Sei	2012/0458	20-Jan-12	13:10	4	0.7	12.0	505	101	55	9		No visual evidence
Caherciveen	Se1	2012/1896	18-Apr-12	12:05	6.27	6.5	4	495	69	13	9.5	< 0.5	No visual evidence
Caherciveen	Se1	2012/3219	11-Jul-12	12:15		6.6	3.5	419	109	46		< 0.5	No visual evidence
Caherciveen	Se1	2012/5087	16-Oct-12	11:00	0.1	6.8	4.7	549	124	61		< 0.5	No visual evidence

Foul Water Monitoring Results 2012

# Appendix III - Landfill Gas Summary

Caherciveen Waste Transfer Station

Monitoring of Landfill Gas Levels

Date	Ref.	CH₄ % v/v	CO <sub>2</sub> % v/v	O <sub>2</sub> % v/v	Atm. Pressure Mbar	Temperature Degrees Celsius
6/10/08	L1a	6.8	2.5	20.1	1008	15
13/5/09	L1a	5.4	3.3	21.4	1010	16
3/12/09	L1a	6.9	3.4	20.9	1005	8
20/4/10	L1a	1.0	0.3	20.1	1017	15
20/7/11	L1a	0.1	0.0	20.8	1011	14
1/11/11	L1a	0.4	0.2	20.5	997	12
17/07/12	L1a	0.8	0.4	19.6	1017	17

# Appendix IV – <u>Results of Dust Monitoring</u>

	2   KERRY COUNTY	COUNCIL - CAH	ERCIVEEN  01		PAGE 01   0	
		ANAL	YSIS REPORT			
CUSTOMER:	KERRY COUN	NTY COUNCIL	SAMPLE TYPE:		DUST	
ADDRESS:	Environment Section, Main Street, Tralee, County Kerry		CONDITION OF SAMPLE ON RECEIPT:		Satisfactory	
			DATE SAMPLED:	12 Septe	mber ~ 23 October 2012	
REPORT TO:	JOHN AHERN		DATE RECEIVED:	2	25 October 2012	
SAMPLED BY:	John Mannix		DATE ANALYSED:	09~	20 November 2012	
SAMPLING PT:	CAHERCIVEEN TRANSFER STATION		DATE REPORTED:	26 November 2012		
ORDER NO:			WORK NO.:	274	27409 C   12P-101	
		TABLE	OF RESULTS			
METHOD:	LAB REF:	YOUR REF:	TOTA PARTICUL mg/m <sup>2</sup> /d	L ATES lav	INORGANIC PARTICULATES mg/m <sup>2</sup> /day	
SCP 039	C12-Oct 475	Station 1			ing/in /unj	
		Station 1	131		44	
SCP 039	C12-Oct 476	Station 2	328		44 35	
Karen Lave Karen Lave Chemistry	C12-Oct 476	Station 2	328		44 35	
CP 039 Karen Lave Chemistry	C12-Oct 476	Station 2	328		44 35	
Karen Lave Karen Lave Chemistry	C12-Oct 476	Station 2	328		44 35	
Karen Lave Karen Lave Chemistry	C12-Oct 476	Station 2	328		44 35	
CP 039 Karen Lave Chemistry	C12-Oct 476	Station 2	328		44 35	
CP 039 Karen Lave Chemistry	C12-Oct 476	e ifems tested.	131 328		44 35	

# Appendix V – Results of Noise Monitoring



### Table of contents

1	INTRODUCTION	1
2	METHODOLOGY	1
2.1	Monitoring periods	1
2.2	Monitoring Locations	1
2.3	Survey Equipment	2
2.4	Measurement Parameters	2
3	RESULTS	3
4	CONCLUSION	4

### LIST OF APPENDICES

Appendix A	Calibration Certificates
Appendix B	Glossary of Noise Related Terms
Appendix C	Frequency Graphs



i

#### 1 INTRODUCTION

Kerry County Council operates a waste transfer station in Inchamacteige, near Caherciveen. The facility operates within the conditions set out in the waster licence register number W087-01. 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 15<sup>th</sup> November 2012. Noise monitoring had to undertaken over two days in order to comply with the EPA guidance note NG4 and because of adverse weather conditions.

#### 2.2 MONITORING LOCATIONS

Monitoring was undertaken at the four nearest noise sensitive locations (B1, B2, B3 and B4). The locations are shown on Figure 1 overleaf.



#### Figure1: NOISE MONITORING LOCATIONS



#### 2.3 Survey Equipment

The measurements were made using a Bruel & Kjaer type 2250 Light Logging integrating Sound Level Meter. This instrument is a Type 1 instrument 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 meter (SLM) was 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.

The instrument was calibrated with a B&K type 4231 calibrator prior to and after the measurement period. Factory calibration certificates for the noise level meter and acoustic calibrator, detailing equipment serial numbers, calibration traceability and re-calibration dates are presented in Appendix A of this report. A glossary of noise related terms is presented in Appendix B.

#### 2.4 Measurement Parameters

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

- L<sub>Aeq</sub> Time-averaged A weighted noise level.
- L<sub>A90</sub> Noise level exceeded for 90% of measurement period (steady underlying noise level).
- L<sub>A10</sub> Noise level exceeded for 10 % of measurement period.

The 1/3 Octave Frequency was also measured at each location. This allows for the detection and identification of tonal content. Typically there is a 5dB(A) penalty for tonal content in the noise signature.

#### 2.4.1.1 Meteorological Conditions

Meteorological conditions were noted as dry, mild with light winds not exceeding 5 meters per second (ms<sup>-1</sup>) at any time during the surveys. 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 5ms<sup>-1</sup>.



#### 3 RESULTS

#### Table 1. Noise Monitoring Results

Location Reference	Date and Time	L <sub>Aeq</sub> dB	L <sub>A90</sub> dB	L <sub>A10</sub> dB	Tones Hz	Description of Noise Sources			
B1	15/11/2012 B1 10:50 - 11:20		27	47	No toned detected	The main contributing noise source cat this location included cars and			
(at main gate)	13:24 - 13:54	47	22	39	No toned detected	traffic entering and exiting the facility. Where a HGV entered the site, the Lann was elevated. Birdsong also contributed to the noise build up.			
	15:50 - 16:05	30	23	31	63 Hz				
R2	15/11/2012	45	26	49	No toned detected				
(at weighbridge)	11:25 - 11:55 14:02 - 14:32 16:10 - 16:25 15/11/2012 12:00 - 12:30 14:35 - 15:05 15:22 - 15:05	50	26	54	630 Hz	Customers and idling cars were the main contributing noise source at this location			
		48	31	50	No toned detected	dis locatori.			
B3		36	24	36	No toned detected	The main contributing noise source at this location was the tipping			
(boundary location)		14:35 - 15:05	48	31	50	No toned detected	shed in operation. Other contributing noise sources included a car exiting the facility, background traffic, an aircraft and some occasional noise from a farmyard in the distance.		
	10.52 - 10.42	55	30	58	315 Hz	noise nonra lannyara in the aistance.			
R4	15/11/2012	38	29	39	No toned detected	A truck unloading a skip contributed the most to the noise build up			
(nearest noise sensitive receptor, west)	12:41 – 13:11 15:4 – 15:45	13:11 43		39	No toned detected	during the second survey. Otherwise there were no notable noise emissions from the facility. A car passing, a tractor on a farmyard and			
	16:50 - 17:05	39	30	40	No toned detected	birdsong also contributed to the noise build up.			



#### 4 CONCLUSION

In conclusion the Caherciveen waste transfer station was not a significant contributor to the ambient noise environment in the area. There were no steady or continuous noise emissions from the facility. The facility does not constitute a nuisance for the nearest noise sensitive receptors. The measured  $L_{A90}$  or background noise levels, which excludes noise from traffic and aircraft, were well below the 55dB(A) noise limit, ranging between  $L_{90}$  22dB(A) to 32dB(A), reflecting the quiet and rural nature of the location.

Although the sound level meter detected tones at 63 Hz, 630 Hz and 315Hz, no obvious tonal source was noted. These tones most likely originated from car or HGV engines or the tipping shed motor.



# Appendix A

**Calibration Certificates** 

Service	e Engineering Report		
Customer:	Malachy Walsh and Partners		
Ref Number:	R0459682/01	Order Num:	13378
Ser/No.:	2654709	Booked In:	22-Mar-10
Product:	B&K 2250 Sound Level Meter	Proceed Date:	07-Apr-10
Narranty:	No		

Fault Diagnosis:

Engineers Report:	
B&K 4950 S/N 2657422 Microphone PASS Frequency & sensitivity test. B&K 2250-L Calibration.	
Calibrate with manufactures performance specification's) PASS Supplied Results Certificate .	

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Disclaimer

All work carried out is covered by a 90 Day warranty on parts and labour. Exceptions - Replacement batteries, electrochemical cells. Any shortages must be reported within seven working days of despatch from our premises. Any queries should be directed to Casalia Customer Sarvice Department. Casella CEL Management system accredited to ISO- 9001:2000 by the SIRA Certification Services (CML), Certificate No. 051824.



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		6			1000			
Customer:	Malachy Walsh	and Parts	ners					
Instrument:	B&K 4231							
Serial No 1:	2665058							
Part No.:								
Ref Number:	0459682/02							
P/Ord Num:	13378							
Firmware Ver:	N/A							
Calibration Method: -								
The Instruments indicate equipment which has be	ed values for the n en calibrated with	traceabil	ient param ity to Natio	neters onal ar	have been valid id International	ated using the test references.	ed traceable	
The uncertainties are fo	r a confidence pro	bability of	f not less t	han 95	5%.			
Traceable Equipment: -	:	Equip M	<u>40.</u>	Call	DueDate			
DMM Fluke 45		00691		18/0	6/2010			
B&K 4231 Calibrator		10066N	4	06/0	1/2010			
Test Conditions: -								
Ambient Temperature	: 24.7°C							
Ambient Humidity	: 35%RH							
Ambient Pressure	: 1010 mBa	r						
Results: -	Initial Readi		nal Roadi		Tel (Class 1):	Tel (Class 2)		
Frequency @ 1kHz:	: 1.0001	19. 14	1.0001	:	±1 Hz (	@ 1 kHz		
SPL @ 114dB:	: 114.2	:	114.0	:	±0.15dB	±0.2dB		0
SPL @ 94dB:	: 94.2		94.0	:	±0.15dB			
With Coupler:	3							
Comments:			monente					
Jasena Measurement					(SHVICA)			
	Nevin Mistry				( 22) )			

# Appendix B

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.

#### <u>EPA</u>

**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.

#### <u>Hertz (Hz)</u>

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)<sub>10</sub>

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

### L(A)<sub>90</sub>

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 ArTr

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

#### <u>Residual Noise</u>

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 C

1/3 Octave Centre Frequency Data Graphical Representation



# Appendix VI - <u>AER/PRTR Return 2012</u>

Sheet : Facility ID Activities

epa Environmental Protection Agency | PRTR# : W0072 | Facility Name : Coolcastaph Transfer Station | Fletname : W0072\_2012.its | Return Year : 2012 |

AER Returns Workbook

Guidance to completing the PRTR workbook

# **AER Returns Workbook**

REFERENCE YEAR	2012
	Le conversione de la constante
1. FACILITY IDENTIFICATION	
Parent Company Name	Kerry County Council
Facility Name	Cooicasiagn Transfer Station
PRIR identification Number	W00/2
Licence number	W0072-01
Waste or IPPC Classes of Activity	
No.	class name
	Renackaging prior to submission to any activity referred to in a
3.12	preceding paragraph of this Schedule.
	Storage prior to submission to any activity referred to in a preceding
	paragraph of this Schedule, other than temporary storage, pending
3.13	collection, on the premises where the waste concerned is produced.
4.1	Solvent reclamation or regeneration.
	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
4.13	produced.
	Recycling or reclamation of organic substances which are not used
	as solvents (including composting and other biological transformation
4.2	processes)
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Coolcaslagh
Address 2	Killamey
Address 3	Co. Kerry
Address 4	
	Kerry
Country	Ireland
Coordinates of Location	-9.43193.52.0657
River Basin District	IESW
NACE Code	3621
AED Detunes Control News	Treatment and disposal of non-nazaroous waste
AER Returns Contact Name	Tara O Carroli
AED Deturns Contact Entail Address	Assistant Engineer
AER Returns Contact Telephone Number	0887162020
AER Returns Contact Vereprone Number	0970120525
AFR Returns Contact Fax Number	0667162001
Production Volume	0(
Production Volume Units	
Number of Installations	
Number of Operating Hours in Year	
Number of Employees	
User Feedback/Comments	
Web Address	
ration and a construction of	9
L PRTR CLASS ACTIVITIES	
Activity Number	Activity Name

Activity Number	Activity Name
5(c)	Installations for the disposal of non-hazardous waste
5(c) 50.1	Installations for the disposal of non-hazardous waste General
3. SOLVENTS REGULATIONS (S.I. No. 543 of 20	02)
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 ?	
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

#### Sheet : Releases to Air

#### AER Returns Workbook

#### 4.1 RELEASES TO AIR Link to previous years emissions data

No.111 N. P. PRINSLIC		
ASES TO AIR	Link to previous years emissions data	(1911)4 : W0072   Facility Name : Contravingh Transiler Balteri (Filamame : W0073, 2012)iis   Refum Year : 2012

200300131482

#### SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

	RELEASES TO AIR	Please enter all quantities in this seedion in KGs								
			METHOD	QUANTITY						
			Method Used				Same and the second		Sec. and the second second	
No. Annex I	Name	M/C/E	Method Code	Designation or Description	Emission Point 1		T (Total) KG/Year	A (Accidental) KG/Year	F (Fugtive	KG(Year
03	Carbon dioxide (CO2)	E	ESTIMATE	Gas Sim Model		0.0	281000.0		Contraction of the local distance of the loc	281000.0
01	Methane (CH4)	E	ESTIMATE	Gas Sim Model		0.0	126000.0	0.	٥	126000.0
	* Select a row by double-clicking on the Pollutant Name (Column 8) then click the delete button									

#### SECTION B : REMAINING PRTR POLLUTANTS

SECTION B : REMAINING PRTR POLLUTAN	TS								
	RELEASES TO AIR				Please enter all quant	ties in this section in KG	6		
	POLLUTANT			METHOD	2		QUANTITY	_	17 ( ) ( )
No Production	A CALIFORNIA CONTRACTOR CONTRACTOR	and the second second	A CONTRACTOR OF A	Method Used		Contractive and the second	C COLORADO NO	eres and	General House Constants
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) K	G/Year	F (Fugitive) KGryear
	del contractione					0.0	0.0	0.0	0.0
	2 Report a results double citizing on the Deltant Name (Column R) that did the delate batter.								

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

	RELEASES TO AIR	Please enter all quantities in this seelion in KGs									
	POLLUTANT			METHOD			QUANTITY	2			
1000 Aug. 1000		949 8-2-2	All the second s	Method Used	Contraction of the	2.7.8.10.002.000	A CONTRACTOR OF A CONTRACTOR	A second of the second			
Pollutant No.	Name-	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year			
			and the second second second		0.0		0.0	0.0			

\* Select a row by double-clicking on the Pollutant Name (Column 2) then click the delete button

Additional Data Requested from Land	ffill operators					
For the purposes of the National Inventory on Greenbo faired or utiliaed on their facilities to accompany the fit	use Ganes, familiti operations are requested to provide summary data on landfill gas (Melhane) pares for total mathane generated. Operations strongs only report their Net methane (CH4)					
Landfilt	exton A: Sector apectic PHCH postulants above. Please complete the table below: Coolcasiagh Transfer Station				-	
Please enter summary data on the quantities of methane flared and / or utilised			Meth	od Uced		
	T (Totai) kg/Year	M/C/E	Method Code	Designation or Description	Facility Total Capacity m3 per hour	<u>^</u>
Total estimated methane generation (as per site model)	0.0				NA	
Methane flared Methane utilised in engine's	0.0	6 8			0.0	(Total Flaring Capacity) (Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				NA	

S. ONSITE TREATS	icht a off and no	and the of	Please enter	all quantities on this sheet in Tonnes	president 1 million	C . WUDDI_	participas (rectam year - a	nor I				0
	European Waste		Quantity (Tonnes per Year)		Waste Treatment		Method Used	Location of	Haz Waste : Name and Licence/Permit No of Next Destination Facility <u>Non Haz Waste</u> Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste Address of RecoverDisposer	Name and License / Permit No. and Address of Final Recoverer (Dispose (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination (.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Transfer Destination	Code	Hazardous		Description of Waste	Operation	M/C/E	Method Used	Treatment				14
To Other Countries	13 02 04	Yes	0.98	mineral-based chlorinated engine, gear and lubricating oils	R9	м	Weighed	Abroad	Enva.W0184-1	Clonminam Industrial Estate, "Portlaoise, County Laois, Ireland Sarsfield Court Industrial	Nehlsen GmbK & Co KG,D3330040,,Bremen,.,G ermany	.,Bremen,,Germany
Within the Country	15 01 01	No	10.26	Bailed Cardboard	R3	м	Weighed	Offsite in Ireland	Greenstar, WFP-CK-10-0047 02	- Estate, ., Glanmire, County Cork, Ireland		
Within the Country	15 01 02	No	11.58	plastic packaging	R3	м	Weighed	Offsite in Ireland	Dillon Waste Ltd, WFP-KY- 10-001	The Kerries ,,,Tralee,County Kerry,Ireland		
Within the Country	15 01 04	No	3.64	metallic packaging	R4	м	Weighed	Offsite in Ireland	Dillon Waste Ltd, WFP-KY- 10-001 Killamer waste	The Kerries ,,,Tralee,County Kerry,Ireland		
Within the Country	20 03 01	No	12.68	mixed municipal waste	R3	м	Weighed	Offsite in Ireland	Disposal,W0217-01	County Kerry, Ireland		
Within the Country	15 01 07	No	23.48	glass packaging	R5	м	Weighed	Offsite in Ireland	Dillon Waste Ltd, WFP-KY- 10-001	The Kerries ,Tralee,County Kerry,Ireland		
To Other Countries	16 02 11 16 02 14	Yes	9.25	discarded equipment containing chlorofluorocarbons, HCFC, HFC discarded equipment other than those mentioned in 16 02 09 to 16 02 13	R4 R4	м	Weighed Weighed	Abroad Abroad	KMK Metals,W0113-01 EWM Ltd,WFP-DS-09-0012- 01	Cappincur Industrial estate,Tullamore, County Offaly, Ireland Block 648 Jordanstown Drive, Greenogue Industrial Estate, Rathcoole, County Dublin, Ireland	EMR,EAML40099,Bently Road South,Dariston,WS10 8LW West Midlands,United Kingdom	Bently Road SouthDarlston,WS10 8LW West Midlands,United Kingdom
									Dillon Waste I to WEP-KY-	The Kerries Tralee County		
Within the Country	20 01 01	No	52.88	News and Pams	R3	м	Weighed	Offsite in Ireland	10-001	Kerry,Ireland Belgard		
Within the Country	20 01 11	No	1.0	textiles	R3	м	Weighed	Offsite in Ireland	014/2	Road, Fallaght, Dublin, 24, Irela nd		
To Other Countries	20 01 21	Yes	0.28	fluorescent tubes and other mercury- containing waste	R5	м	Weighed	Abroad	KMK Metals,W0113-01	Cappincur Industrial estate,,Tullamore,County Offaly,Ireland	Alba Servicce GmbH & Co KG,E57757020,Kanalstrasse 64,Rheine,48432,Germany	Kanalstrasse 64,Rheine,48432,Germany
				batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these	L.					Cappincur Industrial estateTullamore.County	EMR,EAML40099,Bently Road South, ,Dariston,WS10 8LW West Midlands,United	Bently Road SouthDarlston,WS10 8LW West Midlands,United
To Other Countries	20 01 33	Yes	0.03	discarded electrical and electronic equipment other than those mentioned in 20	R4	M	vveigned	Abroad	KMK Metals, WU113-U1	Cappincur Industrial estate,Tullamore,County	Kingdom	Kingdom
Within the Country	20 01 36	No	15.89	01 21, 20 01 23 and 20 01 35 discarded equipment containing hazardous components (16) other than those	R4	м	Weighed	Offsite in Ireland	KMK Metals,W0113-01 EWM Ltd,WFP-DS-09-0012-	Offaly,Ireland Block 648 Jordanstown Drive,Greenogue Industrial Estate,Rathcoole,County	The Recycling Village,WFP/MH/11/0005/01, Unit 21 Duleek Business Park, Commons, Duleek, Coun	Unit 21 Duleek Business Park,Commons,Duleek,Coun
Within the Country	16 02 13	Yes	18.74	mentioned in 16 02 09 to 16 02 12	R4	м	Weighed	Offsite in Ireland	01 Hegarty Metals, WFP-LC-11-	Dublin,Ireland Ballysimon	ty Meath, Ireland	ty Meath, Ireland
Within the Country	20 01 40	No	20.0	metals	R4	м	Weighed	Offsite in Ireland	001-01	Road, "Limerick, "Ireland Muinonaminnane, Tralee Co		
Within the Country	20 03 01	No	557.76	mixed municipal waste	D5	м	Weighed	Offsite in Ireland	North Kerry Landfill,W001-04	unty Kerry, Ireland		

#### 5 ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

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