

## **Kerry County Council**



**Waste Licence Ref No. W0072-01**

### **REPORT TITLE**

**Coolcaslagh Transfer Station, Killarney  
Annual Environmental Report**

**Reporting Period:**

**January 2011 – December 2011**

*Prepared By:  
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Co. Kerry.*

*June 2011*

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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 L2507 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 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 W0072-01 issued by the Environmental Protection Agency (EPA).

## **2.0 Reporting Period**

The reporting period for this Annual Environmental Report is 1<sup>st</sup> January 2011 – 31<sup>st</sup> December 2011.

## **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: 1<sup>st</sup> Jan – 31<sup>st</sup> Dec 2011**

Waste tonnage disposed of at Coolcaslagh Transfer Station during the reporting year (2011) decreased by 16% on the previous year (2010). This is primarily due to the downturn in the economy resulting in a significant change in the disposal habits of members of the public. The quantity of construction and demolition waste delivered directly to the facility has significantly reduced.

The weight of the waste accepted into Coolcaslagh Transfer Station Facility for disposal for the reporting period was 3,387.78 Tonnes. This comprises of the following breakdown:

<i><b>Waste for Disposal</b></i>	<i><b>Tonnes</b></i>		
	<i><b>2009</b></i>	<i><b>2010</b></i>	<i><b>2011</b></i>
Municipal waste collected by Local Authority & Private Contractors	2,287.43	1,925.39	1,634.22
Commercial & Industrial	114.78	419.34	293.25
Road Sweepings & Graveyard Waste	194.42	178.58	213.12
Flytipping	34.04	40.14	50.76
Public Domestic	2,128.45	1,473.73	1,196.43
<b>Total for Disposal</b>	<b>4,759.12</b>	<b>4,037.18</b>	<b>3,387.78</b>

**Table 1 Waste Stream Break down for reporting Period.**

The quantities of waste sent for recycling decreased by 4% overall in comparison to last year. Reductions were particularly noted for metals, WEEE, cardboard and textiles. Waste sent for recycling during the reporting period compared with previous years is outlined in Table 2 below.

<b>Waste for Recycling &amp; Recovery</b>	<b>Tonnages 2008</b>	<b>Tonnages 2009</b>	<b>Tonnages 2010</b>	<b>Tonnages 2011</b>
Metals	40.41	29.6	39.9	17.30
Glass	117.6	115 est.	59.33	59.87
Aluminium	12.4	10 est.	2.6	2.00
Batteries	17.0	15 est.	1.28	5.12
Newspapers	139.8	125.05	133.66	127.26
Cardboard	67.5	54.95	50.62	43.84
Fluorescent Tubes	0.2	0.54	0	0.04
Domestic Hazardous Waste	0.1	0.76	0	1.70
Plastic Bottles	17.2	19.46	19.77	44.60
Waste Engine Oil	3.5	3.06	0	2.10
WEEE	125.01	91.627	104.19	91.01
Dry Recyclables	6.5	4.28	1.62 <sup>1</sup>	7.80 <sup>1</sup>
Organics	26.32	23.43	0	0
Textiles	0	0	1.92	0.76
<b>Total for Recycling/Recovery</b>	<b>573.54</b>	<b>664.43</b>	<b>414.89</b>	<b>403.40</b>

<sup>1</sup> Dry recyclables collected in eco sense bags only

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

It is expected that waste disposal rates and recycling/recovery rates at Coolcaslagh 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 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 2011 Kerry County Council transported 678.24 T of foul effluent and silt/sludge from the facility for treatment in Killarney Wastewater Treatment Plant. The foul water effluent is monitored quarterly and the results are sent to the EPA and are also available at the Coolcaslagh facility.

### **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.**

Dust monitoring was carried out on three occasions during 2011 in accordance with the licence conditions. The dust monitoring results were within the ELV set down in the licence except for Station 3 in one report dated 28<sup>th</sup> October, 2011. However, during this period substantial excavation works were being carried out in the adjoining quarry to the southwest of the facility which had a significant impact on the nearest dust monitoring location, Station 3.

There were no issues with dust during 2011 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.

**b) Noise monitoring.**

Noise monitoring was carried out at the facility by Southern Scientific Services on the 22<sup>nd</sup> November, 2011. The noise monitoring report is available at the facility and was forwarded separately to the EPA inspector. The noise limit prescribed in the Waste Licence is not being met at all the on-site and noise sensitive monitoring locations (primarily due to traffic and other activities). However, the report concludes that activities at the waste transfer station are not adversely impacting on the noise environment at the nearest noise sensitive locations.

There were no issues with noise during 2011 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.

**c) Monitoring of surface water**

The surface water monitoring results are attached in Appendix II. SW4 still experienced slight contamination as evidenced from consistently above background ammonia levels. As effluent from the transfer station is now tankered away from site it is evident that this slight contamination is not due to transfer station activity. The source of the impact is from excavation and development works upstream of landfill and possibly from legacy landfill activities.

No significant impact however is noted in the main Woodford River channel (SW1, SW3A, SW6 and SW7).

**d) Biological Monitoring.**

Kerry County Council carried out a biological assessment of the Woodford River on 18<sup>th</sup> 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 issues or complaints in relation to the water quality of the Woodford River as a result of activities at the facility during 2011.

**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.

**f) Landfill gas**

The levels of methane gas and carbon dioxide recorded in 2011 have reduced significantly (average  $\text{CH}_4$  - L1: 41.4 % v/v, L2: 18.9 % v/v., average  $\text{CO}_2$  - L1: 27.8% v/v, L2: 10.1% v/v) compared to 2008 and 2009. The landfill gas monitoring results are attached in Appendix III.

## **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 2011 was 1,139 litres. The primary usage of diesel is for the rubber tyred excavator on site and the oil burner in the steam washer.

### **8.2 Electricity**

The electricity usage for the facility during the reporting period was 16,376 kilowatt hours. This is a decrease of 7,304 kilowatt hours compared to 2010. This can primarily be attributed to the downturn in activity due to the current economic environment.

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 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 116,000 litres. Water is mainly used on site for site office facilities, power washing yards, transfer station apron and hopper and washing of trucks where required. No surface water or ground water is abstracted.

## **9 Report on Development Works Undertaken during the Reporting Period**

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

## **10 Proposed Development Works For Forthcoming Year**

No development works are proposed at the facility for 2011.

## 11 Schedule of Environmental Objectives and Targets for the Forthcoming Year

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

## 12 Report on Progress towards achievement of the 2010 Environmental Objectives and Targets

<i>Objective</i>	<i>Target</i>	<i>Progress</i>
<i>Keep Surface Water Emissions within limits</i>	Regular monitoring & Inspections	Ongoing
<i>Reduction in Litter on Public Roads to facility</i>	Regular inspection & clean up of roads	Ongoing
<i>Reduction in use of Energy Resources</i>	Reduce quantity of diesel and electricity used on site	Ongoing
<i>Increase collection of Cardboard and Textiles</i>	Increase promotion & marketing	Ongoing

## 13 Summary of Procedures Developed by the Licensee

The following procedures were developed during the reporting period:

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

## 14 Reported Incidents and Complaints

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

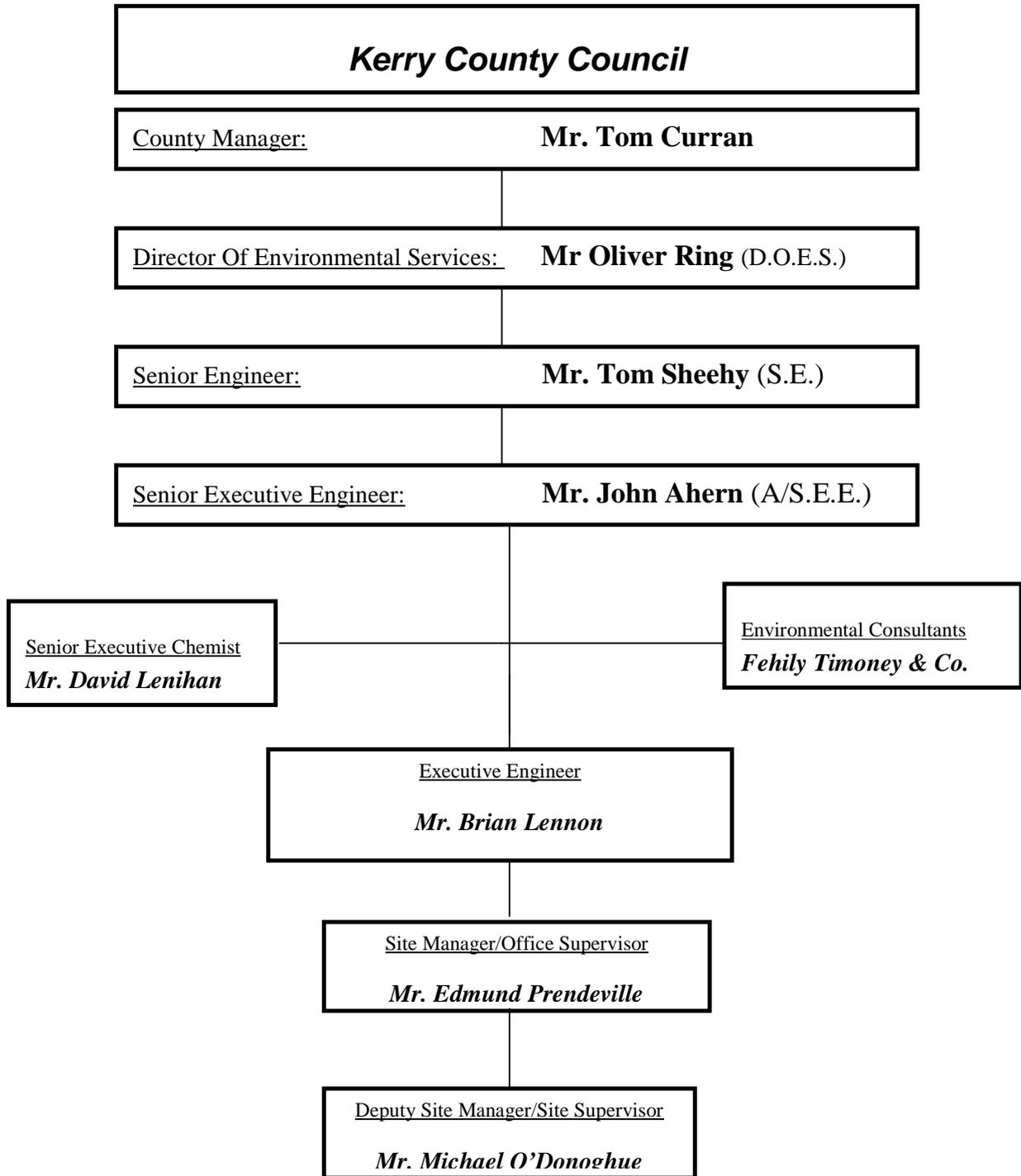
## 15 Report on Financial Provision

### a) Statement of Costs for Waste Operations at Facility

<b>Waste 2011</b>		
<b>Acc element</b>	<b>Acc element(T)</b>	<b>Total Charge €</b>
60030	Wages	57,599.98
60040	Salaries	8,561.86
60100	ER PRSI	11,392.61
60200	Overtime	36,881.35
60300	Arrears	47.28
60400	Sick Pay	3,001.60
60500	Annual Leave	6,805.43
60510	Bank Holiday Leave	2,146.40
60600	Travel/Subsistence	7,238.88
61990	Other Allowances	1,614.54
65500	Minor Contracts- Trade Services & other works	44,884.48
68500	Non-Capital Equip Purchase - Other	24.01
69000	Hire (Ext) - Plant/Transport/Machinery & Equipment	104.83
69200	Repairs & Maint - Plant	701.33
69400	Transfers from Machinery Yard	8,029.00
70000	Materials	1,699.63
70990	Issues from Stores	4,844.09
70991	Returns to Stores	-45.78
71000	Insurance	329.44
73400	Staff Travelling & Subsistence Expenses	1,469.03
74500	Entertainment Expenses and Associated Expenses	-228.69
76000	Communication Expenses	619.80
77200	Security - Property	280.62
78000	Training	49.62
79900	Consultancy/Professional Fees and Expenses	350.00
80000	Advertising	1,998.44
81000	Printing & Office Consumables	472.64
82100	Statutory Contributions to Other Bodies	5,493.38
85100	Rates & Other LA Charges	1,915.18
86000	Energy	2,969.25
	<b>TOTAL</b>	<b>211,250.23</b>

**b) Statement of Costs for Recycling Operations at Facility**

<b>Recycling 2011</b>		
<b>Accelem</b>	<b>Accelem(T)</b>	<b>Total Charge €</b>
60030	Wages	8,424.57
60040	Salaries	2,853.87
60100	ER PRSI	2,162.57
60200	Overtime	5,613.80
60300	Arrears	15.76
60400	Sick Pay	2,884.22
60500	Annual Leave	1,458.88
60510	Bank Holiday Leave	268.30
60600	Travel/Subsistence	1,041.96
61990	Other Allowances	306.27
65500	Minor Contracts- Trade Services & other works	444.00
69200	Repairs & Maint - Plant	61.30
70000	Materials	420.40
73400	Staff Travelling & Subsistence Expenses	950.03
76000	Communication Expenses	227.28
77200	Security - Property	37.51
82100	Statutory Contributions to Other Bodies	2,354.30
85100	Rates & Other LA Charges	194.22
86000	Energy	60.95
		<b>29,780.19</b>

**16 Management and Staffing Structure at Facility 2011**

## **17 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**

Material type	Suggested EWC Codes	Coolcaslagh Civic Amenity	
		Household Waste	Non-household Waste
<b>(If you must depart from this list, please provide details on a separate sheet)</b>	<b>(overwrite as appropriate)</b>		
mixed residual waste	20 03 01		
organic waste (food and garden) Total	20 01 08; 20 02 01	-	-
<i>if segregated, provide specific information on food and garden waste</i>			
<i>food</i>	<i>20 01 08</i>	-	
<i>garden</i>	<i>20 02 01</i>	-	
mixed dry recyclables (eco-bags)	15 01 06; 20 03 01	7.80	
cardboard, newspaper and other paper (Total)	15 01 01; 20 01 01	171.10	-
<i>if segregated, provide the breakdown of cardboard and paper in the rows below</i>			
<i>*cardboard packaging</i>	<i>15 01 01</i>	<i>43.84</i>	
<i>cardboard non-packaging</i>	<i>20 01 01</i>	-	
<i>paper packaging</i>	<i>15 01 01</i>	-	
<i>paper non-packaging</i>	<i>20 01 01</i>	-	
<i>*newspaper and magazines</i>	<i>20 01 01</i>	<i>127.26</i>	
glass (Total)	15 01 07; 20 01 02	59.87	-
<i>if segregated, provide the breakdown of glass in the next two rows</i>			

glass packaging(bottles)	15 01 07	59.87	
glass non-packaging(sheet)	20 01 02	-	
metals (Total)	15 01 04; 20 01 40	24.42	-
<i>if segregated, provide the breakdown of metals in the next four rows</i>			
aluminium cans (packaging)	15 01 04	2.00	
steel cans (packaging)	15 01 04	5.12	
other metal packaging	15 01 04	-	
other metals (non-packaging)(scrap)	20 01 40	17.30	
plastic (Total)	15 01 02; 20 01 39	44.60	-
<i>if segregated, provide the breakdown of plastic waste in the next two rows</i>			
plastic packaging(bottles)	15 01 02	44.60	
plastic non-packaging	20 01 39	-	
textiles (Total)	15 01 09; 20 01 11	0.76	-
<i>if segregated, provide the breakdown of textiles in the next two rows</i>			
textiles, packaging	15 01 09	-	
textiles, non-packaging	20 01 11	0.76	
wood (Total)	15 01 03; 20 01 38; 20 01 37*	-	-
<i>if segregated, provide the breakdown of wood waste in the next four rows</i>			
wood packaging	15 01 03	-	
wood non-packaging	20 01 38	-	
mixed, uncontaminated wood packaging and non-packaging	15 01 03; 20 01 38	-	
wood, treated, hazardous	20 01 37*	-	
miscellaneous hazardous waste			

(Total)		3.80	-
<i>small batteries</i>	<i>20 01 34; 20 01 33*</i>	<i>1.70</i>	
<i>lead acid batteries (Car Batteries)</i>	<i>16 06 01*</i>	-	
<i>Ni-Cd batteries and Accumulators</i>	<i>16 06 02*</i>	-	
<i>waste mineral oils (lubrication, vehicle, machine etc.)</i>	<i>13 xx xx</i>	<i>2.10</i>	
<i>oil filters (vehicles)</i>		-	
<i>oil containers (mineral oil) - plastic + metal</i>		-	
<i>waste cooking or vegetable oils</i>	<i>20 01 25</i>	-	
<i>aerosols</i>	<i>20 03 99</i>	-	
<i>waste paint and varnish (including containers)</i>		-	
WEEE (Total)	various	91.006	-
<i>if segregated, provide the breakdown of WEEE in the next five rows</i>			
<i>fridges and freezers</i>	<i>20 01 35*; 20 01 36; 16 02 11*; 16 02 14</i>	<i>15.341</i>	
<i>white goods (electrical and electronic)</i>	<i>20 01 36; 16 02 14</i>	<i>33.717</i>	
<i>televisions and PC monitors</i>	<i>20 01 35*; 16 02 13*;</i>	<i>22.739</i>	
<i>ICT- Information and Communications Technology Equipment, e.g Includes Computer Equipment</i>	<i>16 02 14</i>	<i>2.230</i>	
<i>other electrical and electronic equipment, eg. White Goods incl. Washing Machines, Dryers etc, TVs, PCs, Small Items incl. toasters Radios</i>	<i>20 01 36; 20 01 35*</i>	<i>16.979</i>	

<i>Gas Cylinders</i>		-	
<i>C &amp; D Rubble</i>		-	
<i>fluorescent tubes and lighting</i>	20 01 21*	0.04	
<i>Tyres</i>	16 01 03	-	
<i>Ink Cartridges</i>	08 01 11		
bulky waste (provide summary below of waste types), e.g. Furniture, Mattresses, Mixed Bulky Waste	20 03 07	-	

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

**Attn: Brian Lennon EE Waste Management                      Monday, 30 April 2012**  
**Re:    LABORATORY Results for Coolcaslagh Transfer stations : Jan 2011 to jan 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 **COOLCASLAGH Transfer station**. Refer also to *app 1: details of sample locations*

SW4 still experienced contamination as evidenced from consistently above background ammonia levels. As effluent from transfer station is now tankered away from site it is evident that this slight contamination is not due to transfer station activity. The source of impact is a contribution from excavation works upstream of landfill and possibly from impact from legacy landfill activities.

In August waters from SW3 was redirected towards new manhole.

Because of this a new sampling station has been added in January i.e. SW4a, sampled from a manhole just outside main gate into site. This site should reflect more accurately any impact from transfer station and therefore should represent combined impacts from old SW3 and SW4. However because of warren of underground drains it is quiet possible that even in this site impact from other activities beside those from waste management cannot be discounted.

In future sampling will be taken from both SW4 and SW4a which should help to discriminate further between impacts from waste management and other anthropogenic activities. An investigation of greater landfill area and environs will be proceeded with in 2012.

No significant impact however is noted in main river channel ((**Woodford river SW1, SW3a (new site just downstream from discharge from landfill i.e. SW4) SW6 and SW7**))

*David Lenihan MSc*

**Senior Executive Chemist**

Landfill	Location	Sample Reference	Sample Date	Sample Time	Ammonium (NH4)	pH	BOD (O2)	Conductivity @ 20 oC	Chemical Oxygen Demand (O2)	Suspended Solids	Temperature	Oils/Fats & Grease	Oils/Fats & Grease	Odour
					mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	Degrees C	mg/l	derscriptive	Descriptive
Coolcaslagh	FE1	2003/0169	15-Jan-03	14:40	7.45	4.4	1974	1119	3960	233	12.6	88		Sour/Acidic
Coolcaslagh	FE1	2003/0402	23-Jan-03	15:00	15.6	5.6	2036	1290	2840					
Coolcaslagh	FE1	2003/1931	16-Apr-03	13:05	87	5.4	5219	2740	8860	386	12.8	82		Sour/Acidic
Coolcaslagh	FE1	2003/3365	27-Jun-03	12:00	149	5.6	>720	2760	5820	1075				
Coolcaslagh	FE1	2003/3676	09-Jul-03	14:15	127	5.4	6765	4200	10330	472	20	50		putrid
Coolcaslagh	FE1	2003/5468	01-Oct-03	12:48	121	5.6	4579	2950	5280	514	14.5	20		sour/putrid
Coolcaslagh	FE1	2004/0044	06-Jan-04	16:14	51.4		>4000		9820					putrid
Coolcaslagh	FE1	2004/0232	13-Jan-04	16:20	14	4.8			3310	390				putrid
Coolcaslagh	FE1	2004/0267	15-Jan-04	13:50	35.8	5.9	1715	1484	852	236	5.8	24		putrid
Coolcaslagh	FE1	2004/1656	06-Apr-04	11:55	57	5.7	1740	1378	2800	292	9.5	64		putrid
Coolcaslagh	FE1	2004/1976	27-Apr-04	16:00	47.3	6.3	1092	1109	1460	888		100		putrid
Coolcaslagh	FE1	2004/3717	21-Jul-04	11:23	33.3	5.5	1572	1052	1975	912	16.4	49		putrid
Coolcaslagh	FE1	2004/5224	06-Oct-04	12:26	25.6	6.1	478	602	685	67	12.2	34		putrid
Coolcaslagh	FE1	2005/0354	19-Jan-	11:44	5.14	6.1	296	376	1203	431	9	147		putrid

			05											
Coolcaslagh	FE1	2005/1725	12-Apr-05	13:50	27.8	6.5	1314	983	8650	7100	9.6	6464	putrid	
Coolcaslagh	FE1	2005/3612	14-Jul-05	12:36	688	5.9	1674	1547	2810	616	17.3	156	putrid	
Coolcaslagh	FE1	2005/5300	13-Oct-05	11:55	0.52	7.2	90	152	375	254	14	47	OILY ODOUR	
Coolcaslagh	FE1	2006/0369	24-Jan-06	12:00		6.1	4662	723	13760	9880	8	15556	putrid	
Coolcaslagh	FE1	2006/1679	20-Apr-06	11:28	26	5.7	769	825	1213	100	10.4	24	Sour	
Coolcaslagh	FE1	2006/3679	02-Aug-06	12:14	183	6.6	2385	2600	4980	1360	17.2		putrid	
Coolcaslagh	FE1	2006/5012	12-Oct-06	11:48	33	4.2	>1440	1154	3250	236	14.4	51	Sour/Putrid	
Coolcaslagh	FE1	2007/0638	01-Feb-07	12:38	72	5.9	1074	1603	5010	291	8	2560	putrid/sour	
Coolcaslagh	FE1	2007/1954	17-Apr-07	12:10	23	6.1	4.6	868	1130	122	10.8	80	putrid/sour	
Coolcaslagh	FE1	2007/3898	19-Jul-07	15:30	18.4	7.7	468	852	1186	227	15.8	118	putrid	
Coolcaslagh	FE1	2007/5837	25-Oct-07	11:50	36	7.2	1478	656	7710	9150	13.5	21	Putrid	
Coolcaslagh	FE1	2008/0009	03-Jan-08	14:50	12.9	6.7	>1185	642	16160	2726	7.7	28	oily/diesel	
Coolcaslagh	FE1	2008/1624	03-Apr-08	12:00	1.06	6.9	14	189	80	42	9.4	6.3		
Coolcaslagh	FE1	2008/3673	17-Jul-08	11:30	9.66	6.7	162	128	624	100		25.7	oily/petrol	
Coolcaslagh	FE1	2008/5823	04-Nov-08	11:45	2.08	6.5	123	428	390	140	10.4	19.5	oily/sewage	
Coolcaslagh	FE1	2009/0097	07-Jan-09	15:05	<0.02	7.1	816	1266	4220	7460	7.7	533	Strong petrol-like odour	
Coolcaslagh	FE1	2009/1931	07-Apr-09	12:25	39.8	6.3	2230	1213	9530	479		295	putrid	
Coolcaslagh	FE1	2009/3586	08-Jul-09	11:50	45.3	6.6	533	1022	810	180	15	220	putrid	
Coolcaslagh	FE1	2009/5101	01-Oct-09	12:46	69.2	6.7	557	1092	832	112	14	2.2	Putrid/sewage	
Coolcaslagh	FE1	2010/0214	20-Jan-10	13:00	3.54	6.7	86	267	653	229	9	96.7	Putrid/sewage	
Coolcaslagh	FE1	2010/1471	08-Apr-10	12:30	5.75	6.6	488	360	1315	933	10	489	putrid/sewage	
Coolcaslagh	FE1	2010/3107	14-Jul-10	11:18	17.6	6.8	211	439	804	316	14.5	20.7	anaerobic/oily	
Coolcaslagh	FE1	2010/4744	12-Oct-10	15:30	14.8	6.6	1638	426	3350	2875	15.5	2304	Putrid	
Coolcaslagh	FE1	2011/0324	19-Jan-11	14:05	1.84	7	22	525	137	29	7	20.2	Putrid	
Coolcaslagh	FE1	2011/1982	20-Apr-11	12:04	51	6.8	681	1140	1620	522	12	38.8	Oily/Sewage	

			11										
Coolcaslagh	FE1	2011/3480	03-Aug-11	12:02	<b>38</b>	6.7	431.3	<b>842</b>	1005	<b>573</b>	16	10.9	Oily/anaerobic
Coolcaslagh	FE1	2011/4679	18-Oct-11	13:00	<b>58.5</b>	6.4	<b>578</b>	<b>946</b>	1400	<b>424</b>	12	18.9	pungent sewage smell
Coolcaslagh	FE1	2012/0470	25-Jan-12	11:15	9.56	6.8	206	67	413	<b>210</b>	10	<b>147</b>	septic

**Table 1 Foul Water Monitoring Results**

Landfill	Location	Eastings	Northings	Sample Reference	Sample Date	Sample Time	Ammonium (NH4)	pH	BOD (O2)	Conductivity @ 20 oC	Chemical Oxygen Demand (O2)	Chloride (Cl)	Dissolved Oxygen (O2)	Suspended Solids	Temperature	Faecal Coliforms	Total Coliforms
							mg/l	pH units	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	Degrees C	no./100mls	no./100mls
Coolcaslagh	Sw3A	101840.8	91649	2012/0465	25-Jan-12	10:05	0.09	7.1	< 1	108	31	23	10.6	3	9		
Coolcaslagh	Sw4	101880	91659	2011/0321	19-Jan-11	13:15	0.75	7.8	< 1	273	17	28	11.1	6	6		
Coolcaslagh	Sw4	101880	91659	2011/0736	10-Feb-11	11:55	0.16	7.4		130			10.8	8	9.2		
Coolcaslagh	Sw4	101880	91659	2011/1977	20-Apr-11	11:44	1.43	7.6	3.6	377	22	37	9.6	17	10.7		
Coolcaslagh	Sw4	101880	91659	2011/3476	03-Aug-11	11:20	< 0.02	8	< 1	508	35	72.5	10.4	2	14.3	0	34
Coolcaslagh	Sw4	101880	91659	2011/4675	18-Oct-11	12:15	0.36	8.1	1.5	365	41	20.1	10.6	< 1	11		
Coolcaslagh	SW4A	101927	91604	2012/0463	25-Jan-12	12:15	0.07	8.1	2.9	158	36	21	10	210	8.3		
Coolcaslagh	Sw5	101794.7	91628.4	2011/0320	19-Jan-11	13:00	0.05	7	< 1	104	15	16	12.8	2	3.6		

Coolcaslagh	Sw5	101794.7	91628.4	2011/0735	10-Feb-11	12:15	0.03	7		90		11.2	2	8.4				
Coolcaslagh	Sw5	101794.7	91628.4	2011/1978	20-Apr-11	11:28	<	7.4	< 1	118	13	16	11.2	< 1	10.7			
Coolcaslagh	Sw5	101794.7	91628.4	2011/3477	03-Aug-11	11:40	<	7.3	< 1	125	15	14.9	9.9	3	13.1	1203	3450	
Coolcaslagh	Sw5	101794.7	91628.4	2011/4676	18-Oct-11	12:00	0.09	7	< 1	110	62	17.8	10.8	3	8.9			
Coolcaslagh	Sw5	101794.7	91628.4	2012/0466	25-Jan-12	12:30	0.09	6.9	2.9	91	71	17.5	10.5	128	8.6			
Coolcaslagh	Sw6	100842.9	91303.3	2011/0319	19-Jan-11	12:42	0.09	7.1	< 1	108	12	17	12.9	< 1	3.6			
Coolcaslagh	Sw6	100842.9	91303.3	2011/0734	10-Feb-11	13:00	0.06	7.1		93			11.4	4	8.5			
Coolcaslagh	Sw6	100842.9	91303.3	2011/1979	20-Apr-11	10:55	0.06	7.6	1	134	15	16	11.1	11	10.9			
Coolcaslagh	Sw6	100842.9	91303.3	2011/3478	03-Aug-11	10:50	<	7.6	< 1	149	24	16	10.1	1	13.1	770	2950	
Coolcaslagh	Sw6	100842.9	91303.3	2011/4677	18-Oct-11	11:40	0.12	7.3	< 1	114	56	18	11.2	3	9.4			
Coolcaslagh	Sw6	100842.9	91303.3	2012/0467	25-Jan-12	09:35	0.09	7.3	1	112	27	19	10.8	6.5	9			
Coolcaslagh	Sw7	99256.5	90467.4	2011/0318	19-Jan-11	12:15	0.06	7.1	< 1	112	13	16	13.1	< 1	13.1			
Coolcaslagh	Sw7	99256.5	90467.4	2011/0733	10-Feb-11	10:30	0.04	7.3		99			11.5	6	7.8			
Coolcaslagh	Sw7	99256.5	90467.4	2011/1980	20-Apr-11	10:36	<	7.8	< 1	137	14	17	11.3	10	10.9			
Coolcaslagh	Sw7	99256.5	90467.4	2011/3479	03-Aug-11	10:38	<	7.7	< 1	148	<	10	16.9	10.4	< 1	12.6	57	517
Coolcaslagh	Sw7	99256.5	90467.4	2011/4678	18-Oct-11	11:30	0.09	7.4	< 1	118	62	18.5	11.3	4	9.7			
Coolcaslagh	Sw7	99256.5	90467.4	2012/0468	25-Jan-12	09:20	0.05	7.5	< 1	116	27	19	10.8	7.5	9			
Coolcaslagh	Sw1	102081	91718	2003/0156	15-Jan-03	11:47	0.06	6.7	1.2	124		25	10.8		10.5			
Coolcaslagh	Sw1	102081	91718	2003/1927	16-Apr-03	12:25	<	7.1	< 1	118	30	17	10.1	5	11.9			
Coolcaslagh	Sw1	102081	91718	2003/3668	09-Jul-03	14:50	<	7.3	1.8	143	24	17.5	8.9	6	1.7			

																0.02	
Coolcaslagh	Sw1	102081	91718	2003/5463	01-Oct-03	12:04	<	7.3	< 1	156	<	19	9.9	1.5	10.7	<b>146</b>	<b>2755</b>
Coolcaslagh	Sw1	102081	91718	2004/0259	15-Jan-04	12:40	0.09	6.6	1.9	111	82	21	11.2	<b>46</b>	7.2		
Coolcaslagh	Sw1	102081	91718	2004/1650	06-Apr-04	11:12	<	7.1	< 1	116	24	17.5	10.7	2	7.7		
Coolcaslagh	Sw1	102081.4	91717.6	2004/3711	21-Jul-04	10:45	0.07	7.2	< 1	138	26	20.5	11.8	4	13.7	<b>866</b>	<b>4570</b>
Coolcaslagh	Sw1	102081.4	91717.6	2004/5217	06-Oct-04	11:52	0.11	7.1	1.8	101	67	17	10.5	19	10.5		
Coolcaslagh	Sw1	102081.4	91717.6	2005/0355	19-Jan-05	11:38	0.12	6.7	1.5	132	20	27.5	11.4	14	8.3		
Coolcaslagh	Sw1	102081.4	91717.6	2005/1717	12-Apr-05	12:40	<	7.2	< 1	116	<	18.5	11.6		9.8		
Coolcaslagh	Sw1	102081.4	91717.6	2005/3607	14-Jul-05	12:02	0.29	7.1	1.6	162	21	20	8.4	10	15.7		
Coolcaslagh	Sw1	102081.4	91717.6	2005/5295	13-Oct-05	11:40	<	7.1	< 1	135	21	18	11.7	2	7.3	<b>579</b>	<b>&gt; 2419</b>
Coolcaslagh	Sw1	102081.4	91717.6	2006/0361	24-Jan-06	13:00	0.05	7.1	< 1	116	15	18	11.6	2	7.2		
Coolcaslagh	Sw1	102081.4	91717.6	2006/1673	20-Apr-06	11:15	0.05	7	1	108	59	16	11.5	2	8.4		
Coolcaslagh	Sw1	102081.4	91717.6	2006/3671	02-Aug-06	11:35	0.12	6.9	< 1	147	20	17	9.1	5	14.2		
Coolcaslagh	Sw1	102081.4	91717.6	2006/5005	12-Oct-06	11:13	<	6.5	1.1	115	261	18.5	10.4	2	12	<b>816</b>	<b>4718</b>
Coolcaslagh	Sw1	102081.4	91717.6	2007/0630	01-Feb-07	11:24	<	6.7	< 1	123	28	21	11.4	3	7.6		
Coolcaslagh	Sw1	102081.4	91717.6	2007/1949	17-Apr-07	10:50	0.05	7.1	1.7	132	22	17	10.8	3	9.3		
Coolcaslagh	Sw1	102081.4	91717.6	2007/3890	19-Jul-07	15:00	0.03	7	2	121	61	14	9.5	4	13.6		
Coolcaslagh	Sw1	102081.4	91717.6	2007/5832	25-Oct-07	11:12	0.04	6.8	< 1	120	34	24	11.2	< 1	7.5	<b>461</b>	<b>&gt; 2419</b>
Coolcaslagh	Sw1	102081.4	91717.6	2008/0003	03-Jan-08	14:30	0.03	6.5	1.2	122	<	21.5	11.9	3	5.8		
Coolcaslagh	Sw1	102081.4	91717.6	2008/0467	23-Jan-08	15:25	0.05	8	1.4	108	49		10.7	<b>45</b>	10.3		
Coolcaslagh	Sw1	102081.4	91717.6	2008/1618	03-Apr-08	10:45	<	7	1.3	123	54	19	11.2	4	9.6		
Coolcaslagh	Sw1	102081.4	91717.6	2008/3667	17-Jul-08	11:05	0.05	7.3	1.5	123	22	18	10.2	4	13.9		
Coolcaslagh	Sw1	102081.4	91717.6	2008/5815	04-Nov-08	11:10	<	7	< 1	112	16	17	11.5	< 1	7.6	<b>148</b>	<b>436</b>
Coolcaslagh	Sw1	102081.4	91717.6	2009/0091	07-Jan-09	14:50	0.07	7.2	2	137	38	22	13	<b>82</b>	2.8	<b>308</b>	<b>1553</b>
Coolcaslagh	Sw1	102081.4	91717.6	2009/1924	07-Apr-09	11:55	<	7.1	1.6	133	40	20	11.8	<b>31</b>	7.5		
Coolcaslagh	Sw1	102081.4	91717.6	2009/3580	08-Jul-09	11:32	0.02	6.9	< 1	118	39	8	9.5	3	14.3		

Coolcaslagh	Sw1	102145.6	91752.9	2009/5096	01-Oct-09	12:05	<	0.02	7.3	< 1	125	25	17	10.5	4	12.7		
Coolcaslagh	Sw1	102145.6	91752.9	2010/4740	12-Oct-10	14:40	<	0.02	7	< 1	119	20	12	10.7	23	11.2		
Coolcaslagh	Sw1	102145.6	91752.9	2010/0208	20-Jan-10	12:30	0.03	6.8	6.8	< 1	88	30	16	12.3	2	4.3		
Coolcaslagh	Sw1	102145.6	91752.9	2010/1470	08-Apr-10	12:10	0.04	6.4	6.4	< 1	176	16	15	12.1	< 1	8.2		
Coolcaslagh	Sw1	102145.6	91752.9	2010/3101	14-Jul-10	10:30	0.04	7.2	7.2	< 1	124	29	17	9.6	< 1	14.1	1046	13687
Coolcaslagh	Sw1A (New Site)	102224	91786	2011/0323	19-Jan-11	13:45	0.06	7	7	< 1	97	17	16	12.4	1	3.9		
Coolcaslagh	Sw1A (New Site)	102224	91786	2011/0737	10-Feb-11	12:30	0.03	6.8	6.8		86			11.1	3	8.7		
Coolcaslagh	Sw1A (New Site)	102224	91786	2011/1975	20-Apr-11	11:06	0.08	7.5	7.5	< 1	109	20	15	12	8	10.6		
Coolcaslagh	Sw1A (New Site)	102224	91786	2011/3474	03-Aug-11	11:04	<	0.02	7.3	< 1	117	41	14.3	10.5	2	12.9	600	3590
Coolcaslagh	Sw1A (New Site)	102224	91786	2011/4673	18-Oct-11	12:30	0.08	7	7	< 1	105	55	17.6	10.7	2	9.7		
Coolcaslagh	Sw1A (New Site)	102224	91786	2012/0462	25-Jan-12	10:30	<	0.02	6.9	< 1	103	29	22	10.5	2.5	9		
Coolcaslagh	pipe 40m d/s of SW1A	102081.4	91717.6	2010/4745	12-Oct-10	14:55	0.18	8.2	8.2	1.2	260	48	14.5	9	678	13.2		
Coolcaslagh	pipe 40m d/s of SW1A	102181	91801	2011/0743	10-Feb-11	12:35	0.03	9.2	9.2		150			10.2	28	8.9		
Coolcaslagh	pipe 40m d/s of SW1A	102181	91801	2011/4683	18-Oct-11	12:25	0.06	7.3	7.3	< 1	194	27	16.1	9.3	5	11.6		
Coolcaslagh	pipe 40m d/s of SW1A	102189.4	91793.6	2012/0469	25-Jan-12	10:30	0.02	7.7	7.7	1.8	66	23	10	9.4	57	8.9		
Coolcaslagh	Drain Adjacent Sw1	102228	91772	2011/0744	10-Feb-11	12:45	0.03	6.9	6.9		91			10.9	13	8.8		
Coolcaslagh	Sw3	101859	91642	2003/0157	15-Jan-03	11:15	<	0.02	6.9	1	110	10	22	10.8	9	10.5		
Coolcaslagh	Sw3	101859	91642	2003/1928	16-Apr-03	12:37	<	0.02	6.7	< 1	97	10		9.1	3	11.7		
Coolcaslagh	Sw3	101859	91642	2003/3669	09-Jul-03	14:35	<	0.02	6.5	1.2	107	12	15	7.6	24	14.6		
Coolcaslagh	Sw3	101859	91642	2003/5464	01-Oct-03	12:12	<	0.02	5.9	< 1	98	10	16	7.1	14.5	11.1	20	669

Coolcaslagh	Sw3	101859	91642	2004/0260	15-Jan-04	12:55	<	7	< 1	121	12	13.5	10.9	5	7.9			
Coolcaslagh	Sw3	101859	91642	2004/1651	06-Apr-04	11:30	<	8.1	6	157	230	25.5	10	<b>759</b>	9.3			
Coolcaslagh	Sw3	101859.3	91642.2	2004/3712	21-Jul-04	11:06	0.04	7	< 1	114	13	15	12.1	4	14.2	<b>29</b>	<b>816</b>	
Coolcaslagh	Sw3	101859.3	91642.2	2004/5218	06-Oct-04	11:38	0.06	7.3	< 1	126	12	16	10.1	8	10.9			
Coolcaslagh	Sw3	101859.3	91642.2	2005/0348	19-Jan-05	10:55	<	6.8	1.1	141	10	23.5	11.2	2	8.3			
Coolcaslagh	Sw3	101859.3	91642.2	2005/1718	12-Apr-05	12:35	<	7.1	< 1	120	<	10	19	11.2	1	10.7		
Coolcaslagh	Sw3	101859.3	91642.2	2005/3608	14-Jul-05	12:10	<	7	< 1	134	<	10	16	9.1	14	15		
Coolcaslagh	Sw3	101859.3	91642.2	2005/5296	13-Oct-05	11:20	<	7.2	< 1	136	<	10	15.5	11.2	4	7.6	<b>94</b>	<b>1414</b>
Coolcaslagh	Sw3	101859.3	91642.2	2006/0362	24-Jan-06	13:10	<	7.1	< 1	164	34	20	11	7	8.3			
Coolcaslagh	Sw3	101859.3	91642.2	2006/1674	20-Apr-06	11:06	<	7	< 1	135	<	10	17	11.1	2	9.6		
Coolcaslagh	Sw3	101859.3	91642.2	2006/3673	02-Aug-06	11:39	0.18	7	< 1	152	<	10	16.5	9.6	<b>28</b>	14.2		
Coolcaslagh	Sw3	101859.3	91642.2	2006/5006	12-Oct-06	11:25	0.04	6.9	1.2	119	231	16.5	10.6	<b>22</b>	11.9	<b>52</b>	<b>5510</b>	
Coolcaslagh	Sw3	101859.3	91642.2	2007/0631	01-Feb-07	11:38	0.1	6.8	< 1	122	40	16	11.5	<b>76</b>	8.2			
Coolcaslagh	Sw3	101859.3	91642.2	2007/1950	17-Apr-07	11:05	0.02	7.3	1.5	129	14	13	10.2	4	11.3			
Coolcaslagh	Sw3	101859.3	91642.2	2007/3891	19-Jul-07	15:09	0.04	8.2	2.2	116	46	10	9.5	<b>341</b>	16.5			
Coolcaslagh	Sw3	101859.3	91642.2	2007/5833	25-Oct-07	11:20	0.02	7.4	< 1	116	13	14	11.3	11	7.8	<b>57</b>	<b>866</b>	
Coolcaslagh	Sw3	101859.3	91642.2	2008/0004	03-Jan-08	14:02	0.04	6.4	< 1	171	<	10	20.5	10.1	<b>26</b>	7.2		
Coolcaslagh	Sw3	101859.3	91642.2	2008/0468	23-Jan-08	15:00	0.05	7.7	1.3	143	290		10.3	<b>4948</b>	10.5			
Coolcaslagh	Sw3	101859.3	91642.2	2008/1619	03-Apr-08	11:15	0.28	6.7	2.3	192	56	23	9.4	<b>55</b>	10.3			
Coolcaslagh	Sw3	101859.3	91642.2	2008/3668	17-Jul-08	11:15	1.16	7.6	3.2	298	<	10	23	9.4	4	14.5		
Coolcaslagh	Sw3	101859.3	91642.2	2008/5817	04-Nov-08	11:16	0.49	7	1.7	219	<	10	21.5	10.3	17	9.5	<b>10</b>	<b>172</b>
Coolcaslagh	Sw3	101859.3	91642.2	2009/0092	07-Jan-09	14:25	0.59	7.6	4.4	313	107	22	9.6	<b>746</b>	4.7	<b>1</b>	<b>11</b>	
Coolcaslagh	Sw3	101859.3	91642.2	2009/1925	07-Apr-09	11:20	<	<b>5.9</b>	1.5	153	35	18.5	9	<b>136</b>	8.9			
Coolcaslagh	Sw3	101859.3	91642.2	2009/3581	08-Jul-09	11:08	0.39	6.2	< 1	176	<	10	16	6.6	4	11.9		
Coolcaslagh	Sw3	101859.3	91642.2	2009/5097	01-Oct-09	11:30	0.03	<b>5.7</b>	< 1	133	<	17	<b>3.8</b>	4	11.4			

					09												10		
Coolcaslagh	Sw3	101859.3	91642.2	2010/0209	20-Jan-10	12:15	0.05	6.4	< 1	191	12	17	9	2	7.1				
Coolcaslagh	Sw3	101859.3	91642.2	2010/1469	08-Apr-10	11:50	0.82	7.2	< 1	116	16	14.5	9	1	8.5				
Coolcaslagh	Sw3	101859.3	91642.2	2010/3102	14-Jul-10	10:45	0.06	6.2	< 1	148	10	22	7.3	<b>48</b>	11.4	<b>356</b>	<b>18270</b>		
Coolcaslagh	Sw3	101859.3	91642.2	2011/0322	19-Jan-11	13:30	0.23	6.4	< 1	203	14	25	6.1	4	6.2				
Coolcaslagh	Sw3	101859.3	91642.2	2011/1976	20-Apr-11	11:52	0.44	6.4	1.4	133	22	16	8.2	25	10.3				
Coolcaslagh	Sw3	101859.3	91642.2	2011/3475	03-Aug-11	11:28	0.02	6.3	< 1	143	10	15.7	8	7	11.6	0	<b>31</b>		
Coolcaslagh	Sw3A	101840.8	91649	2012/0465	25-Jan-12	10:05	0.09	7.1	< 1	108	31	23	10.6	3	9				
Coolcaslagh	Sw4	101930	91605	2003/0158	15-Jan-03	11:35	0.26	7.8	<b>21.7</b>	266	155	27.5	9.1	<b>465</b>	10.6				
Coolcaslagh	Sw4	101930	91605	2003/1930	16-Apr-03	12:55	0.02	6.6	< 1	89	10	15	8.8	1	12.3				
Coolcaslagh	Sw4	101930	91605	2003/3670	09-Jul-03	14:30	0.02	6.8	1.3	120	12	15	3.4	8	17.3				
Coolcaslagh	Sw4	101930	91605	2004/0261	15-Jan-04	12:30	0.02	7.1	1.2	98	45	9.5	10.2	<b>34</b>	7.3				
Coolcaslagh	Sw4	101930	91605	2004/1652	06-Apr-04	11:25	0.02	6.7	1	96	10	16.5	9.5	6	9.3				
Coolcaslagh	Sw4	101929.5	91604.6	2004/3713	21-Jul-04	10:48	0.04	6.7	< 1	123	12	15	4.1	10	15.1	<b>17</b>	<b>921</b>		
Coolcaslagh	Sw4	101929.5	91604.6	2004/5219	06-Oct-04	11:45	0.06	7.7	< 1	123	10	14	7.9	4	10.9				
Coolcaslagh	Sw4	101929.5	91604.6	2005/0349	19-Jan-05	11:02	0.02	7.3	2.2	191	28	27	11	<b>21</b>	8.9				
Coolcaslagh	Sw4	101929.5	91604.6	2006/0363	24-Jan-06	12:50	0.03	6.6	< 1	151	48	19	8.9	<b>132</b>	8.2				
Coolcaslagh	Sw4	101929.5	91604.6	2006/1675	20-Apr-06	11:11	0.17	7.1	< 1	444	25	16	6.4	9	8.5				
Coolcaslagh	Sw4	101929.5	91604.6	2006/3674	02-Aug-06	11:58	0.16	7.1	< 1	191	10	17.5	8	<b>38</b>	15				
Coolcaslagh	Sw4	101929.5	91604.6	2007/0632	01-Feb-07	12:00	<b>2.55</b>	7.4	< 1	215	119	24	11.8	7	7.7				
Coolcaslagh	Sw4	101929.5	91604.6	2007/3892	19-Jul-07	15:05	0.02	7.7	1.9	111	69	13	9.5	<b>440</b>	16.5				
Coolcaslagh	Sw4	101929.5	91604.6	2008/0005	03-Jan-08	14:10	0.04	7.4	1	161	30	24	11.9	<b>122</b>	6.6				
Coolcaslagh	100m upstream Sw4 (outlet from Cronin's pit)	102061.2	91614.8	2008/0474	23-Jan-08	15:35	0.02	7.2	< 1	78	365		10.5	<b>6936</b>	10.9				
Coolcaslagh	10m upstream SW4	101953.6	91607.8	2008/0469	23-Jan-08	14:40	0.02	8	< 1	121	370		10.5	<b>8060</b>	10.6				

					08													
Coolcaslagh	Sw4	101929.5	91604.6	2008/0471	23-Jan-08	14:47	0.21	7.9	2.1	120	75		10.6	<b>202</b>		10.6		
Coolcaslagh	downstream SW4	101891.8	91604.2	2008/0470	23-Jan-08	14:43	0.05	7.8	1.3	136	355		10.3	<b>5076</b>		10.6		
Coolcaslagh	Sw4	101929.5	91604.6	2008/1620	03-Apr-08	11:45	<b>33.6</b>	7.4	6.3	616	59	48	10.4	<b>75</b>		11.5		
Coolcaslagh	Sw4	101929.5	91604.6	2008/3669	17-Jul-08	11:40	1.05	8.1	5.9	546	44	36	10	<b>76</b>		14.4		
Coolcaslagh	Sw4	101929.5	91604.6	2008/5818	04-Nov-08	10:52	1.26	6.6	< 1	216	10	21	5.6	9		10.1	<b>7</b>	<b>135</b>
Coolcaslagh	Sw4	101929.5	91604.6	2009/0093	07-Jan-09	14:35	<b>16.98</b>	8	2.1	602	46	40	12.1	19		5.6	<b>66</b>	<b>3280</b>
Coolcaslagh	Sw4	101929.5	91604.6	2009/1926	07-Apr-09	12:10	<b>3.43</b>	8	3.6	363	40	20	11.6	6		8.1		
Coolcaslagh	Sw4	101929.5	91604.6	2009/3582	08-Jul-09	11:40	0.92	8.1	1.4	365	39	14.5	9.4	2		15.3		
Coolcaslagh	Sw4	101929.5	91604.6	2010/0210	20-Jan-10	12:25	0.54	7.1	1.1	138	20	17	12.7	7		3.8		
Coolcaslagh	Sw4	101929.5	91604.6	2010/1468	08-Apr-10	12:00	0.03	7.1	1	89	16	11.5	11.2	2		10.6		
Coolcaslagh	Sw4	101929.5	91604.6	2010/3103	14-Jul-10	11:00	<b>1.78</b>	7.8	7.9	183	49	11	9	<b>64</b>		15.6	<b>44625</b>	<b>388275</b>
Coolcaslagh	Sw4	101880	91659	2011/0321	19-Jan-11	13:15	0.75	7.8	< 1	273	17	28	11.1	6		6		
Coolcaslagh	Sw4	101880	91659	2011/0736	10-Feb-11	11:55	0.16	7.4		130			10.8	8		9.2		
Coolcaslagh	Sw4	101880	91659	2011/1977	20-Apr-11	11:44	<b>1.43</b>	7.6	3.6	377	22	37	9.6	17		10.7		
Coolcaslagh	Sw4	101880	91659	2011/3476	03-Aug-11	11:20	<	8	< 1	508	35	72.5	10.4	2		14.3	0	<b>34</b>
Coolcaslagh	Sw4	101880	91659	2011/4675	18-Oct-11	12:15	0.36	8.1	1.5	365	41	20.1	10.6	< 1		11		
Coolcaslagh	Sw4	101880	91659	2012/0464	25-Jan-12	09:55	0.94	7.5	4.3	242	35	24	9.8	<b>23</b>		8.9		
Coolcaslagh	SW4A	101927	91604	2012/0463	25-Jan-12	12:15	0.07	8.1	2.9	158	36	21	10	<b>210</b>		8.3		
Coolcaslagh	Sw5	101795	91628	2003/0159	15-Jan-03	11:25	0.05	7	1.5	125	24	26	11.3			10.5		
Coolcaslagh	Sw5	101795	91628	2003/1929	16-Apr-03	12:45	<	7.1	1.2	121	29	18	11.1	4		11.2		
Coolcaslagh	Sw5	101795	91628	2003/3671	09-Jul-03	14:45	<	7.2	1.3	143	21	18.5	9	9		16.1		
Coolcaslagh	Sw5	101795	91628	2003/5465	01-Oct-03	12:25	0.04	6.5	< 1	138	10	21	7.8	< 1		11.3	<b>1455</b>	<b>3448</b>

Coolcaslagh	Sw5	101795	91628	2004/0262	15-Jan-04	13:15	0.09	6.6	1.9	110	39	19.5	11.2	<b>53</b>	7.1			
Coolcaslagh	Sw5	101795	91628	2004/1653	06-Apr-04	10:50	<	7.3	1	118	25	18	10.6	10	7.7			
Coolcaslagh	Sw5	101794.7	91628.4	2004/3714	21-Jul-04	10:56	0.07	7	< 1	137	24	20	11.9	3	14.1	<b>727</b>	<b>4410</b>	
Coolcaslagh	Sw5	101794.7	91628.4	2004/5220	06-Oct-04	11:32	0.08	7.1	1.8	101	66	17	10.5	<b>24</b>	10.5			
Coolcaslagh	Sw5	101794.7	91628.4	2005/0350	19-Jan-05	11:17	0.11	6.9	1.1	131	19	29.5	10.9	4	7.9			
Coolcaslagh	Sw5	101794.7	91628.4	2005/1719	12-Apr-05	12:30	<	7.3	< 1	112	<	10	18.5	11.4	9.8			
Coolcaslagh	Sw5	101794.7	91628.4	2005/3609	14-Jul-05	12:17	0.14	6.8	1.4	158	<	10	19	8	5	15		
Coolcaslagh	Sw5	101794.7	91628.4	2005/5297	13-Oct-05	11:00	<	7	< 1	128	23	19.5	11.7	1	7	<b>921</b>	<b>2419</b>	
Coolcaslagh	Sw5	101794.7	91628.4	2006/0364	24-Jan-06	13:15	0.02	7	< 1	126	46	20	11.4	3	7.3			
Coolcaslagh	Sw5	101794.7	91628.4	2006/1676	20-Apr-06	10:57	0.07	7	1	111	33	16	11.4	3	8.3			
Coolcaslagh	Sw5	101794.7	91628.4	2006/1676	20-Apr-06	10:57	0.07	7	1	111	33	16	11.4	3	8.3			
Coolcaslagh	Sw5	101794.7	91628.4	2006/3675	02-Aug-06	11:50	0.08	7	< 1	149	<	10	18	9.3	2	14.3		
Coolcaslagh	Sw5	101794.7	91628.4	2006/5007	12-Oct-06	11:32	0.03	6.6	< 1	115	235	18.5	12.4	3	12	<b>649</b>	<b>4718</b>	
Coolcaslagh	Sw5	101794.7	91628.4	2007/0633	01-Feb-07	11:45	<	6.8	< 1	125	32	20	11.5	4	7.9			
Coolcaslagh	Sw5	101794.7	91628.4	2007/1951	17-Apr-07	11:15	0.03	6.7	1.4	152	19	22	10.3	6	10.2			
Coolcaslagh	Sw5	101794.7	91628.4	2007/3893	19-Jul-07	15:15	0.03	7.1	2.1	122	61	15	9.5	<b>28</b>	13.8			
Coolcaslagh	Sw5	101794.7	91628.4	2007/5834	25-Oct-07	11:25	0.04	6.9	< 1	120	38	21	11.2	1	7.5	<b>225</b>	<b>&gt; 2419</b>	
Coolcaslagh	Sw5	101794.7	91628.4	2008/0006	03-Jan-08	13:57	0.04	6.8	< 1	143	10	21.5	11.8	2	6			
Coolcaslagh	Sw5	101794.7	91628.4	2008/0006	03-Jan-08	13:57	0.04	6.8	< 1	143	10	21.5	11.8	2	6			
Coolcaslagh	Sw5	101794.7	91628.4	2008/0473	23-Jan-08	15:07	0.02	7.2	< 1	114	48		10.7	<b>80</b>	10.4			
Coolcaslagh	Sw5	101794.7	91628.4	2008/1621	03-Apr-08	11:30	0.02	7.1	1.4	122	17	20	11.1	9	10.1			
Coolcaslagh	Sw5	101794.7	91628.4	2008/3670	17-Jul-08	11:25	0.08	7.4	< 1	124	22	16.5	10.2	9	13.7			
Coolcaslagh	Sw5	101794.7	91628.4	2008/5819	04-Nov-08	11:24	<	7	< 1	116	27	16.5	11.5	2	7.6	<b>300</b>	<b>700</b>	
Coolcaslagh	Sw5	101794.7	91628.4	2009/0094	07-Jan-09	14:20	0.03	7.6	1.1	126	15	20	12.2	6	2.6	<b>345</b>	<b>1553</b>	
Coolcaslagh	Sw5	101794.7	91628.4	2009/1927	07-Apr-09	11:30	0.06	7.3	1	129	30	16.5	11.2	1	7.4			

Coolcaslagh	Sw5	101794.7	91628.4	2009/3583	08-Jul-09	11:18	0.03	7.2	1	123	41	13	9.6	< 1	14		
Coolcaslagh	Sw5	101794.7	91628.4	2009/5098	01-Oct-09	11:20	0.06	7.1	1.1	136	20	16	9.9	10	12.2		
Coolcaslagh	Sw5	101794.7	91628.4	2010/0211	20-Jan-10	12:05	0.04	6.9	1	91	28	17	12.3	3	4.2		
Coolcaslagh	Sw5	101794.7	91628.4	2010/1467	08-Apr-10	11:35	0.06	7.3	< 1	93	19	11	12.3	1	7.6		
Coolcaslagh	Sw5	101794.7	91628.4	2010/3104	14-Jul-10	10:50	0.02	6.9	< 1	136	14	21	8.6	1	13.4	1259	6867
Coolcaslagh	Sw5	101794.7	91628.4	2010/4741	12-Oct-10	15:05	0.02	7.1	1	127	31	13	10.5	26	10.6		
Coolcaslagh	Sw5	101794.7	91628.4	2011/0320	19-Jan-11	13:00	0.05	7	< 1	104	15	16	12.8	2	3.6		
Coolcaslagh	Sw5	101794.7	91628.4	2011/0735	10-Feb-11	12:15	0.03	7		90			11.2	2	8.4		
Coolcaslagh	Sw5	101794.7	91628.4	2011/1978	20-Apr-11	11:28	<	7.4	< 1	118	13	16	11.2	< 1	10.7		
Coolcaslagh	Sw5	101794.7	91628.4	2011/3477	03-Aug-11	11:40	0.02	7.3	< 1	125	15	14.9	9.9	3	13.1	1203	3450
Coolcaslagh	Sw5	101794.7	91628.4	2011/4676	18-Oct-11	12:00	0.09	7	< 1	110	62	17.8	10.8	3	8.9		
Coolcaslagh	Sw5	101794.7	91628.4	2012/0466	25-Jan-12	12:30	0.09	6.9	2.9	91	71	17.5	10.5	128	8.6		
Coolcaslagh	Sw6	100843	91303	2003/0160	15-Jan-03	11:05	0.19	7.1	1.7	131	27	26	11.2	2	10.9		
Coolcaslagh	Sw6	100843	91303	2003/1926	16-Apr-03	12:12	0.25	7.3	1.2	134	26	19	11.3	3	11.1		
Coolcaslagh	Sw6	100843	91303	2003/3672	09-Jul-03	13:25	0.02	7.5	1	176	10	21	9.2	3	16		
Coolcaslagh	Sw6	100843	91303	2003/5466	01-Oct-03	11:45	0.02	7.5	< 1	192	10	24	10	1	11.1	107	1789
Coolcaslagh	Sw6	100843	91303	2004/0263	15-Jan-04	14:00	0.09	6.8	2.3	109	43	19	11.7	68	7.2		
Coolcaslagh	Sw6	100843	91303	2004/1654	06-Apr-04	10:40	0.1	7.4	1.1	126	22	18	10.9	4	7.7		
Coolcaslagh	Sw6	100842.9	91303.3	2004/3715	21-Jul-04	10:35	0.05	7.3	< 1	144	26	20.5	12.9	< 1	14.3	248	4430
Coolcaslagh	Sw6	100842.9	91303.3	2004/5221	06-Oct-04	11:20	0.07	7.2	1.5	104	52	17	11.1	12	10.3		
Coolcaslagh	Sw6	100842.9	91303.3	2005/0351	19-Jan-05	11:12	0.12	7	1.3	133	24	28	11.2	4	8.5		
Coolcaslagh	Sw6	100842.9	91303.3	2005/1720	12-Apr-05	10:50	0.13	7.3	< 1	120	10	18.5	10.6	< 1	9.4		
Coolcaslagh	Sw6	100842.9	91303.3	2005/3610	14-Jul-05	11:51	0.02	7.3	2.6	173	18	18	9.2	5	16.2		
Coolcaslagh	Sw6	100842.9	91303.3	2005/5298	13-Oct-05	10:45	0.1	7.2	< 1	139	113	19	11.9	< 1	7.4	687	1733

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Coolcaslagh	Sw6	100842.9	91303.3	2006/0365	24-Jan-06	13:25	0.14	7.2	< 1	122	25	22	11.9	2	7.2		
Coolcaslagh	Sw6	100842.9	91303.3	2006/1677	20-Apr-06	10:46	0.16	7.2	< 1	117	31	19	11.8	< 1	8.4		
Coolcaslagh	Sw6	100842.9	91303.3	2006/3676	02-Aug-06	11:20	<	7.4	< 1	178	<	22	10	3	14.1		
Coolcaslagh	Sw6	100842.9	91303.3	2006/5008	12-Oct-06	11:02	0.03	6.8	< 1	117	235	15.5	10.8	2	11.9	236	4286
Coolcaslagh	Sw6	100842.9	91303.3	2007/0634	01-Feb-07	11:07	0.15	7	< 1	136	27	18	11.2	3	8.2		
Coolcaslagh	Sw6	100842.9	91303.3	2007/1952	17-Apr-07	10:42	0.31	7.3	1.8	155	45	22	10.3	3	11.3		
Coolcaslagh	Sw6	100842.9	91303.3	2007/3894	19-Jul-07	14:49	0.19	7.3	1.3	139	11	17	9.9	5	13.6		
Coolcaslagh	Sw6	100842.9	91303.3	2007/5835	25-Oct-07	11:02	0.12	7.2	< 1	133	33	23	11.2	< 1	8.2	308	> 2419
Coolcaslagh	Sw6	100842.9	91303.3	2008/0007	03-Jan-08	13:48	0.04	7.1	< 1	146	16	22.5	12.2	2	6		
Coolcaslagh	Sw6	100842.9	91303.3	2008/1622	03-Apr-08	10:35	0.1	7.3	< 1	130	16	22	11.6	2	9.4		
Coolcaslagh	Sw6	100842.9	91303.3	2008/3671	17-Jul-08	10:50	0.16	7.4	< 1	133	21	18.5	10.3	10	13.2		
Coolcaslagh	Sw6	100842.9	91303.3	2008/5820	04-Nov-08	10:40	0.18	7.2	< 1	126	17	17.5	11.9	2	7.4	235	946
Coolcaslagh	Sw6	100842.9	91303.3	2009/0095	07-Jan-09	15:25	0.28	7.5	1.7	143	13	22	13	15	3.7	248	1553
Coolcaslagh	Sw6	100842.9	91303.3	2009/1928	07-Apr-09	11:15	0.2	7.5	1.5	143	29	19.5	11.5	11	7.7		
Coolcaslagh	Sw6	100842.9	91303.3	2009/3584	08-Jul-09	11:02	0.05	7.2	1	136	36	13.5	9.7	2	13.8		
Coolcaslagh	Sw6	100842.9	91303.3	2009/5099	01-Oct-09	11:05	0.07	7.4	1.1	142	21	16	10.3	3	1.4		
Coolcaslagh	Sw6	100842.9	91303.3	2010/0212	20-Jan-10	11:50	0.08	7	< 1	101	30	19	12.7	1	4.3		
Coolcaslagh	Sw6	100842.9	91303.3	2010/1466	08-Apr-10	11:20	0.02	7.3	< 1	100	14	12	12.7	1	6.7		
Coolcaslagh	Sw6	100842.9	91303.3	2010/3105	14-Jul-10	10:21	0.07	7.7	< 1	144	26	18	9.7	2	14.1	820	7701
Coolcaslagh	Sw6	100842.9	91303.3	2010/4742	12-Oct-10	16:05	0.08	7.4	< 1	134	26	13.5	10.7	1	11.3		
Coolcaslagh	Sw6	100842.9	91303.3	2011/0319	19-Jan-11	12:42	0.09	7.1	< 1	108	12	17	12.9	< 1	3.6		
Coolcaslagh	Sw6	100842.9	91303.3	2011/0734	10-Feb-11	13:00	0.06	7.1		93			11.4	4	8.5		
Coolcaslagh	Sw6	100842.9	91303.3	2011/1979	20-Apr-11	10:55	0.06	7.6	1	134	15	16	11.1	11	10.9		
Coolcaslagh	Sw6	100842.9	91303.3	2011/3478	03-Aug-11	10:50	<	7.6	< 1	149	24	16	10.1	1	13.1	770	2950
Coolcaslagh	Sw6	100842.9	91303.3	2011/4677	18-Oct-11	11:40	0.12	7.3	< 1	114	56	18	11.2	3	9.4		

Coolcaslagh	Sw6	100842.9	91303.3	2012/0467	11 25-Jan-12	09:35	0.09	7.3	1	112	27	19	10.8	6.5	9		
Coolcaslagh	Sw7	99257	90467	2003/0161	15-Jan-03	10:54	0.1	7.1	1.7	136	23	31	11.3	10	11.3		
Coolcaslagh	Sw7	99257	90467	2003/1925	16-Apr-03	11:55	<	7.5	< 1	133	19	19	10.8	1	11.5		
Coolcaslagh	Sw7	99257	90467	2003/3673	09-Jul-03	15:00	0.02	7.8	1.2	157	10	20.5	9.9	2	15.6		
Coolcaslagh	Sw7	99257	90467	2003/5467	01-Oct-03	11:27	<	7.6	< 1	158	10	20	10.6	8	10.9	10	15531
Coolcaslagh	Sw7	99257	90467	2004/0264	15-Jan-04	14:10	0.05	7	2.1	119	38	21	11.7	50	7		
Coolcaslagh	Sw7	99257	90467	2004/1655	06-Apr-04	10:27	<	7.6	< 1	132	10	19	11	< 1	7.9		
Coolcaslagh	Sw7	99256.5	90467.4	2004/3716	21-Jul-04	10:20	0.02	7.6	< 1	149	15	21.5	13.7	< 1	14.1	162	1730
Coolcaslagh	Sw7	99256.5	90467.4	2004/5222	06-Oct-04	11:08	0.06	7.3	1.4	108	51	17	11.3	6	10.5		
Coolcaslagh	Sw7	99256.5	90467.4	2005/0352	19-Jan-05	10:42	0.07	7	1.2	137	21	27.5	11.6	4	8.3		
Coolcaslagh	Sw7	99256.5	90467.4	2005/1721	12-Apr-05	10:36	<	7.4	< 1	124	10	19	11.9	1	9.7		
Coolcaslagh	Sw7	99256.5	90467.4	2005/3611	14-Jul-05	11:22	<	7.7	< 1	161	14	18	9.9	< 1	15.7		
Coolcaslagh	Sw7	99256.5	90467.4	2005/5299	13-Oct-05	10:25	0.02	7.3	< 1	142	47	20	12	2	7.4	292	1300
Coolcaslagh	Sw7	99256.5	90467.4	2006/0366	24-Jan-06	13:35	0.02	7.3	< 1	133	37	22	11.8	1	7.6		
Coolcaslagh	Sw7	99256.5	90467.4	2006/1678	20-Apr-06	10:37	0.02	7.4	1	121	24	19	11.8	3	9.2		
Coolcaslagh	Sw7	99256.5	90467.4	2006/3678	02-Aug-06	11:00	0.02	7.7	< 1	172	10	22	10.6	2	14		
Coolcaslagh	Sw7	99256.5	90467.4	2006/5009	12-Oct-06	10:50	0.02	6.9	< 1	118	120	15	10.8	1	12.1	308	3030
Coolcaslagh	Sw7	99256.5	90467.4	2007/0635	01-Feb-07	10:32	<	7.2	< 1	140	30	20	11.5	3	8.4		
Coolcaslagh	Sw7	99256.5	90467.4	2007/1953	17-Apr-07	10:34	0.02	7.9	1.5	153	28	21	11.6	2	10.4		
Coolcaslagh	Sw7	99256.5	90467.4	2007/3895	19-Jul-07	15:49	0.02	7.6	7.6	153	88	21	8	39	13.5		
Coolcaslagh	Sw7	99256.5	90467.4	2007/5836	25-Oct-07	10:53	<	7.4	< 1	135	33	25	11.3	< 1	8.5	70	921
Coolcaslagh	Sw7	99256.5	90467.4	2008/0008	03-Jan-08	13:20	0.04	7.3	1	134	10	21.5	12.3	2	6.3		

Coolcaslagh	Sw7	99256.5	90467.4	2008/1623	03-Apr-08	10:20	0.04	7.4	< 1	131	39	22	11.7	< 1	9.8		
Coolcaslagh	Sw7	99256.5	90467.4	2008/3672	17-Jul-08	10:30	0.04	7.1	< 1	138	18	19.5	10.6	4	13.5		
Coolcaslagh	Sw7	99256.5	90467.4	2008/5821	04-Nov-08	10:32	0.02	7.4	< 1	131	17	17	12	< 1	7.6	200	646
Coolcaslagh	Sw7	99256.5	90467.4	2009/0096	07-Jan-09	11:20	0.04	7.6	1.5	146	22	22	12.6	12	3.5	228	830
Coolcaslagh	Sw7	99256.5	90467.4	2009/1929	07-Apr-09	11:00	0.06	7.6	1.2	142	49	18	11.4	2	8.3		
Coolcaslagh	Sw7	99256.5	90467.4	2009/3585	08-Jul-09	10:47	< 0.02	7.5	< 1	144	31	15	9.8	2	14.1		
Coolcaslagh	Sw7	99256.5	90467.4	2009/5100	01-Oct-09	10:45	0.02	7.7	< 1	149	13	17	10.8	2	12.5		
Coolcaslagh	Sw7	99256.5	90467.4	2010/0213	20-Jan-10	11:30	0.04	7.1	< 1	102	29	16	12.5	2	4.7		
Coolcaslagh	Sw7	99256.5	90467.4	2010/1465	08-Apr-10	11:10	0.02	7.1	< 1	86	17	10.5	12.7	1	7.2		
Coolcaslagh	Sw7	99256.5	90467.4	2010/3106	14-Jul-10	10:02	0.02	7.8	< 1	178	16	30	10.3	6	13.8	778	28272
Coolcaslagh	Sw7	99256.5	90467.4	2010/4743	12-Oct-10	16:15	0.02	7.6	< 1	137	21	13.5	10.8	< 1	11.8		
Coolcaslagh	Sw7	99256.5	90467.4	2011/0318	19-Jan-11	12:15	0.06	7.1	< 1	112	13	16	13.1	< 1	13.1		
Coolcaslagh	Sw7	99256.5	90467.4	2011/0733	10-Feb-11	10:30	0.04	7.3		99			11.5	6	7.8		
Coolcaslagh	Sw7	99256.5	90467.4	2011/1980	20-Apr-11	10:36	< 0.02	7.8	< 1	137	14	17	11.3	10	10.9		
Coolcaslagh	Sw7	99256.5	90467.4	2011/3479	03-Aug-11	10:38	0.02	7.7	< 1	148	10	16.9	10.4	< 1	12.6	57	517
Coolcaslagh	Sw7	99256.5	90467.4	2011/4678	18-Oct-11	11:30	0.09	7.4	< 1	118	62	18.5	11.3	4	9.7		
Coolcaslagh	Sw7	99256.5	90467.4	2012/0468	25-Jan-12	09:20	0.05	7.5	< 1	116	27	19	10.8	7.5	9		
Coolcaslagh	Sw8	101881.9	91477.6	2007/0636	01-Feb-07	12:20	2.61	7.2	< 1	217	23	25	9.5	13	8.2		
Coolcaslagh	Sw8	101881.9	91477.6	2007/3897	19-Jul-07	15:50	< 0.02		1.4	125	38	15	9.3	120	16.6		
Coolcaslagh	Sw8	101881.9	91477.6	2008/5822	04-Nov-08	11:00	< 0.02	6.5	< 1	270	10	16	5.5	1	7.6	2	20

Table 2 Surface Water Monitoring Results

### Appendix III - Landfill Gas Summary

Coolcaslagh Waste Transfer Station

Monitoring of Landfill Gas Levels

Date	Ref.	CH <sub>4</sub> % v/v	CO <sub>2</sub> % v/v	O <sub>2</sub> % v/v	Atm. Pressure Mbar	Temperature Degrees Celsius
14/10/08	L1	40.9	24.1	8.5	1011	8
	L2	35.2	20.9	10.3	1011	8
7/5/09	L1	63.9	28.2	1.2	1005	17
	L2	60.1	29.6	1.6	1005	17
10/12/09	L1	59.8	30.1	1.4	1005	8
	L2	60.2	31.0	1.0	1005	8
14/4/10	L1	40.4	24.6	5.5	1005	12
	L2	8.5	4.6	17.3	1005	12
30/3/11	L1	34.6	24.2	5.5	987	13
	L2	12.6	5.8	17.2	986	13
15/7/11	L1	48.2	31.3	4.2	992	17
	L2	25.1	14.3	13.2	992	17

## Appendix IV - AER/PRTR Return 2011

Sheet : Facility ID Activities

AER Returns Workbook

29/6/2012 14:34



| PRTR# : W0072 | Facility Name : Coolcaslagh Transfer Station | Filename :  
W0072 AER PRTR 2011 V1.xls | Return Year : 2011 |

[Guidance to completing the PRTR workbook](#)

# AER Returns Workbook

Version 1.1.13

<b>REFERENCE YEAR</b>	2011
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### 1. FACILITY IDENTIFICATION

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

Waste or IPPC Classes of Activity

No.	class_name
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	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.
4.1	Solvent reclamation or regeneration.
4.13	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.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation 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	Killarney
Address 3	Co. Kerry
Address 4	
	Kerry
Country	Ireland
Coordinates of Location	-9.43193 52.0657
River Basin District	IESW
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
<b>AER Returns Contact Name</b>	Brian Lennon
<b>AER Returns Contact Email Address</b>	blennon@kerrycoco.ie
<b>AER Returns Contact Position</b>	Executive Engineer
<b>AER Returns Contact Telephone Number</b>	066-7162000
<b>AER Returns Contact Mobile Phone Number</b>	087-8173683
<b>AER Returns Contact Fax Number</b>	066-7162001
Production Volume	0.0
Production Volume Units	
Number of Installations	0

| PRTR# : W0072 | Facility Name : Coolcaslagh Transfer Station | Filename : W0072 AER PRTR 2011 V1.xls | Return  
Year : 2011 | Page 1 of 2

Sheet : Facility ID Activities

AER Returns Workbook

29/6/2012 14:34

Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	
Web Address	

**2. PRTR CLASS ACTIVITIES**

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

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

Is it applicable?	No
Have you been granted an exemption ?	No
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

Sheet : Releases to Air

AER Returns Workbook

29/6/2012 14:34

4.1 RELEASES TO AIR [Link to previous year's emissions data](#)

[ PRTR# : W0072 | Facility Name : Coolcaslagh Transfer Station | Filename : W0072 AER PRTR 2011 V1.xls | Return Year : 2011 ]

29/06/2012 14:34

**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
03	Carbon dioxide (CO2)	C	OTH	GasSim V1.54		0.0	0.0	0.0
01	Methane (CH4)	C	OTH	GasSim V1.54		281000.0	0.0	281000.0
						126000.0	0.0	126000.0

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

**SECTION B : REMAINING PRTR POLLUTANTS**

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0

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

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

POLLUTANT		METHOD			QUANTITY			
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
						0.0	0.0	0.0

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

**Additional Data Requested from Landfill operators**

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

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

Sheet : Releases to Waters

AER Returns Workbook

20/6/2012 14:35

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

| PRTR# : W0072 | Facility Name : Coolcaslagh Transfer Station | Filename : W0072 AER PRTR 2011 V1.xls | Return Year : 2011 |

29/05/2012 14:35

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of elcimsurface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

Sheet : Releases to Wastewater or Sewer

AER Returns Workbook

29/9/2012 14:39

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

[PRTM - W0072] Facility Name : Coolcaslagh Transfer Station | Filename : W0072 AER PRTM 2011 V 29/09/2012 14:39

SECTION A - DTRR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER				Please enter all quantities in this section in KGs				
POLLUTANT		METHOD		QUANTITY				
No. Annex II	Name	M/C/E	Method Code	Method Used	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
05	Ammonia (NH3)	M	OTH	Ammonia by ISE	25.32	25.32	0.0	0.0
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column 8) then click the delete button

SECTION B - REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER				Please enter all quantities in this section in KGs				
POLLUTANT		METHOD		QUANTITY				
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
303	BOD	M	OTH	Hach spectrophotometric method using Potassium Dichromate	290.2	290.2	0.0	0.0
306	COD	M	OTH	hexane extr followed by gravimetric determination	705.6	705.6	0.0	0.0
314	Fats, Oils and Greases	M	OTH	gravimetric determination	15.05	15.05	0.0	0.0
240	Suspended Solids	M	OTH	gravimetric determination	262.4	262.4	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column 8) then click the delete button

[Link to previous years emissions data](#)

Page 1 of 1

Sheet : Releases to Land

AER Returns Workbook

29/8/2012 14:40

4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR#: W0072 | Facility Name : Coolcaslagh Transfer Station | Filename : W0072 AER PRTR 2011 V1.xls | Return Year : 2011 |

29/08/2012 14:40

SECTION A : PRTR POLLUTANTS

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

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

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

POLLUTANT		METHOD		Please enter all quantities in this section in KGs		
Name		M/C/E	Method Used	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
Pollutant No.			Designation or Description		0.0	0.0

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

Sheet - Treatment Transfers of Waste

AER Returns Workbook

18/02/2012 17:38

5. ON-SITE TREATMENT & OFF-SITE TRANSFERS OF WASTE [PRTR# : W0072] Facility Name : Coolcaslagh Transfer Station | Filenames : W0072\_AER\_PRTR\_2011\_V1.xls | Return Year : 2011 | 30/06/2012 14:40

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	MCE	Method Used	Location of Treatment	Site Name - Name and Licence/Permit No. of the	Site Name - Name and Licence/Permit No. of the	Site Name - Name and Licence/Permit No. of the	Site Name - Name and Licence/Permit No. of the
									Reception Facility (Name and Licence/Permit No. of Reception)	Reception Facility (Name and Licence/Permit No. of Reception)	Reception Facility (Name and Licence/Permit No. of Reception)	Reception Facility (Name and Licence/Permit No. of Reception)
Within the Country	15 01 06	No	7.8	mixed packaging	R3	M	Weighted	Offsite in Ireland	Kilberry Waste Depot, W0217-01	Agglucastion, Kilberry County Kerry Ireland		
Within the Country	15 01 01	No	43.84	paper and cardboard packaging	R3	M	Weighted	Offsite in Ireland	Greenstar WFP-CK-10-0047-02	Stanford Court Industrial Estate, Glenties County Cork, Ireland		
Within the Country	20 01 01	No	127.26	paper and cardboard	R3	M	Weighted	Offsite in Ireland	Dillon Waste LXC/WFP-KY-10-001	The Keshes, Tralee County Kerry, Ireland		
Within the Country	15 01 07	No	59.67	glass packaging	R5	M	Weighted	Offsite in Ireland	Rehab Glascoo Ltd. WFP-KE-08-0357-01	Road, Naas, County Kildare, Ireland		
Within the Country	15 01 04	No	7.12	metallic packaging	R4	M	Weighted	Offsite in Ireland	Rehab Glascoo Ltd. WFP-KE-08-0357-01	Kilmore, Ireland		
Within the Country	20 01 40	No	17.3	metals	R4	M	Weighted	Offsite in Ireland	Regency Metals, WFP-LC-11-021-01	Ballyvaughan, Tralee County Kerry, Ireland		
Within the Country	15 01 02	No	44.6	plastic packaging	R3	M	Weighted	Offsite in Ireland	Dillon Waste LXC/WFP-KY-10-001	The Keshes, Tralee County Kerry, Ireland		
Within the Country	20 01 11	No	0.76	batteries	R3	M	Weighted	Offsite in Ireland	Turbid Recycling Ltd. WPR-0142	Road, Tallaght, Dublin, 24, Ireland		
To Other Countries	20 01 34	No	1.7	batteries and accumulators other than those mentioned in 20 01 33	R4	M	Weighted	Abroad	BVM Ltd. WFP-06-09-0012-01	Block 648 Jordanstown Drive, Omeoque Industrial Estate, Rathfriland County Dublin, Ireland		
To Other Countries	19 02 04	Yes	2.1	mineral based chlorinated engine, gear and lubricating oils	R9	M	Weighted	Abroad	Enva W0184-1	Chemicals Industrial Estate, Portlaoise County Laois, Ireland	Nelissen GmbH & Co KG, D-33300 D., Bielefeld, Germany	
To Other Countries	16 02 11	Yes	15.34	discarded equipment containing chlorofluorocarbons, HCFC, HFC, other than those mentioned in 20 01 21, 20 01 22, 20 01 23 and 20 01 35	R4	M	Weighted	Abroad	KMK Metals, W0113-01	Capricorn Industrial Estate, Tullamore County Offaly, Ireland	EMR EAM, 40200 Bently Road, South, Darbhon, WS10 BLV west Midlands, United Kingdom	
Within the Country	20 01 36	No	33.72	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 22, 20 01 23 and 20 01 35	R4	M	Weighted	Offsite in Ireland	KMK Metals, W0113-01	Capricorn Industrial Estate, Tullamore County Offaly, Ireland		
Within the Country	20 01 35	Yes	22.74	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	R4	M	Weighted	Offsite in Ireland	BVM Ltd. WFP-06-09-0012-01	Block 648 Jordanstown Drive, Omeoque Industrial Estate, Rathfriland County Dublin, Ireland	The recycling Village, WPTM4H11000501, Unit 21 Duleek Business Park, Commons, Duleek, County Meath, Ireland	
To Other Countries	16 02 14	No	2.23	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	R4	M	Weighted	Abroad	BVM Ltd. WFP-06-09-0012-01	Block 648 Jordanstown Drive, Omeoque Industrial Estate, Rathfriland County Dublin, Ireland		
To Other Countries	20 01 36	No	16.98	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 22, 20 01 23 and 20 01 35	R4	M	Weighted	Abroad	BVM Ltd. WFP-06-09-0012-01	Block 648 Jordanstown Drive, Omeoque Industrial Estate, Rathfriland County Dublin, Ireland		
To Other Countries	20 01 21	Yes	0.04	fluorescent tubes and other mercury-containing waste	R5	M	Weighted	Abroad	KMK Metals, W0113-01	Capricorn Industrial Estate, Tullamore County Offaly, Ireland	Abis Service GmbH & Co KG, D-55657020, Karselthorstrasse 64, Rheine, 48432, Germany	
Within the Country	20 05 01	No	3367.78	mixed municipal waste	D5	M	Weighted	Offsite in Ireland	North Kerry Landfill W001-04	North Kerry, Lixnaw, Tralee County Kerry, Ireland		

Link to: [www.epa.ie/info](http://www.epa.ie/info)  
[www.epa.ie/info](http://www.epa.ie/info), [www.epa.ie/info](http://www.epa.ie/info) & [www.epa.ie/info](http://www.epa.ie/info)



