Clare County Council

Waste Licence W0170-01

Annual Environmental Report for 2013

Name & location of facility: **Lisdeen Recycling Centre & Transfer Station, Cemetery Road, Lisdeen, Kilkee, Co. Clare**

Submitted by:

Environment Section, Clare County Council, New Road, Ennis, Co. Clare.

Table of Contents

1) Reporting Period

1/01/13 – 31/12/13

2) Details of Activity

The principal waste activity of the Transfer Station is the compaction of solid waste into 30 m^3 closed containers for subsequent disposal to landfill in accordance with Class 12 of the Third Schedule of the Waste Management Act, 1996. Other waste activity is the storage of non-recoverable waste received at the facility, prior to disposal at an appropriate facility in accordance with Class 13 of the Third Schedule.

Other waste recovery activities include recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes) in accordance with Class 2 of the Fourth Schedule, recycling or reclamation of metals and metal compounds in accordance with Class 3 of the Fourth Schedule, and recycling or reclamation of other inorganic materials in accordance with Class 4 of the Fourth Schedule. This covers the acceptance of waste oils, cooking oils, beverage cans, white goods, other metals, and glass at the facility.

3) Volume and composition of waste received during the reporting period.

The quantity of municipal solid waste accepted at the facility during the reporting period(s) was as follows:

Public Domestic Waste delivered to site	471	tonnes
Recyclable material delivered to site	464	tonnes
Total	935	tonnes

The quantity of waste materials accepted for subsequent recycling/recovery for 2013 is as outlined in Table 3.1 below

Table 3.1

Material Type	E.W.C. Code	Tonnage
Domestic waste	20 00 00 20 03 01	474.57
Metals for recycling	20 01 40	25.02
Glass for recycling	20 01 02	12.34
Aluminium Cans	15 01 04	.6
Plastic bottles	20 01 39	8.74
Steel cans	15 01 04	5.88
Car Batteries	16 06 01*	0.54
Newspapers	20 01 01	30.86
Waste Engine Oil	13 02 00	0.72
Cardboard	20 01 01	23.9
Tetrapak	15 01 01	.8
Timber	20 01 38	34.7
Textiles	20 01 11	2.42
WEEE	20 01 36	54.47

The quantities of waste allowed for acceptance the facility under Schedule A of the licence at are as outlined in Table 3.2 below:

Table 3.2:

Waste Type	Maximum (Tonnes per annum)
Municipal Waste	1,800
Wastes for recovery/recycling	200 Note4
Total	2,000

Note 4: The amount of wastes accepted for recovery/recycling may be altered as long as the total accepted at the facility does not exceed 2000 tonnes per annum.

4) Summary report on emissions, including wastes from silt traps and interception sumps.

No desludging of the septic tank has taken place since installation. Loading on the tank is quite small with one w.c. and sink as well as run-off from waste transfer area.

5) Foul Water Emissions

There is no direct foul water discharge. Foul water is diverted to a septic tank unit, which in turn is discharged to a reed bed. This foul water is collected from w.c., sink unit, the transfer station shed, from the compactor and the bin transverse area. It comprises wash water and rainwater falling on the contaminated areas.

6) Surface Water Emissions

Surface water runoff from site roads and uncontaminated surfaces discharges to the surface water drains. There are no other emissions of any environmental significance from the facility.

7) Summary of Results and Interpretation of Environmental Monitoring.

Table 7.1. Lisdeen Transfer Station (WL170-1) Monitoring Schedule

Schedule D	Monitoring
D.1	Monitoring Locations
D.2	Waste Water
D.3	Landfill Gas
D.4	Surface Water, Groundwater and Leachate

Monitoring was conducted at the specified locations and frequencies as indicated in each of the above referenced Schedules of the Waste Licence, unless otherwise noted in this report. Monitoring locations are shown in Appendix 1. Wastewater monitoring has not

been carried out to date as the discharge from the septic tank is directly to a percolation area. The reed bed system is now commissioned; however due to the low flow, it was not possible to obtain a sample from the system.

7.1. Landfill Gas

During this reporting period, landfill gas monitoring was carried out on a monthly basis at landfill gas wells L1 and L2. Monitoring was carried out in accordance with Schedule D.3 of the waste licence. Gas monitoring locations are shown in Appendix 1. Completed landfill gas monitoring forms for the period is available for inspection at the facility and can be forwarded if required. Landfill gas results for L1 and L2 are graphed in figures 7.1 and 7.2 below:

Figure 7.1:

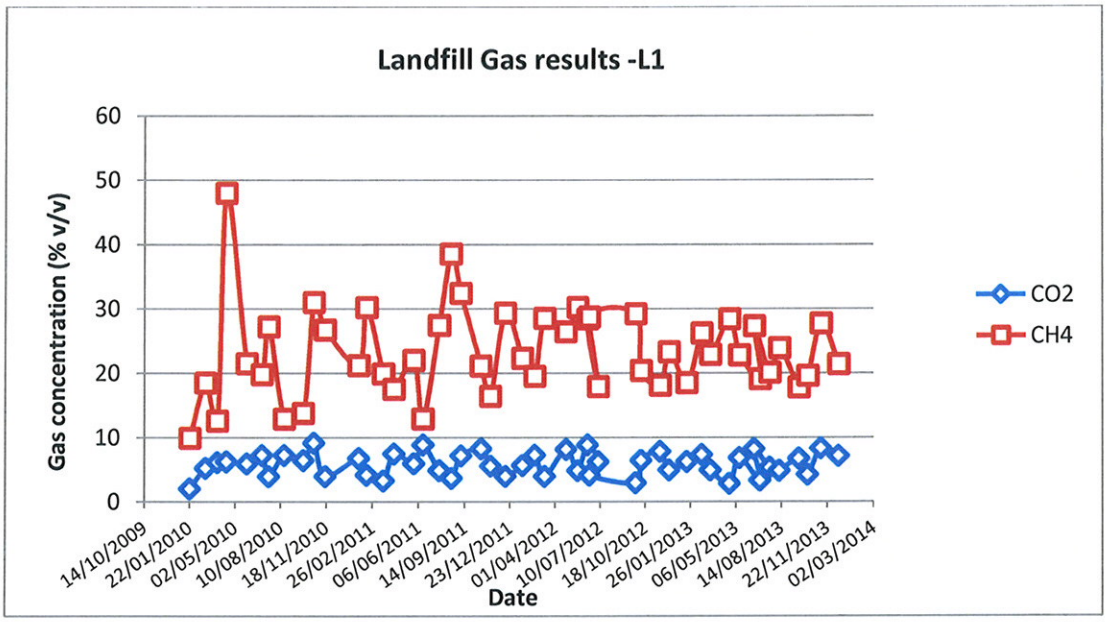
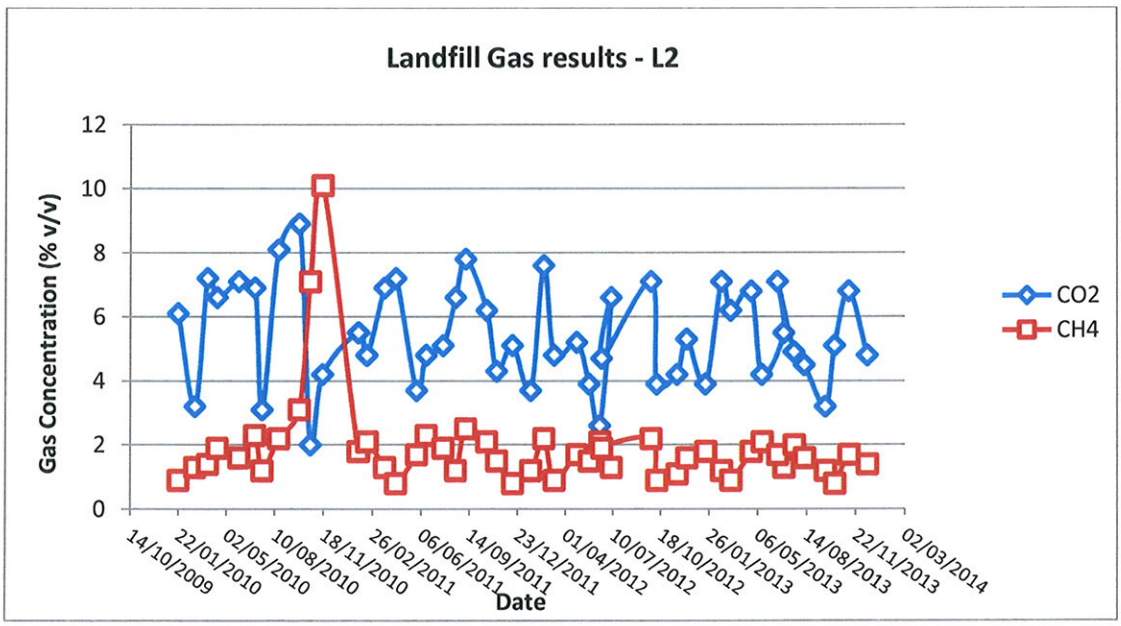


Figure 7.2:



Both leachate wells are located in waste; L2 is located in the centre of the waste body and L1 is close to the northwest site boundary

The methane concentration at L1 is significantly higher than at L2. The trend during 2013 was in line with historic monitoring within the site. Carbon dioxide levels for the majority of the year were similar at both locations with levels <10%v/v.

Landfill gas levels in the caretaker's office are continuously monitored using the online gas analyser. No methane or carbon dioxide was detected in the caretaker's office by either monitoring method during the 2013 and are within trigger levels as stated in Condition 6.4.1 of Waste licence 170-1.

Surface Water, Groundwater and Leachate.

SNC-Lavalin Environment (SLE) was retained by Clare County Council to complete groundwater, surface water and leachate sampling at the Lisdeen Waste Recycling Centre (Lisdeen) located at Kilkee, Co. Clare. Sampling was conducted on the 27th March 2013.

7.2 Surface Water

7.2.1a Water Quality Standards and Trigger values used for comparison

Although water is not abstracted for drinking water use from these surface water locations, it is useful to provide a benchmark for comparison of monitoring results and therefore the measured results are compared to the Water Quality Standards as presented below.

PARAMETER	WATER QUALITY STANDARDS			
	SURFACE WATER REGULATIONS [1]			[2]
	A1 MAC	A2 MAC	A3 MAC	SALMONID REGULATIONS
Conductivity, µS/cm at 20°C	1000	1000	1000	
Temperature, °C	25	25	25	NS
pH	5.5 – 8.5	5.5 – 9.0	5.5 – 9.0	> 6 < 9
Dissolved oxygen, mg/L	NS	NS	NS	NS
Dissolved oxygen, % Saturation	> 60%	> 50%	> 30%	50%, > 9 mg/l O2
BOD, mg/L O2	5	5	7	< 5
COD, mg/L O2	NS	NS	NS	NS
Total Ammonium, mg NH4/L	0.2	1.5	4.0	1.0
Suspended solids, mg/L	50	NS	NS	<25
Chloride, mg/L Cl	250	250	250	NS

Phosphates, mg/L P2O5	0.5	0.7	0.7	NS
Sulphates, ml/L SO4	200	200	200	NS

[1] EC (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations, 1988 [S.I. No. 294 of 1989]

[2] EC (Quality of Salmonid Waters) Regulations, 1988 [S.I. No. 293 of 1988]

7.2.1b Trigger Levels

Clare County Council has proposed trigger levels for ammonia and BOD concentrations for the surface water monitoring locations around the site. These trigger levels are considered to highlight a significant change in water quality compared to normal results and require corrective action to be taken. The proposed trigger levels, which are yet to be agreed with the EPA are presented below in Table 7.2.1.

Table 7.2.1 Surface water trigger levels at Lisdeen Recycling Facility

Monitoring Location	SW1	SW2	SW3	SW5	SW5a	SW7
Ammonia Concentration (ppm)	2.5	-	10	12.5	-	1.2
BOD Concentration (ppm)	38	-	10	36	-	10

Evaluation of monitoring results

Annual sampling was completed at six (6) surface water sampling locations on the boundaries of the site and off site to determine any potential impacts the site may have had on surface water quality in the area. Five main surface water bodies were sampled as part of the sampling programme:

- Stream 1 – Main tidal channel located along the eastern boundary of the site.
- Stream 2 – Small stream located along eastern boundary of site parallel to Stream 1.

- Stream 3 – Stream located north of the site before it discharges to stream 1 (main tidal
- channel) and stream 2 located along the eastern boundary of the site.
- Stream 4 – Surface water ditch located along southern boundary of site.
- Stream 5 – Surface water ditch located south of the site and parallel with Stream 4.

Stream 1 –Main Tidal Channel East of the Site

Annual monitoring and sampling was completed at two (2) locations on stream 1. Sample location SW3 was at the surface water outlet from the Lisdeen site and sample location SW7 was located approximately 200m downstream from the outlet. The electrical conductivity at SW3 was 19,471µS/cm, exceeding the EPA water quality limit of 1,000µS/cm. This was greatly reduced at SW7 (i.e. 6,130µS/cm) but still exceeded the EPA water quality limit. The concentrations of all parameters analysed from SW3 with the exception of elevated boron, chloride, ammoniacal nitrogen (NH4-N) and COD concentrations were less than the 2009 surface water regulations and EPA guideline values. Concentrations of all parameters analysed from SW7 were less than the 2009 surface water regulations and/ or EPA guideline values with the exception of elevated concentrations of chloride, BOD and COD.

Additional monitoring was conducted in November 2013, at the request of Clare County Council. The aim of this additional monitoring was to establish the cause of elevated results which had been recorded during the annual monitoring event in March 2013.
Monitoring locations were selected along the inner drain, and along the main tidal channel. It was found that results were elevated at a number of locations along the inner drain, however it could not be clearly stated that these elevated results were due to migration from the landfill, or saline water ingress due to a faulty control barriers which allowed the high tide to infiltrate the drain. Clare County Council is in the process of repairing these control barriers, and additional monitoring shall be conducted.

Stream 2 – Stream Parallel to Main Tidal Channel East of the Site

Annual sampling was completed at one (1) location on stream 2 at the northeast corner, and upstream, of the Lisdeen site (SW2). The concentrations of all parameters analysed from SW2 with the exception of COD concentrations were less than the 2009 surface water regulations and/or EPA guideline values

Stream 3 – Stream North of the Site – Background

Annual sampling was completed at one (1) location on stream 3 to the north, and upstream, of the Lisdeen site (SW1). The concentrations of all parameters analysed from SW1 with the exception of chloride, BOD and COD concentrations were less than the 2009 surface water regulations and EPA guideline values. The elevated concentrations of parameters in surface water upstream of the site indicates that factors other than the landfill site maybe influencing the elevated concentrations of chloride, BOD and COD at this location.

Stream 4 – Surface Water Ditch on Southern Boundary of Site

Annual sampling was completed at one (1) location on stream 4 located along the southern boundary of the Lisdeen site (SW5). The electrical conductivity of the sample collected from SW5 (1,090µS/cm) marginally exceeded the EPA guideline value of 1000µS/cm. The concentrations of all parameters analysed from SW5 with the exception of NH4-N and BOD concentrations were less than the 2009 surface water regulations and applicable EPA guideline values. The BOD and NH4-N concentrations found at SW5 were the highest results found at the site for the 2013 sample event (8mg/l O2 and 2.66mg/l, respectively). The concentration of NH4- N at SW5 exceeded the 2009 surface water regulations with the elevated concentration most probably due to runoff from the Lisdeen site. It should be noted that although the NH4-N concentration in SW5 was greater than the 2009 surface water regulations it was consistent with historic results and significantly less than the proposed trigger level for that sample location. The stagnant nature of surface water at SW5 allowed for algal and water based plant growth this may also be influencing the elevated BOD concentrations at this location.

Stream 5 – Surface Water Ditch South of the Site Parallel with Stream 4.

Annual sampling was completed at one (1) location on stream 5 located south (and outside the boundary) of the Lisdeen site (SW5a). The concentrations of all parameters analysed from SW5a were less than the 2009 surface water regulations and applicable EPA guideline values. Analytical results indicated no impacts on the water quality in the surface water ditch located south of the Lisdeen site.

7.3 Groundwater

Groundwater wells BH1, BH3s, BH3d, BH4s and BH4d were sampled on the 27th March 2013. Monitoring locations are shown in Appendix 1.

Table 7.3.1 Groundwater water locations

Location Reference	Description of location
BH1	Artesian bedrock well located outside the site, adjacent to the northeast boundary.
BH3d	Bedrock well located close to BH3s, downgradient of the main waste body.
BH3s	Overburden well located within the landfill, close to the southern site boundary.
BH4d	Bedrock monitoring well located in waste and downgradient of the main waste body.
BH4s	Overburden well located within the landfill, close to the southern site boundary.

7.3.1 Water Quality Standards and Trigger Values used for comparison purposes

Table 7.3.2 Extracted from E.C. (Drinking Water) Regulations, 2007 SI No. 106 of 2007

Parameter	**Table [1]**	**Drinking Water Quality Standard**	**Deviations**
Temperature	Not Listed	-	N/A
Conductivity	Table C	2500 µS/cm @ 20°C	none
pH	Table C	$6.5 \leq pH \leq 9.5$	none
Ammonium	Table C	0.23 mg/l N (0.30 mg/l NH_4)	See trigger levels below
Total Organic Carbon	Table C	No abnormal change	N/A
Cadmium	Table B	0.005 mg/l	none
Chromium	Table B	0.05 mg/l	none
Iron	Table B	0.2 mg/l	BH3, BH3s, BH4
Lead	Table B	0.010 mg/l	none
Manganese	Table B	**0.05 mg/l**	none
Nickel	Table B	**0.020 mg/l**	none
Sodium	Table B	**200 mg/l**	none

[1] The notes above quote the Table in the regulations from which parametric or limit values were obtained

N/A Not applicable.

Trigger Levels

Clare County Council have proposed trigger levels for ammonia concentrations for the monitoring wells located around the site. These trigger levels are considered to highlight a significant change in water quality compared to normal results and require corrective action to be taken. The proposed trigger levels, which are yet to be agreed with the EPA are presented below in Table 7.3.3.

Table 7.3.3 Groundwater trigger levels at Lisdeen Recycling Facility

Monitoring Well	BH1	BH3	BH3s	BH4
Ammonia Concentration (ppm)	0.5	1.7	1.0	0.5

7.3.2 Evaluation of results

Background Well

The annual sampling programme indicated that the concentrations of the majority of contaminants of concern in groundwater at the Lisdeen site were below the applicable groundwater standards and/or the EPA interim guideline values. The only parameters with elevated concentrations in monitoring well BH1 were manganese and total alkalinity. The ammoniacal nitrogen (NH4-N) concentrations in BH1 were significantly less than the 2010 groundwater standard and there has been a reduction in NH4-N since the October, 2012 sampling event.

The elevated concentrations of manganese in BH1 indicated that there may be a natural source of manganese in the area. The background well is located up gradient of the site and would not be considered to be influenced by historic activities at the Lisdeen site. The EPA interim guideline value for manganese is set as an aesthetic objective for drinking water (i.e., staining of pipes and appliances) rather than as a concentration that would constitute a health impact.

However, none of the monitoring wells at Lisdeen are used for potable water extraction and the application of the standard may be considered overly conservative.

Southwest Area Wells

Monitoring wells BH3 and BH3S are located at the southwest of the site, and down gradient from the historic landfill body. The results of the annual sampling event indicated that that the concentrations of the majority of contaminants of concern in groundwater were below the applicable groundwater standards and/or the EPA interim guideline values in monitoring wells BH3 and BH3S. The only parameters with elevated concentrations that exceeded the 2010 groundwater standard in both monitoring wells were total alkalinity and manganese. BH3S contained NH4-N concentrations that exceeded the 2010 groundwater standard.

The analytical results for monitoring well BH3S (i.e. 0.24mg/l) indicated that the concentration of NH4-N in the shallow groundwater table at the southwest of the site was slightly higher than the concentrations in the background well (BH1) indicating potential limited NH4-N migration from the landfill to the shallow aquifer to the southwest. Although the concentration of NH4-N in well BH3S (located in the southwest of the site) was greater than the 2010 groundwater standard it was less than the proposed trigger level for monitoring well BH3S and less than the analytical result for NH4-N at the same well in October, 2012.

There has been a significant reduction in iron concentrations since October, 2012 and concentrations found in March, 2013 were below the MDL for all monitoring wells. The elevated concentrations of manganese in BH3 and BH3s indicated that there are natural source of manganese in the area. However, based on the elevated concentrations of manganese when compared to background concentrations it is considered that the historic landfill is an additional source of manganese impacts. The EPA interim guideline value for manganese is set as aesthetic objectives for drinking water (i.e., staining of pipes and appliances) rather than as a concentration that would constitute a health impact. However, none of the monitoring wells are used for potable water extraction and the application of the standards may be overly conservative.

The slightly elevated total alkalinity concentration in both monitoring wells indicated that the water contains higher concentrations of calcium carbonate (CaCO3) which may act as a buffer against significant pH changes within the groundwater aquifer.

Southeast Area Wells

Monitoring wells BH4 and BH4S are located at the southeast of the site, and down gradient from the historic landfill body. The results of the annual sampling event indicated that the concentrations of the majority of contaminants of concern in groundwater were below the applicable groundwater standards and/or the EPA interim guideline values in both monitoring wells with the exception of total alkalinity. Iron concentrations were significantly reduced in both monitoring wells to below the MDL. Manganese concentrations found in BH4 exceeded the EPA interim guideline limit.
The elevated concentration of manganese in BH4 indicated that although there is a natural source of manganese in the area it is considered that the historic landfill is an additional source of manganese impacts. It should be noted that though still elevated manganese concentrations have reduced when compared to previous analytical results (October, 2012). It should also be noted that the EPA interim guideline value for manganese is as an aesthetic objective for drinking water (i.e., staining of pipes and appliances) rather than as a concentration that would constitute a health impact. However, none of the monitoring wells at Lisdeen are used for potable water extraction and the application of the standards may be overly conservative.

The slightly elevated total alkalinity concentration in both monitoring wells indicated that the water contained higher concentrations of calcium carbonate (CaCO3) which may act as a buffer against significant pH changes within the groundwater aquifer.

7.4 Leachate

7.4.1 Evaluation of monitoring results

The leachate samples were collected from monitoring locations L1 and L2 on the 27th March 2013.

The results of the sampling programme are discussed below:

Electrical conductivity for the leachate sample collected from L1 was 2,660µS/cm which exceeds the 2010 groundwater standard of 1,875µS/cm. The sample collected from L2 was 536µS/cm which was below the 2010 groundwater standard.

pH for the leachate samples collected from L1 was 7 and L2 was 7.9.

The concentration of NH4-N in L1 (0.09mg/l) was below the 2010 groundwater standard of 0.175mg/l. In L2 the NH4-N concentration (89.55mg/l) was significantly greater than the 2010 groundwater regulation standard and the EPA guideline value of 0.3mg/l. NH4-N concentrations indicated a decrease since the last annual sampling event in October, 2012. In L1 they fell to below the 2010 groundwater standard from 1.39mg/l and in L2 they decreased from 105.63mg/l.

Metals concentrations (i.e., chromium, copper, iron, lead, mercury, nickel and zinc) for the samples collected in March, 2013 were all less than the 2010 groundwater standard and/or the applicable EPA guideline values.

The concentration of magnesium (87.8mg/l), potassium (65.2mg/l) and sodium (152.7mg/l) exceeded the EPA guideline values of 50mg/l, 12mg/l and 150mg/l respectively, in L2, which are consistent with previous results obtained in October, 2012. Concentrations of magnesium, sodium and potassium in L1 were less than the applicable EPA guideline values.

Results for earth metals (i.e., boron and calcium,) and major anions (i.e., fluoride, sulphate and chloride) in wells L1 and L2 were all less than the applicable 2010 groundwater standards and/or EPA guideline values;

The concentration of manganese in L1 (437µg/l) and L2 (2,395µg/l) significantly exceeded the EPA guideline value of 50µg/l though there has been a slight decrease compared to results obtained in October, 2012 (i.e. 557µg/l and 3,057µg/l, respectively).

Total alkalinity concentrations in L1 (292mg/l) and L2 (1,376mg/l) exceeded the EPA guideline value of 200µg/l.

The concentration of BOD in L1 (<1mg/l O2) was below the 2009 surface water regulation standard of 2.6mg/l. Concentrations of BOD in L2 (33mg/l O2) were greater than the 2009 surface water regulation standard. BOD concentrations have decreased in L1 compared to results obtained in October, 2012 (i.e. 10mg/l O2) and increased in L2 (i.e. 7mg/l O2 in October, 2012).

The concentration of COD in L1 (18mg/l O2) was below the EPA guideline value of 50mg/l. COD concentrations in L2 (89mg/l O2) were greater than the EPA guideline value though concentrations in both leachate samples were reduced from concentrations obtained during the last annual monitoring and sampling event in October, 2012 (i.e. 198mg/l O2 and 103mg/l O2, respectively).

The analytical results indicated that the concentrations of manganese, chloride, NH4-N and total alkalinity were significantly higher in leachate well L2 (i.e., central area of the site) than in leachate well L1 (i.e., north western area of site). The concentrations of organic and inorganic contaminants, particularly in L2 are indicative of leachate from an historic landfill site (e.g., manganese, COD, BOD). Analytical results for samples collected from both leachate wells are consistent with available historic results.

The slightly elevated total alkalinity concentration in both leachate wells indicated that the leachate contains higher concentrations of calcium carbonate (CaCO3) which may act as a buffer against significant pH changes.

The Leachate results are presented in Appendix IV Table IV.

8) Resource Consumption Summary

Diesel

Fuel consumption was similar to that used in previous years.

Electricity

It is estimated that approximately 3,000 units of electricity were used in 2013.

Water

Water supply to the site is via a connection to the group water scheme. Water usage on site is mainly for power washing yards, transfer station apron and hopper. Average water usage is approximately 3,000 litres monthly, with an approximate total of 36,000 litres used in 2013.

9) Development works undertaken during the period and timescale for proposed works.

Clare County Council has received Part VIII Planning Permission to begin the remediation process. Clare County Council intend to begin works as soon as finances permit.

10) Full title and written summary of any procedures developed by the licensee during the previous year.

No procedures were developed during the past year.

11) Drum, Tank and Bund Testing.

An integrity test was carried out on the bund in May 2012.

12) Reported Incidents and Complaints Summaries.

There were no complaints received during the year and no incidents recorded at the facility.

13) Review of nuisance controls

No review of nuisance controls was carried out during 2013; no nuisances were noted at the facility during 2013, therefore a review was not considered to be necessary.

14) Schedule of Environmental Objectives and Targets

Objective 1

Comply with all aspects of the licence.

> Target 1.1 - Every effort will be made to comply with all conditions of the waste licence by the prescribed dates.

The Senior Engineer, Executive Engineer in charge, Deputy Site Manager, Executive Chemist and Environmental Patrol Warden have responsibility for implementing this objective.

Objective 2

Ensure that sufficient funds are available to comply with condition 12 of the licence.

Responsibility for ensuring compliance with this objective lies with the Finance Officer of Clare County Council.

Objective 3

Increase the quantity of waste collected for recycling at the facility.

Target 3.1-Increase the quantities of cardboard and newspaper collected at the Recycling Centre. Suitable containers for each waste type will be provided on site and the public will be informed by means of appropriate awareness campaigns.

Target 3.2-Increase the quantities of glass, aluminium cans, and steel cans collected at the Recycling Centre.

The Senior Engineer, Environmental Services has responsibility for implementing this objective with the assistance of the Executive Engineer in charge and the Environmental Awareness Officer in the Environment Dept.

Objective 4

Improve facilities at the facility.

Target 4.1 - Make facility more user-friendly by providing containers and providing clear instructions as to what these are for. This will allow for proper segregation of recyclable streams. All bulky wastes and hazardous wastes will be stored in one particular area of the facility and this area will be secured thus

allowing for greater supervision when these recyclable streams are being deposited. This will also eliminate traffic hazards. On occasion there is difficulty with turning/reversing manoeuvres at the facility due to large stockpiles of white goods and large recycling receptacles.

Target 4.2 - Provision of additional recyclable streams by year-end.

The Executive Engineer in charge has responsibility for implementing this objective.

Objective 5

Improve correspondence with the E.P.A.

Target 5.1 - Council will make every effort to reply to letters of correspondence received from the Agency by the requested dates.

The Executive Engineer in charge and Senior Staff Officer have responsibility for implementing this objective.

Objective 6

Comply with condition 3.10.1

Target 6.1 - Install by mid-2008 an interceptor as per condition 3.10.1 of the waste license, as part of overall landfill remediation programme.

This will be installed when funds become available.

The Executive Engineer in charge will have responsibility for implementing this objective.

Objective 7

Advance the Restoration and Aftercare Plan.

Target 7.1 - Implement the first phase of the Restoration and Aftercare plan as agreed with the Agency.

The Senior Executive Engineer, Executive Engineer, Finance Officer and Senior Staff Officer have responsibility for implementing this objective.

Time scale

A requisition for funding is with the DOEHLG at present. When this funding becomes available details of the Restoration and Aftercare plan will be submitted.

Designation of Responsibilities

The Senior Engineer, Environmental Services Section of Clare County Council has overall responsibility for the implementation of these objectives. The specific responsibilities for each objective are outlined in the description.

15) Progress of objectives and targets

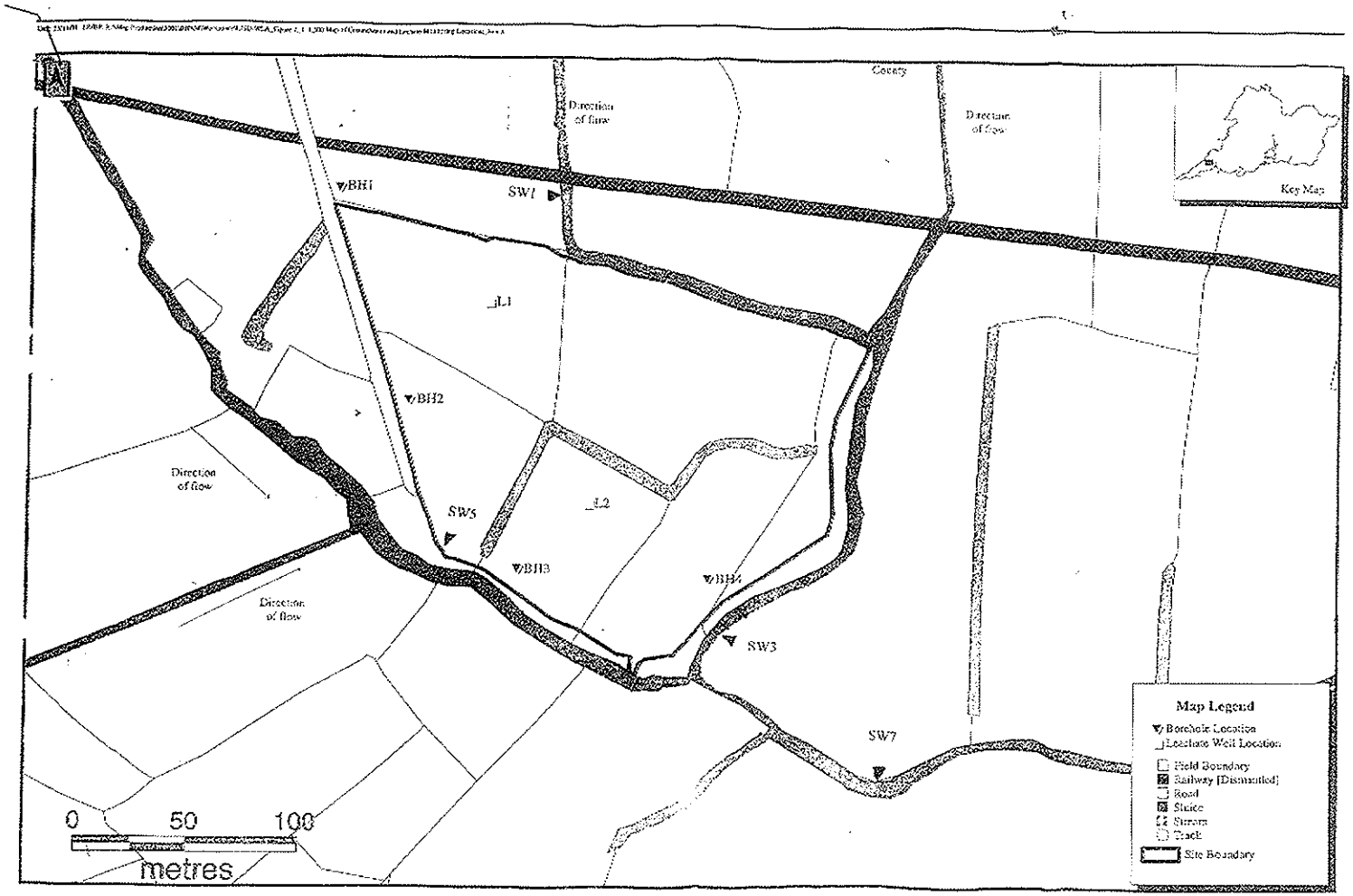
Objective 1	This is ongoing and mainly successful, the licensee will continue to aim for maximum compliance.
Objective 2	Funding has been made available and the licensee will continue to ensure funding is made available.
Objective 3	Recyclable material amounted to 50.3% of all waste accepted at the facility in 2012.
Objective 4	The licensee placed additional signage to improve user friendliness on the site. A new concrete base was installed in the main recycling area which

	improves greatly the safety and layout of the site. The licensee will continue to review the site layout in order to provide the best possible service. We introduced the following new waste streams: rigid plastics and flourescent tubes (WEEE).
Objective 5	Correspondence with EPA as set out by EPA is an ongoing objective, the licensee will continue to progress this objective.
Objective 6	Installation of the oil Interceptor will form part of the remediation project.
Objective 7	This project will proceed when funding becomes available

16) Financial Provision

A sum of €200,000 has been set aside in the 2012 Clare Co. Council Budget for the operation of the facility. Additional monies are being sought through grants from the Department of the Environment and Local Government for the capital works relating to the Restoration and Aftercare of the Site.

Appendix I
Location of Monitoring Points



Fehily Timoney & Company

1: 1,500 Map of Groundwater and Leachate Monitoring Locations

Figure 2

Appendix II
Summary of Surface Water Monitoring Results

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LISDEEN SURFACE WATER SAMPLING RESULTS - MARCH 2013

SAMPLE LOCATIONS	pH	Conductivity (uS/cm)	Temperature (°C)	Dissolved Oxygen (mg/l)	Visual	Boron (ug/l)	Cadmium (ug/l)	Calcium (mg/l)	Chromium (ug/l)	Copper (ug/l)
SW1	7.7	339	10.1	7.7	Straw colour, No odour	331	<0.5	57.7	2.1	<7
SW2	7.6	712	6.1	7.5	Straw colour, No odour	38	<0.5	34.3	<1.5	<7
SW3	7.8	20000	8.2	7.9	Clear- slightly turbid, No odour	2080	<0.5	263.1	<1.5	<7
SW5	7.6	1090	7.4	9.6	Slight scum visible in drain. Straw colour, Some floating organics, No odour	121	<0.5	75.5	<1.5	<7
SW5a	7.6	397	7.3	7.1	Stagnant water, pond weed cover, clear-straw colour, No odour	18	<0.5	32.7	<1.5	<7
SW7		6130	8.5	8.3	Straw colour, No odour	554	<0.5	79.3	<1.5	<7
SI 272 of 2009 Standards [1]	6.0 - 9.0	-	1.5 °C < Ambient	>80%	n/a	-	0.45	-	3.4	30**
EPA Water Quality Limits [2]	5.5 - 8.5	1,000	25°C	-	n/a	2,000	5	-	50	50

* - Field Reading at time of Sample Collection

[1] - European Communities Environmental Objectives (Surface waters) Regulations 2009

[2] - Parameters of Water Quality - Interpretation and Standards, Environmental Protection Agency, 2001

3 - Limit for A2 Waters under Parameters of Water Quality - Interpretation and Standards, Environmental Protection Agency, 2001

** - Regulatory Limit is Hardness dependant - no hardness analysis was required in the sampling plan

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Environment

LISDEEN SURFACE WATER SAMPLING RESULTS - MARCH 2013

SAMPLE LOCATIONS	Iron (ug/l)	Lead (ug/l)	Magnesium (mg/l)	Manganese (ug/l)	Nickel (ug/l)	Potassium (mg/l)	Sodium (mg/l)	Zinc (ug/l)	Chloride (mg/l)	NH4-N (mg/l)	BOD (mg/l)	COD (mg/l)	S. Solids (mg/l)
SW1	992	<5	84.8	211	7	27.5	745.6	13	1256.7	<0.03	3	111	<10
SW2	970	<5	17.4	29	2	7.2	89.1	<3	153.4	<0.03	1	484	<10
SW3	<20	<5	466.3	74	<2	221	6364	<3	10796	0.46	1	347	48
SW5	<20	6	27.3	<2	<2	6.8	75	<3	89	2.66	8	14	15
SW5a	156	<5	10.2	3	3	3	30	<3	56.6	<0.03	1	40	<10
SW7	201	<5	212.9	<2	<2	52	1358	<3	2657.3	<0.03	4	99	25
SI 272 of 2009 Standards [1]	–	7.2	–	–	20	–	–	50**	–	0.04 - 0.14	1.3 - 2.6	–	–
EPA Water Quality Limits [2]	2000 [3]	50	–	300 [3]	–	–	–	3000	250 mg/l	0.2	5	40 mg/l	50

* - Field Reading at time of Sample Collection

[1] - European Communities Environmental Objectives (Surface waters) Regulations 2009

[2] - Parameters of Water Quality - Interpretation and Standards, Environmental Protection Agency, 2001

3 - Limit for A2 Waters under Parameters of Water Quality - Interpretation and Standards, Environmental Protection Agency, 2001

** - Regulatory Limit is Hardness dependant - no hardness analysis was required in the sampling plan

Appendix III
Summary of Groundwater Monitoring Results

SNC·LAVALIN
Environment

LISDEEN ANNUAL GROUNDWATER SAMPLING RESULTS - MARCH 2013

Monitoring Well ID	Visual inspection /odour	Water Level (m)	Conductivity (uS/cm)	pH	Temperature (°C)	NH4-N (mg/l)	Boron (ug/l)	Cadmium (ug/l)	Calcium (mg/l)	Chromium (ug/l)	Copper (ug/l)	Iron (ug/l)
BH1	Clear, No odour	Artesian	700	7.8	12	<0.03	67	<0.5	58.4	<1.5	<7	<20
BH3	Very turbid, No Odour	0.1	778	8	9	0.05	81	<0.5	62.4	<1.5	<7	<20
BH4	Clear, No odour	Artesian	1040	7.1	6.3	<0.03	86	<0.5	53.6	<1.5	<7	<20
BH3S	Very turbid/ Grey, No Odour	0.25	730	7.9	10.8	0.24	86	<0.5	61.5	<1.5	<7	<20
BH4S	Slightly turbid/ Brown, No odour	1.03	1050	7.1	6.1	<0.03	86	<0.5	53.7	<1.5	<7	<20
Groundwater Regulation Standards 2010 [1]		N/A	1,875	-	-	0.065 - 0.175 mg/l	750	3.75	-	37.5	1500	-
Surface Water Regulation Standards 2009 [2]		N/A	N/A	4.5 - 9.0	<1.5°C Ambient	0.040 - 0.140 mg/l	-	0.45	-	3.4	30	-
EPA Guideline Values [3]		N/A	1,500	6.5 - 9.5	25°C	0.30 mg/l	1000	5	200	50	2000	200

* - Field Reading at time of Sample Collection

[1] - European Communities Environmental Objectives (Groundwater) Regulations 2010

[2] - European Communities Environmental Objectives (Surface Waters) Regulations 2009

[3] - Towards Setting Guideline Values for the Protection of Groundwater in Ireland - Interim Report, 2003

SNC·LAVALIN
Environment

LISDEEN ANNUAL GROUNDWATER SAMPLING RESULTS - MARCH 2013

Monitoring Well ID	Manganese (ug/l)	Magnesium (mg/l)	Lead (ug/l)	Mercury (ug/l)	Nickel (ug/l)	Potassium (mg/l)	Sodium (mg/l)	Zinc (ug/l)	Fluoride (mg/l)	Sulphate (mg/l)	Chloride (mg/l)	Ortho-P (mg/l)	T. Ox. Nitrogen (mg/l)	Cyanide (mg/l)	T. Alkalinity (mg/l)	T. Org. Carbon (mg/l)	Residue on Evap. (mg/l)
BH1	386	23.4	6	<1	<2	2.7	69.7	<3	<0.3	6.22	12.5	<0.06	<0.2	<0.01	326	<2	410
BH3	518	24	6	<1	<2	3.5	73.4	<3	<0.3	6.77	67.2	<0.06	<0.2	<0.01	348	79	1184
BH4	433	16.9	5	<1	<2	3.1	89	<3	<0.3	4.76	66.2	<0.06	<0.2	<0.01	348	<2	429
BH3S	431	23.7	5	<1	<2	3.5	78.3	<3	<0.3	11.7	66.4	<0.06	<0.2	<0.01	356	78	1325
BH4S	4	16.8	7	<1	<2	3.2	92.5	<3	<0.3	5.03	65.7	<0.06	<0.2	<0.01	340	<2	533
Groundwater Regulation Standards 2010 [1]			18.75	0.75	15	-	150	-	-	187.5	187.5	0.035	-	0.0375	-	-	-
Surface Water Regulation Standards 2009 [2]			7.2	0.07	20	-	-	50	500	-	-	0.035	-	10	-	-	-
EPA Guideline Values [3]	50	50	10	1	20	12	150	5000	1	250	250	0.03	No Change	0.05	200	-	1000 mg/l

* - Field Reading at time of Sample Collection

[1] - European Communities Environmental Objectives (Groundwater) Regulations 2010

[2] - European Communities Environmental Objectives (Surface Waters) Regulations 2009

[3] - Towards Setting Guideline Values for the Protection of Groundwater in Ireland - Interim Report, 2003

Appendix IV
Summary of Leachate Monitoring Results

SNC·LAVALIN Environment

LISDEEN ANNUAL LEACHATE SAMPLING RESULTS - MARCH 2013

Monitoring Well ID	Visual inspection /odour	Water Level (m)	Conductivity (uS/cm)	pH	Temperature (°C)	NH4-N (mg/l)	Boron (ug/l)	Cadmium (ug/l)	Calcium (mg/l)	Chromium (ug/l)	Copper (ug/l)	Iron (ug/l)	Lead (ug/l)
L1	Cloudy	1.887	2660	7	6.5	**0.09**	25	<0.5	80.8	<1.5	<7	<20	<5
L2	Clear, Floating Particals, Oily smell	1.601	536	7.9	7.9	**89.55**	499	<0.5	170.4	<1.5	<7	78	8
Groundwater Regulation Standards 2010 [1]			**1,875**	**-**	**-**	**0.065 - 0.175 mg/l**	**750**	**3.75**	**-**	**37.5**	**1500**	**-**	**18.75**
Surface Water Regulation Standards 2009 [2]			**N/A**	**4.5 - 9.0**	**<1.5°C Ambient**	**0.040 - 0.140 mg/l**	**-**	**0.45**	**-**	**3.4**	**30**	**-**	**7.2**
EPA Guideline Values [3]			**1,500**	**6.5 - 9.5**	**25°C**	**0.30 mg/l**	**1000**	**5**	**200**	**50**	**2000**	**200**	**10**

* - Field Reading at time of Sample Collection

[1] - European Communities Environmental Objectives (Groundwater) Regulations 2010

[2] - European Communities Environmental Objectives (Surface Waters) Regulations 2009

[3] - Towards Setting Guideline Values for the Protection of Groundwater in Ireland - Interim Report, 2003

SNC·LAVALIN Environment

LISDEEN ANNUAL LEACHATE SAMPLING RESULTS - MARCH 2013

Monitoring Well ID	Magnesium (mg/l)	Manganese (ug/l)	Mercury (ug/l)	Nickel (ug/l)	Potassium (mg/l)	Sodium (mg/l)	Zinc (ug/l)	Fluoride (mg/l)	Sulphate (mg/l)	Chloride (mg/l)	Ortho-P (mg/l)	T. Ox. Nitrogen (mg/l)	T. Alkalinity (mg/l)	T. Org. Carbon (mg/l)	BOD (mg/l)	COD (mg/l)
L1	8.9	437	<1	<2	6.4	22.2	<3	<0.3	12.6	26.9	<0.06	<0.2	292	5	<1	18
L2	87.8	2395	<1	2	65.2	152.7	<3	<0.3	20.18	160.8	<0.06	<0.2	1376	12	33	89
Groundwater Regulation Standards 2010 [1]			0.75	15	-	150	-	-	187.5	187.5	0.035	-	-	-	-	-
Surface Water Regulation Standards 2009 [2]			0.07	20	-	-	50	500	-	-	0.035	-	-	-	2.6	-
EPA Guideline Values [3]	50	50	1	20	12	150	5000	1	250	250	0.03	No Change	200	-		50

* - Field Reading at time of Sample Collection

[1] - European Communities Environmental Objectives (Groundwater) Regulations 2010

[2] - European Communities Environmental Objectives (Surface Waters) Regulations 2009

[3] - Towards Setting Guideline Values for the Protection of Groundwater in Ireland - Interim Report, 2003

Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR	2013

1. FACILITY IDENTIFICATION

Parent Company Name	Clare County Council
Facility Name	Lisdeen Recycling Centre & Transfer Station
PRTR Identification Number	W0170
Licence Number	W0170-01

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.
4.13	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	Cemetry Road
Address 2	Lisdeen
Address 3	Kilkee
Address 4	
	Clare
Country	Ireland
Coordinates of Location	-9.61238 52.6695
River Basin District	IEGBNISH
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Patrick Mullane
AER Returns Contact Email Address	pmullane@clarecoco.ie
AER Returns Contact Position	Enforcement Odfficer
AER Returns Contact Telephone Number	065-6846331
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	2
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
50.1	General

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

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	

This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

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: Lisdeen Recycling Centre & Transfer Station

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

4.2 RELEASES TO WATERS

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
No. Annex II	Name	M/C/E	Method Used: 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	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
No. Annex II	Name	M/C/E	Method Used: 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	0.0

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

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

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
Pollutant No.	Name	M/C/E	Method Used: 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	0.0

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

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

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

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

SECTION B : REMAINING 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			
			Method Used					
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	0.0

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

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					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 POLLUTANT EMISSIONS (as required in your Licence)

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0170 | Facility Name : Lisdeen Recycling Centre & Transfer Station | Filename : W0170_2013(1).xls | Return Year : 2013 |

30/05/2014 12:30

0

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	13 02 04	Yes	0.72	mineral-based chlorinated engine, gear and lubricating oils	R9	M	Weighed	Offsite in Ireland	Enva Irelamd,W0184-01	Portloaise ,Laoise,.,.,Ireland	Enva Ireland,W0184091,Portlaoise,Laoise,.,.,Ireland	Portlaoise,Laoise,.,.,Ireland
Within the Country	15 01 01	No	23.9	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Binman,W062-02	Kilmallock,Limerick, ,.,Ireland		
Within the Country	15 01 02	No	8.74	plastic packaging	R3	M	Weighed	Offsite in Ireland	Clean Irl.,002/07/wpt/cl	Cree,Clare,.,.,Ireland		
Within the Country	15 01 05	No	0.8	composite packaging	R3	M	Weighed	Offsite in Ireland	Clean Irl.,002/07/wpt/cl	Cree,Clare,.,.,Ireland		
Within the Country	16 06 01	Yes	0.54	lead batteries	R4	M	Weighed	Offsite in Ireland	Enva Irelamd,W0184-01	Portloaise ,Laoise,.,.,Ireland	Enva Ireland,W0184091,Portlaoise,Laoise,.,.,Ireland	Portlaoise,Laoise,.,.,Ireland
Within the Country	20 01 01	No	23.9	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Clean Irl.,002/07/wpt/cl	Cree,Clare,.,.,Ireland		
Within the Country	20 01 02	No	12.34	glass	R5	M	Weighed	Offsite in Ireland	Binman,W062-02	Kilmallock,Limerick, ,.,Ireland		
To Other Countries	20 01 11	No	2.42	textiles	R3	M	Weighed	Abroad	All-Tex Recyclers,N/A	Ballycregagh Rd.,Ballymena,Antrim,.,Ireland		
Within the Country	20 01 36	No	54.47	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R4	M	Weighed	Offsite in Ireland	Enva Irelamd,W0184-01	Portloaise ,Laoise,.,.,Ireland		
Within the Country	20 01 38	No	34.7	wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Clare Waste & Recycling,WFP/CE/08/002/01	Scarriff ,Clare ,.,.,Ireland		
Within the Country	20 01 40	No	25.02	metals	R4	M	Weighed	Offsite in Ireland	Clearcircle Environmental,WFP-LK-10-001-01	Ballysimon Road,Limerick,.,.,Ireland		
Within the Country	20 03 01	No	474.6	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	CWMF Clare Co. Co. ,W109-01	Inagh ,Co. Clare,.,.,Ireland		

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

Link to previous years waste data
Link to previous years waste summary data & percentage change
Link to Waste Guidance