



Clare County Council

Waste Licence W0170-01

Annual Environmental Report for 2012

**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.

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1) Reporting Period

1/01/12 – 31/12/12

2) Details of Activity

The principal waste activity of the Transfer Station is the compaction of solid waste into 30 m³ 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 2012 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	
Metals for recycling	20 01 40	21.79
Glass for recycling	20 01 02	271.35
Aluminium Cans	15 01 04	.69
Plastic bottles	20 01 39	6.6
Steel cans	15 01 04	9.2
Car Batteries	16 06 01*	0.89
Newspapers	20 01 01	33.34
Waste Engine Oil	13 02 00	1.8
Cardboard	20 01 01	26.28
Tetrapak	15 01 01	.83
Timber	20 01 38	34
Textiles	20 01 11	2.66
WEEE	20 01 36	55.12

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:

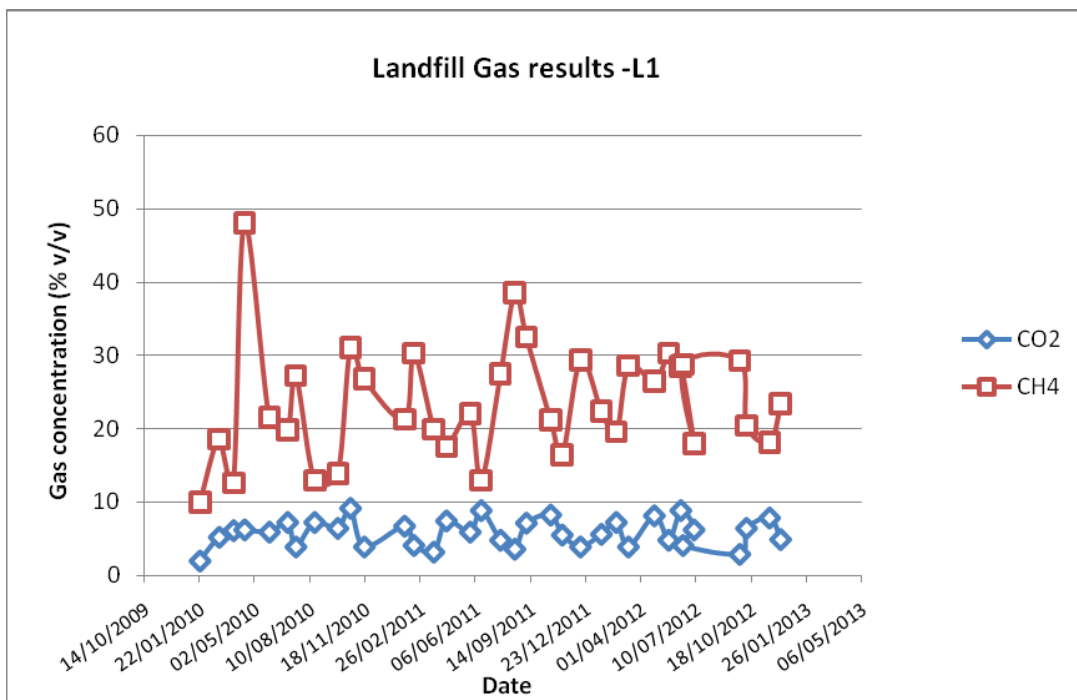
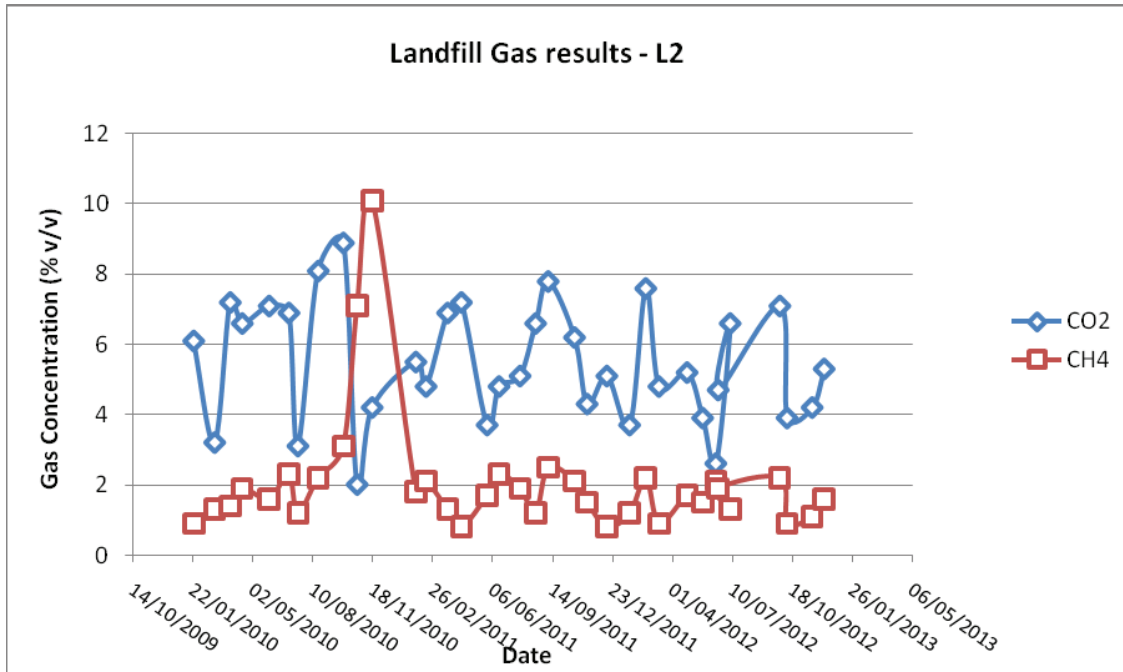


Figure 7.2:



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. This trend is in line with historic monitoring within the site. Methane at L1 during 2012 ranged between 17 to 31%v/v. However methane levels at L2 ranged at the low levels of 0.9 to 2.2%v/v.

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 2012 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 17th October 2012.

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, $\mu\text{S/cm}$ 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 O ₂
BOD, mg/L O ₂	5	5	7	< 5
COD, mg/L O ₂	NS	NS	NS	NS
Total Ammonium, mg NH ₄ /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 sampling was completed at two 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 concentrations of all parameters analysed from SW3 with the exception of elevated BOD and COD concentrations were less than the 2009 surface water regulations and EPA guideline values. Concentrations of BOD and COD were lower at SW7 but were also greater than the 2009 surface water regulations and EPA guideline values.

The concentration of NH₄-N increased between SW3 and SW7 indicating potential organic impacts from sources external to the Lisdeen site.

Suspended solids concentrations were less than the EPA guideline values at SW3 but were significantly greater at SW7. The results indicated that elevated suspended solids

concentrations at SW7 were not a result of elevated suspended solids in surface water runoff from the Lisdeen site but suspended fine sand material from the channel bed and sides further downstream from the site.

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

Annual sampling was completed at one 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 chloride, NH₄-N, BOD,

COD and suspended solids concentrations were less than the 2009 surface water regulations and EPA guideline values. The concentration of NH₄-N at SW2 marginally exceeded the 2009 surface water regulations and the elevated concentration may be due to a combination of impacts from the Lisdeen site and other external sources (e.g., animal waste). BOD and COD concentrations were also elevated at SW2 but may be due to carryover of elevated BOD and COD concentrations found in SW1 (collected from Stream 3) upstream of SW2 (see below).

The sample at SW2 was collected when the tidal waters were beginning to rise which would account for the elevated chloride concentrations and also the suspension of fine sand in the sample which resulted in elevated suspended solids concentrations.

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 NH₄-N, BOD and COD concentrations were less than the 2009 surface water regulations and EPA guideline values.

Analytical results indicated that concentrations of BOD and COD in SW1 (upstream of the site) were the most elevated concentrations of any surface water sample location. The results indicated that the main sources of elevated BOD and COD concentrations in surface water bodies to the north and east of the Lisdeen site are external to the site. It should be noted that although the BOD concentrations in SW1 were greater than the 2009 surface water regulations they were consistent with historic results and significantly less than the proposed trigger level for that sample location.

The concentration of NH₄-N at SW1 marginally exceeded the 2009 surface water regulations with the elevated concentration due to sources external to the Lisdeen site (e.g., animal waste).

It should be noted that although the NH₄-N concentrations in SW1 were marginally greater than the 2009 surface water regulations they were consistent

with historic results and significantly less than the proposed trigger level for that sample 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 concentrations of all parameters analysed from SW5 with the exception of NH₄-N, BOD and COD concentrations were less than the 2009 surface water regulations and applicable EPA guideline values.

Analytical results indicated that concentrations of BOD and COD in SW5 (downgradient of the site) were elevated in the surface water sample collected on the southern boundary of the site.

The results indicated that organic contaminants on the Lisdeen site were the most probable source of increased BOD and COD concentrations at this sample location. It should be noted that although the BOD concentration in SW5 was greater than the 2009 surface water regulations they were less than the proposed trigger level for that sample location.

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 significantly greater than the 2009 surface water regulations they were consistent with historic results and significantly less than the proposed trigger level for that sample 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 groundwater quality 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 17th October 2012. Monitoring locations are shown in Appendix 1.

Table 7.3.1 Groundwater water locations	
Location Reference	Description of location
<i>BH1</i>	Artesian bedrock well located outside the site, adjacent to the northeast boundary.
<i>BH3d</i>	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 ≤ pH ≤ 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 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 guideline values. The only parameters with elevated concentrations in monitoring well BH1 were NH₄-N and manganese. The NH₄-N concentrations BH1 indicated that background concentrations of NH₄-N were similar to those in on-site wells and that some external factors apart from the historic landfill (e.g., animal waste, sewage from septic tanks and chemical fertilisers) may be sources of elevated NH₄-N concentrations.

Although the concentrations of NH₄-N in the background well were greater than the 2010 groundwater standards they were less than the proposed trigger levels for monitoring well BH1. The elevated concentrations of manganese in BH1 indicate that there may be a natural source of manganese in the area. The background well is located upgradient of the site and would not be considered to be influenced by historic activities at the Lisdeen site. The EPA 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 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 guideline values in monitoring wells BH3 and BH3S. The only parameters with elevated concentrations in both monitoring wells were NH₄-N, iron, total alkalinity and manganese.

The analysis results for both monitoring wells indicated that concentrations of NH₄-N in the southwest of the site were slightly higher than the concentrations in the background well (BH1) indicating potential limited NH₄-N migration from the landfill to the deep and shallow aquifer to the southwest. Although the concentrations of NH₄-N in both wells located in the southwest of the site were greater than the 2010 groundwater standards they were less than the proposed trigger levels for monitoring wells BH3 and BH3S.

The elevated concentrations of iron and manganese in BH3 and BH3s indicated that there are natural source of iron and manganese in the area. However, based on the elevated concentrations of both parameters when compared to background concentrations it is considered that the historic landfill is an additional source of manganese and iron impacts. The EPA guideline value for iron and manganese are 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 that the concentrations of the majority of contaminants of concern in groundwater were below the applicable groundwater standards and/or the EPA guideline values in both monitoring wells with the exception of NH₄-N, iron, total alkalinity and manganese.

The analytical results indicated that the concentration of NH₄-N in the deeper aquifer (BH4) contained similar concentrations of NH₄-N to the groundwater sample collected from the background well (BH1), indicating minimal impact on

the groundwater quality from on-site historic activities. The concentration of NH₄-N in the shallow aquifer (BH4S) was only marginally greater than the 2010 groundwater standard and significantly less than the NH₄-N concentration in all other monitoring wells sampled (including background well BH1). Although the concentrations of NH₄-N in both wells located in the southwest of the site were greater than the 2010 groundwater standards they were less than the proposed trigger levels for monitoring wells BH4 and BH4S.

The elevated concentrations of iron and manganese in BH4 and BH4S indicated that although there are natural source of iron and manganese in the area it is considered that the historic landfill is an additional source of manganese and iron impacts. It should be noted that the EPA guideline value for iron and manganese are 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 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 17th October 2012.

Background Wells

Monitoring well BH1 is located in the southwest corner of an agricultural field located immediately to the north of the entrance gate of the Lisdeen site. The monitoring well was located up gradient from the Lisdeen site and had artesian flow when the well cap was removed. The analysis results for the submitted groundwater sample from BH1 indicated the following:

- The NH₄-N concentration in the groundwater sample collected from monitoring well BH1 (i.e., 0.3 mg/l) exceeded the 2010 groundwater standard of 0.175 mg/l and was equal to the EPA guideline value of 0.3 mg/l.
- Monitoring well BH1 contained concentrations of manganese (458 µg/l) and total alkalinity (256 mg/l) that exceeded the applicable EPA guideline values of 50 µg/l and 200 mg/l respectively. The concentrations of all other anions in the groundwater sample submitted from BH1 contained concentrations less than the 2010 groundwater standards or the applicable EPA guideline values;
- The concentrations of dissolved metals in the submitted groundwater sample from BH1 were less than the 2010 groundwater standards and/or the applicable EPA guideline values;

The well is located on agricultural land where a number of horses were observed in close proximity. The elevated NH₄-N concentration may be due to the infiltration of other potential sources (i.e., other than landfill leachate) including; animal waste, fertilisers or sewage. It should be noted that although the NH₄-N concentration exceeded the 2010 groundwater standard it was less than the proposed concentration trigger level for BH1 (i.e., 0.5 mg/l) indicating that the result was consistent with historic concentrations for that monitoring well.

The elevated concentrations of manganese in BH1 indicate that there may be a natural source of manganese in the area. The background well is located upgradient of the site and would not be considered to be influenced by historic activities at the Lisdeen site. It has been established that historic manganese concentrations reported for the site reported as parts per billion (ppb) should have been reported as parts per million (ppm). Based on this change the manganese concentrations for 2012 are consistent with historic concentrations observed on site during previous annual sampling events. The EPA 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, the monitoring well is not used for potable water extraction and the application of the standard may be overly conservative.

Southwest Area Wells

Monitoring wells BH3 and BH3S are located at the southwest of the site, and from the old landfill body, the analysis results for samples submitted from the monitoring wells indicated the following:

- Concentrations of NH₄-N in BH3 (0.43 mg/l) and BH3S (0.41 mg/l) were greater than the 2010 groundwater standard of 0.175 mg/l;
- Concentrations of manganese in BH3 (998 µg/l) and BH3S (1,023 µg/l) were greater than the applicable EPA guideline value of 50 µg.
- Concentrations of iron in BH3 (4,061 µg/l) and BH3S (19,160 µg/l) were greater than the applicable EPA guideline value of 200 µg/l;
- Total alkalinity concentrations in both BH3 and BH3S (i.e., 298 mg/l and 288 mg/l respectively) marginally exceeded the applicable EPA guideline value of 200 mg/l;
- All other parameters analysed in submitted groundwater samples contained concentrations less than the 2010 groundwater standards and/or the applicable EPA guideline values.

The wells indicated NH₄-N concentrations marginally greater than background concentrations indicating that the groundwater quality at both wells may be influenced by on-site and off-site sources of ammonia. It should be noted that although the NH₄-N concentration exceeded the 2010 groundwater standard in both BH3 and BH3S it was significantly less than the proposed concentration trigger level for both wells (i.e., 1.7 mg/l and 1.0 mg/l respectively).

The elevated concentrations of iron and manganese in BH3 and BH3s indicated that there are natural source of iron and manganese in the area. However, based on the elevated concentrations of both parameters when compared to background concentrations it is considered that the historic landfill may also be an additional source of manganese and iron impacts. The EPA guideline value for iron and manganese are 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 old landfill body. The analysis results for samples submitted from the monitoring wells indicated the following:

- Concentrations of NH₄-N in BH4 (0.35 mg/l) and BH4S (0.19 mg/l) were greater than the 2010 groundwater standard of 0.175 mg/l;
- Concentrations of manganese in BH4 (416 µg/l) and BH4S (1,285 µg/l) were greater than the applicable EPA guideline values of 50 µg;
- Concentrations of iron in BH4 (531 µg/l) and BH4S (2,898 µg/l) were greater than the applicable EPA guideline values of 200 µg;
- Total alkalinity concentrations in both BH4 and BH4S (i.e., 242 mg/l and 240 mg/l respectively) marginally exceeded the applicable EPA guideline value of 200 mg/l;
- All other parameters analysed in submitted groundwater samples from BH4 and BH4S contained concentrations less than the 2010 groundwater standards and/or the applicable EPA guideline values.

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Monitoring wells BH4 and BH4S are located at the southeast of the site, and down gradient from the old landfill body. The results of the annual sampling event indicated that that the concentrations of the majority of contaminants of concern for groundwater were below the applicable groundwater standards and/or the EPA

guideline values in both monitoring wells with the exception of NH₄-N, iron, total alkalinity and manganese.

The analytical results indicated that the concentration of NH₄-N in the deeper aquifer (BH4) contained similar concentrations of NH₄-N to the groundwater sample collected from the background well (BH1), indicating minimal impact on the groundwater quality from on-site historic activities. The concentration of NH₄-N in the shallow aquifer (BH4S) was only marginally greater than the 2010 groundwater standard and significantly less than the NH₄-N concentration in all other monitoring wells sampled (including background well BH1). Although the concentrations of NH₄-N in both wells located in the southwest of the site were greater than the 2010 groundwater standards they were less than the proposed trigger levels for monitoring wells BH4 and BH4S.

The elevated concentrations of iron and manganese in BH4 and BH4S indicated that although there are natural source of iron and manganese in the area it is considered that the historic landfill is an additional source of manganese and iron impacts. It should be noted that the EPA guideline value for iron and manganese are 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, neither 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.

The Leachate results are presented in Appendix IV Table IV.

8) Resource Consumption Summary

Diesel

700 litres of diesel was used to power the 3-phase generator on site.

Electricity

It is estimated that approximately 3,000 units of electricity were used in 2012.

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 2011/12

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

Additional lighting and CCTV cameras were installed during 2012 to improve security on site.

Additional traffic control measures were also implemented to aid traffic flow through the facility.

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 2012; no nuisances were noted at the facility during 2012, 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 fluorescent 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

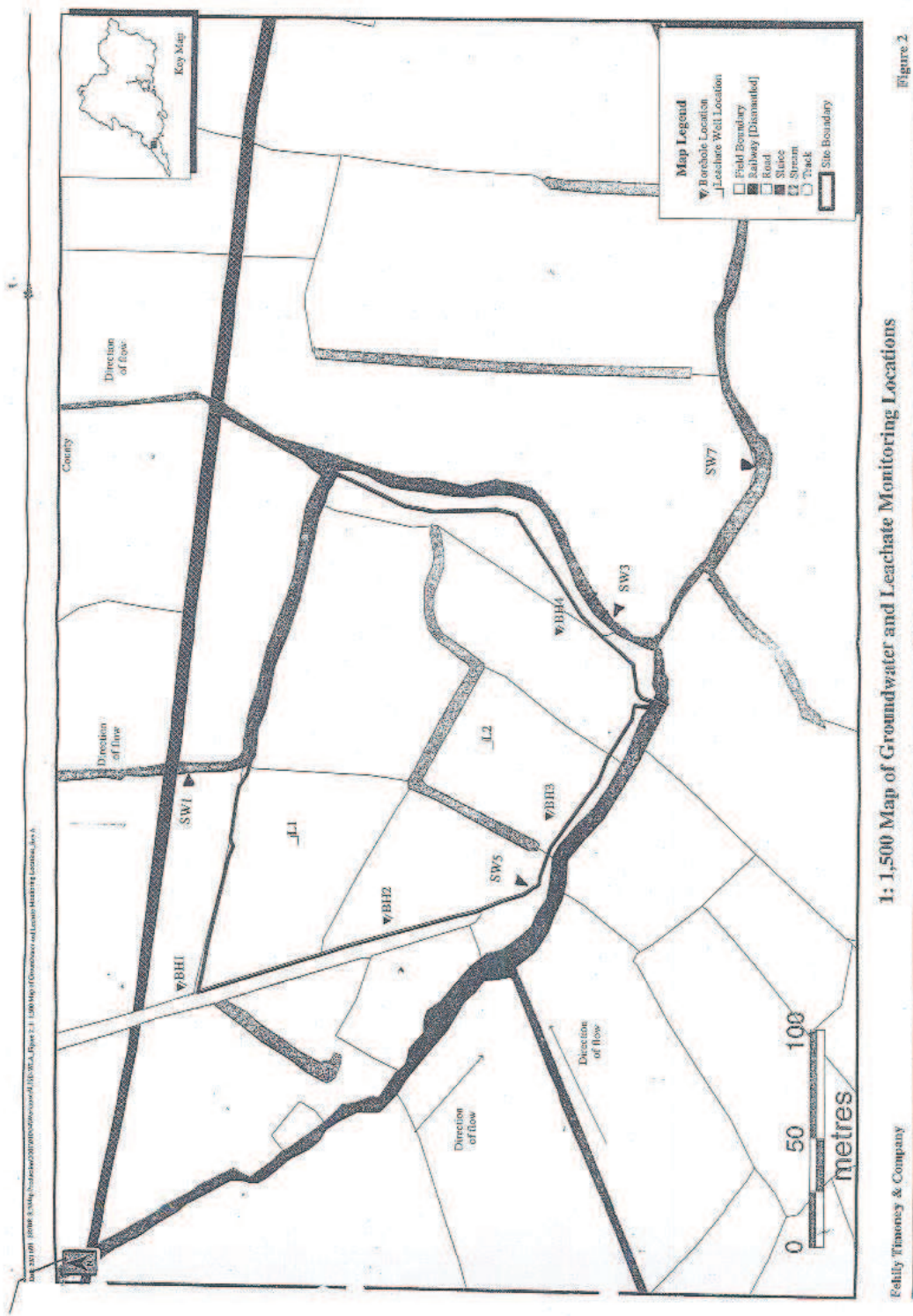


Figure 2

Appendix II
Summary of Surface Water Monitoring Results

Table II: Surface water results at Lisdeen facility (17th October 2012)

Sample Type:	Surface Waters					
Location:	Lisdeen Transfer Station					
Date:	17 th October 2012					
Sampled By:	SNC Lavelin					
Variables	SW1	SW2	SW3	SW5	SW5a	SW7
Biochemical Oxygen Demand (ppm)	15	13	14	15	3	8
Boron (ppm)	40	538	59	85	15	193
Calcium (ppm)	30.3	66.8	32.3	72.9	28.1	35.5
Cadmium (ppb)	.5	.5	.5	.5	.5	.5
Chloride (ppm)	65.6	2095.5	171.3	73.6	48.8	590.1
Chemical Oxygen Demand (ppm)	140	99	98	131	22	81
Electrical Conductivity (uS/cm)						
Chromium (ppb)	2.6	<1.5	<1.5	<1.5	<1.5	<1.5
Copper (ppb)	<7	<7	<7	<7	<7	<7
Temperature (Celcius)						
Iron (ppb)	1853	287	531	<20	569	335
Potassium (ppm)	3.6	46.3	8.5	5.8	6.9	17.3
Magnesium (ppm)	7.5	115.6	14.0	21.5	6.6	38.4
Manganese (ppb)	211	8	8	6	4	<2
Sodium (ppm)	41	962.7	95.3	68.4	24.6	292.7
Ammoniacal Nitrogen (ppm)	.16	.37	.06	1.7	.09	.23
Nickel (ug/l)	12	<2	3	<2	4	2
Lead (ppb)	<5	<5	<5	<5	<5	<5
pH						
Total Suspended Solids (ppm)	11	169	50	39	26	1173
Zinc (ppb)	20	<3	<3	<3	<3	<3

Appendix III
Summary of Groundwater Monitoring Results

Table III: Groundwater water results at Lisdeen facility (17th October 2012)

Sample Type:	Groundwater					
Location:	Lisdeen Transfer Station					
Date:	17 th October 2012					
Sampled By:	SNC Lavelin					
Parameter	BH1	BH3	BH3s	BH4	BH4s	Limits(1)
Alkalinity (ppm)	256	298	242	288	240	No abnormal change
Boron (ppb)	57	65	74	61	72	1000
Calcium (ppm)	60	69.1	52.1	68.6	54.2	200
Cadmium (ppm)	.5	1.2	.5	2	.5	5
Chloride (ppm)	75.1	75.6	74.8	75.6	75.3	250
Cyanide (ppm)	<.01	<.01	<.01	<.01	<.01	0.05
Electrical Conductivity (uS/cm)	858	869	975	824	887	1500
Chromium (ppb)	<1.5	4.2	<1.5	12.1	1.9	50
Copper (ppb)	<7	10	<7	7	<7	2000
Iron (ppm)	78	4061	531	19160	2898	200
Fluoride (ppm)	<.3	<.3	<.3	<.3	<.3	1
Mercury (ppb)	<.1	<.1	<.1	<.1	<.1	1
Potassium (ppm)	2.7	3.6	3	3.4	3	12
Magnesium (ppm)	20.2	21.1	13.1	20.3	13	50
Manganese (ppb)	458	998	416	1023	1285	50
Sodium (ppm)	69.1	72.5	94	70.2	93.4	150
Total dissolved solids (mg/l)						Not specified
Temperature (Celsius)	11.7	12.5	11.9	11.8	11.9	25
Ammoniacal Nitrogen (ppm)	.3	.43	.35	.41	.19	0.30mg/l
Nickel (ppm)	<2	4	<2	2	<2	20
Orthophosphate P ppm	<0.06	<0.06	<0.06	<0.06	<0.06	0.03 (Orthophosphate)
Lead (ppm)	<5	11	<5	9	<5	10

pH	7.3	7.7	7.6	7.6	7.9	6.5-9.5
Sulphate (ppm)	7.25	5.3	4.97	5.63	5.17	250
Total Organic Carbon (ppm)	26	22	20	19	21	No abnormal change
Total Oxidised Nitrogen (ppm)	<0.2	<0.2	<0.2	<0.2	<0.2	No abnormal change
Total phosphorus (ppm)						
Zinc (ppb)	4	33	3	27	7	5000

Limits quoted are Interim Guidance Values from EPA document "Towards setting guidance values for protection of Groundwater in Ireland"

Appendix IV
Summary of Leachate Monitoring Results

Table IV: Leachate results at Lisdeen facility (17th October 2012)

Sample Type:	Groundwater	
Location:	Lisdeen Transfer Station	
Date:	17 th October 2012	
Sampled By:	SNC Lavelin	
Parameter	L1	L2
Alkalinity (ppm)	242	864
Biochemical Oxygen Demand (ppm)	10	7
Boron (ppb)	19	518
Calcium (ppm)	78.7	277
Cadmium (ppb)	<0.5	<0.5
Chloride (ppm)	17.1	151.6
Cyanide (ppm)		
Chemical Oxygen Demand (ppm)	198	103
Electrical Conductivity (uS/cm)	568	1100
Chromium (ppb)	<1.5	<1.5
Copper (ppb)	<7	<7
Iron (ppb)	1072	81
Fluoride (ppm)	<0.3	<0.3
Mercury (ppb)	<1	<1
Potassium (ppm)	7.4	72.7
Magnesium (ppm)	7.4	79.2
Manganese (ppb)	557	3057
Sodium (ppm)	12.9	163.3
Ammoniacal Nitrogen (ppm)	1.39	105.63
Orthophosphate P	<0.06	<0.06
Lead (ppb)	<5	<5
pH	7	7
Sulphate (ppm)	7.78	7.64
Total Organic Carbon (ppm)	26	49
Total Oxidised Nitrogen (ppm)	<0.2	.3
Total phosphorus (ppm)		
Temperature C	12.1	12.3



Environmental Protection Agency

[PRTR# : W0170 | Facility Name : Lisdeen Recycling Centre & Transfer Station |
 Filename : PRTR_W0170_2012(1).xls | Return Year : 2012 |

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.16

REFERENCE YEAR	2012
-----------------------	------

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	Cemetery Road
Address 2	Lisdeen
Address 3	Kilkee
Address 4	Co Clare
	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 Officer
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	1
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) ?	
--	--

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

[PRTR# : W0170 | Facility Name : Lisdeem Recycling Centre & Transfer Station | Filename : PRTR_W0170_2012(1).xls | Return Year : 2012]

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		RELEASERS TO AIR		METHOD		QUANTITY	
No. Annex II	Name	M/C/E	Description or Description	Method Used	Emission Point 1	T (Total) KG/Year	F (Fugitive) KG/Year
						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 AIR		METHOD		QUANTITY	
No. Annex II	Name	M/C/E	Description or Description	Method Used	Emission Point 1	T (Total) KG/Year	F (Fugitive) KG/Year
						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 AIR		METHOD		QUANTITY	
Pollutant No.	Name	M/C/E	Description or Description	Method Used	Emission Point 1	T (Total) KG/Year	F (Fugitive) KG/Year
						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:	T (Total) kg/Year	Method Used		Facility Total Capacity m3 per hour
		M/C/E	Description or Description	
Lisdeem Recycling Centre & Transfer Station	0.0			N/A
Total estimated methane generation (as per site model)	0.0			0.0 (Total Flaring Capacity)
Methane flared	0.0			0.0 (Total Utilising Capacity)
Methane utilised in engine/s	0.0			
Net methane emission (as reported in Section A. above)	0.0			N/A

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS
 Please enter all quantities in this section in KGs
 Data on emission monitoring of stormrunoff water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AEN / PRTR Reporting in this section

POLLUTANT		Method Used		Emission Point 1		QUANTITY	
No. Annex II	Name	M/C/E	Method Code	Description or Designation	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
 Please enter all quantities in this section in KGs

POLLUTANT		Method Used		Emission Point 1		QUANTITY	
No. Annex II	Name	M/C/E	Method Code	Description or Designation	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
78	Cadmium and compounds (as Cd)	C	PER		0.0	0.001744	0.0
79	Chlorides (as Cl)	C	PER		0.0	294.212	294.212
19	Chromium and compounds (as Cr)	C	PER		0.0	0.00523	0.00523
20	Copper and compounds (as Cu)	C	PER		0.0	0.0274	0.0274
33	Fluorides (as total F)	C	PER		0.0	1.046	1.046
21	Mercury and compounds (as Hg)	C	PER		0.0	0.003488	0.003488
23	Lead and compounds (as Pb)	C	PER		0.0	0.01744	0.01744
24	Zinc and compounds (as Zn)	C	PER		0.0	0.09417	0.09417

* 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)
 Please enter all quantities in this section in KGs

POLLUTANT		Method Used		Emission Point 1		QUANTITY	
Pollutant No	Name	M/C/E	Method Code	Description or Designation	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
351	Total Organic Carbon (as C)	C	PER		0.0	0.1308	0.1308
305	Calcium	C	PER		0.0	0.0	620.34
336	Potassium	C	PER		0.0	135.5	135.5
320	Magnesium	C	PER		0.0	151.03	151.03
321	Manganese (as Mn)	C	PER		0.0	6.27	6.27
341	Sodium	C	PER		0.0	306.7	306.7
338	Ammonia (as N)	C	PER		0.0	186.6	186.6
387	Ortho-phosphate (as P)	C	PER		0.0	0.209	0.209
343	Sulphate	C	PER		0.0	26.8	26.8

* 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](#)

PRTR# : WV170 | Facility Name : Laseen Recycling Centre & Transfer Station | Filename : PRTR_17/07/2013 11:42

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER							
No. Annex II	Name	M/C/E	METHOD		QUANTITY		
			Method Code	Method Used Designation or Description	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0
				Emission Point 1	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							
Pollutant No.	Name	M/C/E	METHOD		QUANTITY		
			Method Code	Method Used Designation or Description	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0
				Emission Point 1	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](#)

| PRTR# : W0170 | Facility Name : Lisdeeen Recycling Centre & Transfer Station | Filename : PRTR_W0170_2012(1).xls | Return Year : 2012 |

SECTION A : PRTR POLLUTANTS

POLLUTANT		METHOD		QUANTITY	
No. Annex II	Name	M/C/E	Method Used Designation or Description	T (Total) KG/Year	A (Accidental) KG/Year
				0.0	0.0

Please enter all quantities in this section in KGs

* 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		QUANTITY	
Pollutant No.	Name	M/C/E	Method Used Designation or Description	T (Total) KG/Year	A (Accidental) KG/Year
				0.0	0.0

Please enter all quantities in this section in KGs

* 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 : Lisdreen Recycling Centre & Transfer Station | Filename : PRTR_W0170_2012(1).xls | Return Year : 2012 |

Please enter all quantities on this sheet in Tonnes

17/07/2013 11:43

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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	M					
Within the Country	20 03 01	No	650.0	mixed municipal waste	D1	M	Weighted	Offsite in Ireland	CWMF Clare Co. Co. W108-01 Clearcricle Environmental, WFP-LK-10-001-01	Inagh, Co. Clare, Ireland		
Within the Country	20 01 40	No	21.79	metals	R4	M	Weighted	Offsite in Ireland	Binman, W062-02 Clean Int. 002/07/wpt/cl	Ballysimon Road, Limerick, Ireland		
Within the Country	20 01 02	No	271.0	glass	R5	M	Weighted	Offsite in Ireland	Binman, W062-02 Clean Int. 002/07/wpt/cl	Kilmallock, Limerick, Ireland		
Within the Country	20 01 39	No	6.6	plastics	R3	M	Weighted	Offsite in Ireland	Clare Waste & Recycling, WFP/CE/08/002/0	Cree, Clare, Ireland		
Within the Country	15 01 04	No	9.2	metallic packaging	R5	M	Weighted	Offsite in Ireland	1	Scarriff, Clare, Ireland		
Within the Country	16 06 01	Yes	0.89	lead batteries	R4	M	Weighted	Offsite in Ireland	Enva Ireland, W0184-01 Clean Int. 002/07/wpt/cl	Portlaoise, Laoise, Ireland	Enva Ireland, W0184091, Portlaoise, Laoise, Ireland	Portlaoise, Laoise, Ireland
Within the Country	20 01 01	No	33.34	paper and cardboard	R3	M	Weighted	Offsite in Ireland	Enva Ireland, W0184-01 Clean Int. 002/07/wpt/cl	Cree, Clare, Ireland		
Within the Country	13 02 04	Yes	1.8	mineral-based chlorinated engine, gear and lubricating oils	R9	M	Weighted	Offsite in Ireland	Enva Ireland, W0184-01	Portlaoise, Laoise, Ireland	Enva Ireland, W0184091, Portlaoise, Laoise, Ireland	Portlaoise, Laoise, Ireland
Within the Country	20 01 01	No	26.28	paper and cardboard	R3	M	Weighted	Offsite in Ireland	Binman, W062-02 Clean Int. 002/07/wpt/cl	Kilmallock, Limerick, Ireland		
Within the Country	15 01 05	No	0.83	composite packaging	R3	M	Weighted	Offsite in Ireland	Clare Waste & Recycling, WFP/CE/08/002/0	Cree, Clare, Ireland		
Within the Country	20 01 38	No	34.0	wood other than that mentioned in 20 01 37	R3	M	Weighted	Offsite in Ireland	1	Scarriff, Clare, Ireland		
Within the Country	20 01 11	No	2.66	textiles discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R3	M	Weighted	Offsite in Ireland	All-Text Recyclers N/A	Ballycragh Rd., Ballymena, Antrim, Ireland		
Within the Country	20 01 36	No	55.12	wood other than that mentioned in 20 01 37	R4	M	Weighted	Offsite in Ireland	Enva Ireland, W0184-01	Portlaoise, Laoise, Ireland		

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