

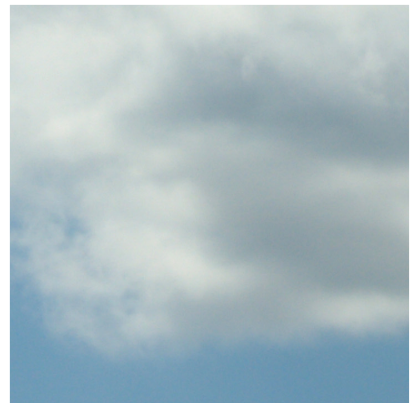
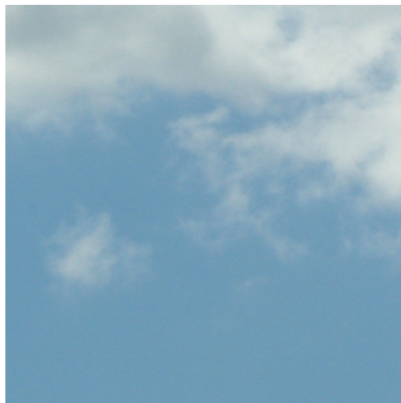
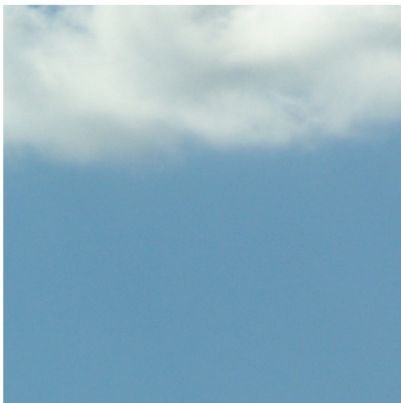
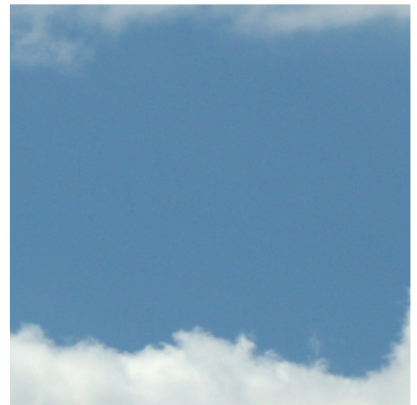
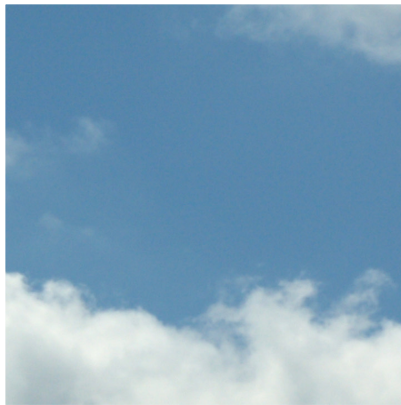
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Donegal County Council

Annual Environmental Report 2016

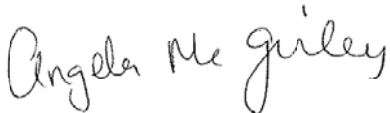

Glenalla Landfill Site

IBR0859 / March 2017



Document Control Sheet

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1 Introduction

This Annual Environmental Report (AER) has been prepared to meet the requirements of Schedule E and F of Waste Licence W0125-1 for Glenalla Landfill. This report provides an environmental review of the site from January to December 2016.

On the 4th of December 2001 the Environmental Protection Agency granted the Council a Waste Licence (registration number W0125-1) for the orderly closure, capping and restoration of the landfill facility, in accordance with the Third Schedule of the Waste Management Act, 1996. Donegal County Council ceased operational activity at Glenalla Landfill Site after the Christmas period in December 2001. Subsequently, Donegal County Council was only permitted to accept inert waste for disposal for the purposes of restoration and aftercare of the site. The quantity of inert waste to be accepted is limited to 46,000 tonnes. The site was formally restored in 2005/6. The Council continues to manage the facility to ensure that activities have not caused environmental pollution and carries out regular environmental monitoring. All monitoring data is submitted to the EPA.

Glenalla Landfill is an unlined, capped facility, historically operated on the dilute and disperse principle, whereby leachate generated by rainfall infiltration and the decomposition of the landfilled waste is allowed to disperse into the surrounding environment. The landfill site is situated in a low-lying hollow that has been infilled by peat deposits constituting an area of blanket bog. These deposits can represent an effective hydraulic barrier to the downward percolation of leachate. The disposal of waste was undertaken by the landraise method, whereby tipping took place directly onto the stripped ground surface raising its level to form an elevated landform flanked by low graded banks. As mentioned above the site was formally restored in 2005/6.

The landfill is situated in a fully rural setting, some 4km east of Milford in an area of moderate relief that forms part of the upper catchment of the Glenalla River. This watercourse dissects the southwest boundary of the landfill site. The ground surface of the closed hollow in which the landfill is based generally falls in a south to south westerly direction under a shallow gradient towards the Glenalla River. The downstream extent of the landfill is therefore represented by a small area situated on the southern site boundary. The area to the north and northeast of the site represents the principal upstream area.

A summary of Facility Information is provided in Table 1.1 below.

Table 1.1 Facility Information Summary

AER Reporting Year	2016
Licence Register Number	W00125-01
Name of site	Glenalla Landfill Site
Site Location	Glenalla, Milford, County Donegal
NACE Code	3821
Class/Classes of Activity	Landfill

2 Waste Activities Carried Out at the Facility

2.1 Type of Waste

The licensed disposal activities, in accordance with the Third Schedule of the Waste Management Act, 1996 are restricted to those listed as follows:

- **Class 1 Deposit on, in or under land (including landfill):** This activity is limited to the deposition of inert waste;
- **Class 4 Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons:** This activity is limited to leachate collection and treatment; and
- **Class 13 Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced:** This activity is limited to leachate collection and storage prior to treatment.

3 Quantities and Composition of Waste

3.1 Quantities of Waste for Restoration

In accordance with Condition 1 of the waste licence only inert waste may be deposited at the facility. A maximum of 46,000 tonnes shall be accepted for the purposes of restoration and aftercare. The quantity of waste received during the reporting period and each previous year at the facility are presented in Table 3.1.

Glenalla landfill site was closed in 2001 and no material was imported or exported until restoration works commenced during 2005. The material imported during 2005 was inert and specifically for the purpose of restoring the site.

Table 3.1 Waste Quantities Accepted (Tonnes)

Waste Types	1998	1999	2000	2001	2002	2003	2004	2005
Total (tonnes)	550	1,565	5,722	10,093	0	0	0	34,474*

* = inert material imported for restoration.

4 Summary Report of Emissions

4.1 Environmental Monitoring Requirements

There is no continuous air, groundwater, surface water or wastewater (sewer) monitoring at Glenalla landfill site. Periodic / non-continuous monitoring of groundwater, surface water, leachate and landfill gas is carried out at the site as per the schedule, and as agreed with the EPA, as set out in Tables A1, A2, A3 and A4 of Appendix B. It should be noted that monitoring is reduced in frequency from quarterly to bi-annual and annual parameters are in abeyance as agreed with the Agency.

Details of the monitoring locations are shown on Drawing IBR0859/010.

4.2 Monitoring Results

Laboratory results certificates for groundwater, surface water, leachate and gas monitoring for the period are contained in Appendix C. Trend graphs for key parameters are also provided.

It should be noted that due to disruption of service suffered by the Council at its County Laboratory on 18th November (as advised to the Agency at the time and updates provided when possible), all samples for surface water, groundwater and leachate that were taken on 15th November have been unavailable to analyse for ammonia (as N), Chloride, BOD and TON. These samples were frozen on the day they were delivered to the laboratory and remain within the non-operational and inaccessible laboratory. When the service resumes in 2017 a decision will be made as to whether or not the samples are still of value. Therefore limited results are available for November.

4.3 Groundwater

The groundwater results contained in this report were assessed against the following:

- EPA Interim Guideline Values¹ (IGV);
- SI No 278 of 2007 EC (Drinking Water) Regulations (DWR); and

¹EPA (2003) Towards setting guideline values for the protection of groundwater in Ireland. Interim Report

- SI No 9 of 2010 European Communities Environmental Objectives (Groundwater) Regulations 2010 as amended (GTV).

GW1 is located up gradient of the landfill and GW2 and GW3 are immediately down gradient. GW2 was re-drilled during 2006. The direction of groundwater flow is presented in Figure 4 in Appendix A. Parameters to be monitored and frequencies as required by the Waste Licence are listed in Appendix B. Since restoration the Agency has agreed to reduce monitoring frequency to bi-annual and the requirement to test for annual frequency parameters has been dropped. Laboratory certificates and results presented in graphical format are contained in Appendix C.

4.3.1 Up Gradient

The GTV guideline value for ammonia is 0.175 mg/l. No elevated concentrations of ammonia (as N) were recorded up gradient of the site in GW1 during the monitoring period (April). Trends for ammonia in groundwater are provided in graph format in Appendix C.

No elevated concentrations in exceedance of the appropriate GTV or IGV values up gradient of the site have been recorded for the remaining parameters measured throughout the monitoring period.

4.3.2 Down Gradient

A number of parameters monitored bi-annually in the down gradient boreholes exceed the GTV and / or IGV guideline values. These are highlighted in Table 4.1 below and in graph format in Appendix C.

Elevated concentrations of ammonia (as N) were recorded down gradient of the site in boreholes GW2 and GW3. These concentrations were elevated relative to the screening value in April. These results are consistent with previous results for these wells and generally show an increasing long-term trend. It should also be noted that these groundwater wells are located in close proximity to the unlined waste body.

Table 4.1 Groundwater Concentrations 2016

Station	Sample Date	Ammonia (as N)	Chloride	Conductivity @ 20°C	Dissolved Oxygen	pH	Temp	Iron	Potassium	Sodium	Depth	Total Organic Carbon	Phenols	Total Oxidised Nitrogen
		mg/l	mg/l	µS/cm	mg/l	pH units	DegC	µg/l	mg/l	mg/l	m	mg/l	µg/l	mg/l
GW 1	19-Apr	< 0.05	41.69	286	2.5	6.9	8.5	> 20	2.8	16	1	1.5	< 100	0.186
GW 2	19-Apr	5.38	33.75	633	1	7.3	10	< 20	6	62.2	0.1	3.23	100	0.016
GW 3	19-Apr	1.9	21.84	503	3	6.8	9.1	1200	2.7	19	0.3	13.29	< 100	0.493
GW 1	15-Nov	NA	NA	317 *	2.6 20%	6.7 *	9.9	< 20 *** Dissolved	4.8 ***	15.9 ***	0.53 from ground level	NA	< 100 ***	NA
GW 2	15-Nov	NA	NA	537 *	2.1 20%	6.9 *	10.1	21 *** Dissolved	4.2 ***	20.9 ***	0.47 from ground level	NA	230 ***	NA
GW 3	15-Nov	NA	NA	388 *	4.1 38%	6.7 *	10.2	2700 *** Dissolved	2.7 ***	12.9 ***	0.5 from ground level	NA	< 100 ***	NA

* Accredited ** Sub-Contract *** Accredited & Sub-Contract
NA Result not available

The IGV guideline value for potassium is 5 mg/l. A slightly elevated concentration of potassium was recorded down gradient of the site in borehole GW2 in April with a concentration of 6 mg/l.

Significantly elevated concentrations of iron were recorded down gradient of the site in GW2 (2,700 µg/l) and GW3 (1,200 µg/l) were recorded in the monitoring period. It should be noted that iron occurs naturally in Donegal groundwater as it is associated with naturally occurring conditions such as iron rich bedrock or the presence of reducing conditions, that is, anaerobic environment such as peat.

An elevated concentration of Phenol above the IGV of 0.5 ug/l was detected in GW2 in April (100 ug/l) and November (230 ug/l).

No elevated concentrations in exceedance of the appropriate GTV or IGV values down gradient of the site have been recorded for the remaining parameters measured throughout the monitoring period.

A hydrogeological risk assessment was undertaken in 2015 and submitted to the EPA. There is uncertainty about the information provided by the downstream wells (GW2 and GW3) for a number of reasons (integrity of the wells and their close proximity to the site). Ideally these wells should be replaced and more remote wells installed, however there are number of practical issues at this site with regards to installing new boreholes.

The Conceptual Site Model (CSM) identified a number of source-pathway-receptor (SPR) linkages ranging from Moderate to High risk to identified sensitive receptors. The main SPR linkages include the horizontal migration of leachate off-site via overtopping of the toe drains or leaks in the landfill cap to the River Glenalla and the horizontal migration of contaminated groundwater to the River Glenalla.

A series of proposed mitigation measures and additional investigation have been proposed to address the data gaps at the site, to facilitate a more detailed understanding of the hydrogeological regime and to assess the risk posed to downgradient receptors.

Plans for all actions identified in the hydrogeological risk assessment across all 6 sites are being developed. The overall plan is being finalised at present and will be issued to the Agency when complete.

4.4 Surface Water

The surface water results contained in this report were assessed against the following:

- SI No 294 of 1989 European Communities (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations (SWQS); and
- SI No 272 of 2009 European Communities Environmental Objectives (Surface Water) Regulations 2009 (EQS).

Surface water monitoring is carried out at SW1, SW2, SW3 and SW4. SW1 is reflective of the quality of the surface water upstream of the landfill site. The parameters and frequencies of monitoring required by the Waste Licence are as listed in Appendix B, however since restoration of the site the Agency has agreed to a frequency of bi-annual monitoring and to drop the requirement for the annual parameters. The results of monitoring are highlighted in Table 4.2 below. Laboratory results certificates and trend graphs are provided in Appendix C.

4.4.1 Upstream

The EQS guideline value for ammonia for good status is 0.140 mg N/l. Upstream of the site, at surface water monitoring point SW1, no elevated concentrations of ammonia (as N) were recorded (April). This reflects the baseline conditions of the surface water upstream of the site.

No elevated concentrations in exceedance of the appropriate EQS and SWQS values have been recorded for all other parameters measured bi-annually throughout the monitoring period upstream of the site.

4.4.2 Downstream

Elevated concentrations of ammonia were recorded downstream of the site in April at surface water monitoring points SW3 (2.26 mg/l) and SW4 (6.69 mg/l). The higher level of ammonia at surface water monitoring point SW4 appears to be from a source independent of the landfill site given the increase in level further downstream of the site.

BOD concentration above the EQS value for good status (2.6 mg/l) was recorded in surface water monitoring point SW4 in April when a concentration of 8.76 mg/l was recorded.

No elevated concentrations in exceedance of the appropriate EQS and SWQS values have been recorded for all other parameters measured bi-annually throughout the monitoring period downstream of the site.

The hydrogeological risk assessment in 2015 found that the site is currently impacting on surface waters in the vicinity of the landfill. A number of pathways for leachate to migrate to Glenalla River exist and additional investigation and monitoring is recommended to ascertain the level of risk posed and to develop appropriate mitigation measures.

Plans for all actions identified in the hydrogeological risk assessment across all 6 sites are being developed. The overall plan is being finalised at present and will be issued to the Agency when complete.

Table 4.2 Surface Water Concentrations 2016

Station	Sample Date	Ammonia (as N)	BOD	Chloride	Conductivity @ 20°C	COD	Dissolved Oxygen	pH	Temperature	Suspended Solids
		mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	pH units	Degrees C	mg/l
SW 1	19-Apr	< 0.05	< 1	28.79	97.8	22	10.4	7.4	9	< 6
SW 2	19-Apr	< 0.04	< 1	25.81	99.4	20	10.3	7.2	9	< 6
SW 3	19-Apr	2.26	< 1	29.78	169.2	20	9.7	6.9	9	< 6
SW 4	19-Apr	6.69	8.76	37.72	167.8	18	9.9	7.2	9	< 6
SW 1	15-Nov	NA	NA	NA	117.5 *	30	10.2 93%	7.4 *	9.9	NA
SW 2	15-Nov	NA	NA	NA	98.2 *	34	10.2 93%	7.4 *	9.9	NA
SW 3	15-Nov	NA	NA	NA	117.4 *	37	10.1 91%	7.4 *	9.8	NA
SW 4	15-Nov	NA	NA	NA	117.2 *	36	10.3 93%	7.2 *	10.2	NA

* Accredited

NA Result not available

4.5 Leachate

Leachate is monitored at one location at the facility, L1. Leachate quality varies during the lifetime of a landfill depending on the stage of decomposition of waste. Results from L1 are presented in Appendix C. Some characteristic parameters have been compared with those of 'typical' raw leachate in Table 4.3 below.

Table 4.3 Leachate Results 2016

PARAMETER	Glenalla Landfill Site		From 30 samples from UK/Irish landfills accepting domestic waste Results in mg/l		
	April Conc	Oct Conc	Min.Conc	Max.Conc	Mean
Ammonia (as N)	48.1	NA	<0.2	1700	491
BOD	1.44	NA	4.5	>4800	>834
COD	35	37	<10	33,700	3078
Chloride (mg/l)	122.09	NA	27	3410	1256
TON (mg/l N)	0.148	NA	/	/	/
Conductivity (µS/cm)	1426	1284	503	19,200	7789
pH (pH units)	7.4	7.3	6.4	8.0	7.2

Table 4.3 compares raw leachate concentrations detected at Glenalla with 'typical leachate composition from 30 samples from UK/Irish Landfills accepting mainly domestic waste' (taken from EPA Manual for Landfill Operational Practices). Parameters measured are all consistent with typical leachate ranges shown and with the results issued last period. The leachate is weak.

4.6 Landfill Gas

Landfill gas is monitored at three locations at the facility, LG1, LG2, and LG3 which are all located in waste. Both LG1 and LG3 were replaced during restoration works. Maintenance works were carried out previously to secure access to these wells.

Monitoring of the landfill gas was undertaken during April and December of the monitoring period and results are shown in Table 4.4 below.

The results show high levels of methane and carbon dioxide % v/v during the monitoring period.

Table 4.4 Landfill Gas Results 2016

Station	Sample Date	Methane %v/v	Carbon Dioxide %v/v	Oxygen %v/v	Atmospheric Pressure
LG1	19/04/2016	68.5	29.3	0.9	1008
LG2	19/04/2016	59.2	28.7	1.9	1008
LG3	19/04/2016	4.6	4.4	15.5	1008
LG1	16/12/2016	61.5	27.9	0.9	1001
LG2	16/12/2016	9.7	7.7	10.5	1001
LG3	16/12/2016	63.3	27	1.8	1001

5 Volume of Leachate Produced and Volume of Leachate Discharged

A water balance calculation has been undertaken and is contained in Appendix D. This indicates that the estimated volume of leachate produced at the site for 2016 was approximately 2,199 m³.

Leachate is currently removed at a rate of three loads per week. This was introduced after problems with the sump pump were detected at the beginning of 2016 (refer to Section 14).

The total volume of leachate tankered during the last reporting period was 2,999.79 m³. Table 5.1 below shows a breakdown of volumes tankered.

Table 5.1 Breakdown of Leachate Volumes by Month in 2016

Month	Leachate Volume (m3)
January	186.76
February	187.62
March	284.32
April	249.26
May	255.19
June	253.06
July	285.04
August	273.12
September	109.42
October	211.88
November	389.42
December	314.7
Total	2999.79

6 Topographical Site Survey

A topographical survey of the site was carried out in June 2006 post restoration. Copies of the survey were forwarded to the Agency in March 2007.

7 Reported Incidents and Complaints Summaries

Other than the reporting of on-going emissions exceedances detected in the routine monitoring programme (2 in total), no other incidents occurred during the monitoring period and no complaints were received.

A monitoring site visit was undertaken by the EPA on the 26/09/2016. Samples were taken from GW1, GW2, SW1 and SW2.

No observations or non compliances were issued in 2016.

8 Review of Nuisance Controls

As the facility is non-operational and fully restored, programmes associated with the monitoring and control of potential nuisances are now in abeyance. Site inspections conducted during periodic monitoring check for any sign of nuisance and if any is detected then appropriate measures are taken as per the EMS for the site.'

9 Management Structure of the Site

9.1 Organisation

The Management Structure of Glenalla Landfill site is set out in Figure 10.1 below.

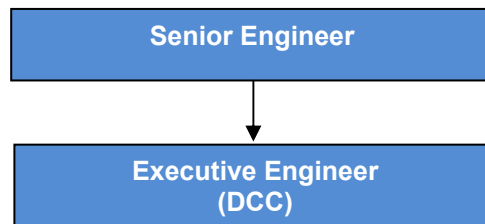


Figure 9.1 Management Structure

An Environmental Liability Risk Assessment has not been carried out at this facility as the landfill site is closed it is not a requirement of the licence.

9.2 Management Responsibility

Senior Engineer: Overall responsibility for the management of the site and ensuring compliance with the Waste Licence. Delegation of authority and responsibility to ensure the effective management of the facility and licence compliance.

Executive Engineer: Responsible for overall compliance with EPA Licence.

10 Programme for Public Information

A public communication programme has been initiated in accordance with Condition 2 of the Waste Licence to ensure that information concerning the environmental performance is available at reasonable times. The public may view environmental records at the Donegal County Council Environmental Headquarters at Three Rivers Centre in Lifford. Details regarding this programme are contained in Section 2 of the Environmental Management System Manual.

11 Capping and Restoration of the Site

The site was fully restored in 2005/6 in accordance with the approved Restoration and Aftercare Plan dated May 2004.

It was agreed with the Agency in July 2006 that monitoring and reporting frequency would be reduced to bi-annually. It is hoped that when the benefits of restoration have been fully demonstrated that the Council can surrender the licence for this facility.

It was further agreed with the Agency in November 2009 that the annual parameters (including List I & II parameters) could be dispensed with on the restored sites such as Glenalla.

12 Report on Staff Training

No training has been undertaken as the facility is now closed and there are no operational personnel on the site.

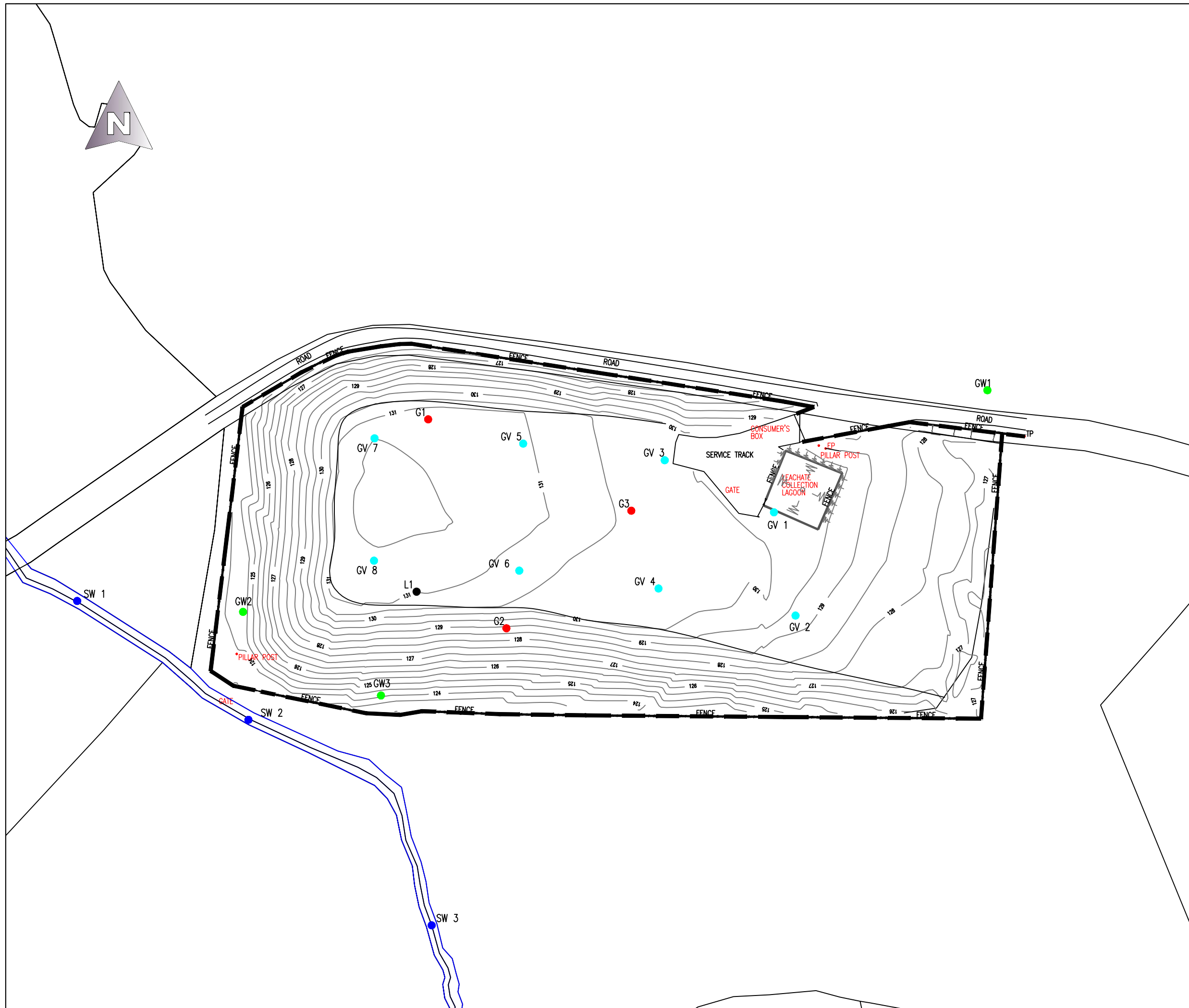
13 Resources and Energy Consumption Summary

An energy efficiency audit has not been carried out at this facility as the landfill site is closed it is not a requirement of the licence. Energy consumption data for the site is unavailable.

14 Report on Development Work Undertaken During the Reporting Period, and a Timescale for those Proposed During the Coming Year

Perimeter breakouts (particularly along the western boundary and portions of the northern and southern boundaries) have been investigated in the last year. Issues identified include the drainage of adjacent lands into the site which have now been rectified and high volumes of leachate in perimeter leachate toe drains as a result of pump downtime. The pumps have been repaired and additional investigations to determine the effectiveness of these actions are due to take place before the end of April 2017 during drier weather conditions.

Appendix A Drawings



NOTES

1. Verifying Dimensions.
The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
2. Existing Services.
Any information concerning the location of existing services indicated on this drawing is intended for general guidance only. It shall be the responsibility of the contractor to determine and verify the exact horizontal and vertical alignment of all cables, pipes, etc. (both underground and overhead) before work commences.
3. Issue of Drawings.
Hard copies, dwf and pdf will form a controlled issue of the drawing. All other formats (dwg, dxf etc.) are deemed to be an uncontrolled issue and any work carried out based on these files is at the recipients own risk. RPS will not accept any responsibility for any errors arising from the use of these files, either by human error by the recipient, listing of un-dimensioned measurements, compatibility issues with the recipient's software, and any errors arising when these files are used to aid the recipients drawing production, or setting out on site.

4. Datum:

5. Keys:
- GV Gas Vents
 - L1 Leachate Monitoring Point
 - G1 Gas Monitoring Point
 - SW1 Surface Water Monitoring Point
 - GW1 Ground Waster Monitoring Point

A	Monitoring points updated	MC	Nov 15
rev	amendments	drawn	date

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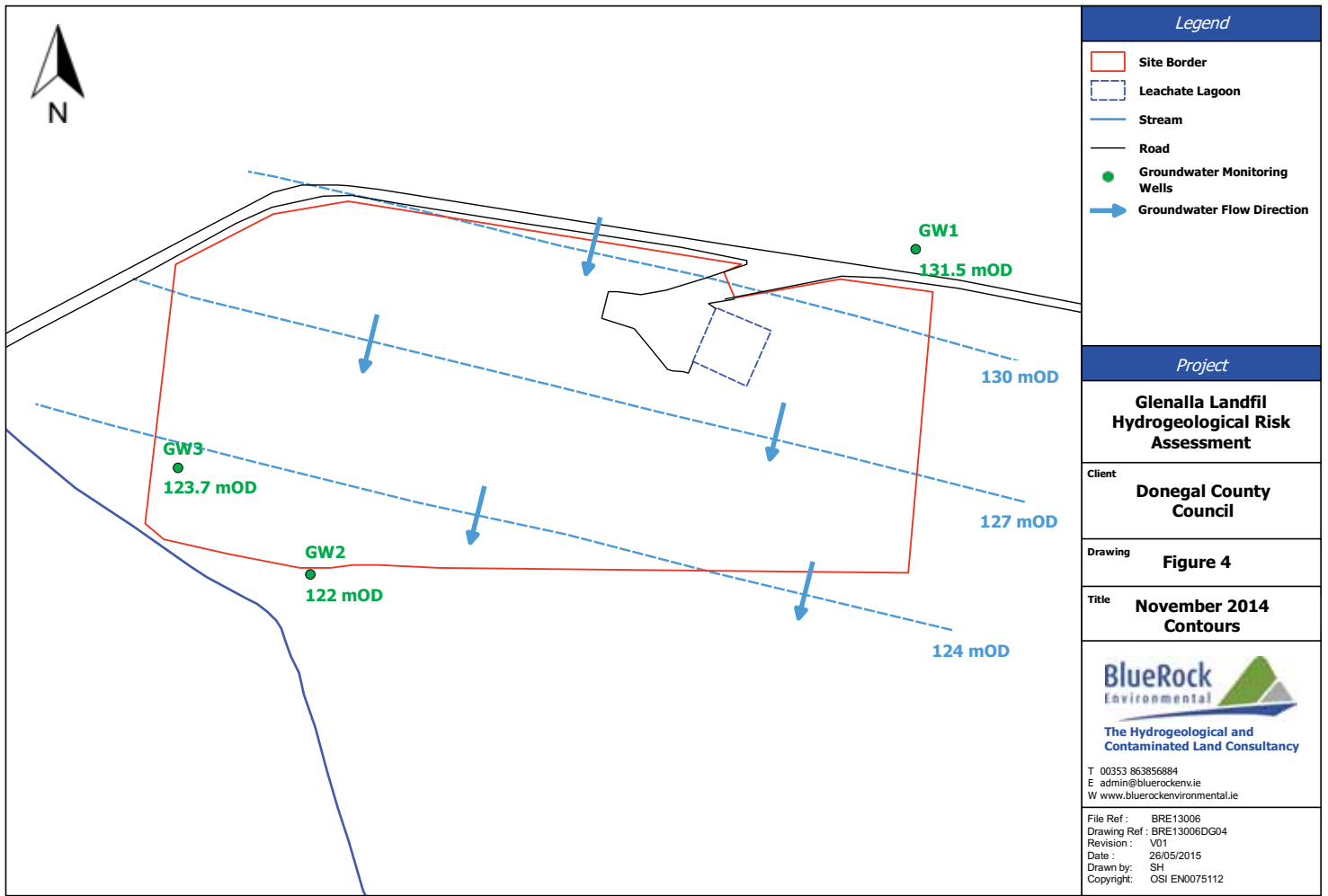
Project
Donegal Landfill Site Reporting 2016

Title
Glenalla LFS - Monitoring Points

Drawing Status	Sheet Size	Drawing Scale
Preliminary	A3	1:1000

Drawing Number	Rev
IBR0859/101	A

Project Leader	Drawn By	Date	Initial Review
DD	AMB	Apr '15	AMcG



Appendix B

Monitoring Information

Table A1 Groundwater Parameters and Monitoring Frequencies

Bi-Annually
Visual Inspection
Temperature
Groundwater Level
pH
Electrical Conductivity
Ammoniacal Nitrogen
Dissolved Oxygen
Chloride
Iron
Potassium
TOC
TON
Phenols
Sodium

Table A2 Surface Water Parameters and Monitoring Frequencies

Bi-Annually
Visual Inspection
Temperature
Total Suspended Solids
pH
Electrical Conductivity
Ammoniacal Nitrogen
Dissolved Oxygen
Chloride
BOD
COD

Table A3 Leachate Parameters and Monitoring Frequencies

Bi-Annually
Visual Inspection
Leachate Level
Temperature
pH
Electrical Conductivity

Ammoniacal Nitrogen
COD
BOD
Chloride
TON

Table A4 Landfill Gas Parameters and Monitoring Frequencies

Bi-Annually
Atmospheric Pressure
Carbon Dioxide
Methane
Oxygen
Temperature

Table A5 Monitoring Locations Grid References.

Station_Purpose	Station_Name	Northing	Easting
Landfill Monitoring - Groundwater	GW1	427966	223321
Landfill Monitoring - Groundwater	GW2	427905	223116
Landfill Monitoring - Groundwater	GW3	427877	223153
Landfill Monitoring - Leachates	L1	427902	223169
Landfill Monitoring - Leachates	Leachate Holding Lagoon	427942	223278
Landfill Monitoring - Air Quality	LG1	427958	223167
Landfill Monitoring - Air Quality	LG2	427895	223190
Landfill Monitoring - Air Quality	LG3	427929	223224
Landfill Monitoring - Surface Water	SW at corner	427888	223122
Landfill Monitoring - Surface Water	SW1	427912	223060
Landfill Monitoring - Surface Water	SW2	427884	223109
Landfill Monitoring - Surface Water	SW3	427827	223168
Landfill Monitoring - Surface Water	SW4	427668	223333

Appendix C

Results of Monitoring



Comhairle Contae Dhún na nGall
Donegal County Council
Central Laboratory, The Kube
Magheranan
Letterkenny
 074-9122787

Sample No.:	162501226	Sample Date/Time:	19/04/2016 @ 12:30
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Gw 1	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual GW	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501226
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	
		Date Received:	19/04/2016
		Mode Of Delivery:	Cooler Box
		Condition On Delivery:	OK
		Date Started:	19/04/2016
		Report Date:	07/06/2016
Customer Reference:	Landfill Compliance Monitoring	Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT
					Accredited* Sub-Contract**
Ammonia (as N) mg/l		--	--	05/05/16	< 0.05
Chloride mg/l		--	--	20/04/16	41.69
Conductivity @ 20°C µS/cm		--	--	19/04/16	286
Iron µg/l		--	--	24/05/16	> 20 ***
pH pH units		--	--	19/04/16	6.9
Potassium mg/l		--	--	24/05/16	2.8 ***
Sodium mg/l		--	--	24/05/16	16 ***
Total Organic Carbon mg/l		--	--	19/04/16	1.5
Total Oxidised Nitrogen mg/l		--	--	05/05/16	0.186
Depth m		--	--	19/04/16	1
Dissolved Oxygen (Measurement) keep mg/l		--	--	19/04/16	2.5
Phenols µg/l		--	--	24/05/16	< 100 ***
Temperature Degrees C		--	--	19/04/16	8.5
Visual Inspection Descriptive		--	--	19/04/16	0

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Notes 4.....

Notes 5.....



Comhairle Contae Dhún na nGall
Donegal County Council
Central Laboratory, The Kube
Magheranan
Letterkenny
 074-9122787

Sample No.:	162501227	Sample Date/Time:	19/04/2016 @ 11:55
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Gw 2	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual GW	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501227
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	
		Date Received:	19/04/2016
		Mode Of Delivery:	Cooler Box
		Condition On Delivery:	OK
		Date Started:	19/04/2016
		Report Date:	07/06/2016
Customer Reference:	Landfill Compliance Monitoring	Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Ammonia (as N) mg/l		--	--	06/05/16	5.38
Chloride mg/l		--	--	20/04/16	33.75
Conductivity @ 20°C µS/cm		--	--	19/04/16	633
Iron µg/l		--	--	24/05/16	< 20 ***
pH pH units		--	--	19/04/16	7.3
Potassium mg/l		--	--	24/05/16	6 ***
Sodium mg/l		--	--	24/05/16	62.2 ***
Total Organic Carbon mg/l		--	--	19/04/16	3.23
Total Oxidised Nitrogen mg/l		--	--	06/05/16	0.016
Depth m		--	--	19/04/16	0.1
Dissolved Oxygen (Measurement) keep mg/l		--	--	19/04/16	1
Phenols µg/l		--	--	24/05/16	100 ***
Temperature Degrees C		--	--	19/04/16	10
Visual Inspection Descriptive		--	--	19/04/16	0

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Notes 4.....

Notes 5.....



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Sample No.:	162501228	Sample Date/Time:	19/04/2016 @ 12:10
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Gw 3	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual GW	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501228
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	
		Date Received:	19/04/2016
		Mode Of Delivery:	Cooler Box
		Condition On Delivery:	OK, Orange on Colour
		Date Started:	19/04/2016
		Report Date:	07/06/2016
Customer Reference:	Landfill Compliance Monitoring	Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Ammonia (as N) mg/l		--	--	06/05/16	1.9
Chloride mg/l		--	--	20/04/16	21.84
Conductivity @ 20°C µS/cm		--	--	19/04/16	503
Iron µg/l		--	--	24/05/16	1200 ***
pH pH units		--	--	19/04/16	6.8
Potassium mg/l		--	--	24/05/16	2.7 ***
Sodium mg/l		--	--	24/05/16	19 ***
Total Organic Carbon mg/l		--	--	19/04/16	13.29
Total Oxidised Nitrogen mg/l		--	--	06/05/16	0.493
Depth m		--	--	19/04/16	0.3
Dissolved Oxygen (Measurement) keep mg/l		--	--	19/04/16	3
Phenols µg/l		--	--	24/05/16	< 100 ***
Temperature Degrees C		--	--	19/04/16	9.1
Visual Inspection Descriptive		--	--	19/04/16	0

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Letterkenny
074-9122787**

Sample No.:	162501229	Sample Date/Time:	19/04/2016 @ 11:30
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Sw 1	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual SW	Analyst:	Donegal CoCo
Sample Notes:			
Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501229
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	
		Date Received:	19/04/2016
		Mode Of Delivery:	Cooler Box
		Condition On Delivery:	OK
		Date Started:	19/04/2016
		Report Date:	20/05/2016
Customer Reference:	Landfill Compliance Monitoring	Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Ammonia (as N) mg/l		--	--	05/05/16	< 0.05
Chemical Oxygen Demand mg/l		--	--	20/04/16	22
Chloride mg/l		--	--	20/04/16	28.79
Conductivity @ 20°C µS/cm		--	--	19/04/16	97.8
pH pH units		--	--	19/04/16	7.4
Suspended Solids mg/l		--	--	20/04/16	< 6
BOD mg/l		--	--	21/04/16	< 1
Dissolved Oxygen (Measurement) keep mg/l		--	--	19/04/16	10.4
Temperature Degrees C		--	--	19/04/16	9
Visual Inspection Descriptive		--	--	19/04/16	0

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Sample No.:	162501230	Sample Date/Time:	19/04/2016 @ 11:45
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Sw 2	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual SW	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501230
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	
		Date Received:	19/04/2016
		Mode Of Delivery:	Cooler Box
		Condition On Delivery:	OK
		Date Started:	19/04/2016
		Report Date:	20/05/2016
Customer Reference:	Landfill Compliance Monitoring	Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Ammonia (as N) mg/l		--	--	06/05/16	< 0.04
Chemical Oxygen Demand mg/l		--	--	20/04/16	20
Chloride mg/l		--	--	20/04/16	25.81
Conductivity @ 20°C µS/cm		--	--	19/04/16	99.4
pH pH units		--	--	19/04/16	7.2
Suspended Solids mg/l		--	--	20/04/16	< 6
BOD mg/l		--	--	21/04/16	< 1
Dissolved Oxygen (Measurement) keep mg/l		--	--	19/04/16	10.3
Temperature Degrees C		--	--	19/04/16	9
Visual Inspection Descriptive		--	--	19/04/16	0

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Notes 5.....



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074-9122787**

Sample No.:	162501231	Sample Date/Time:	19/04/2016 @ 12:15
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Sw 3	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual SW	Analyst:	Donegal CoCo
Sample Notes:			
Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501231
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	
		Date Received:	19/04/2016
		Mode Of Delivery:	Cooler Box
		Condition On Delivery:	OK
		Date Started:	19/04/2016
Customer Reference:	Landfill Compliance Monitoring	Report Date:	20/05/2016
		Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Ammonia (as N) mg/l		--	--	06/05/16	2.26
Chemical Oxygen Demand mg/l		--	--	20/04/16	20
Chloride mg/l		--	--	20/04/16	29.78
Conductivity @ 20°C µS/cm		--	--	19/04/16	169.2
pH pH units		--	--	19/04/16	6.9
Suspended Solids mg/l		--	--	20/04/16	< 6
BOD mg/l		--	--	21/04/16	< 1
Dissolved Oxygen (Measurement) keep mg/l		--	--	19/04/16	9.7
Temperature Degrees C		--	--	19/04/16	9
Visual Inspection Descriptive		--	--	19/04/16	0

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Notes 4.....

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 074-9122787

Sample No.:	162501232	Sample Date/Time:	19/04/2016 @ 12:20
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Sw 4	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual SW	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501232
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	
		Date Received:	19/04/2016
		Mode Of Delivery:	Cooler Box
		Condition On Delivery:	OK
		Date Started:	19/04/2016
		Report Date:	20/05/2016
Customer Reference:	Landfill Compliance Monitoring	Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT
					Accredited* Sub-Contract**
Ammonia (as N) mg/l		--	--	06/05/16	6.69
Chemical Oxygen Demand mg/l		--	--	20/04/16	18
Chloride mg/l		--	--	20/04/16	37.72
Conductivity @ 20°C µS/cm		--	--	19/04/16	167.8
pH pH units		--	--	19/04/16	7.2
Suspended Solids mg/l		--	--	20/04/16	< 6
BOD mg/l		--	--	21/04/16	8.76
Dissolved Oxygen (Measurement) keep mg/l		--	--	19/04/16	9.9
Temperature Degrees C		--	--	19/04/16	9
Visual Inspection Descriptive		--	--	19/04/16	0

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Notes 4.....

Notes 5.....



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 074-9122787

Sample No.:	162501234	Sample Date/Time:	19/04/2016 @ 11:35
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	L 1	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual Leachate	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501234
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	
		Date Received:	19/04/2016
		Mode Of Delivery:	Cooler Box
		Condition On Delivery:	OK
		Date Started:	19/04/2016
		Report Date:	20/05/2016
Customer Reference:	Landfill Compliance Monitoring	Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Ammonia (as N) mg/l		--	--	09/05/16	48.1
BOD mg/l		--	--	21/04/16	1.44
Chemical Oxygen Demand mg/l		--	--	20/04/16	35
Chloride mg/l		--	--	20/04/16	122.09
Conductivity @ 20°C µS/cm		--	--	19/04/16	1426
pH pH units		--	--	19/04/16	7.4
Total Oxidised Nitrogen mg/l		--	--	06/05/16	0.148
Depth m		--	--	19/04/16	4.1
Temperature Degrees C		--	--	19/04/16	8.7
Visual Inspection Descriptive		--	--	19/04/16	0

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Notes 4.....

Notes 5.....



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074-9122787**

Sample No.:	162501233	Sample Date/Time:	19/04/2016 @ 11:40
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Leachate Holding Lagoon	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual Leachate	Analyst:	Donegal CoCo
Sample Notes:			
Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501233
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	
		Date Received:	19/04/2016
		Mode Of Delivery:	Cooler Box
		Condition On Delivery:	OK
		Date Started:	19/04/2016
		Report Date:	20/05/2016
Customer Reference:	Landfill Compliance Monitoring	Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Ammonia (as N) mg/l		--	--	06/05/16	23.8
BOD mg/l		--	--	21/04/16	1.42
Chemical Oxygen Demand mg/l		--	--	20/04/16	22
Chloride mg/l		--	--	20/04/16	40.7
Conductivity @ 20°C µS/cm		--	--	19/04/16	748
pH pH units		--	--	19/04/16	7.6
Total Oxidised Nitrogen mg/l		--	--	06/05/16	0.083
Depth m		--	--	19/04/16	0.6
Temperature Degrees C		--	--	19/04/16	9
Visual Inspection Descriptive		--	--	19/04/16	0

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Notes 4.....

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 074-9122787

Sample No.:	162501235	Sample Date/Time:	19/04/2016 @ 11:04
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Lg1	Laboratory:	Donegal Co Council
Template:	Landfill Monitoring - Landfill Gas	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501235
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	Biannual 1
		Date Received:	19/04/2016
		Mode Of Delivery:	Field test
		Condition On Delivery:	n/a
		Date Started:	19/04/2016
Customer Reference:	Landfill Compliance Monitoring	Report Date:	21/04/2016
		Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Atmospheric Pressure mBar		--	--	19/04/16	1008
Carbon Dioxide %		--	--	19/04/16	29.3
Methane %		--	--	19/04/16	68.5
Oxygen % O2		--	--	19/04/16	0.9

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 074-9122787

Sample No.:	162501236	Sample Date/Time:	19/04/2016 @ 11:20
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Lg2	Laboratory:	Donegal Co Council
Template:	Landfill Monitoring - Landfill Gas	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501236
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	Biannual 1
Customer Reference:	Landfill Compliance Monitoring	Date Received:	19/04/2016
		Mode Of Delivery:	Field test
		Condition On Delivery:	n/a
		Date Started:	19/04/2016
		Report Date:	21/04/2016
		Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Atmospheric Pressure mBar		--	--	19/04/16	1008
Carbon Dioxide %		--	--	19/04/16	28.7
Methane %		--	--	19/04/16	59.2
Oxygen % O2		--	--	19/04/16	1.9

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 074-9122787

Sample No.:	162501237	Sample Date/Time:	19/04/2016 @ 11:30
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Lg3	Laboratory:	Donegal Co Council
Template:	Landfill Monitoring - Landfill Gas	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. - Laboratory:	162501237
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. - Customer:	Biannual 1
		Date Received:	19/04/2016
		Mode Of Delivery:	Field test
		Condition On Delivery:	n/a
		Date Started:	19/04/2016
Customer Reference:	Landfill Compliance Monitoring	Report Date:	21/04/2016
		Report Reference:	Original Test Report

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	RESULT Accredited* Sub-Contract**
Atmospheric Pressure mBar		--	--	19/04/16	1008
Carbon Dioxide %		--	--	19/04/16	4.4
Methane %		--	--	19/04/16	4.6
Oxygen % O2		--	--	19/04/16	15.5

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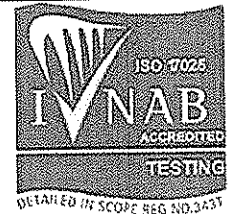
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 074-9122787



Sample No.:	162503802	Sample Date/Time:	15/11/2016 @ 12:45
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Gw 1	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual GW	Analyst:	Donegal CoCo

Sample Notes:

Customer Name: Landfill Monitoring Donegal Co. Council
Contact Details: Julie McMahon
 Central Lab
 The Kube, Magheranan
 Letterkenny
 0749122787: 0872861096
 julie.mcmahon@donegalcoco.ie
Customer Ref: Landfill Compliance Monitoring

Sample No. Laboratory: 162503802
Sample No. Customer:
Date Received: 15/11/2016
Mode Of Delivery: coolbox
Condition On Delivery: ok
Date Started: 15/11/2016
Report Date: 13/01/2017
Report Reference: 17DL21

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Ammonia (as N) mg/l	5.4P-TMC6	--	--	15/11/16	--
Chloride mg/l	5.4P-TMC14	--	--	15/11/16	--
Conductivity @ 20°C µS/cm	5.4P-TMC2	--	--	15/11/16	317 *
Iron µg/l		--	--	15/11/16	< 20 ***
pH pH units	5.4P-TMC1	--	--	15/11/16	6.7 *
Potassium mg/l		--	--	18/11/16	4.8 ***
Sodium mg/l		--	--	18/11/16	15.9 ***
Total Organic Carbon mg/l	5.4P-TMC10	--	--	02/12/16	--
Total Oxidised Nitrogen mg/l	5.4P-TMC6	--	--	02/12/16	--
Depth m	5.4P-TMC27	--	--	15/11/16	0.53
Dissolved Oxygen (Measurement) keep mg/l	5.4P-TMC18	--	--	15/11/16	2.6
Phenols µg/l		--	--	18/11/16	< 100 ***
Temperature Degrees C	5.4P-TMC1	--	--	15/11/16	9.9
Visual Inspection Descriptive	5.4P-TMC26	--	--	15/11/16	Normal
Phenols mg/l		--	--	18/11/16	< 0.1 ***

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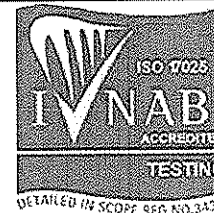
Geraldine
 Dr. Joe Ferry, Laboratory Manager

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Comhairle Contae Dhún na nGall
Donegal County Council
Central Laboratory, The Kube
Magheranan
Letterkenny
 074-9122787



Sample No.: 162503803	Sample Date/Time: 15/11/2016 @ 11:15
Category: Landfill Monitoring	Sample Method: Grab
Entity: Glenalla Landfill	Sampled By: Eddie Carr
Station: Gw 2	Laboratory: Donegal Co Council
Template: Glenalla Biannual GW	Analyst: Donegal CoCo

Sample Notes:	
Customer Name: Landfill Monitoring Donegal Co. Council	Sample No. Laboratory: 162503803
Contact Details: Julie McMahon	Sample No. Customer:
Central Lab	Date Received: 15/11/2016
The Kube, Magheranan	Mode Of Delivery: coolbox
Letterkenny	Condition On Delivery: ok
0749122787: 0872861096	Date Started: 15/11/2016
julie.mcmahon@donegalcoco.ie	Report Date: 13/01/2017
Customer Ref: Landfill Compliance Monitoring	Report Reference: 17DL21

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Ammonia (as N) mg/l	5.4P-TMC6	--	--	15/11/16	--
Chloride mg/l	5.4P-TMC14	--	--	15/11/16	--
Conductivity @ 20°C µS/cm	5.4P-TMC2	--	--	15/11/16	537 *
Iron µg/l		--	--	15/11/16	21 ***
pH pH units	5.4P-TMC1	--	--	15/11/16	6.9 *
Potassium mg/l		--	--	18/11/16	4.2 ***
Sodium mg/l		--	--	18/11/16	20.9 ***
Total Organic Carbon mg/l	5.4P-TMC10	--	--	15/11/16	--
Total Oxidised Nitrogen mg/l	5.4P-TMC6	--	--	15/11/16	--
Depth m	5.4P-TMC27	--	--	15/11/16	0.47
Dissolved Oxygen (Measurement) keep mg/l	5.4P-TMC18	--	--	15/11/16	2.1
Phenols µg/l		--	--	15/11/16	230 ***
Temperature Degrees C	5.4P-TMC1	--	--	15/11/16	10.1
Visual Inspection Descriptive	5.4P-TMC26	--	--	15/11/16	Normal

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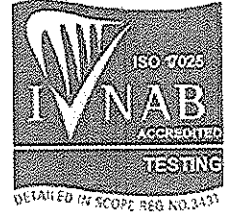
Joe Ferry
 Dr. Joe Ferry, Laboratory Manager

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Central Laboratory, The Kube
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Letterkenny
074-9122787**



Sample No.: 162503804	Sample Date/Time: 15/11/2016 @ 11:40
Category: Landfill Monitoring	Sample Method: Grab
Entity: Glenalla Landfill	Sampled By: Eddie Carr
Station: Gw 3	Laboratory: Donegal Co Council
Template: Glenalla Biannual GW	Analyst: Donegal CoCo

Sample Notes:	
Customer Name: Landfill Monitoring Donegal Co. Council	Sample No. Laboratory: 162503804
Contact Details: Julie McMahon	Sample No. Customer:
Central Lab	Date Received: 15/11/2016
The Kube, Magheranan	Mode Of Delivery: coolbox
Letterkenny	Condition On Delivery: ok
0749122787; 0872861096	Date Started: 15/11/2016
julie.mcmahon@donegalcoco.ie	Report Date: 13/01/2017
Customer Ref: Landfill Compliance Monitoring	Report Reference: 17DL21

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Ammonia (as N) mg/l	5.4P-TMC6	--	--	15/11/16	--
Chloride mg/l	5.4P-TMC14	--	--	15/11/16	--
Conductivity @ 20°C µS/cm	5.4P-TMC2	--	--	15/11/16	388 *
Iron µg/l		--	--	18/11/16	2700 ***
pH pH units	5.4P-TMC1	--	--	15/11/16	6.7 *
Potassium mg/l		--	--	18/11/16	2.7 ***
Sodium mg/l		--	--	18/11/16	12.9 ***
Total Organic Carbon mg/l	5.4P-TMC10	--	--	18/11/16	--
Total Oxidised Nitrogen mg/l	5.4P-TMC6	--	--	18/11/16	--
Depth m	5.4P-TMC27	--	--	15/11/16	0.5
Dissolved Oxygen (Measurement) keep mg/l	5.4P-TMC18	--	--	15/11/16	4.1
Phenols µg/l		--	--	18/11/16	< 100 ***
Temperature Degrees C	5.4P-TMC1	--	--	15/11/16	10.2
Visual Inspection Descriptive	5.4P-TMC26	--	--	18/11/16	Normal

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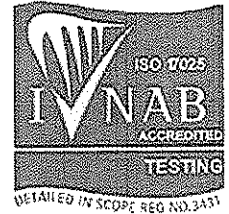
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**Comhairle Contae Dhún na nGall
Donegal County Council
Central Laboratory, The Kube
Magheranan
Letterkenny
074-9122787**



Sample No.: 162503798	Sample Date/Time: 15/11/2016 @ 13:05
Category: Landfill Monitoring	Sample Method: Grab
Entity: Glenalla Landfill	Sampled By: Eddie Carr
Station: Sw 1	Laboratory: Donegal Co Council
Template: Glenalla Biannual SW	Analyst: Donegal CoCo

Sample Notes:	
Customer Name: Landfill Monitoring Donegal Co. Council	Sample No. Laboratory: 162503798
Contact Details: Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. Customer: Date Received: 15/11/2016 Mode Of Delivery: Coolerbox Condition On Delivery: ok Date Started: 15/11/2016 Report Date: 13/01/2017
Customer Ref: Landfill Compliance Monitoring	Report Reference: 17DL21

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Ammonia (as N) mg/l	5.4P-TMC5	--	--	15/11/16	--
Chloride mg/l	5.4P-TMC14	--	--	15/11/16	--
Conductivity @ 20°C µS/cm	5.4P-TMC2	--	--	15/11/16	117.5 *
pH pH units	5.4P-TMC1	--	--	15/11/16	7.4 *
Suspended Solids mg/l	5.4P-TMC4	--	--	15/11/16	--
BOD mg/l	5.4P-TMC9	--	--	15/11/16	--
Dissolved Oxygen (Measurement) keep mg/l	5.4P-TMC18	--	--	15/11/16	10.2
Temperature Degrees C	5.4P-TMC1	--	--	15/11/16	9.9
Visual Inspection Descriptive	5.4P-TMC26	--	--	15/11/16	Normal
ÇOD mg/l	5.4P-TMC3	--	--	18/11/16	30

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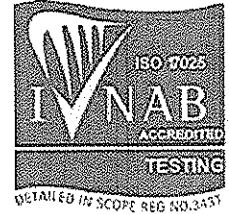
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**Comhairle Contae Dhún na nGall
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Magheranan
Letterkenny
074-9122787**



Sample No.: 162503799	Sample Date/Time: 15/11/2016 @ 11:30
Category: Landfill Monitoring	Sample Method: Grab
Entity: Glenalla Landfill	Sampled By: Eddie Carr
Station: Sw 2	Laboratory: Donegal Co Council
Template: Glenalla Biannual SW	Analyst: Donegal CoCo

Sample Notes:	Sample No. Laboratory: 162503799
Customer Name: Landfill Monitoring Donegal Co. Council	Sample No. Customer:
Contact Details: Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Date Received: 15/11/2016 Mode Of Delivery: coolbox Condition On Delivery: ok Date Started: 15/11/2016 Report Date: 13/01/2017 Report Reference: 17DL21
Customer Ref: Landfill Compliance Monitoring	

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Ammonia (as N) mg/l	5.4P-TMC5	--	--	15/11/16	--
Chloride mg/l	5.4P-TMC14	--	--	15/11/16	--
Conductivity @ 20°C µS/cm	5.4P-TMC2	--	--	15/11/16	98.2 *
pH pH units	5.4P-TMC1	--	--	15/11/16	7.4 *
Suspended Solids mg/l	5.4P-TMC4	--	--	15/11/16	--
BOD mg/l	5.4P-TMC9	--	--	15/11/16	--
Dissolved Oxygen (Measurement) keep mg/l	5.4P-TMC18	--	--	15/11/16	10.2
Temperature Degrees C	5.4P-TMC1	--	--	15/11/16	9.9
Visual Inspection Descriptive	5.4P-TMC26	--	--	15/11/16	Normal
COD mg/l	5.4P-TMC3	--	--	18/11/16	34

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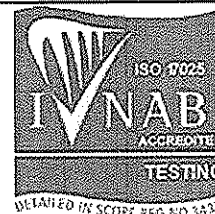
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074-9122787**



Sample No.:	162503800	Sample Date/Time:	15/11/2016 @ 11:50
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Sw 3	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual SW	Analyst:	Donegal CoCo

Sample Notes:

Customer Name: Landfill Monitoring Donegal Co. Council
Contact Details: Julie McMahon
 Central Lab
 The Kube, Magheranan
 Letterkenny
 0749122787: 0872861096
 julie.mcmahon@donegalcoco.ie

Sample No. Laboratory: 162503800
Sample No. Customer:
Date Received: 15/11/2016
Mode Of Delivery: coolbox
Condition On Delivery: ok
Date Started: 15/11/2016
Report Date: 13/01/2017
Report Reference: 17DL21

Customer Ref: Landfill Compliance Monitoring

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Ammonia (as N) mg/l	5.4P-TMC5	--	--	15/11/16	--
Chloride mg/l	5.4P-TMC14	--	--	15/11/16	--
Conductivity @ 20°C µS/cm	5.4P-TMC2	--	--	15/11/16	117.4 *
pH pH units	5.4P-TMC1	--	--	15/11/16	7.4 *
Suspended Solids mg/l	5.4P-TMC4	--	--	15/11/16	--
BOD mg/l	5.4P-TMC9	--	--	15/11/16	--
Dissolved Oxygen (Measurement) keep mg/l	5.4P-TMC18	--	--	15/11/16	10.1
Temperature Degrees C	5.4P-TMC1	--	--	15/11/16	9.8
Visual Inspection Descriptive	5.4P-TMC26	--	--	15/11/16	Normal
COD mg/l	5.4P-TMC3	--	--	18/11/16	37

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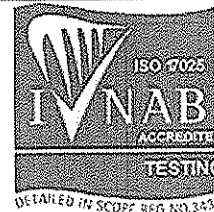
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**Comhairle Contae Dhún na nGall
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Magheranan
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074-9122787**



Sample No.: 162503801	Sample Date/Time: 15/11/2016 @ 12:10
Category: Landfill Monitoring	Sample Method: Grab
Entity: Glenalla Landfill	Sampled By: Eddie Carr
Station: Sw 4	Laboratory: Donegal Co Council
Template: Glenalla Biannual SW	Analyst: Donegal CoCo

Sample Notes:	
Customer Name: Landfill Monitoring Donegal Co. Council	Sample No. Laboratory: 162503801
Contact Details: Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787; 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. Customer: Date Received: 15/11/2016 Mode Of Delivery: coolbox Condition On Delivery: ok Date Started: 15/11/2016 Report Date: 13/01/2017
Customer Ref: Landfill Compliance Monitoring	Report Reference: 17DL21

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Ammonia (as N) mg/l	5.4P-TMC5	--	--	15/11/16	--
Chloride mg/l	5.4P-TMC14	--	--	15/11/16	--
Conductivity @ 20°C µS/cm	5.4P-TMC2	--	--	15/11/16	117.2 *
pH pH units	5.4P-TMC1	--	--	15/11/16	7.2 *
Suspended Solids mg/l	5.4P-TMC4	--	--	15/11/16	--
BOD mg/l	5.4P-TMC9	--	--	15/11/16	--
Dissolved Oxygen (Measurement) keep mg/l	5.4P-TMC18	--	--	15/11/16	10.3
Temperature Degrees C	5.4P-TMC1	--	--	15/11/16	10.2
Visual Inspection Descriptive	5.4P-TMC26	--	--	15/11/16	Normal
COD mg/l	5.4P-TMC3	--	--	18/11/16	36

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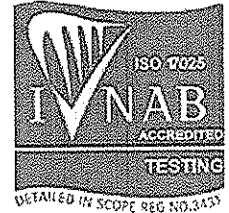
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**Comhairle Contae Dhún na nGall
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074-9122787**



Sample No.:	162503805	Sample Date/Time:	15/11/2016 @ 11:04
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	L 1	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual Leachate	Analyst:	Donegal CoCo

Sample Notes:		Sample No. Laboratory:	162503805
Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. Customer:	
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Date Received:	15/11/2016
		Mode Of Delivery:	coolbox
		Condition On Delivery:	ok
		Date Started:	15/11/2016
Customer Ref:	Landfill Compliance Monitoring	Report Date:	13/01/2017
		Report Reference:	17DL21

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Ammonia (as N) mg/l	5.4P-TMC6	--	--	15/11/16	--
BOD mg/l	5.4P-TMC9	--	--	15/11/16	--
Chloride mg/l	5.4P-TMC14	--	--	15/11/16	--
Conductivity @ 20°C µS/cm	5.4P-TMC2	--	--	15/11/16	1284
pH pH units	5.4P-TMC1	--	--	15/11/16	7.3
Total Oxidised Nitrogen mg/l	5.4P-TMC6	--	--	15/11/16	--
Depth m	5.4P-TMC27	--	--	15/11/16	6.71
Temperature Degrees C	5.4P-TMC1	--	--	15/11/16	11.8
Visual Inspection Descriptive	5.4P-TMC26	--	--	15/11/16	Normal
COD mg/l	5.4P-TMC3	--	--	18/11/16	258 *

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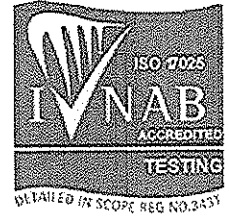
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**Comhairle Contae Dhún na nGall
Donegal County Council
Central Laboratory, The Kube
Magheranan
Letterkenny
074-9122787**



Sample No.:	162503806	Sample Date/Time:	15/11/2016 @ 13:30
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Leachate Holding Lagoon	Laboratory:	Donegal Co Council
Template:	Glenalla Biannual Leachate	Analyst:	Donegal CoCo

Sample Notes:

Customer Name:	Landfill Monitoring Donegal Co. Council	Sample No. Laboratory:	162503806
Contact Details:	Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787; 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. Customer:	
Customer Ref:	Landfill Compliance Monitoring	Date Received:	15/11/2016
		Mode Of Delivery:	coolbox
		Condition On Delivery:	ok
		Date Started:	15/11/2016
		Report Date:	13/01/2017
		Report Reference:	17DL21

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Ammonia (as N) mg/l	5.4P-TMC6	--	--	15/11/16	--
BOD mg/l	5.4P-TMC9	--	--	15/11/16	--
Chloride mg/l	5.4P-TMC14	--	--	15/11/16	--
Conductivity @ 20°C µS/cm	5.4P-TMC2	--	--	15/11/16	528
pH pH units	5.4P-TMC1	--	--	15/11/16	7.6
Total Oxidised Nitrogen mg/l	5.4P-TMC6	--	--	15/11/16	--
Depth m	5.4P-TMC27	--	--	15/11/16	0.9
Temperature Degrees C	5.4P-TMC1	--	--	15/11/16	9.9
Visual Inspection Descriptive	5.4P-TMC26	--	--	15/11/16	Normal
COD mg/l	5.4P-TMC3	--	--	18/11/16	37

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**Comhairle Contae Dhún na nGall
Donegal County Council
Central Laboratory, The Kube
Magheranan
Letterkenny
074-9122787**

Sample No.: 162504060	Sample Date/Time: 16/12/2016 @ 09:35
Category: Landfill Monitoring	Sample Method: Grab
Entity: Glenalla Landfill	Sampled By: Eddie Carr
Station: Lg1	Laboratory: Donegal Co Council
Template: Landfill Monitoring - Landfill Gas	Analyst: Eddie Carr

Sample Notes:	
Customer Name: Landfill Monitoring Donegal Co. Council	Sample No. Laboratory: 162504060
Contact Details: Julie McMahon Central Lab The Kube, Magheranan Letterkenny 0749122787: 0872861096 julie.mcmahon@donegalcoco.ie	Sample No. Customer: Date Received: 16/12/2016 Mode Of Delivery: field test Condition On Delivery: Not applicable Date Started: 16/12/2016 Report Date: 21/12/2016 Report Reference: 17DL21
Customer Ref: Landfill Compliance Monitoring	

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Atmospheric Pressure mBar		--	--	16/12/16	1001
Carbon Dioxide %		--	--	16/12/16	27.9
Methane %		--	--	16/12/16	61.5
Oxygen % O2		--	--	16/12/16	0.9

* Accredited **Sub-Contract ***Accredited Sub-Contract

SIGNED

Geraldine Friel

13/01/2017

Dr. Joe Ferry, Laboratory Manager

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 Micro. parameters with units MPN/100mls are reported as zero for result of <1 MPN/100ml, i.e. none detected in volume tested
 Original Test Report, unless otherwise indicated by the insertion of Supplementary Test Report in Report Reference section
 In RESULT column, unaccredited in-house test result - no asterisk, *inhouse accred., **unaccred. & subcontracted, *** accred. & sub-cont.



**Comhairle Contae Dhún na nGall
Donegal County Council
Central Laboratory, The Kube
Magheranan
Letterkenny
074-9122787**

Sample No.:	162504061	Sample Date/Time:	16/12/2016 @ 09:10
Category:	Landfill Monitoring	Sample Method:	Grab
Entity:	Glenalla Landfill	Sampled By:	Eddie Carr
Station:	Lg2	Laboratory:	Donegal Co Council
Template:	Landfill Monitoring - Landfill Gas	Analyst:	Eddie Carr

Sample Notes:

Customer Name: Landfill Monitoring Donegal Co. Council
Contact Details: Julie McMahon
 Central Lab
 The Kube, Magheranan
 Letterkenny
 0749122787: 0872861096
 julie.mcmahon@donegalcoco.ie
Customer Ref: Landfill Compliance Monitoring

Sample No. Laboratory: 162504061
Sample No. Customer:
Date Received: 16/12/2016
Mode Of Delivery: field test
Condition On Delivery: Not applicable
Date Started: 16/12/2016
Report Date: 21/12/2016
Report Reference: 17DL21

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Atmospheric Pressure mBar		--	--	16/12/16	1001
Carbon Dioxide %		--	--	16/12/16	7.7
Methane %		--	--	16/12/16	9.7
Oxygen % O2		--	--	16/12/16	10.5

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Geraldine Friel
Dr. Joe Ferry, Laboratory Manager

13/01/2017

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**Comhairle Contae Dhún na nGall
Donegal County Council
Central Laboratory, The Kube
Magheranan
Letterkenny
074-9122787**

Sample No.: 162504062	Sample Date/Time: 16/12/2016 @ 09:00
Category: Landfill Monitoring	Sample Method: Grab
Entity: Glenalla Landfill	Sampled By: Eddie Carr
Station: Lg3	Laboratory: Donegal Co Council
Template: Landfill Monitoring - Landfill Gas	Analyst: Eddie Carr

Sample Notes:	
Customer Name: Landfill Monitoring Donegal Co. Council	Sample No. Laboratory: 162504062
Contact Details: Julie McMahon	Sample No. Customer:
Central Lab	Date Received: 16/12/2016
The Kube, Magheranan	Mode Of Delivery: field test
Letterkenny	Condition On Delivery: Not applicable
0749122787; 0872861096	Date Started: 16/12/2016
julie.mcmahon@donegalcoco.ie	Report Date: 21/12/2016
Customer Ref: Landfill Compliance Monitoring	Report Reference: 17DL21

Parameter/Unit	Test Method	Maximum Limit	Minimum Limit	Test Date	Test RESULT
Atmospheric Pressure mBar		--	--	16/12/16	1001
Carbon Dioxide %		--	--	16/12/16	27
Methane %		--	--	16/12/16	63.3
Oxygen % O2		--	--	16/12/16	1.8

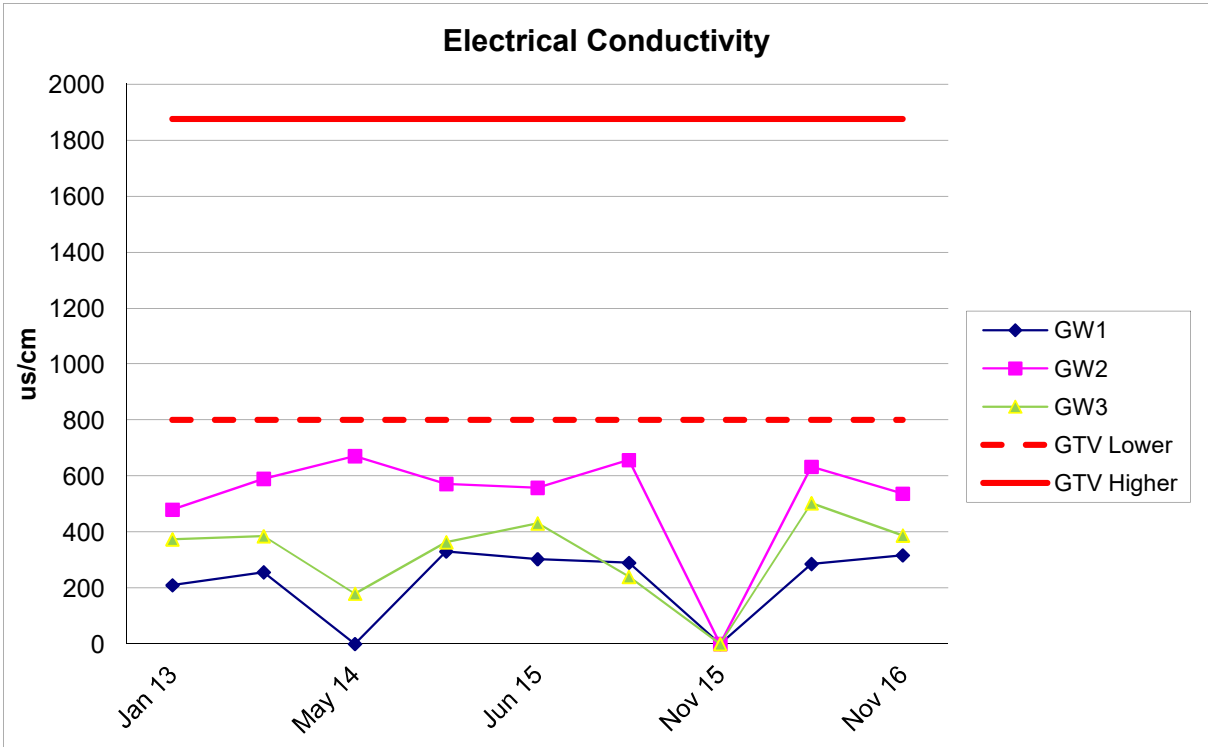
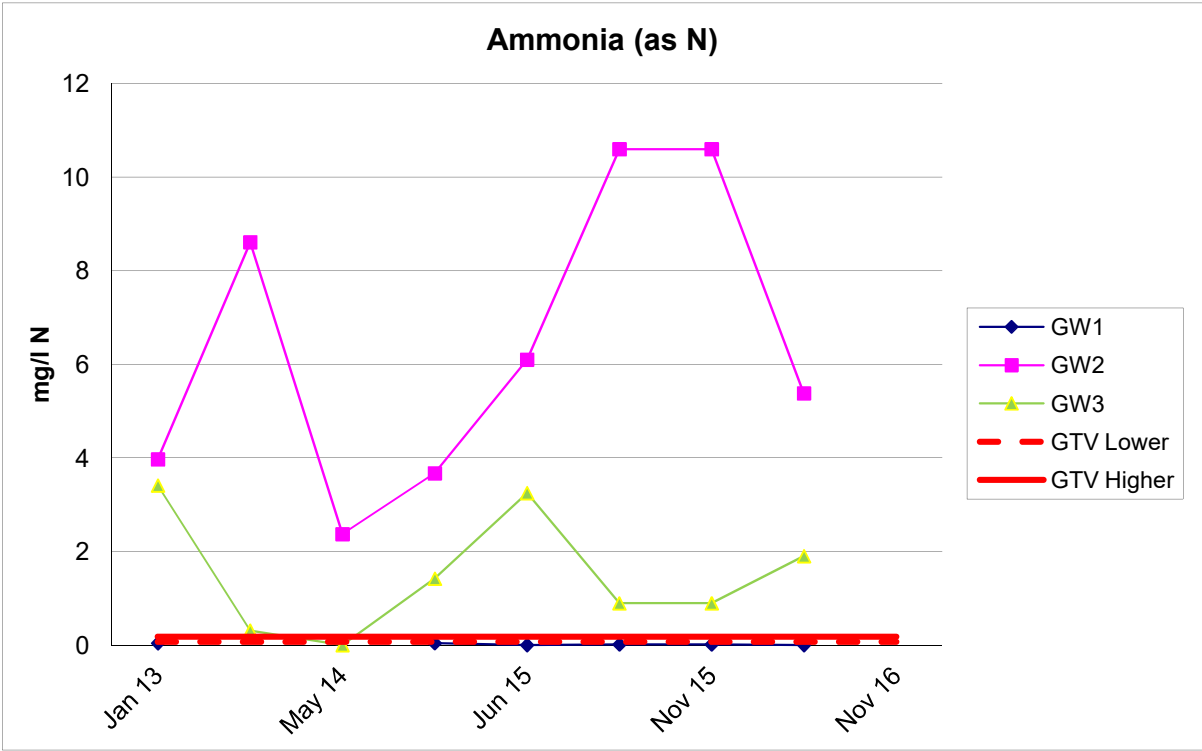
* Accredited **Sub-Contract ***Accredited Sub-Contract

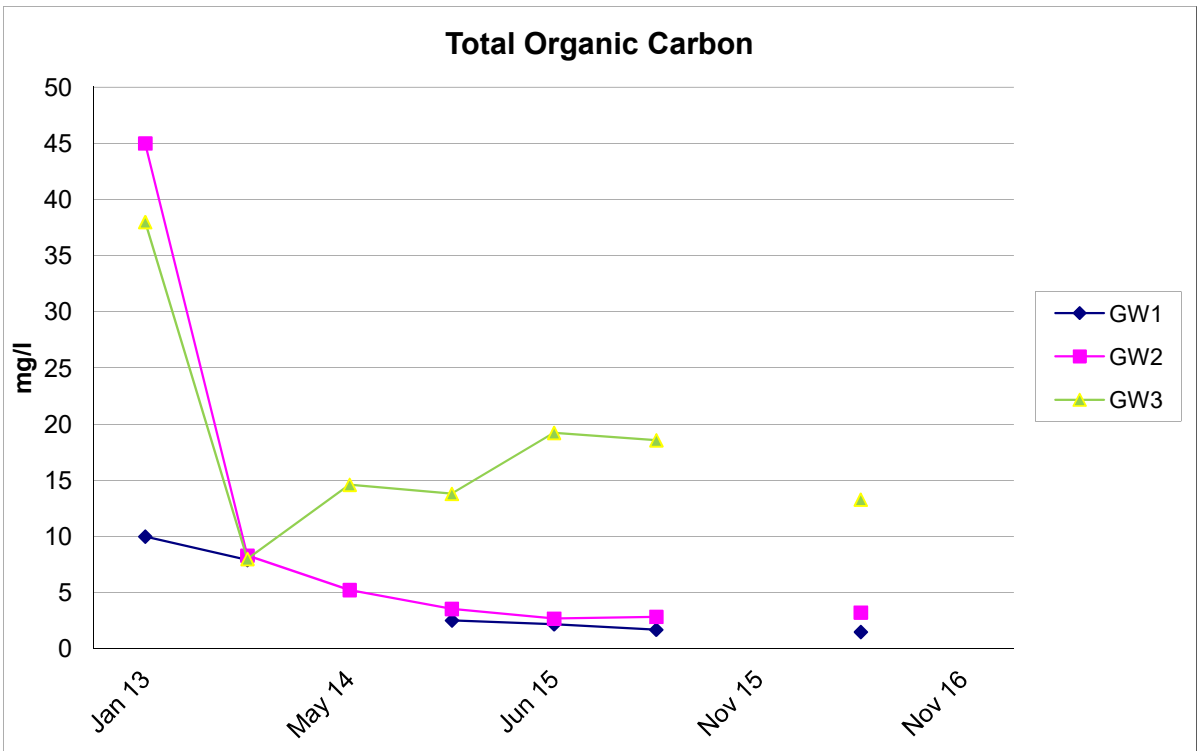
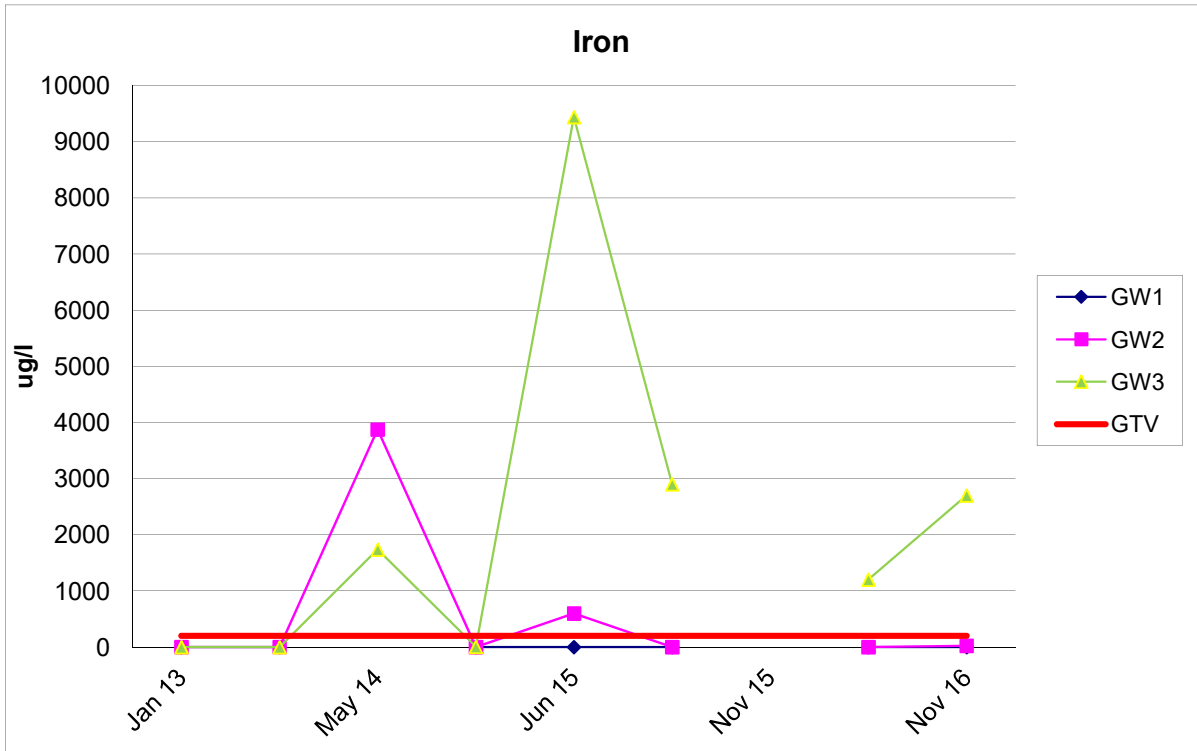
SIGNED

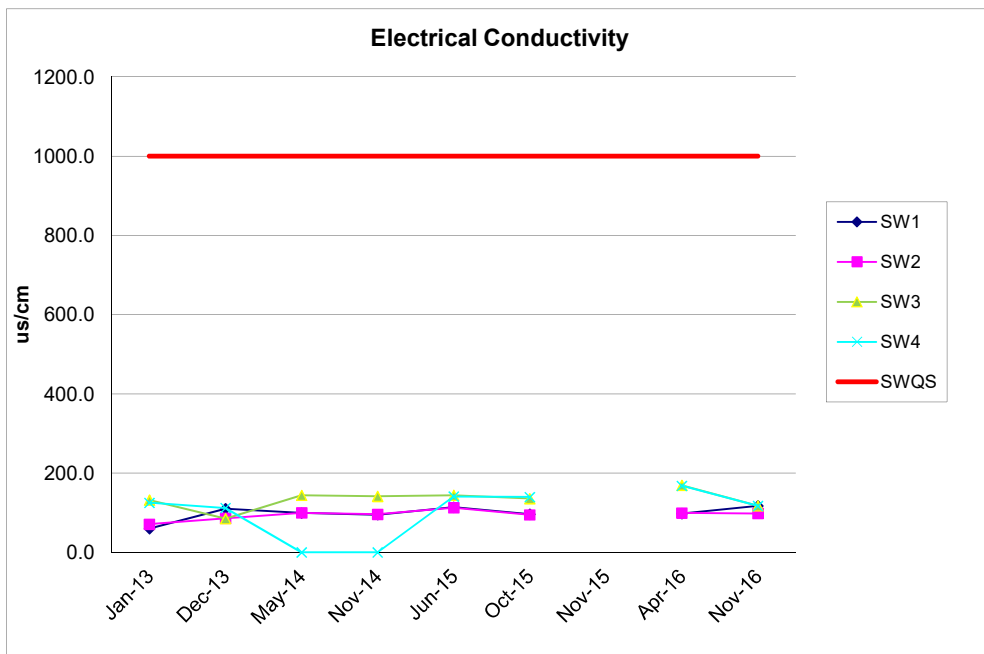
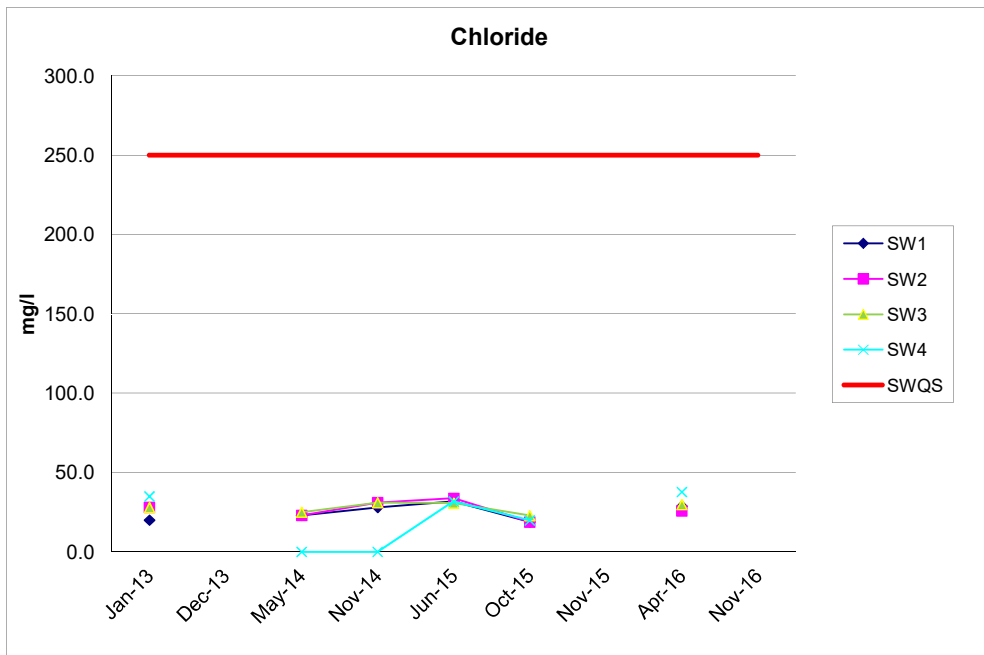
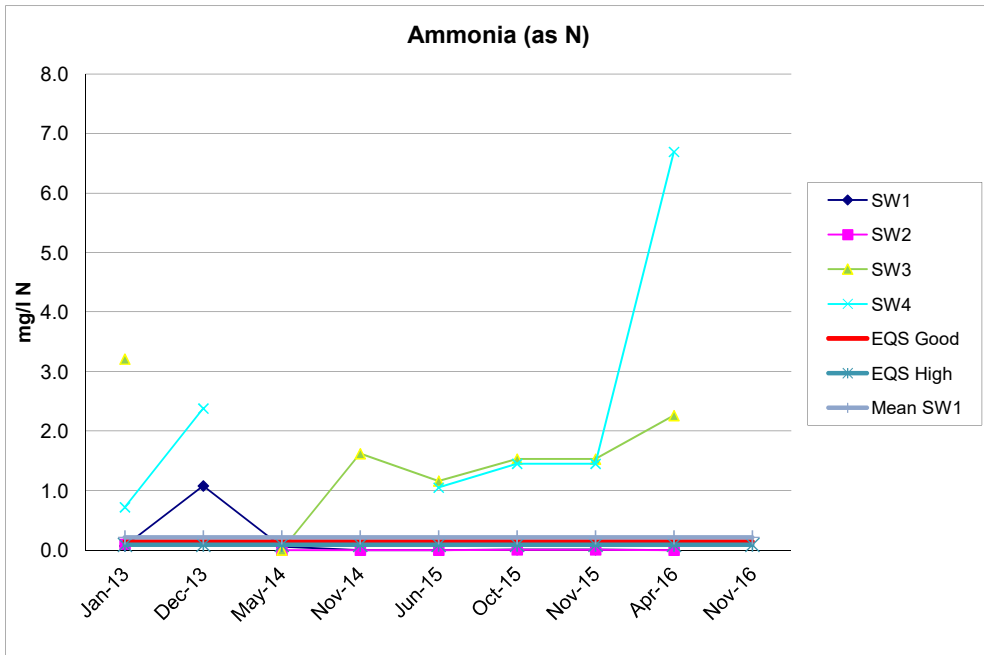
Joe Ferry
Dr. Joe Ferry, Laboratory Manager

13/01/2017

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 Original Test Report, unless otherwise indicated by the insertion of Supplementary Test Report in Report Reference section
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Appendix D

Water Balance Calculation and Meteorological Data

GLENNALLA WATER BALANCE CALCULATION

Year	Status	Rainfall (mm)	Temp Restored area Area	Temp Restored area infiltration IRCA(m3)	Restored area Area	Restored area infiltration IRCA(m3)	Total Water	Leachate produced Lo(m3)	Leachate Volume Tankered
2016	Closed	1,073			20,500	2,199	2,199	2,199	2999.79
Total		1,073						2,199	2999.79

Assumptions

IRCA=	Fully Capped/Restored area infiltration of rainfall estimated (2-10% of ER),EPA Manual	10%	%
Restored area	Area capped is 20,500.	20,500	m ²
Rainfall Data	Data taken from Met Eireann Station Malin Head, Total Rainfall used.	1072.6	mm

Total rainfall in millimetres for Malin_head	Year	2016	2015	2014	2013	2012
	Jan	166.3	176.0	162.2	140.9	134.7
	Feb	130.7	85.8	189.9	74.1	68.1
	Mar	72.7	123.1	71.6	61.7	29.8
	Apr	52.9	64.7	33.4	61.6	46.3
	May	65.6	137.0	86.8	102.5	50.7
	Jun	72.4	56.1	48.6	85.5	141.1
	Jul	109.9	132.7	86.0	56.5	91.4
	Aug	79.9	111.0	95.3	92.6	87.3
	Sep	94.7	29.7	23.0	69.7	139.2
	Oct	37.6	71.9	131.4	103.8	123.5
	Nov	113.9	222.9	134.4	116.0	87.4
	Dec	76.0	272.9	150.5	178.6	149.3
	Annual	1072.6	1483.8	1213.1	1143.5	1148.8

Appendix E

E-PRTR (AER Electronic Reporting System)



Environmental Protection Agency

| PRTR# : W0125 | Facility Name : Glenalla Landfill Site | Filename : W0125_2016.xls
 | Return Year : 2016 |

[Guidance to completing the PRTR workbook](#)

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2016
-----------------------	------

1. FACILITY IDENTIFICATION

Parent Company Name	Donegal County Council
Facility Name	Glenalla Landfill Site
PRTR Identification Number	W0125
Licence Number	W0125-01

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Glenalla
Address 2	Milford
Address 3	
Address 4	
	Donegal
Country	Ireland
Coordinates of Location	-7.63731 55.0981
River Basin District	GBNIIENW
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Julie McMahon
AER Returns Contact Email Address	julie.mcmahon@donegalcoco.ie
AER Returns Contact Position	0749122787
AER Returns Contact Telephone Number	0872861096
AER Returns Contact Mobile Phone Number	0749161304
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# : W0125 | Facility Name : Glenalla Landfill Site | Filename : W0125_2016.xls | Return Year : 2016 |

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
01	Methane (CH4)	C	OTH	Landgem-v302	0.0	40093.3	0.0	40093.3
03	Carbon dioxide (CO2)	C	OTH	Landgem-v302	0.0	110007.0	0.0	110007.0
02	Carbon monoxide (CO)	C	OTH	Landgem-v302	0.0	19.6	0.0	19.6
07	Non-methane volatile organic compounds (NMVOC)	C	OTH	Landgem-v302	0.0	258.5	0.0	258.5
55	1,1,1-trichloroethane	C	OTH	Landgem-v302	0.0	0.32	0.0	0.32
56	1,1,2,2-tetrachloroethane	C	OTH	Landgem-v302	0.0	0.92	0.0	0.92
34	1,2-dichloroethane (EDC)	C	OTH	Landgem-v302	0.0	0.2	0.0	0.2
62	Benzene	C	OTH	Landgem-v302	0.0	0.74	0.0	0.74
58	Trichloromethane	C	OTH	Landgem-v302	0.0	0.18	0.0	0.18
65	Ethyl benzene	C	OTH	Landgem-v302	0.0	2.44	0.0	2.44
73	Toluene	C	OTH	Landgem-v302	0.0	0.0	0.0	0.0
78	Xylenes	C	OTH	Landgem-v302	0.0	6.37	0.0	6.37
57	Trichloroethylene	C	OTH	Landgem-v302	0.0	1.84	0.0	1.84
60	Vinyl chloride	C	OTH	Landgem-v302	0.0	2.28	0.0	2.28
35	Dichloromethane (DCM)	C	OTH	Landgem-v302	0.0	5.94	0.0	5.94

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

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

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0125 | Facility Name : Glenalla Landfill Site | Filename : W0125_2016.xls | Return Year : 2016 |

30/03/2017 12:50

Please enter all quantities on this sheet in Tonnes

3

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 : Address of Next Destination Facility	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)
						Haz Waste : Name and Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Recover/Disposer						
Within the Country	19 07 03	No	2999.79 in 19 07 02	landfill leachate other than those mentioned	D8	M	Weighed	Offsite in Ireland	Donegal County Council,D0009-01		Thorn rd,Magheranan .Letterkenny WWTP,Letterkenny County Donegal,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](#)