



WASTE LICENSE REFERENCE NO. W166/01

ANNUAL ENVIRONMENTAL REPORT 2014

WASTE RECOVERY FACILITY

LIOSBAN INDUSTRIAL ESTATE, SANDY ROAD,

GALWAY.

Prepared by:

Ronan O'Reilly,

Environment dept.,

Galway City Council

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INTRODUCTION

This is the tenth Annual Environmental Report (AER) to be submitted to the Agency relating to Waste Licence W166-1 granted on 16th of March 2004 for Galway City Council Depot, Sandy Road, Liosban Industrial Estate, Galway. This annual environmental report is drafted in line with the content requirements as set out in schedule F of the waste license.

Policy Statement

Galway City Council is committed to meeting all conditions set out in EPA Waste Licence W166-1.

Item 1 Reporting Period

1st January 2014 – 31st December 2014.

Item 2 Waste activities carried out

See appendix 1 for map detailing area designation.

Area 1

The public area of the recycling centre (the civic amenity facility) facilitates for the disposal of Waste electronic and electrical equipment, glass Bottles, Clothes, Fluorescent tubes, Batteries, Waste Cooking & Engine Oil, Large Plastics, Aluminium cans, Waste Metal and Large Timber all from domestic houses.

Area 2

This area caters for the disposal of household WEEE from the Commercial Sector. The acceptance of commercial WEEE at the facility has ceased due to the implementation of the revised WEEE regulations in July 2014.

Area 3

This area is used by departments within Galway City Council. Waste streams accepted in this area are Road Sweepings, Street litter, Community Wardens waste collected, Drainage waste arising from works, Housing waste arising from works, Parks and Roads Departments. Each department separates their waste into designated areas/skips, mainly Construction & Demolition, Timber, Metal, Hard Plastics, Glass, Tyres, Municipal Waste, Green Waste, Deceased Animals, Inspection and Quarantine.

Area 4

This area was previously utilised to transfer clean and dry recyclables from the GCC refuse service. This service ceased in December 2013. The area was utilised as a plant storage area during the reporting period.

Item 3 quantity and composition of waste recovered, received and disposed of during 2014 and each previous year (EWC codes to be provided)

incoming waste 2014			outgoing waste 2014		
description	EWC code	tonnes	description	EWC code	tonnes
Mixed dry recyclables (typically green bin)	20 03 01	0.00	mixed dry recyclables collected by GCC household waste collection service	20 03 01	0.00
Glass from municipal sources	20 01 02	17.92	glass from domestic households (bottles and jars)	20 01 02	14.93
Clothing waste from municipal sources	20 01 10	4.34	clothes from domestic householders	20 01 10	3.61
Fluorescent tubes & other mercury-containing waste	20 01 21*	1.52		20 01 21*	1.27
Alkaline batteries from municipal sources	16 06 04	5.14	Mixed batteries from municipal sources	16 06 04	4.28
Lead batteries from municipal sources	16 06 01*	1.28	Lead batteries from municipal sources	16 06 01*	1.06
	20 01 38	122.18	Wood waste from municipal sources (e.g. furniture)	20 01 38	101.82
Plastic from municipal sources	20 01 39	48.67	Plastic from municipal sources	20 01 39	40.56
Metals from municipal waste e.g. light iron	20 01 40	221.33	Metals from municipal waste e.g. light iron	20 01 40	184.44
Street-cleaning residues	20 03 03	1,119.68	Street-cleaning residues	20 03 03	1,119.68
Segregated metal packaging - aluminium cans	15 01 04	5.16	Segregated metal packaging - aluminium cans	15 01 04	4.30
Fridges & freezers	16 02 11* 20 01 23*	99.53	Fridges & freezers	16 02 11* 20 01 23*	82.94
White goods	16 02 14 20 01 36	214.39	White goods	16 02 14 20 01 36	178.66
TVs & PC monitors	16 02 13* 20 01 35*	140.22	TVs & PC monitors	16 02 13* 20 01 35*	116.85
	16 02 14 20 01 36	168.04	Other WEEE (e.g. phones, computer equipment, electronic toys, hairdryers, vacuum cleaners)	16 02 14 20 01 36	140.04
Oil filters	16 01 07*	0.14	Oil filters	16 01 07*	0.12
Tyres	16 01 03	0.00	Tyres	16 01 03	0.00
Parks waste	20 02 02	27.05	parks waste Included in C and D waste out	20 02 02	22.54
Glass from C&D waste (e.g. window glass)	17 02 02	7.90	Glass from C&D waste (e.g. window glass)	17 02 02	6.58
Mixed C&D waste	17 01 07	615.60		17 09 04	513.00
Waste engine, gear & lubricating oils	13 02 08*	1.84	Waste engine, gear & lubricating oils	13 02 08*	1.53
waste cooking oil	20 01 25	0.78	waste cooking oil	20 01 25	0.65
total		2822.696	total		2538.86

Note: previous year's figures included in appendix 2

Item 4 & 5 Summary report on emissions, results summary and monitoring locations plan

Emission limits are set out in Schedule C of the licence for the following: Noise; Dust Deposition and Surface Water. The locations of these monitoring points are set out in the Drawing AER /02 Monitoring Locations attached in appendix 3.

Noise Emissions

Detailed report of noise monitoring that was carried out is included in Appendix 5. Complete Laboratory solutions carried out this monitoring on behalf of Galway City Council.

The noise levels at the facility were assessed at two locations on the 17th October 2014 as per the license requirements set out in schedule D.

The day time noise levels at the facility at both survey points are shown to be less than the limits outlined in the waste license. This indicates that the facility has very little noise impact on the environs. As the facility does not have any night time work or activity there was no night time monitoring of noise levels carried out during the reporting period.

Noise Survey Summary

Monit oring point	Date/t ime	Sampling interval (mins)	L(A)_{eq}	License limit L(A)_{eq}	Comments
NSL1 i	17/10/ 14 (comme nced at 11am)	30	54.6	55	Below limits set out in license
NSL1 ii	17/10/ 14 (comme nced at 11am)	30	53.7	55	Below limits set out in license
NSL1 iii	17/10/ 14 (comme nced at 11am)	30	53.3	55	Below limits set out in license
NSL2 i	17/10/ 14 (comme nced at 11am)	30	51.8	55	Below limits set out in license
NSL2 ii	17/10/ 14 (comme nced at 11am)	30	51.4	55	Below limits set out in license
NSL2 iii	17/10/ 14 (comme nced at 11am)	30	51.6	55	Below limits set out in license

Dust Emissions

Detailed dust emissions report is attached in appendix 4.

Monitoring took place twice at two locations at the facility between the 29th May and 3rd June and also between the 20th November and the 3rd of December as per the license requirements set out in schedule D2. The second sampling was later than the September guideline and this was due to a programming mistake made.

A summary of results are detailed below.

All results obtained are well within the parameters as set out by the license in schedule C2. This is attributable to the facility being well maintained and swept by a mechanical road sweeper on a regular basis.

May/June 2014 summary

Monitoring location	Mass of dust	Collection surface area m ²	Sample duration	Dustfall g/m ² /d	Dustfall mg/m ² /d	Dustfall limit mg/m ² /d
D1	.0157	.00607	30	.104	104	350
D2	.0206	.00607	30	.084	84	350

Nov/Dec 2014 summary

Monitoring location	Mass of dust	Collection surface area m ²	Sample duration	Dustfall g/m ² /d	Dustfall mg/m ² /d	Dustfall limit mg/m ² /d
D1	.0165	.00607	29	.145	145	350
D2	.0230	.00607	29	.139	139	350

Surface Water Emissions

Detailed results are attached in appendix 6. The surface water network collects the roof water from the main building and surface water from the south and east of the site. Surface water monitoring was carried out at locations SW01; SW02 and SW03. Samples were taken on the 25th April 2014 and the 16th October 2014; individual results are attached in the additional documents section. The analysis shows the samples to be below the emission limit values as outlined in the license under schedule C3. The results are compared to the EPA guidance – Parameters of water quality – Interpretation and standards. The results indicate that the surface waters are in line with A1 category waters as outlined in the EPA document

Summary of results are detailed below:

April 2014 summary

Lab ref	units	a1	a2	a3	sw01	sw02	sw03	limits
ammonia	Mg/L as N	.16	.17	3.11	.147	.183	.085	-
BOD	Mg/L	5	5	7	<1	<1	<1	-
Oils fats and greases	Mg/l	-	-	40	<5	<5	<5	5
conductivity	Uscm - 1@25 C	1000	1000	1000	369	375	690	-
pH	PH units	5.5-8.5	5.5-9	5.5-9	7.6	7.6	7.7	-
Suspended solids	Mg/l	50	-	-	<2	3	5	-
Mineral oil (calc)	mg/l	5			.031	.065	.177	-

October 2014 summary

Lab ref	units	a1	a2	a3	sw01	sw02	sw03	limits
ammonia	Mg/L as N	.16	.17	3.11	.066	.043	.116	-
BOD	Mg/L	5	5	7	<1	<1	<1	-
Oils fats and greases	Mg/l	-	-	40	<5	<5	<5	5
conductivity	Uscm - 1@25 C	1000	1000	1000	243	243	646	-
pH	PH units	5.5-8.5	5.5-9	5.5-9	8	8	7.8	-
Suspended solids	Mg/l	50	-	-	<2	2	8	-
Mineral oil (calc)	Mg/l	5			.147	.162	.388	-

Foul Water emissions

The foul water network collects all foul discharge from the site, surface water from the wash bay areas and the main recycling yard. Foul water monitoring was required to be carried out at the location FW3 as agreed with the Agency and is shown on the *Drawing AER/02 Monitoring Locations*. Monitoring was carried out twice during 2014 (25/04/14 & 16/10/14) and the results are included in appendix 7.

Summary of Emissions to Foul Water

Parameter	Units	FW3-april	FW3 - oct	FW3 average
pH	pH Units	7.7	7.8	7.75
Biological Oxygen Demand	mg/L	18	196	107
Suspended Solids	mg/L	202	128	165
Ammonia	mg/L as N	5.87	10.6	8.235
Fats, Oils, Grease	mg/L	<5	<5	<5
Total Phosphate	mg/L as P	2.6	10.6	6.6

Item 6 resource and energy consumption summary

The recycling facility is operated daily utilising 2 no staff on a permanent basis. From time to time this staff compliment will be increased to 3no. staff depending on operations (eg additional loading requirements etc.). In addition to this the facility manager is in attendance at the facility daily also.

To facilitate the operating of the facility the following machinery is in place:

1no. JCB

1no. Fork lift

In addition to this there is a permanent weighbridge at the facility which is calibrated regularly and is used to record waste weights in and out of the facility.

The depot which is covered under license W166-01 is also utilised by all GCC departments for:

- fuelling and storage of plant and machinery
- GCC stores departments
- GCC garage
- storage of materials
- workshops
- training rooms
- staff parking

Energy consumption

A summary is detailed below. It should be noted that the figures included are for the entire operation of the Sandy road facility which is included within the license.

The figures used are estimated as final 2014 figures are yet to be delivered. The diesel figure for 2014 shows a great reduction on the previous year due to the cessation of the direct provision of the refuse service by GCC at the end of 2013. A detailed breakdown of the energy consumption for 2013 is shown in appendix 8 for reference.

	Liquid petroleum gas	Electricity	Diesel	Marked gas oil	Unleaded petrol (estimated)
Quantity used (lt)	32327	-	120000	70889	500
Quantity used (KWhr)	229522	327028	1219319	720303	4719
Carbon Dioxide (NCV kg O₂)	52629	159917	621249	190160	1180

Item 7 development/infrastructural works in place or planned to process waste quantities for the following year (including plant operating capacity, provision of adequate standby capacity and provision of contingency, back up and spares in case of breakdown)

The equipment used in the facility is in the main hired and therefore all hire companies provide contingency plans for the replacement of equipment in the event of breakdown etc.

The facility is also supported by the Galway city council fleet management unit to assist with any additional plant requirements that may occur from time to time.

Item 8 Schedule of environmental objectives and targets for the forth coming year

- To seek to improve the civic amenity facility so as to ensure that the service provided to the customer continues to improve
- carry out a survey of the drainage network in the facility
- continue to improve the environmental management system for the facility
- complete bund inspections as required under the license
- ensure that staff deployed at the facility continue to receive necessary training

- improve on monitoring reporting to the agency throughout the reporting period
- continue to review customer/user information systems on site – ie update signage as required.
- Look further at bird mitigation and control measures to ensure the site is kept clear of birds as best as possible.

Item 9 report on the progress towards achievements of environmental objectives and targets contained in the previous years AER

- The computer system on site has been connected to the main GCC network and is now in a position to connect with information as needed
- The information on the web site was updated during the reporting period as required to ensure that customers are aware of how the facility operates and any changes to same are also notified via SMS, website and twitter feeds.
- The proposed implementation of a fixed charge at the civic amenity facility was reviewed and has been rejected by GCC senior management at this time.
- The bund inspections were not completed in the reporting period. These will be completed in 2015.
- Road sweeping storage at the facility was revised in the reporting period. All road sweepings are now deposited into a container and thus this has greatly improved the cleanliness at the facility and also controlled the drainage at the facility.
- The management systems at the facility are continually being reviewed.
- A shredding machine was deployed at the facility in February to facilitate the shredding of Christmas trees that were accepted at the civic amenity facility. This was a successful initiative and will be implemented going forward.
- Bird control measures were not upgraded during the reporting period. Birds at the facility continue to be monitored.

Item 10 full title and a written summary of any procedures developed by the licensee in the year which relates to the facility operation.

There were no new procedures developed during the reporting period.

Item 11 Tank, drum, pipeline and bund testing and inspection report

Weekly inspections of the drainage system take place as required by the license a sample record sheet for same is attached to this report (appendix 10). A full detailed CCTV pipe line inspection was carried out in 2012 at the facility and is therefore required during the next reporting period.

Item 12 Reported incidents and complaints summaries

No incidents were recorded or reported to the agency during the reporting period

Item 13 Review of nuisance controls

During the reporting period Ecolab Ltd were awarded the contract to manage vermin control at the facility. A management system for this measure is in place and continually monitored and reported on. Records of same are maintained on site. The management system implemented by Ecolab is also detailed in monthly reports online. In addition to this, weekly nuisance inspections are carried out at the facility and recorded and retained at the facility office for inspection. A sample copy of a nuisance report is attached to this document appendix 9.

Dust at the facility is minimised by a sweeping regime that is carried out as required and at a minimum every second day at the facility.

Bird control measures at the facility have been implemented (bird netting) at great cost however may need additional control measures

The issue of odour at the facility does not arise and no complaints have been received during the reporting period. Monitoring of same forms part of the weekly nuisance inspections.

Item 14 reports on financial provision made under this license, management and staffing structure of the facility and a programme for public information

financial provision

the financial provision made for the facility in 2013 was as follows:

total budget - €182,379 total expenditure - €193,565

The financial provision made for 2015 is:

budget allowed - €166,099

management and staffing

facility manager – Ronan O'Reilly, EE

deputy facility manager – J O Connor, Waste Operations Supervisor

Ganger	–	G O Connor Full time
Driver	-	J Dolphin Full Time
Administrative support	–	C Clancy, clerical officer (25% assigned to facility)
Community warden	–	1no. warden attends at the civic amenity facility for 4hrs per week.
Waste enforcement officer	–	GCC waste enforcement officer attends at the facility and assists with all aspects waste related at the facility as required

In addition to the above staffing compliment the civic amenity facility is operated on Saturdays (9am-1pm) by 2no. additional staff assigned on a rota basis throughout the year.

programme for public information

The information available to the public regarding the facility is continually monitored and changed as the need arises. GCC utilise the GCC web site and also social media to inform the public of any issues regarding the facility.

Item 15 volume of waste water produced and volume of waste water discharged off site

No records available at this time

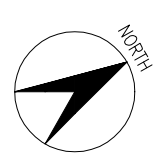
Appendices

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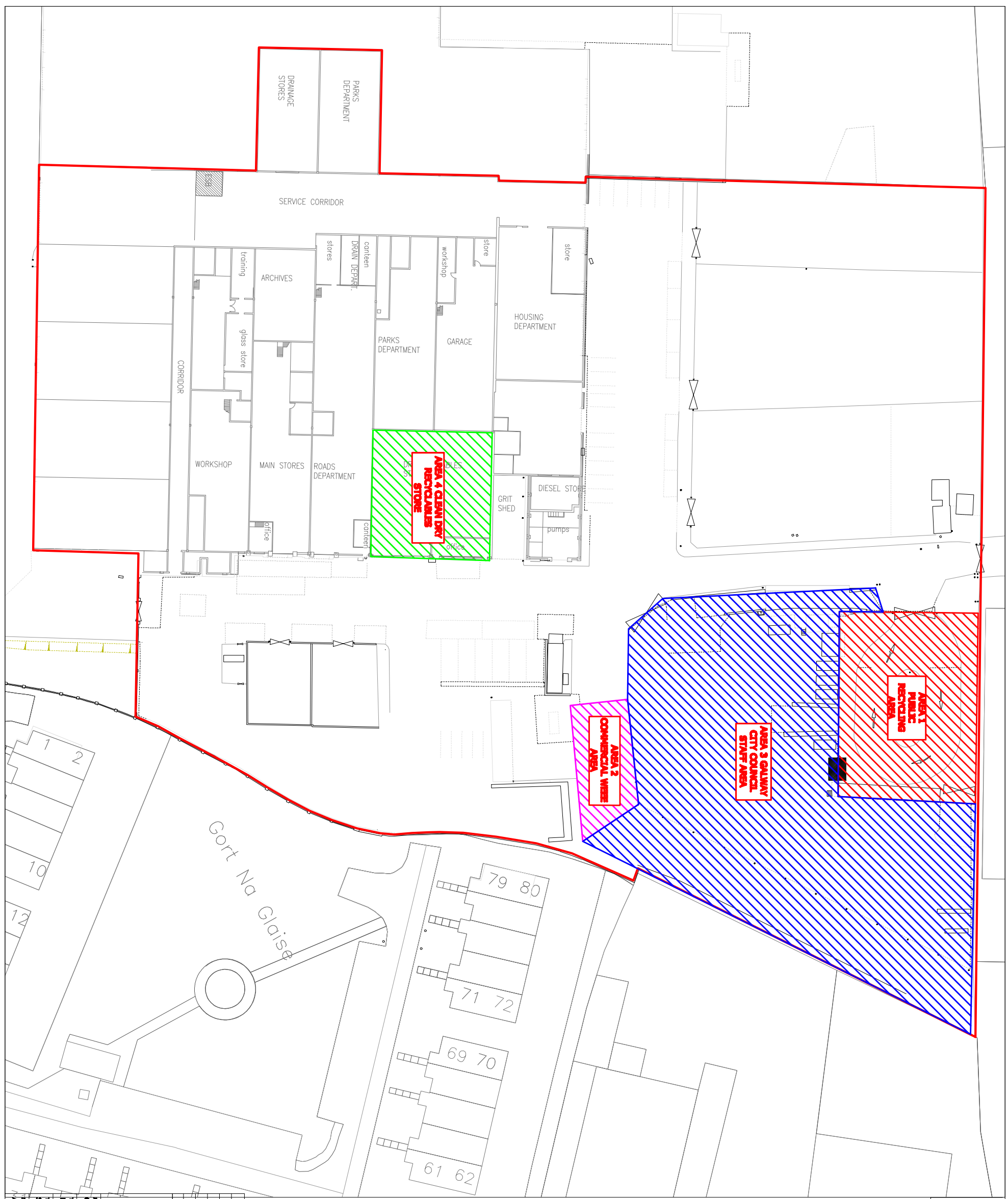
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[Appendix 1 Drawing AER/01 area designation](#)

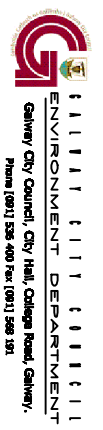
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 NO OFF-SITE FROM THIS DRAWING - WORK ONLY FROM ISSUED DIMENSIONS
 ALL DRAWING AND DIMENSIONS TO BE REFERRED TO THE EXHIBIT
 Checked by: [Signature]
 Drawn by: [Signature]
 Date: [Signature]



— Site Boundary



CHK	STA	DATE	REV



ENVIRONMENT DEPARTMENT
 Galway City Council, City Hall, College Road, Galway.
 Phone: (091) 536 400 Fax: (091) 568 181

PROJECT: GALWAY CITY COUNCIL RECYCLING CENTRE

TITLE: EPA LICENCE 166-1

DATE: MAY 2012

DRAWN BY: RDR

NO: AER/01

[Appendix 2 previous years waste in waste out figures](#)

incoming waste 2013			outgoing waste 2013		
description	EWC code	tonnes	description	EWC code	tonnes
Mixed dry recyclables (typically green bin)	20 03 01	1,849.00	mixed dry recyclables collected by GCC household waste collection service	20 03 01	1,849.00
Glass from municipal sources	20 01 02	13.32	glass from domestic households (bottles and jars)	20 01 02	13.32
Clothing waste from municipal sources	20 01 10	8.00	clothes from domestic householders	20 01 10	5.30
Fluorescent tubes & other mercury-containing waste	20 01 21*	1.35	Fluorescent tubes & other mercury-containing waste	20 01 21*	1.35
Alkaline batteries from municipal sources	16 06 04	3.59	Mixed batteries from municipal sources	16 06 04	3.59
Lead batteries from municipal sources	16 06 01*	3.53	Lead batteries from municipal sources	16 06 01*	3.53
Wood waste from municipal sources (e.g. furniture)	20 01 38	165.48	Wood waste from municipal sources (e.g. furniture)	20 01 38	165.48
Plastic from municipal sources	20 01 39	42.12	Plastic from municipal sources	20 01 39	42.12
Metals from municipal waste e.g. light iron	20 01 40	104.9	Metals from municipal waste e.g. light iron	20 01 40	104.90
Street-cleaning residues	20 03 03	1,766.00	Street-cleaning residues	20 03 03	1,213.00
Segregated metal packaging - aluminium cans	15 01 04	5.98	Segregated metal packaging - aluminium cans	15 01 04	5.98
Fridges & freezers	16 02 11* 20 01 23*	102.00	Fridges & freezers	16 02 11* 20 01 23*	102.00
White goods	16 02 14 20 01 36	236.48	White goods	16 02 14 20 01 36	236.48
TVs & PC monitors	16 02 13* 20 01 35*	139.71	TVs & PC monitors	16 02 13* 20 01 35*	139.71
Other WEEE (e.g. phones, computer equipment, electronic toys, hairdryers, vacuum cleaners)	16 02 14 20 01 36	152.65	Other WEEE (e.g. phones, computer equipment, electronic toys, hairdryers, vacuum cleaners)	16 02 14 20 01 36	152.65
Oil filters	16 01 07*	0.01	Oil filters	16 01 07*	0.00
Tyres	16 01 03	1.00	Tyres	16 01 03	1.00
Parks waste	20 02 02	98.50	parks waste Included in C and D waste out	20 02 02	
Glass from C&D waste (e.g. window glass)	17 02 02	9.66	Glass from C&D waste (e.g. window glass)	17 02 02	9.66
Mixed C&D waste	17 09 04	439.00	Mixed C&D waste (figure estimated as recorded as loads out wards only)	17 09 04	537.00
Waste engine, gear & lubricating oils	13 02 08*	5	Waste engine, gear & lubricating oils	13 02 08*	2.94
waste cooking oil	20 01 25	0.92	waste cooking oil	20 01 25	0.92
total		5148.2	total		4589.93

Appendix 3 AER/02 – Monitoring locations

Appendix 4 Dust deposition results



Complete Laboratory Solutions

Complete Laboratory Solutions
Ros Muc, Co. Galway.
[Tel] 091 574355
[Fax] 091 574356
[Email] services@cls.ie
[web] www.completelabsolutions.com

Client : Ronan O'Reilly
Galway City Council
Environment Department
College Road
Galway City

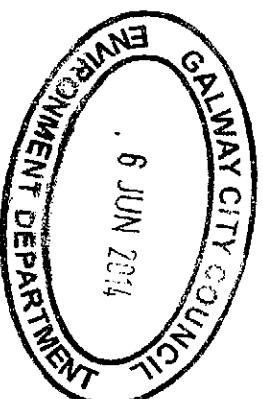
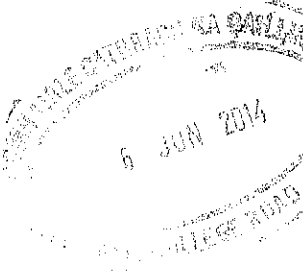
Report No. : 229242
Date of Receipt : 29/05/2014
Start Date of Analysis : 29/05/2014
Date of Report : 04/06/2014
Order Number :
Sample taken by : CLS

CERTIFICATE OF ANALYSIS

Lab No	Sample Description	Test	Result	Units
520611	Dust Jar 1	Settleable Dust (Bergerhoff Method)	104	mg/sq.m/day
520612	Dust Jar 2	Settleable Dust (Bergerhoff Method)	84	mg/sq.m/day
520613	Dust Jar 3	Settleable Dust (Bergerhoff Method)	175	mg/sq.m/day

Approved by: Barbara Lee
Barbara Lee
Environmental Scientist

See page 2 for test specifications and accreditation status
This report only relates to items tested and shall not be reproduced but in full with the permission of Complete Laboratory Solutions.



Test	Specification	Subcontracted	CLS 17025 Status	Sub 17025 Status
Settleable Dust (Bergerhoff Method)	CLS 31	No	No	No

Laboratory Analysis, Sampling, Technical Backup, Training, Food Safety Program Auditing and Monitoring are all ISO 9001:2008 certified

CERTIFICATE OF ANALYSIS

Client : Ronan O'Reilly
 Galway City Council
 Environment Department
 College Road
 Galway City

Report No. : 245575
 Date of Receipt : 20/11/2014
 Start Date of Analysis : 20/11/2014
 Date of Report : 04/12/2014
 Order Number :
 Sample taken by : CLS

Lab No	Sample Description	Test	*	Result	Units
558416	Dust Jar 1	Settleable Dust (Bergerhoff Method)	R	145	mg/sq.m/day
558417	Dust Jar 2	Settleable Dust (Bergerhoff Method)	R	139	mg/sq.m/day
558418	Dust Jar 3	Settleable Dust (Bergerhoff Method)	R	393	mg/sq.m/day

Approved by:



Barbara Lee
Environmental
Scientist

See below for test specifications and accreditation status.

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* Location of analysis: R=Ros Muc, M=MedPharma, S=Subcontracted.

Test	Specification	CLS 17025 status	GMP/FDA ¹	ISO ²	Sub ³	Sub 17025 Status
Settleable Dust (Bergerhoff Method)	CLS 31	No	No	Yes	No	No

¹Analysis carried out in a GMP approved, FDA inspected facility (MedPharma site only).

²Laboratory Analysis, Sampling, Technical Backup, Training, Food Safety Program Auditing and Monitoring are all ISO 9001:2008 certified (Ros Muc site only).

³Subcontracted.

Lab No	Sample ID	Sample Condition on Receipt	Sampling Date
558416	Dust Jar 1	Good condition	Not Supplied by Client
558417	Dust Jar 2	Good condition	Not Supplied by Client
558418	Dust Jar 3	Good condition	Not Supplied by Client

Appendix 5 noise emissions



ANNUAL NOISE MONITORING REPORT FOR GALWAY CITY COUNCIL, SANDY ROAD DEPOT.

Client name: Ronan O'Reilly, Environment Department, Galway City Council.

Licencee: Galway City Council

Licensed by the EPA (Licence number W166-01)

Location of Facility: Liosban Industrial Estate, Sandy Road, Galway City

17/10/2014

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1.0 Scope

This report presents the results of an Environmental noise survey carried out in the vicinity of Galway City Councils Sandy Road Depot in Liosban Industrial Estate Galway City. The report was prepared to satisfy the annual (2014) environmental noise monitoring requirements of the Environmental Protection Agency's Waste Licence, Register Number W0166-01.

This Survey was completed with reference to *ISO 1996: Acoustics – Description and Measurement of Environmental Noise* and with reference to the EPA publication *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)*.

This survey was completed during daytime period (07:00 to 19:00hrs) during normal operating conditions. Night-time or evening monitoring did not take place as there is no night-time or evening activity on site. The Survey took place on the 17th October 2014.

2.0 Receiving Environment

2.1 General Description

Sandy Road Depot is a Civic waste recycling facility which also acts as a depot that consists of offices and garages for the maintenance and storage of City Council vehicles and equipment. The waste facility is licensed by the EPA to carry out a wide variety of waste management and recycling operations as set out in **Part 1 Schedule of Activities Licensed** of the waste licence Reg: W0166-01 in accordance with the Third and Fourth Schedule of the Waste Management Act, 1996.

2.2 Receptors

There are total of two noise monitoring locations. These are located outside of the facility at the nearest noise sensitive locations (NSL) NSL1 and NSL2. A map of site and monitoring locations are provided in Appendix I (Map was supplied by Galway City Council). Table 2.1 over page gives a brief description of each location and the GPS Co-ordinate taken at the time of measurement.

Table 2.1 Description of Monitoring Locations

Position	Description	GPS Co-Ordinates
NSL 1	Located on a tarmac surface on access road to entrance of machinery section approximately 50m from eastern facility boundary.	IM 30649 IG 26659
NSL 2	Located on grass common in Gort Na Glaise housing estate approximately 15m from easterly facility boundary wall.	IM 30780 IG 26457

3.0 Survey Protocol

3.1 Instrumentation and Methodology

Measurements were made according to the requirements of *ISO 1996: Acoustics – Description and Measurement of Noise* and with reference to EPA publication *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)*.

Measurements were made using a Sound Level Meter (SLM) Bruel & Kjaer Hand-held Analyser Type 2250-L Class 1 Serial No. 2709372 and a prepolarised Free-field ½” Microphone Type 4950 Serial No. 2698576. Field calibrations were taken using a Calibrator, a Bruel and Kjaer calibrator Type 4231 Serial No. 2705843. The latest Laboratory Calibration on the meter and calibrator was carried out on 21/01/14. Copies of the lab calibration certificates are presented in Appendix V.

The instrument was field calibrated on the day before and after measurements were taken to verify measurement precision. A table of calibrations is shown in Appendix III. The SLM was set to an A-weighted fast response mode. The mic was placed on a tripod 1.5m above the ground and 5 m away from any reflective surfaces where possible and oriented towards the noise source (facility).

3.2 Survey Implementation

The Survey was conducted on the 17th October 2014. Prevailing weather conditions on the day were good and favourable for noise monitoring. Temperatures starting off at 11:00am were mild and dry at 15-16⁰C with a moderate breeze of 4-5m/s and 100% cloud cover. Conditions stayed favourable throughout readings for NSL1 with the wind becoming more blustery towards the end. Weather conditions stayed favourable and pretty much unchanged for N2 readings with a slightly blustery wind again and temperatures at 16-17⁰C. It remained dry throughout survey.

All sources of noise were noted, recorded and where possible identified. 3 x 30 minute readings were taken for each noise monitoring location. For the purpose of this monitoring the selected parameters were L_{Aeq} , L_{A90} , L_{A10} and L_{Amax} . The L_{Aeq} was recorded to establish the overall average noise level at each station. The percentile levels represent the noise level in dBA exceeded for N% of the measurement time. A glossary of acoustics terms can be seen in Appendix II. In addition, a 1/3 octave band frequency analysis was recorded at each location for each reading to determine the presence of any tonal component of noise generated at the site. A graphical representation of the frequency analysis for each reading is presented in Appendix IV.

4.0 Licensed Emission Limit Values

Day dB(A) L_{Aeq} (30 minutes)	Night dB(A) L_{Aeq} (30 minutes)
55	45

No night-time readings were taken as there is no activity on the site at night.

5.0 Noise Monitoring Results

Table 5.1 Measurement Results for Location N1

Date	Position	Lmax dB(A)	L10 dB(A)	L90 dB(A)	Leq dB(A)
17/10/2014	NSL1 Reading 1	77.7	54.6	51.2	54.6
17/10/2014	NSL1 Reading 2	70.8	54.8	51.7	53.7
17/10/2014	NSL1 Reading 3	69.6	54.4	51.3	53.3

Table 5.2 Measurement Results for Location N2 (NSL)

Date	Position	Lmax dB(A)	L10 dB(A)	L90 dB(A)	Leq dB(A)
17/10/2014	NSL2 Reading 1	73.4	52.5	48.6	51.8
17/10/2014	NSL2 Reading 2	65.7	52.8	49.3	51.4
17/10/2014	NSL2 Reading 3	70.5	53.0	49.6	51.6

6.0 Evaluation of Results

6.1 Daytime noise survey

Schedule C.1 of waste licence W0166-01 specifies a limit of 55 dB(A) for a daytime period of between 07:00 – 19:00hrs. The new daytime period of 07:00 – 19:00hrs is set out in the most up to date guidelines from the EPA in Section 7 Table 5 of *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)*. This survey was completed to assess the impact that the site activities have on the local noise environment in the vicinity of the site based on this specified noise limit value. The daytime noise limit (55 dB(A) L_{Aeq} (30 minutes)) was not exceeded for any of the 3 readings at NSL1 or NSL2.

NSL1 - (10:52am – 12:33am) - The recorded L_{Aeq} values for NSL1 ranged from 53 – 55 dB(A). L_{A90} values ranged from 51 – 52 dB(A). NSL 1 is located outside the boundary of the facility about 20m away from the main industrial estate road. The noise was mainly characterised by traffic noise from this road and the general ambient noise of the surrounding area. At the time of monitoring there was very little noise noted as being attributable to the facility which could be heard over the general din at the location. Occasional reverse beacons could be heard from vehicles inside the facility. The percentile levels (L_{A90}) and (L_{A10}) can be used as descriptors for background and intrusive noise respectively. However the similarity in the percentile levels and the L_{Aeq} levels indicate that there was a continuous ambient level at this location at the given time of monitoring of which the facility contributed little or none.

NSL2 – (12:38pm – 14:15pm) - The recorded L_{Aeq} values for NSL2 ranged from 52 – 53 dB(A). L_{A90} values ranged from 49 – 50 dB(A). NSL2 is located in a housing estate approximately 15m from the facility boundary wall. As for NSL1 there was little of note regarding noise emanating from the facility. The noise was characterised mainly by trees rustling and traffic noise from the nearby Sandy Road.

6.2 1/3 Octave Band Frequency Analysis

A 1/3 octave band analysis was conducted at each receptor for each reading in order to assess any tonal or impulsive component associated with site activities or plant operation. Analysis of the 1/3 octave band frequency spectrum measured for each reading are presented in Appendix IV.

In general, no octave band should exceed adjacent bands by more than 15 db(A) in low-frequency bands (25Hz to 125 Hz), 8dB in middle frequency bands (160Hz to 400 Hz) and 5 dB in high- frequency bands (500Hz to 10,000 Hz) in order to insure that there is no tonal component associated with noise activity. Even in some instances especially in low-frequencies where an individual octave band is observed to exceed an adjacent band by these values it may be considered to be unlikely that a significant audible tone would be noticeable if the corresponding decibel level is low.

It can be concluded after analysis of the frequency graphs that there is no significant tonal or impulsive noise content associated with the operation of the site at the time of monitoring. Each frequency analysis is generally broadband which supports the conclusion that site activities have a minimal impact on the local noise climate and a low potential to cause noise disturbance at local NSLs.

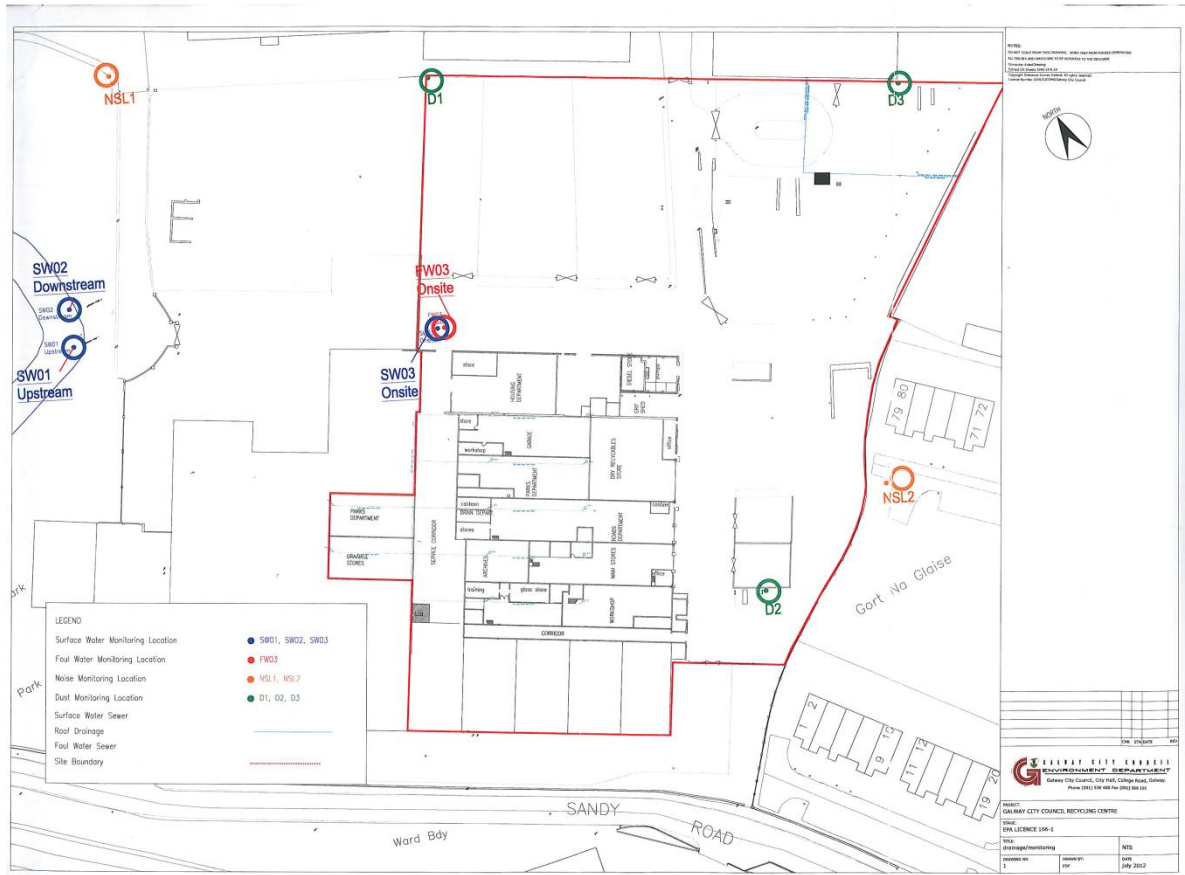
7.0 Result Summary

The results of the survey clearly indicate that activities at the site do not generate unacceptable noise levels beyond site boundaries and in particular at the closest NSLs to the site and that the operation of the site complies with the specified noise limit values as outlined in the EPA waste licence.

Conclusions drawn from inspection of the frequency analysis and on site observations was that there was no tonal or impulsive noise element associated with activity in the facility at the time of monitoring.

Appendix I

Map of Site and Monitoring Locations.



Appendix II

Glossary of Acoustic terminology:

dBA A unit of measurement, decibels (A), of sound pressure level which has its frequency characteristics modified by a filter ("A-weighted") so as to more closely approximate the frequency response of the human ear.

Leq -The equivalent continuous noise level for the measurement period, weighted for duration and intensity. Leq is an indicator of the average noise level (usually dBA).

L10- The noise level which is equalled or exceeded for 10% of the measurement period. L10 is an indicator of the mean maximum noise level, and is used as the descriptor for intrusive noise (usually in dBA).

L90 - The noise level which is equalled or exceeded for 90% of the measurement period. L90 is an indicator of the mean minimum noise level and is used as the descriptor for background or ambient noise.

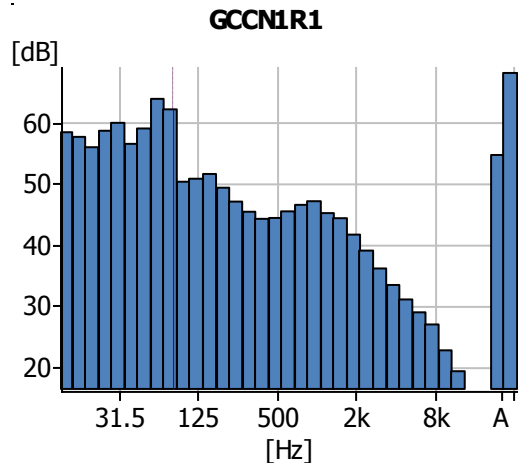
Lmax - The maximum noise level for the measurement period (usually in dBA).

Appendix III

Field Calibration	
Transducer:	4950 (2698576)
Used at Top Socket	
Calibration Type	External reference
Start	
Date	17/10/2014
Time	10:44
Sensitivity	47.27 mV/Pa
Dev from init.	0.01 dB
Finish	
Date	17/10/2014
Time	14:18
Sensitivity	47.28 mV/Pa
Dev from init.	0.00 dB

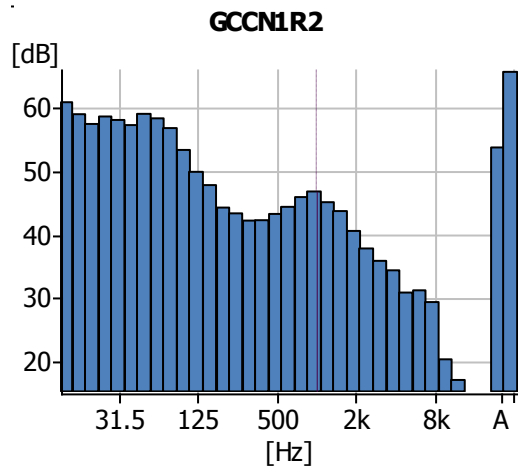
Appendix IV

N1 Frequency Analysis Graphs R1 – R3



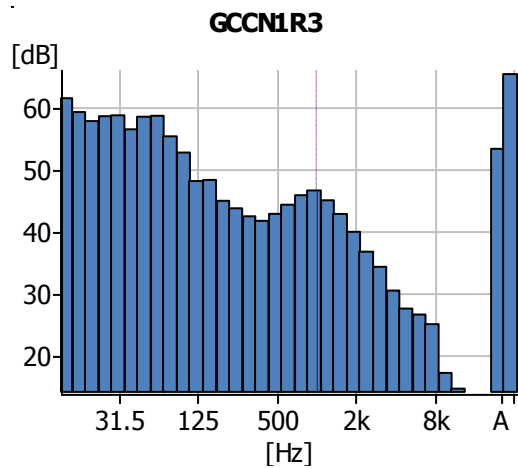
Cursor value

X: 80 Hz
LZeq: 62.1 dB



Cursor value

X: 1 kHz
LZeq: 46.8 dB

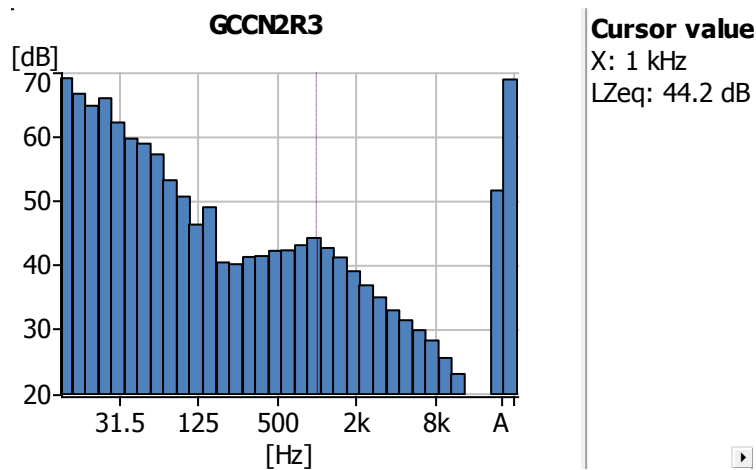
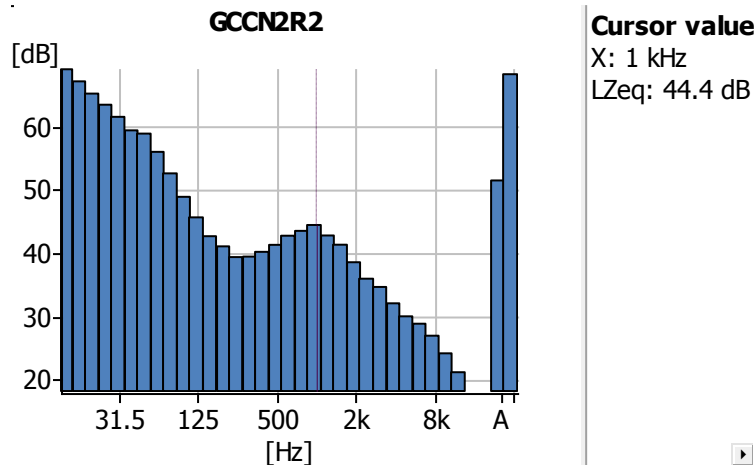
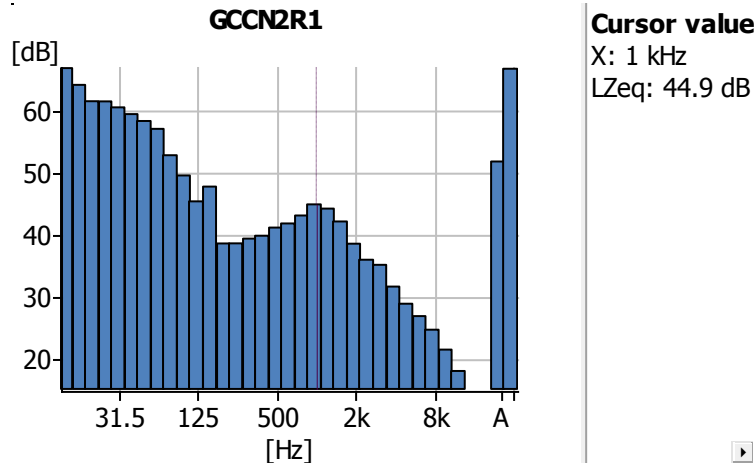


Cursor value

X: 1 kHz
LZeq: 46.6 dB








N2 Frequency Analysis Graphs R1-R3



Appendix V

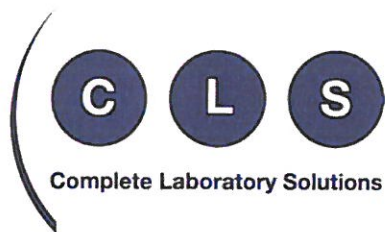
Calibration Certificate for SLM and Calibrator

 The Calibration Laboratory Skodsborgvej 307, DK-2850 Nærum, Denmark	  CAL Reg. nr. 307	
CERTIFICATE OF CALIBRATION	No: CDK1400400	Page 1 of 4
CALIBRATION OF		
Calibrator:	Brüel & Kjær Type 4231	No: 2705843 Id: -
½ Inch adaptor:	Brüel & Kjær Type UC-0210	
Pattern Approval:	PTB-1.61-4057176	
CUSTOMER		
	Complete Laboratory Solutions Ltd Saotharlann Chonamara Teo Rosmuc Galway, Ireland	
CALIBRATION CONDITIONS		
Preconditioning:	4 hours at 23°C ± 3°C	
Environment conditions:	Pressure: 101.24 kPa. Humidity: 36 % RH. Temperature: 23 °C.	
SPECIFICATIONS		
The Calibrator Brüel & Kjær Type 4231 has been calibrated in accordance with the requirements as specified in IEC60942:2003 Annex B Class I. The accreditation assures the traceability to the international units system SI.		
PROCEDURE		
The measurements have been performed with the assistance of Brüel & Kjær acoustic calibrator calibration application software Type 7794 (version 2.4) by using procedure P_4231_D05.		
RESULTS		
Calibration Mode: Calibration as received.		
The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$ providing a level of confidence of approximately 95 %. The uncertainty evaluation has been carried out in accordance with EA-4/02 from elements originating from the standards, calibration method, effect of environmental conditions and any short time contribution from the device under calibration.		
Date of calibration: 2014-01-21	Date of issue: 2014-01-21	
 Lene Petersen Calibration Technician	 Susanne Jørgensen Approved Signatory	
Reproduction of the complete certificate is allowed. Parts of the certificate may only be reproduced after written permission.		

Office DEPOT:

 CAL. Reg. nr. 307	Instr. no.: 2709372 / 2698576 Calib. d.: 2014-01-21 Brüel & Kjær Cert. no.: CDK1400426		 CAL. Reg. nr. 307
Brüel & Kjær 			
The Calibration Laboratory Skodsborgvej 307, DK-2850 Nærum, Denmark			
CERTIFICATE OF CALIBRATION		No: CDK1400426	Page 1 of 10
CALIBRATION OF			
Sound Level Meter:	Brüel & Kjær Type 2250 Light	No: 2709372	Id: -
Microphone:	Brüel & Kjær Type 4950	No: 2698576	
Preamplifier:	Brüel & Kjær Type ZC-0032	No: 12672	
Supplied Calibrator:	Brüel & Kjær Type 4231	No: 2705843	
Software version:	BZ7130 Version 3.4.3	Pattern Approval:	PTB1.63-4052414
Instruction manual:	BE1853-11		
CUSTOMER			
Complete Laboratory Solutions Ltd Saotharlann Chonamara Teo Rosmuc Galway, Ireland			
CALIBRATION CONDITIONS			
Preconditioning:	4 hours at 23°C ± 3°C		
Environment conditions:	See actual values in <i>Environmental conditions</i> sections.		
SPECIFICATIONS			
The Sound Level Meter Brüel & Kjær Type 2250 Light has been calibrated in accordance with the requirements as specified in IEC61672-1:2002 class 1. Procedures from IEC 61672-3:2006 were used to perform the periodic tests. The accreditation assures the traceability to the international units system SI.			
PROCEDURE			
The measurements have been performed with the assistance of Brüel & Kjær Sound Level Meter Calibration System 3630 with application software type 7763 (version 4.9 - DB: 4.90) by using procedure 2250-L-4950.			
RESULTS			
Calibration Mode: Calibration as received.			
The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$ providing a level of confidence of approximately 95 %. The uncertainty evaluation has been carried out in accordance with EA-4/02 from elements originating from the standards, calibration method, effect of environmental conditions and any short time contribution from the device under calibration.			
Date of calibration: 2014-01-21		Date of issue: 2014-01-22	
 Sabine Støvring Calibration Technician		 Erik Bruus Approved Signatory	
Reproduction of the complete certificate is allowed. Parts of the certificate may only be reproduced after written permission.			

Appendix 6 surface water emissions



Complete Laboratory Solutions
 Ros Muc, Co. Galway.
 [Tel] 091 574355
 [Fax] 091 574356
 [Email] services@cls.ie
 [web] www.completelabsolutions.com

Client : Ronan O'Reilly Galway City Council Environment Department College Road Galway City	Report No. : 226090 Date of Receipt : 25/04/2014 Start Date of Analysis : 25/04/2014 Date of Report : 13/05/2014 Order Number : 400126214 Sample taken by : CLS
---	--

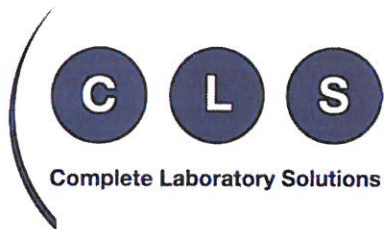
CERTIFICATE OF ANALYSIS

Lab No	Sample Description	Test	Result	Units
513361	Surface Water SW03 Onsite, Sandy Road Depot	Fats, Oils and Greases	<5	mg/l
		BOD	<1	mg/l
		Suspended Solids	5	mg/l
		pH	7.7	pH Units
		Conductivity @20C	690	uS/cm
		Ammonia as N	0.085	mg/l
		Mineral Oil (by calculation)	177	ug/l



Approved by: Barbara Lee
Barbara Lee
 Environmental Scientist

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 [Email] services@cls.ie
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Client : Ronan O'Reilly Galway City Council Environment Department College Road Galway City	Report No. : 226089 Date of Receipt : 25/04/2014 Start Date of Analysis : 25/04/2014 Date of Report : 09/05/2014 Order Number : Sample taken by : CLS
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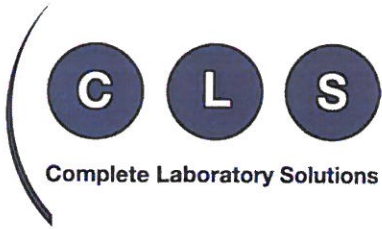
CERTIFICATE OF ANALYSIS

Lab No	Sample Description	Test	Result	Units
513360	Surface Water SW02 Downstream, Sandy Road Depot	Fats, Oils and Greases	<5	mg/l
		BOD	<1	mg/l
		Suspended Solids	3	mg/l
		pH	7.6	pH Units
		Conductivity @20C	375	uS/cm
		Ammonia as N	0.183	mg/l
		Mineral Oil (by calculation)	65	ug/l



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 Environmental Scientist

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Client : Ronan O'Reilly Galway City Council Environment Department College Road Galway City	Report No. : 226088 Date of Receipt : 25/04/2014 Start Date of Analysis : 25/04/2014 Date of Report : 13/05/2014 Order Number : 400126214 Sample taken by : CLS
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CERTIFICATE OF ANALYSIS

Lab No	Sample Description	Test	Result	Units
513359	Surface Water SW01 Upstream, Sandy Road Depot	Fats, Oils and Greases	<5	mg/l
		BOD	<1	mg/l
		Suspended Solids	<2	mg/l
		pH	7.6	pH Units
		Conductivity @20C	369	uS/cm
		Ammonia as N	0.147	mg/l
		Mineral Oil (by calculation)	31	ug/l



Approved by: Barbara Lee
 Barbara Lee
 Environmental Scientist

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CERTIFICATE OF ANALYSIS

Client : Ronan O'Reilly
 Galway City Council
 Environment Department
 College Road
 Galway City

Report No. : 242005
 Date of Receipt : 16/10/2014
 Start Date of Analysis : 16/10/2014
 Date of Report : 29/10/2014
 Order Number :
 Sample taken by : CLS

Lab No	Sample Description	Test	*	Result	Units
549678	Surface Water SW03 Onsite, Sandy Road Depot	Fats, Oils and Greases	R	<5	mg/l
		BOD	R	<1	mg/l
		Suspended Solids	R	8	mg/l
		pH	R	7.8	pH Units
		Conductivity @20C	R	646	uS/cm
		Ammonia as N	R	0.116	mg/l
		Mineral Oil (by calculation)	R	388	ug/l



Approved by:

Barbara Lee

Barbara Lee
Environmental
Scientist

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* Location of analysis: R=Ros Muc, M=MedPharma, S=Subcontracted.

Test	Specification	CLS 17025 status	GMP/FDA ¹	ISO ²	Sub ³	Sub 17025 Status
Fats, Oils and Greases	CLS 25	Yes	No	Yes	No	No
BOD	CLS 12	Yes	No	Yes	No	No
Suspended Solids	CLS 13	Yes	No	Yes	No	No
pH	CLS 26	Yes	No	Yes	No	No
Conductivity @20C	CLS 67	Yes	No	Yes	No	No
Ammonia as N	Konelab CLS 40	Yes	No	Yes	No	No
Mineral Oil (by calculation)	CLS 147	No	No	Yes	No	No

¹Analysis carried out in a GMP approved, FDA inspected facility (MedPharma site only).

²Laboratory Analysis, Sampling, Technical Backup, Training, Food Safety Program Auditing and Monitoring are all ISO 9001:2008 certified (Ros Muc site only).

³Subcontracted.

Lab No	Sample ID	Sample Condition on Receipt	Sampling Date
549678	Surface Water SW03 Onsite, Sandy Road Depot	Good condition	Not Supplied by Client

CERTIFICATE OF ANALYSIS

Client : Ronan O'Reilly
 Galway City Council
 Environment Department
 College Road
 Galway City

Report No. : 242003
 Date of Receipt : 16/10/2014
 Start Date of Analysis : 16/10/2014
 Date of Report : 29/10/2014
 Order Number :
 Sample taken by : CLS

Lab No	Sample Description	Test	*	Result	Units
549676	Surface Water SW01 Upstream, Sandy Road Depot	Fats, Oils and Greases	R	<5	mg/l
		BOD	R	<1	mg/l
		Suspended Solids	R	<2	mg/l
		pH	R	8.0	pH Units
		Conductivity @20C	R	243	uS/cm
		Ammonia as N	R	0.066	mg/l
		Mineral Oil (by calculation)	R	147	ug/l



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Environmental
Scientist

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* Location of analysis: R=Ros Muc, M=MedPharma, S=Subcontracted.

Test	Specification	CLS 17025 status	GMP/FDA ¹	ISO ²	Sub ³	Sub 17025 Status
Fats, Oils and Greases	CLS 25	Yes	No	Yes	No	No
BOD	CLS 12	Yes	No	Yes	No	No
Suspended Solids	CLS 13	Yes	No	Yes	No	No
pH	CLS 26	Yes	No	Yes	No	No
Conductivity @20C	CLS 67	Yes	No	Yes	No	No
Ammonia as N	Konelab CLS 40	Yes	No	Yes	No	No
Mineral Oil (by calculation)	CLS 147	No	No	Yes	No	No

¹Analysis carried out in a GMP approved, FDA inspected facility (MedPharma site only).

²Laboratory Analysis, Sampling, Technical Backup, Training, Food Safety Program Auditing and Monitoring are all ISO 9001:2008 certified (Ros Muc site only).

³Subcontracted.

Lab No	Sample ID	Sample Condition on Receipt	Sampling Date
549676	Surface Water SW01 Upstream, Sandy Road Depot	Good condition	Not Supplied by Client

CERTIFICATE OF ANALYSIS

Client : Ronan O'Reilly
 Galway City Council
 Environment Department
 College Road
 Galway City

Report No. : 242004
 Date of Receipt : 16/10/2014
 Start Date of Analysis : 16/10/2014
 Date of Report : 29/10/2014
 Order Number :
 Sample taken by : CLS

Lab No	Sample Description	Test	*	Result	Units
549677	Surface Water SW02 Downstream, Sandy Road Depot	Fats, Oils and Greases	R	<5	mg/l
		BOD	R	<1	mg/l
		Suspended Solids	R	2	mg/l
		pH	R	8.0	pH Units
		Conductivity @20C	R	243	uS/cm
		Ammonia as N	R	0.043	mg/l
		Mineral Oil (by calculation)	R	162	ug/l



Approved by:

Barbara Lee

Barbara Lee
Environmental
Scientist

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* Location of analysis: R=Ros Muc, M=MedPharma, S=Subcontracted.

Test	Specification	CLS 17025 status	GMP/FDA ¹	ISO ²	Sub ³	Sub 17025 Status
Fats, Oils and Greases	CLS 25	Yes	No	Yes	No	No
BOD	CLS 12	Yes	No	Yes	No	No
Suspended Solids	CLS 13	Yes	No	Yes	No	No
pH	CLS 26	Yes	No	Yes	No	No
Conductivity @20C	CLS 67	Yes	No	Yes	No	No
Ammonia as N	Konelab CLS 40	Yes	No	Yes	No	No
Mineral Oil (by calculation)	CLS 147	No	No	Yes	No	No

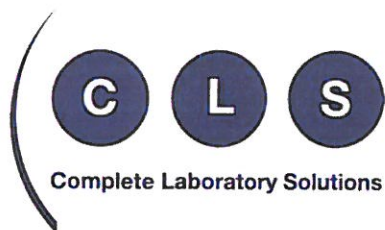
¹Analysis carried out in a GMP approved, FDA inspected facility (MedPharma site only).

²Laboratory Analysis, Sampling, Technical Backup, Training, Food Safety Program Auditing and Monitoring are all ISO 9001:2008 certified (Ros Muc site only).

³Subcontracted.

Lab No	Sample ID	Sample Condition on Receipt	Sampling Date
549677	Surface Water SW02 Downstream, Sandy Road Depot	Good condition	Not Supplied by Client

[Appendix 7_foul water emissions](#)



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 Ros Muc, Co. Galway.
 [Tel] 091 574355
 [Fax] 091 574356
 [Email] services@cls.ie
 [web] www.completelabsolutions.com

Client : Ronan O'Reilly Galway City Council Environment Department College Road Galway City	Report No. : 226091 Date of Receipt : 25/04/2014 Start Date of Analysis : 25/04/2014 Date of Report : 28/05/2014 Order Number : 400126214 Sample taken by : CLS
---	--

CERTIFICATE OF ANALYSIS

Lab No	Sample Description	Test	Result	Units
513362	Foul Water FW01 Onsite, Sandy Road Depot	Fats, Oils and Greases	<5	mg/l
		Suspended Solids	202	mg/l
		pH	7.7	pH Units
		Total Phosphorus as P	2.6	mg/l
		BOD.	18	mg/l
		Ammonia as N	5.87	mg/l



Approved by: Barbara Lee
Barbara Lee
 Environmental Scientist

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CERTIFICATE OF ANALYSIS

Client : Ronan O'Reilly
 Galway City Council
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 College Road
 Galway City

Report No. : 242055
 Date of Receipt : 16/10/2014
 Start Date of Analysis : 16/10/2014
 Date of Report : 29/10/2014
 Order Number :
 Sample taken by : CLS

Lab No	Sample Description	Test	*	Result	Units
549768	Foul Water FW01 Onsite, Sandy Road Depot	Fats, Oils and Greases	R	<5	mg/l
		Suspended Solids	R	128	mg/l
		pH	R	7.8	pH Units
		Total Phosphorus as P	R	36.4	mg/l
		BOD.	R	196	mg/l
		Ammonia as N	R	10.6	mg/l



Approved by:

Barbara Lee

**Barbara Lee
 Environmental
 Scientist**

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 * Location of analysis: R=Ros Muc, M=MedPharma, S=Subcontracted.

Test	Specification	CLS 17025 status	GMP/FDA ¹	ISO ²	Sub ³	Sub 17025 Status
Fats, Oils and Greases	CLS 25	Yes	No	Yes	No	No
Suspended Solids	CLS 13	Yes	No	Yes	No	No
pH	CLS 26	Yes	No	Yes	No	No
Total Phosphorus as P	CLS 151	Yes	No	Yes	No	No
BOD.	CLS 12	Yes	No	Yes	No	No
Ammonia as N	Konelab CLS 40	Yes	No	Yes	No	No

¹Analysis carried out in a GMP approved, FDA inspected facility (MedPharma site only).

²Laboratory Analysis, Sampling, Technical Backup, Training, Food Safety Program Auditing and Monitoring are all ISO 9001:2008 certified (Ros Muc site only).

³Subcontracted.

Lab No	Sample ID	Sample Condition on Receipt	Sampling Date
549768	Foul Water FW01 Onsite, Sandy Road Depot	Good condition	Not Supplied by Client

[Appendix 8 energy consumption](#)

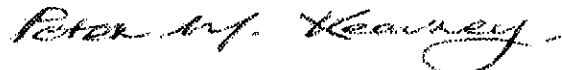
Galway City Council - Galway Energy Agency

Sandy Road Depot, Environment Department - Energy Consumption 2013

Jan - Dec 2013	Quantity (litres)	Quantity (kWh)	Carbon Dioxide (NCV kg CO ₂)
Liquid Petroleum Gas (LPG)	32,327	229,522	52,629
Electricity (MPRN 10000063536)		327,028	159,917
Fuels (Transport Fleet/Plant/Tools)			
DERV (Diesel)	231,593	2,353,216	621,249
Marked Gas Oil	70,889	720,303	190,160
Unleaded Petrol (estimate only minimum use 2013)	500	4,719	1,180
TOTALS 2013			1,025,135
TOTALS 2012			1,050,908
TOTALS 2011			1,247,405
TOTALS 2010			1,306,938

All Conversion Factors based on SEAI EPSSU (Electricity Carbon Intensity figures updated for previous years as SEAI data becomes available)

Signed:



Date:

5th February 2014

[Appendix 9 Sample weekly Nuisance inspection report](#)

GALWAY CITY COUNCIL Liosban facility Nuisance inspection report REV1 (EPA license W166/01 license requirement condition 8.9)

Inspection to be carried out at minimum weekly

Monthly sheet April 2014.

Date	Litter	Comme nt	Vermin	Comme nt	Birds	Comme nt	Flies	Comme nt	Mud	Comme nt	Dust	Comme nt	Odour	Comme nt	Carried out by (block capitals)	Signatur e
2/4/14	none		none evident	2 calls to was co. carrying out works	none evident @ 5pm		none evident (not)		site cleans		site cleans		none		RO Reilly	RO Reilly
22/4/14	none		none evident	Establish report	none evident		none evident		site cleans		site cleans		none		RS Reilly	RS Reilly
22/4/14	none		none evident	Establish report	none evident		none		site cleans ✓		site cleans		none		RO Reilly	RO Reilly

[Appendix 10 Sample weekly Drainage inspection report](#)

GALWAY CITY COUNCIL Liosban facility drainage system inspection report REV1 (EPA license W166/01 license requirement condition 3.12.2)

Visual Inspection to be carried out at minimum weekly

MONTH: *September*

Date	<i>1/9/14</i>	<i>8/9/14</i>	<i>17/9/14</i>	<i>24/9/14</i>
Weather Conditions	<i>good</i>	<i>good</i>	<i>sunny</i>	<i>dry</i>
Manhole Name	Note/issue	Note/issue	Note/issue	Note/issue
SW 03	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
SW 04a & 04b (inter)	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
SW 05	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
SW 05a	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
SW 05b	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
SW 06 (interceptor)	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
SW 07	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
SW 08	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
SW 08a	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
SW 03	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
FW 03a	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
FW 04	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
FW 04a	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
FW 04b	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>
FW 05	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>

SIGNED	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
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Appendix 11 PRTR data



Environmental Protection Agency

| PRTR# : W0166 | Facility Name : Galway Corporation Depot | Filename : W0166_2014.xls | Return Year : 2014 |

[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR	2014
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1. FACILITY IDENTIFICATION

Parent Company Name	Galway City Council
Facility Name	Galway Corporation Depot
PRTR Identification Number	W0166
Licence Number	W0166-01

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Sandy Road
Address 2	Liosban Industrial Estate
Address 3	Galway
Address 4	
	Galway
Country	Ireland
Coordinates of Location	-9.03918 53.2847
River Basin District	IEWE
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	ronan o reilly
AER Returns Contact Email Address	Ronan.Oreilly@galwaycity.ie
AER Returns Contact Position	exec eng
AER Returns Contact Telephone Number	09156463
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	1950
Number of Employees	3
User Feedback/Comments	
Web Address	www.galwaycity.ie

2. PRTR CLASS ACTIVITIES

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

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

Is it applicable?	
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) ?	
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5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : W0166 | Facility Name : Galway Corporation Depot | Filename : W0166_2014.xls | Return Year : 2014 |

19/06/2015 15:26

Please enter all quantities on this sheet in Tonnes

11

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	Haz Waste : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility	Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used							
Within the Country	13 02 08	Yes	1.53	other engine, gear and lubricating oils	R13	C	Volume Calculation	Offsite in Ireland	enva ltd,w0184-01		clonminam ind estate,portlaoise,..co laois,Ireland		enva ltd,w0184-01,clonminam ind est,portlaoise,co laois,..ireland	clonminam ind est,portlaoise,co laois,..ireland
Within the Country	15 01 04	No	5.16	metallic packaging	R13	m	Weighed	Offsite in Ireland	barna waste ltd,w0106		carrowbrowne,headford rd,galway ..,Ireland			
Within the Country	16 01 03	No	0.0	end-of-life tyres	R13	m	Weighed	Offsite in Ireland	barna waste ltd,w0106		carrowbrowne,headford rd,galway ..,Ireland			
Within the Country	16 06 05	No	5.34	other batteries and accumulators	R13	m	Weighed	Offsite in Ireland	kmc recycling,w0113		rd,tullamore,co offally,Ireland			
Within the Country	17 02 02	No	6.58	glass mixed construction and demolition wastes other than those mentioned in 17 09 01, 17	R13	m	Weighed	Offsite in Ireland	walsh waste ltd,wcp mo 08 0584 01		galway,Ireland			
Within the Country	17 09 04	No	513.0	09 02 and 17 09 03	R13	C	Volume Calculation	Offsite in Ireland	john madden and sons,wcp-mo-10-0651-01		kilmaine road,ballinrobe,co mayo,..ireland			
To Other Countries	20 01 01	No	0.0	paper and cardboard	R13	m	Weighed	Abroad	regen ltd,wml 22/25		estate,..newry,co down,United Kingdom			
Within the Country	20 01 02	No	14.93	glass	R13	M	Weighed	Offsite in Ireland	Rehab glassco ltd,pending		business,ballybrit,galway,..ireland			
To Other Countries	20 01 10	No	3.61	clothes	R13	m	Weighed	Abroad	cookstown textile recycling ltd,dc 10 1272 01		road,randalstown,co antrim,United Kingdom			
Within the Country	20 01 21	Yes	1.27	fluorescent tubes and other mercury-containing waste	R13	m	Weighed	Offsite in Ireland	kmc recycling,w0113		cappincur ind estate,daingean rd,tullamore,co offally,Ireland		kmc recycling,wo113,cappincur ind estate,daingean rd,tullamore ,offally,ireland	cappincur ind estate,daingean rd,tullamore ,offally,ireland
Within the Country	20 01 23	Yes	82.84	discarded equipment containing chlorofluorocarbons	R13	m	Weighed	Offsite in Ireland	kmc recycling,w0113		rd,tullamore,co offally,Ireland		kmc recycling,wo113,cappincur ind estate,daingean rd,tullamore ,offally,ireland	cappincur ind estate,daingean rd,tullamore ,offally,ireland
Within the Country	20 01 25	No	0.65	edible oil and fat	R13	C	Volume Calculation	Offsite in Ireland	frylite ltd,wcp-dc-10-1297/wfp-10-G0007-01		kilcolgan,co galway,..,ireland			
Within the Country	20 01 35	Yes	116.85	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	R13	m	Weighed	Offsite in Ireland	kmc recycling,w0113		rd,tullamore,co offally,Ireland		kmc recycling,wo113,cappincur ind estate,daingean rd,tullamore ,offally,ireland	cappincur ind estate,daingean rd,tullamore ,offally,ireland
Within the Country	20 01 36	No	318.7	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	R13	m	Weighed	Offsite in Ireland	kmc recycling,w0113		rd,tullamore,co offally,Ireland			
Within the Country	20 01 38	No	101.82	wood other than that mentioned in 20 01 37	R13	m	Weighed	Offsite in Ireland	barna waste ltd,w0106		carrowbrowne,headford rd,galway ..,Ireland			
Within the Country	20 01 39	No	40.56	plastics	R13	m	Weighed	Offsite in Ireland	barna waste ltd,w0106		carrowbrowne,headford rd,galway ..,Ireland			
Within the Country	20 01 40	No	184.44	metals	R13	m	Weighed	Offsite in Ireland	barna waste ltd,w0106		carrowbrowne,headford rd,galway ..,Ireland			
Within the Country	20 03 03	No	1119.68	street-cleaning residues	R13	m	Weighed	Offsite in Ireland	barna waste ltd,w0106		carrowbrowne,headford rd,galway ..,Ireland			

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