

TED O' DONOGHUE & SONS WASTE DISPOSAL
KNOCKPOGE, WATERFALL, Co. CORK

ANNUAL ENVIRONMENTAL REPORT

Period: January 2014 - December 2014

Waste Licence Register Number:	W00214-1
Licensee:	Ted O' Donoghue & Sons Limited
Location of Facility:	Knockpoge, Waterfall, County Cork

TABLE OF CONTENTS

	<u>PAGE</u>
1. INTRODUCTION	2
2. MANAGEMENT OF THE FACILITY	3
2.1 MANAGEMENT OF THE ACTIVITY	3
2.2 ENVIRONMENTAL MANAGEMENT SYSTEM	3
2.3 ENVIRONMENTAL MANAGEMENT PROGRAMME	3
3. NOTIFICATION AND RECORD KEEPING.....	3
3.1. INFORMATION STORED ON-SITE	3
3.2. WASTE RECORDS	4
3.3. REPORT ON WASTE RECOVERY.....	5
3.4. REGISTER OF COMPLAINTS	6
3.5. NON-COMPLIANCES	6
3.6. SUMMARY OF RESOURCE & ENERGY CONSUMPTION	6
3.7. ON-SITE PROCEDURES	6
4. ENVIRONMENTAL MONITORING SUMMARY.....	6
4.1. NOISE MONITORING	6
4.2. DUST DEPOSITION MONITORING.....	7
4.3. GROUNDWATER MONITORING.....	8
4.4. STORM WATER MONITORING	8
4.5. WASTE MANAGEMENT ACTIVITIES.....	10
4.5.1. <i>Household and Commercial Waste Containing Putrescible Materials...</i>	<i>10</i>
4.5.2. <i>Non Putrescible Household and Commercial Waste.....</i>	<i>10</i>
4.5.3. <i>Construction and Demolition Waste.....</i>	<i>10</i>
4.5.4. <i>Wood, Timber Waste.....</i>	<i>11</i>
4.5.5. <i>Other recovery Infrastructure.....</i>	<i>11</i>
4.6. QUANTITY & COMPOSITION OF WASTE RECOVERED	11
5. REPORT ON ENVIRONMENTAL NUISANCES & CONTROLS	11
5.1. LITTER CONTROL	11
5.2. ODOUR CONTROL	11
5.3. DUST CONTROL.....	12
5.4. NOISE CONTROL	12

1. INTRODUCTION

This Annual Environmental Report (AER) for Ted O' Donoghue & Sons Limited covers the reporting period January 2014 to December 2014. Ted O' Donoghue & Sons received a waste licence (Register Number W214-1) on 26th September 2005. The AER has been prepared in compliance with Condition 11.10 of the Waste Licence.

The content of the AER is based on Schedule D of the Waste Licence and the report format follows guidelines set in the "Draft Guidance on Environmental Management Systems and Reporting to the Agency" issued by the Environmental Protection Agency (Agency). The Waste Licence allows *the facility* to accept Commercial, Household and Construction and Demolition non-hazardous waste on-site and recovered from the incoming waste streams. The various waste streams are processed and stored on-site pending removal to authorised off-site recycling and disposal facilities. The annual licensed waste throughput is limited to 23,000 tonnes.

2. MANAGEMENT OF THE FACILITY

2.1 Management of the Activity

The site is managed and operated by O' Donoghue family. Details of the management structure for the facility were submitted to the Agency as part of the Environmental Management Programme in March 2006.

2.2 Environmental Management System

An Environmental Management System (EMS) is in operation for the site and is updated annually in accordance with site requirements and conditions, as required under Condition 2.2 of the Waste Licence.

2.3 Environmental Management Programme

The objective of the EMP is to act as the site manual, which will assist the site in achieving its objectives and targets during the current and future operation of the site. The EMP has been prepared and was submitted to the Agency in March 2006.

3. NOTIFICATION AND RECORD KEEPING

3.1. Information stored on-site

All copies of environmental data and prescribed reports obtained and prepared on behalf of the licensee are forwarded to the Agency. Copies of reports and correspondence are retained and available for inspection at the reception building.

The facility provides the following documentation to view:

- Waste Licence 214-1
- Waste Licence Application form
- Periodic reports
- All monitoring records
- Waste transfer and acceptance dockets
- Incident/Complaints reports
- Once-off reports submitted to the agency
- Rejected loads log
- Agency correspondence, EPA approvals and request for additional information
- Monitoring personnel, experience and training
- Audit records
- Rejected load, compliance, integrity of bunds
- Daily Site Log

- Weekly site inspection forms
- Surface Water Inspection forms

3.2. Waste Records

Records of all waste loads entering and leaving the site is kept electronically by the weighbridge operator. Details such as date, time, origin, waste type, contractors name, waste collection permit number, quantities and vehicle registration number are recorded. Waste records are contained in Appendices I.

All waste materials accepted at the site are recorded on two separate documents, including a waste transfer document and a computer printout of the waste accepted. The following details are recorded:

Computer Printout:

- ◆ Ticket Number/Transaction Number
- ◆ Customer code
- ◆ Operator / driver signature
- ◆ Net weight
- ◆ Vehicle Registration Number
- ◆ Contractor Name
- ◆ Waste Code for site
- ◆ Waste Type
- ◆ Name of person who checked load
- ◆ Waste Source
- ◆ Accepted or rejected status
- ◆ Weight entering and weight of container leaving site

Waste Transfer Docket includes additional headings of:

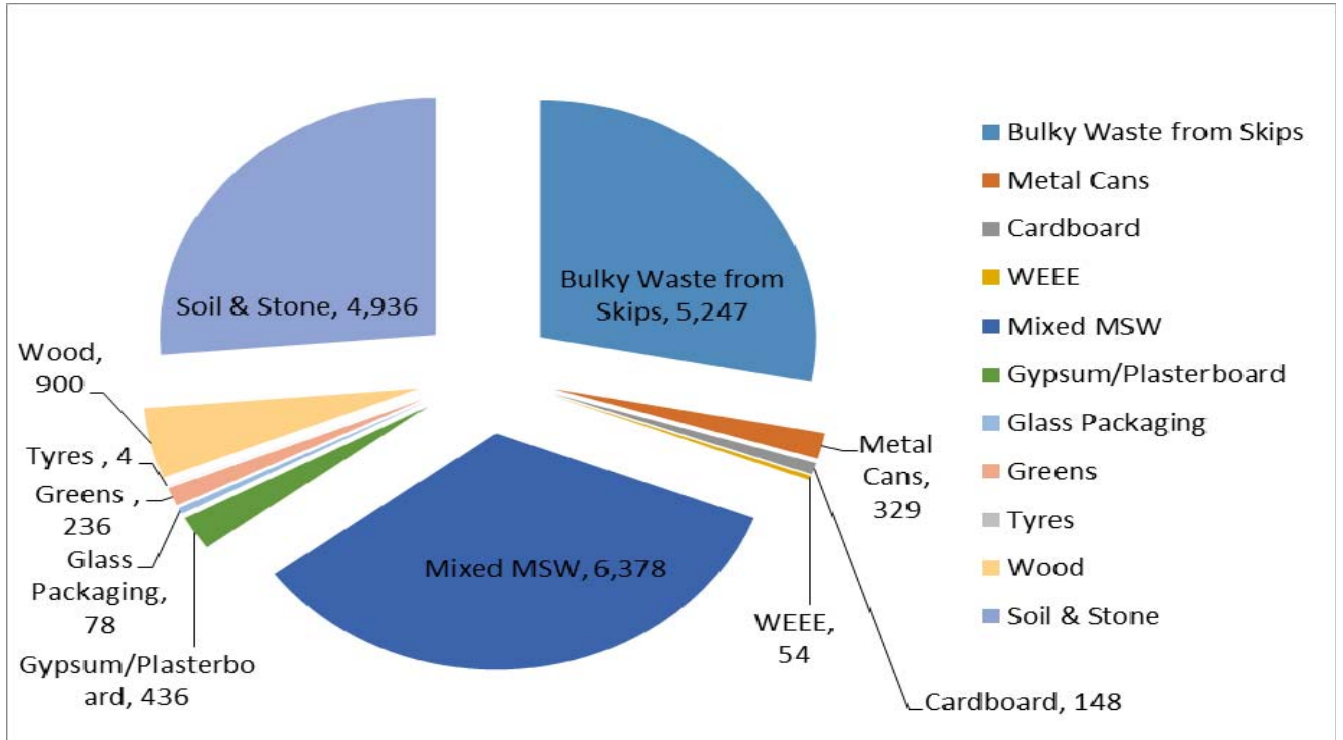
- ◆ How waste is contained
- ◆ European waste catalogue number
- ◆ Physical description
- ◆ Odour/Description of odour
- ◆ Special problems/requirements of waste
- ◆ Knowledge with regard to waste
- ◆ Waste Producer
- ◆ Waste Collection Permit Number

All waste records are retained at the site office.

3.3. Report on Waste Recovery

The waste volumes received at the facility have reduced significantly since 38,331 tonnes were received at the facility in 2008. In 2012 a total of 14,320 tonnes of waste were received at the facility.

Figure 3.1 Waste Tonnes Removed from Facility in 2013



3.4. Register of Complaints

Details of all complaints made by the public are recorded in a Complaints Register. Complaints can be registered by contacting the facility manager or staff at the site. The register includes the name of the complainant, the nature of the complaint, the date of the complaint and the actions taken to remedy the complaint. The facility manager signs off the completed form. Operational Procedure 9.3 details the recording of complaints.

3.5. Non-Compliances

No complaints were received by the facility manager during the reporting period.

3.6. Summary of Resource & Energy Consumption

Table 3.1 presents an estimate of the resources used on-site during the reporting period.

Table 3.1: Estimate of Resources Used On-Site

Resources	Quantities
Diesel	32,000 litres
Hydraulic and Engine Oil	95 litres
Disinfectant	3 litres(concentrate)
Truck Wash Detergent	25 litres
Electricity	6,400 KWH

3.7. On-site Procedures

Current procedures relating to the handling and storage of waste are being developed and will be forwarded to the Agency when completed.

4. ENVIRONMENTAL MONITORING SUMMARY

The following is a summary of the noise, dust, and groundwater quality monitoring and monitoring carried out at the site during 2014.

4.1. Noise Monitoring

The following are the details of the survey as carried out at Ted O' Donoghue and Sons Ltd premises on the 18th June 2014.

The following is a description of the noise sensitive locations monitored during the noise survey and the sources of noise in the area at the time.

The following is a description of the noise sensitive locations monitored during the noise survey and the sources of noise in the area at the time.

Table 4.1: Monitoring Locations

<u>Monitoring Location</u>	<u>Description</u>
N1	<u>Adjacent O Donoghue family residence</u>
N2	<u>South east corner of site adjacent transfer station and workshop</u>
N3	<u>North west corner of site, close to trailer parking area</u>
N4	<u>North east corner of site, close to timber shredder</u>
N5	<u>At sensitive dwelling, north east of site</u>

Measurements at location N1 were recorded close to the O' Donoghue family residence adjacent to the entrance to the facility. Intermittent traffic noise from the public road contributed to the ambient levels. A number of vehicles entered the facility during the 30-minute monitoring period. Noise from the waste processing building was audible at this monitoring location. The L_{Aeq} average noise level ranged from 58.8dB(A) to 61.3dB(A).

Noise measurements at N2 and N3 were recorded at the north-western and north-eastern corners of the site respectively. Site vehicle movements and the mechanical grab within the transfer station building contributed to the ambient noise. The average noise levels were recorded in the range 58.6dB(A) to 61.0dB(A).

The noise from the facility was not audible at locations N4 and N5. Intermittent traffic movements were the main noise source

4.2. Dust Deposition Monitoring

The dust gauges were set up at the locations D1, D2, D3 and D4 as listed in Table E.2.2 of the waste licence. The gauges were erected such that the containers were 1.8m above the ground surface and free from any obstruction. The containers were exposed from 18th June to 17th July 2014.

The second round of sampling was conducted from 17th July to 18th August 2014.

- D1: This sample location is sited on the western boundary of the site close to the O' Donoghue family residence.
- D2: This sample location is positioned at the south-east corner of the site close to the workshop and transfer building.
- D3: This sample location is at the north-western side boundary
- D4: Located at the north-eastern corner of the facility

The results of the dust monitoring event are outlined in the table below.

Table 2: Dust Monitoring Results

Location	Total Dust mg/m ² /day	
	18 th June to 17 th July	17 th July to 18 th August 2014.
D1	191	144
D2	112	206
D3	88	119
D4	157	173

CONCLUSIONS:

The results of the both rounds of dust monitoring at the 4 locations are within the conditions stated in the EPA licence for the facility.

4.3. Groundwater Monitoring

A water sample from an external tap water source GW1 was sampled for analysis in December 2013. This sample is comparable with the drinking water quality in the O' Donoghue residence located adjacent the waste transfer activities. The sample was analysed for parameters as listed in the Schedule C of the waste licence for the facility.

The results of the water monitoring indicate a water quality that complies with the standards in the EC Drinking Water Directive [98/83/EC].

4.4. Storm Water Monitoring

Laboratory results of monthly surface water run-off samples are detailed in Appendix II.

Table 5.1: Schedule of Objective and Targets 2015

No.	2014 Objective	Target	Responsibility	Timescale
1	Employee Training	Provide Emergency Response training to employees.	Facility Manager	2015
2	Maintain site infrastructure	Test storage tanks for integrity and tightness	Facility Manager	August 2015
3	Maintain and improve the EMS	Continue to hold quarterly and annual Environmental management review meetings at the site.	Environmental Compliance Manager	2015

4.5. Waste Management Activities

The facility is licensed to accept the following waste types as specified in Schedule A of the Waste Licence: -

- Household,
- Commercial,
- Construction & Demolition,
- Industrial Non-Hazardous Solids

Hazardous waste is not accepted at the facility, with the exception of small quantities of machinery batteries that inadvertently arrive in waste deliveries. Such batteries are stored in a designated skip pending collection by an off-site recycling organisation. Any other materials suspected either to be hazardous or not acceptable under licence conditions (e.g. gas cylinders, sheets of asbestos) are temporarily stored on-site in the waste quarantine area, before removal off-site for treatment/disposal at an appropriate facility.

4.5.1. Household and Commercial Waste Containing Putrescible Materials

Household and commercial wastes (originating in factories, hotels, pubs and supermarkets) containing an organic fraction are either deposited on the floor of the transfer building, or tipped directly into open trailers. All the household waste deposited on the floor is either pushed into an open trailer, or compacted for removal off-site for disposal at an off-site landfill, as agreed with the Agency. The commercial waste is inspected and segregated into recyclable cardboard, bottles, domestic waste, or compactor waste (supermarkets are generally the main origin of this waste). All uncontaminated cardboard and plastic packaging material, which is suitable for baling, is collected for recycling. Drink cans are collected, baled and stored on-site pending removal off-site for recycling. Glass bottles, which are either segregated prior to arrival on-site or deposited at the civic amenity area, are stored on-site pending removal for recycling off-site.

4.5.2. Non Putrescible Household and Commercial Waste

Non putrescible household wastes, arising from the kerbside collection, and non putrescible commercial/industrial waste is deposited onto the floor of the transfer building and inspected for disposable and/or recoverable fractions. Non-recyclable/recoverable waste is stored within the building before transfer for disposal to an off-site landfill, as agreed with the Agency.

4.5.3. Construction and Demolition Waste

All construction and demolition waste is inspected to determine if it is suitable for transfer and/or recovery. Wood and metal are separated using a mechanical grab and subsequently removed off-site to approved recovery/recycling facilities. The residual material is passed through a trommel to remove the fine fraction containing subsoil and topsoil. This material is either used on-site for restoration purposes, or is sold for agricultural and/or horticultural purposes. The heavy fraction from the trommel

containing concrete, brick etc is then passed through the crusher to produce a crushed inert aggregate.

4.5.4. Wood, Timber Waste

Wood delivered to and recovered on-site is shredded and removed off-site for disposal.

4.5.5. Other recovery Infrastructure

External storage bays are located at the facility for storing waste recovered for recycling. Concrete storage bays for soil, rubble green waste and chipped wood are located at the north east of the facility. At the south-west of the waste transfer building there will be bays for glass and scrap metal and also a quarantine area for white and electrical goods.

4.6. Quantity & Composition of Waste Recovered

Details of the quantities of waste recovered are contained in Appendix I.

5. REPORT ON ENVIRONMENTAL NUISANCES & CONTROLS

The site is inspected daily and weekly by the manager and recorded on separate inspection sheets as required by Condition 8.10. The daily inspection sheet records environmental nuisances such as flies, loose litter, vermin, birds, odour, dust, fires and complaints. The sheet also provides for the recording of descriptions of works on the day of inspection and provides for comments and required actions.

5.1. Litter Control

Litter picking is carried out daily and as required. Daily and weekly inspection sheets are maintained at the site office. The site manager carries out daily litter inspection in the area surrounding the waste transfer station. An overhead CCTV camera is located at the weighbridge to enable inspection of loads brought to the facility. The weighbridge operator inspects each load brought to the facility and ensures that they are covered with appropriate netting.

Weekly inspection sheet provides for the recording of nuisances as well as site security, infrastructure and housekeeping.

A road sweeper vehicle attachment has been procured for use on the site and for local access roads when required.

5.2. Odour Control

Operations at the waste transfer facility involve the transfer and compaction of solid waste only. No liquids, agricultural or sewage sludges will be accepted at the site.

Waste accepted at the facility will have generally undergone relatively little decomposition. The storage of waste in sealed containers following compaction and

fast turnaround times on site means that the potential for odour problems arising at the facility will be minimised.

5.3. Dust Control

In dry weather all site access roads will be sprayed with a water bowser to suppress dust. To minimise dust generation traffic restrictions on the site will be implemented including a speed limit of 15 mph. Dust deposition monitoring at the site show that present dust emissions are unlikely to cause a nuisance.

However management propose to implement the following mitigation measures:

- Sprinkling water by applying a fine water mist over dusty waste as it's unloaded inside the transfer building
- Covering/dampening any external dusty waste stockpiles of C&D waste
- Sweeping and washing down the transfer building floor regularly
- Using a road sweeper on the facility yard and local road during dry weather

Dust deposition levels were recorded twice a year using Bergerhoff gauges, during the period May to September.

5.4. Noise Control

Noise measurements have been recorded annually at the facility since 2003. The results from the monitoring indicate that noise from the facility is not a source of nuisance outside the perimeter of the facility. The doors of the waste transfer building remain closed during trommeling of waste. There have been no reports of noise nuisance complaints made to the facility manager.

Noise levels will continue to be monitored annually at locations. The L_{Aeq} , L_{A10} and L_{A90} are monitored at each location for a thirty-minute duration.

APPENDIX I

PRTR WASTE TRANSFR DATA

APPENDIX II

INTERCEPTOR RUN-OFF WATER ANALYSIS RESULTS



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Contact Name	Pat Power	Report Number	81536 - 1
Address	Glenside Environmental Cuil Greine House Ballincollig Commercial Park	Sample Number	81536/001
Tel No	021 4810016	Date of Receipt	12/12/2014
Fax No		Date Started	12/12/2014
Customer PO	Not Required	Received or Collected	Courier
Quotation No	QN002529	Condition on Receipt	Good
Customer Ref	SW1 December O'Donoghue Waste	Date of Report	22/12/2014
		Sample Type	Surface Waters

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Ammonia									
	Ammonia (as N)		EW154M-1	0.0070		0.046	mg/l N	INAB	
AQ2-UP1									
	Phosphate-Ortho(as P)		EW154M-1	0.009		<0.009	mg/l P	INAB	
AQ2-UP2									
	Sulphate		EW154M-1	1.0		1.6	mg/L	INAB	
BOD									
	BOD		EW001	1		2	mg/L	INAB	
COD									
	COD		EW094	8		28	mg/L	INAB	
Micro -Total & Faecal (Sub 1)									
	Total Coliforms (Coliform Count)	*	Default	0		240	MPN/100ml	YES	
	Faecal coliforms	*	Default	0		43	MPN/100ml	YES	
Suspended Solids									
	Suspended Solids		EW013	5		<5	mg/L	INAB	
Titralab									
	pH		EW153			7.6	pH Units	INAB	
	Conductivity @20 DegC		EW153	25		51	uscm-1@20	INAB	

Signed :

22/12/2014

Dr. Ruairi O'Concubhair-Technical Manager

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- 6."*" Indicates sub-contract test



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DETAILED IN SCOPE REG NO.1117

Contact Name	Pat Power	Report Number	80148 - 1
Address	Glenside Environmental Cuil Greine House Ballincollig Commercial Park	Sample Number	80148/001
Tel No	021 4810016	Date of Receipt	30/10/2014
Fax No		Date Started	30/10/2014
Customer PO	Not Required	Received or Collected	Hand
Quotation No	QN002529	Condition on Receipt	Good
Customer Ref	O DON SW1 OCT	Date of Report	21/11/2014
		Sample Type	Surface Waters

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Ammonia									
	Ammonia (as N)		EW154M-1	0.0070		0.963	mg/l N		
AQ2-UP1									
	Phosphate-Ortho(as P)		EW154M-1	0.009		<0.009	mg/l P	INAB	
AQ2-UP2									
	Sulphate		EW154M-1	1.0		429.1	mg/L		
BOD									
	BOD		EW001	1		>15	mg/L	INAB	
COD									
	COD		EW094	8		119	mg/L	INAB	
Micro -Total & Faecal (Sub 1)									
	Total Coliforms (Coliform Count)	*	Default	0		18	MPN/100ml	YES	
	Faecal coliforms	*	Default	0		18	MPN/100ml	YES	
Suspended Solids									
	Suspended Solids		EW013	5		<5	mg/L	INAB	
Titralab									
	pH		EW153			7.4	pH Units	INAB	
	Conductivity @20 DegC		EW153	25		1444	uscm-1@20	INAB	

Signed :

21/11/2014

Brendan Murray-Deputy Technical Manager

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Contact Name	Pat Power	Report Number	75128 - 1
Address	Glenside Environmental Cuil Greine House Ballincollig Commercial Park	Sample Number	75128/001
Tel No	021 4810016	Date of Receipt	30/04/2014
Fax No		Date Started	30/04/2014
Customer PO	Not Required	Received or Collected	Hand
Quotation No	QN002529	Condition on Receipt	Good
Customer Ref	SW1 April O'Donoghue Waste	Date of Report	09/05/2014
		Sample Type	Surface Waters

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Ammonia									
	Ammonia (as N)		EW154M-1	0.007		0.637	mg/l N	INAB	
AQ2-UP1									
	Phosphate-Ortho(as P)		EW154M-1	0.009		<0.009	mg/l P	INAB	
AQ2-UP2									
	Sulphate		EW154M-1	1.0		160.7	mg/L	INAB	
BOD									
	BOD		EW001	1		>10	mg/L	INAB	
COD									
	COD		EW094	8		54	mg/L	INAB	
Micro -Total & Faecal (Sub 1)									
	Total Coliforms (Coliform Count)	*	Default	0		210	MPN/100ml	YES	
	Faecal coliforms	*	Default	0		210	MPN/100ml	YES	
Suspended Solids									
	Suspended Solids		EW013	5		<5	mg/L	INAB	
Titralab									
	pH		EW153			7.1	pH Units	INAB	
	Conductivity @20 DegC		EW153	25		776	uscM-1@20	INAB	

Signed : _____ 09/05/2014

Technical Manager (or Deputy): Brendan Murray

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Contact Name	Pat Power	Report Number	73605 - 1
Address	Glenside Environmental Cuil Greine House Ballincollig Commercial Park	Sample Number	73605/001
Tel No	021 4810016	Date of Receipt	28/02/2014
Fax No		Date Started	28/02/2014
Customer PO	Not Required	Received or Collected	Hand
Quotation No	QN002529	Condition on Receipt	Good
Customer Ref	SW1 February O'Donoghue Waste	Date of Report	07/03/2014
		Sample Type	Surface Waters

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Ammonia									
	Ammonia (as N)		EW154M-1	0.007		0.821	mg/l N	INAB	
AQ2-UP1									
	Phosphate-Ortho(as P)		EW154M-1	0.009		<0.009	mg/l P	INAB	
AQ2-UP2									
	Sulphate		EW154M-1	1.0		116.5	mg/L		
BOD									
	BOD		EW001	1		3	mg/L		
COD									
	COD		EW094	8		19	mg/L		
Micro -Total & Faecal (Sub 1)									
	Total Coliforms (Coliform Count)	*	Default	0		7	MPN/100ml		
	Faecal coliforms	*	Default	0		7	MPN/100ml		
Suspended Solids									
	Suspended Solids		EW013	5		<5	mg/L	INAB	
Titralab									
	pH		EW153			7.3	pH Units	INAB	
	Conductivity @20 DegC		EW153	25		871	uscm-1@20	INAB	

Signed : _____ 07/03/2014

Technical Manager (or Deputy): **Brendan Murray**

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Contact Name	Pat Power	Report Number	72490 - 1
Address	Glenside Environmental Cuil Greine House Ballincollig Commercial Park	Sample Number	72490/001
Tel No	021 4810016	Date of Receipt	15/01/2014
Fax No		Date Started	15/01/2014
Customer PO	No PO given	Received or Collected	Hand
Quotation No	QN002529	Condition on Receipt	Good
Customer Ref	SW1 O'Donoghue Waste	Date of Report	21/01/2014
		Sample Type	Surface Waters

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Ammonia									
	Ammonia (as N)		EW154M-1	0.007		0.470	mg/l N		
AQ2-UP1									
	Phosphate-Ortho(as P)		EW154M-1	0.009		<0.009	mg/l P		
AQ2-UP2									
	Sulphate		EW154M-1	1.0		179.3	mg/L		
BOD									
	BOD		EW001	1		5	mg/L		
COD									
	COD		EW094	8		34	mg/L		
Micro -Total & Faecal (Sub 1)									
	Total Coliforms (Coliform Count)	*	Default	0		150	MPN/100ml		
	Faecal coliforms	*	Default	0		150	MPN/100ml		
Suspended Solids									
	Suspended Solids		EW013	5		20	mg/L		
Titralab									
	pH		EW153			6.9	pH Units		
	Conductivity @20 DegC		EW153	25		1073	uscM-1@20		

Signed : _____ 21/01/2014

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APPENDIX II

**SW3 RECEIVING WATER
DOWNSTREAM ANALYSIS RESULTS**



ENVIRONMENTAL
LABORATORY SERVICES
Acorn Business Campus
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Blackrock,
Cork
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Tel: +353 21 453 6141
Fax: +353 21 453 6149
Web: www.irishwatertesting.com
email: info@elsltd.com



Contact Name	Pat Power	Report Number	81563 - 1
Address	Glenside Environmental Cuil Greine House Ballincollig Commercial Park	Sample Number	81563/001
Tel No	021 4810016	Date of Receipt	12/12/2014
Fax No		Date Started	12/12/2014
Customer PO	Per Batch	Received or Collected	Courier
Quotation No	QN003543	Condition on Receipt	Good
Customer Ref	O' DON SW2 December	Date of Report	22/12/2014
		Sample Type	Surface Waters

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Ammonia									
	Ammonia (as N)		EW154M-1	0.0070		0.046	mg/l N	INAB	
AQ2-UP2									
	Sulphate		EW154M-1	1.0		17.7	mg/L	INAB	
BOD									
	BOD		EW001	1		<1	mg/L	INAB	
COD									
	COD		EW094	8		<8	mg/L	INAB	
Suspended Solids									
	Suspended Solids		EW013	5		<5	mg/L	INAB	
Titralab									
	pH		EW153			6.5	pH Units	INAB	
	Conductivity @20 DegC		EW153	25		186	uscm-1@20	INAB	
Total Phosphorus-TP									
	Total Phosphorus-TP		EW146	0.010		0.035	mg/l P	INAB	

Signed :

22/12/2014

Dr. Ruairi O'Concubhair-Technical Manager

NOTES

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- 6."*" Indicates sub-contract test



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Contact Name	Pat Power	Report Number	81563 - 1
Address	Glenside Environmental Cuil Greine House Ballincollig Commercial Park	Sample Number	81563/002
Tel No	021 4810016	Date of Receipt	12/12/2014
Fax No		Date Started	12/12/2014
Customer PO	Per Batch	Received or Collected	Courier
Quotation No	QN003543	Condition on Receipt	Good
Customer Ref	O'Don SW3 December	Date of Report	22/12/2014
		Sample Type	Surface Waters

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Ammonia									
	Ammonia (as N)		EW154M-1	0.0070		0.047	mg/l N	INAB	
AQ2-UP2									
	Sulphate		EW154M-1	1.0		17.5	mg/L	INAB	
BOD									
	BOD		EW001	1		<1	mg/L	INAB	
COD									
	COD		EW094	8		<8	mg/L	INAB	
Suspended Solids									
	Suspended Solids		EW013	5		<5	mg/L	INAB	
Titralab									
	pH		EW153			6.5	pH Units	INAB	
	Conductivity @20 DegC		EW153	25		185	uscM-1@20	INAB	
Total Phosphorus-TP									
	Total Phosphorus-TP		EW146	0.010		0.030	mg/l P	INAB	

Signed :

22/12/2014

Dr. Ruairi O'Concubhair-Technical Manager

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