Sonja Smith

To:

Ewa Babiarczyk

Subject:

RE: W0032-03 Dungarvan L. - Unsolicited information from the Applicant

From: Hynes, Gabriel Sent: 10 April 2014 14:23

To: Ewa Babiarczyk

Subject: FW: report of metals testing of wetland ponds at Dungarvan Landfill 8/7/13

Eva,

Find attached unsolicited data relating to the monitoring results for heavy metals at Dungarvan Landfill. If you have any queries on the attached you can contact

Paul Carroll **Executive Scientific Officer Waterford County Council** 051-384393

From: Paul Carroll

Sent: 10 April 2014 13:14

To: Hynes, Gabriel Cc: Regan, David

Subject: report of metals testing of wetland ponds at Dungarvan Landfill 7/13 Please find attached report of metals testing of wetland points at Dungarvan Landfill 8/7/13.

Contact me if any queries,
Regards,

Paul Carroll

Executive Scientific Officer
Waterford County Council

Waterford County Council 051-384393

1





Acom Business Campus Mahon Industrial Park, Blackrock, Cork Ireland

Tel: +353 21 453 6141 Fax: +353 21 453 6149 Web: www.irishwatertesting.com info@elsltd.com



Contact Name	Paul Carroll	Report Number	69219 - 1
Address	Waterford County Council	Sample Number	69219/003
	Water Laboratory	Date of Receipt	02/09/2013
	Kilmeaden	Date Started	02/09/2013
Tel No	051-384393 DVLF	Received or Collected	An Post
Fax No		Condition on Receipt	Good
Customer PO	400138873 POND (A	Date of Report	05/09/2013
Quotation No	QN000915	Sample Type	Surface Waters
Customer Ref	20130638 3/7/13		

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	oos
Metals-Trace	e				-11-00-10-00-				
Aluminium			EM130	5.0		124.6	ug/L	INAB	
Arsenic			EM130	0.200		5.3	ug/L	INAB	
Cadmium			EM130	0.100		<0.1	ug/L	INAB	
Chromium			EM130	1.000		16.5	ug/L	INAB	
Iron			EM130	20.0	ise.	3929.8	ug/L		
Mercury			EM130	0.020	anet C	2.71	ug/L	INAB	
Manganese			EM130	1.000	Oth	901.3	ug/L		
Nickel			EM130	0.5005	Ki	11,2	ug/L	INAB	
Lead			EM130	0,300		9,7	ug/L	INAB	
Antimony			EM130	So los		0.2	ug/L	INAB	
Selenium			EM130	17 0200		1.7	ug/L	INAB	
Boron			EM130	0.020		0.32	mg/L	INAB	
Copper			EM130 10	0.003		0.008	mg/L	INAB	
Sodium			EMION OW	0.500		128.1	mg/L	INAB	
*		Consent	FCOB,						
		Cons							

	The state of the s	
Signed:		05/09/2013

Technical Manager (or Deputy):

Brendan Murray

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2. SPEC= Allowable limit or parametric value

2.5PEC= Allowable limit of parametric value
3.0OS=Result which is outside specification highlighted as OOS
4.LOQ=Limit of Quantification or lowest value that can be reported for the test
5.ACCRED=Indicates matrix accreditation for the test, a blank field indicates not accredited
6."*" Indicates sub-contract test





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DETAILED IN SCOPE REG NO. 1117

Contact Name Paul Carroll Report Number 69219 - 1 Address Waterford County Council Sample Number 69219/004 Water Laboratory **Date of Receipt** 02/09/2013 Kilmeaden **Date Started** 02/09/2013 DV LF 051-384393 Tel No An Post Received or Collected Fax No Condition on Receipt Good POND 2 **Customer PO** 05/09/2013 400138873 **Date of Report** QN000915 Surface Waters **Quotation No** Sample Type 8/2/17 **Customer Ref** 20130639

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	oos
Metals-Trac	ce de la companya de			Daniel Jack					17 . 72111
Aluminium			EM130	5.0		16.2	ug/L	INAB	
Arsenic			EM130	0.200		1.2	ug/L	INAB	
Cadmium			EM130	0.100		< 0.1	ug/L	INAB	
Chromium			EM130	1.000		6.4	ug/L	INAB	
Iron			EM130	20.0		769.4	ug/L	INAB	
Mercury			EM130	0.020	Mar III To	0.07	ug/L	INAB	
Manganese			EM130	1.000		1582.3	ug/L		
Nickel			EM130	0.500	Off	7.4	ug/L	INAB	
Lead			EM130	0.300	all	< 0.3	ug/L	INAB	
Antimony			EM130	0.100	A STATE OF	<0.1	ug/L	INAB	
Selenium			EM130	0200c		0.5	ug/L	INAB	
Boron			EM130	0110 020		0.33	mg/L	INAB	
Соррег			EM130 .	0.003		0.003	mg/L	INAB	
Sodium			EM130	0.500		150.3	mg/L	INAB	
		C Ones	EM130						

Signed: ______ 05/09/2013

Technical Manager (or Deputy):

Brendan Murray

NOTES

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Cork Ireland

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Web: www.irishwatertesting.com email: info@elsltd.com



Contact Name	Paul Carroll		Report Number	69219 - 1
Address	Waterford County Council	ĺ	Sample Number	69219/005
	Water Laboratory		Date of Receipt	02/09/2013
	Kilmeaden		Date Started	02/09/2013
Tel No	051-384393		Received or Collected	An Post
Fax No	<	DVLF	Condition on Receipt	Good
Customer PO	400138873		Date of Report	05/09/2013
Quotation No	QN000915	Pond 3	Sample Type	Surface Waters
Customer Ref	20130640	877/17	2.5	Vi to to

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	oos
Aetals-Trac	e	**************************************							
Aluminium			EM130	5.0		61.3	ug/L	INAB	
Arsenic			EM130	0.200		1.3	ug/L	INAB	
Cadmium			EM130	0.100		<0.1	ug/L	INAB	
Chromium			EM130	1.000		5.6	ug/L	INAB	
Iron			EM130	20.0	other use.	861.0	ug/L	INAB	
Mercury			EM130	0.020	of the	0.10	ug/L	INAB	
Manganese			EM130	1.000	othe	814.8	ug/L		
Nickel			EM130	0.5004	B	8,5	ug/L	INAB	
Lead			EM130	0.300		0.4	ug/L	INAB	
Antimony			EM130	Seg. 180		< 0.1	ug/L	INAB	
Selenium			EM130	0200		1.3	ug/L	INAB	
Boron			EM130	0.020		0.31	mg/L	INAB	
Copper			EM13000	0.003		0.014	mg/L	INAB	
Sodium			EMASO OWL	0.500		141.8	mg/L	INAB	
		Consent	of copy.						

Signed: _______ 05/09/2013

Technical Manager (or Deputy):

Brendan Murray

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Contact Name	Paul Carroll		Report Number	69219 - 1	
Address	Waterford County	/ Council	Sample Number	69219/006	
	Water Laboratory	,	Date of Receipt	02/09/2013	
	Kilmeaden		Date Started	02/09/2013	
Tel No	051-384393	DVLF	Received or Collected	An Post	
Fax No		0 1 1	Condition on Receipt	Good	
Customer PO	400138873	Pond 4	Date of Report	05/09/2013	
Quotation No	QN000915	11-	Sample Type	Surface Waters	
Customer Ref	20130641	8/7/13			

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	oos
Metals-Tra	ce						She Kwele		102
Aluminium	ı		EM130	5.0		565.0	ug/L	INAB	
Arsenic			EM130	0.200		1.9	ug/L	INAB	
Cadmium			EM130	0.100		< 0.1	ug/L	INAB	
Chromium			EM130	1.000		4.8	ug/L	INAB	
Iron			EM130	20.0		1496.1	ug/L	INAB	
Mercury			EM130	0.020	othervi	2.64	ug/L	INAB	
Manganese			EM130	1.000	their	549.7	ug/L		
Nickel			EM130	0,500	. 400	8,0	ug/L	INAB	
Lead			EM130	0.300 0119	r any C	2.7	ug/L	INAB	
Antimony			EM130	0.100	,	<0.1	ug/L	INAB	
Selenium			EM130	92000		1.7	ug/L	INAB	
Boron			EM130	0110,020		0.27	mg/L	INAB	
Copper			EM130 .	0.003		0.004	mg/L	INAB	
Sodium			EM130	0.500		136.7	mg/L	INAB	
		c Original Control of the Control of	EM130						

05/09/2013 Signed:

Technical Manager (or Deputy):

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email: info@elsltd.com

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INAB
ACCRED TED
TESTING
DETAILED IN SCOPE REG NO.1117

Contact Name Address Paul Carroll

Waterford County Council

Water Laboratory

Kilmeaden

Tel No Fax No 051-384393

Customer PO 400138873
Quotation No QN000915

Customer Ref 20130642

DV LF POND 5 IN Report Number Sample Number Date of Receipt Date Started

Received or Collected Condition on Receipt

Date of Report Sample Type 69219 - 1

69219/007 02/09/2013

02/09/2013

An Post Good

05/09/2013 Surface Waters

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	oos
Metals-Tra	ce								
Aluminiun			EM130	5.0		12,0	ug/L	INAB	
Arsenic			EM130	0.200		1.6	ug/L	INAB	
Cadmium			EM130	0.100		<0.1	ug/L	INAB	
Chromium			EM130	1.000		2.1	ug/L	INAB	
Iron			EM130	20.0	AT IN 18	1974.0	ug/L		
Mercury			EM130	0.020	otheri	< 0.02	ug/L	INAB	
Manganese			EM130	1.000	Oll	999.5	ug/L		
Nickel			EM130	0.500	MIN	5.1	ug/L	INAB	
Lead			EM130	0.3000	No.	<0.3	ug/L	INAB	
Antimony			EM130	0300		< 0.1	ug/L	INAB	
Selenium			EM130	11 0.200		1.6	ug/L	INAB	
Boron			EM130	6.020		0.19	mg/L	INAB	
Copper			EM130 C10	0.003		< 0.003	mg/L	INAB	
Sodium		Conse	EMI300 Tight of	0.500		95.3	mg/L	INAB	
	¥.	٥	ent of cold						
		Cous							

Signed: ______ 05/09/2013

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Page 7 of 12





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Fax: +353 21 453 6149
Web: www.irishwatertesting.com
email: info@elsltd.com



Contact Name

Paul Carroll

Address

Waterford County Council

Water Laboratory

Kilmeaden

Tel No Fax No

Customer PO

051-384393

400138873 QN000915

Quotation No QN000915 Customer Ref 20130643 DVL

Pond 5 out

Report Number Sample Number Date of Receipt Date Started

Received or Collected Condition on Receipt Date of Report

Date of Report Sample Type 69219 - 1

69219/008 02/09/2013 02/09/2013

An Post Good 05/09/2013

Surface Waters

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	oos
Metals-Tra	ce	Secretary and		The average as					TOTAL STREET
Aluminium	i		EM130	5.0		29.6	ug/L	INAB	
Arsenic			EM130	0.200		1.2	ug/L	INAB	
Cadmium			EM130	0.100		< 0.1	ug/L	INAB	
Chromium			EM130	1,000		1.1	ug/L	INAB	
Iron			EM130	20.0		≥ 270.2	ug/L	INAB	
Mercury			EM130	0.020	other us	<0.02	ug/L	INAB	
Manganese			EM130	1.000	ther	160,7	ug/L	INAB	
Nickel			EM130	0.500	. 4	3.9	ug/L	INAB	
Lead			EM130	0.300	Salt.	1.5	ug/L	INAB	
Antimony			EM130	0.100		0.2	ug/L	INAB	
Selenium			EM130	0.200°C		2,6	ug/L	INAB	
Boron			EM130	0000		0.17	mg/L	INAB	
Copper			EM130 :0	0.003		0.013	mg/L	INAB	
Sodium			EM130	0,500		68.3	mg/L	INAB	
		Cons	for installar						

Signed: ______ 05/09/2013

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