

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 8/7/13

Gabriel,

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

Contact me if any queries,
Regards,

Paul Carroll
Executive Scientific Officer
Waterford County Council
051-384393

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email: info@elsltd.com



Contact Name	Paul Carroll	Report Number	69219 - 1
Address	Waterford County Council Water Laboratory Kilmeaden	Sample Number	69219/003
Tel No	051-384393	Date of Receipt	02/09/2013
Fax No		Date Started	02/09/2013
Customer PO	400138873	Received or Collected	An Post
Quotation No	QN000915	Condition on Receipt	Good
Customer Ref	20130638	Date of Report	05/09/2013
	DVLF	Sample Type	Surface Waters
	POND 1A		
	8/7/13		

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Metals-Trace									
	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		3929.8	ug/L		
	Mercury		EM130	0.020		2.71	ug/L	INAB	
	Manganese		EM130	1.000		901.3	ug/L		
	Nickel		EM130	0.500		11.2	ug/L	INAB	
	Lead		EM130	0.500		9.7	ug/L	INAB	
	Antimony		EM130	0.100		0.2	ug/L	INAB	
	Selenium		EM130	0.200		1.7	ug/L	INAB	
	Boron		EM130	0.020		0.32	mg/L	INAB	
	Copper		EM130	0.003		0.008	mg/L	INAB	
	Sodium		EM130	0.500		128.1	mg/L	INAB	

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Signed :

05/09/2013

Technical Manager (or Deputy):

Brendan Murray

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- 6."*" Indicates sub-contract test



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

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Metals-Trace									
	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		0.07	ug/L	INAB	
	Manganese		EM130	1.000		1582.3	ug/L	INAB	
	Nickel		EM130	0.500		7.4	ug/L	INAB	
	Lead		EM130	0.300		<0.3	ug/L	INAB	
	Antimony		EM130	0.100		<0.1	ug/L	INAB	
	Selenium		EM130	0.200		0.5	ug/L	INAB	
	Boron		EM130	0.030		0.33	mg/L	INAB	
	Copper		EM130	0.003		0.003	mg/L	INAB	
	Sodium		EM130	0.500		150.3	mg/L	INAB	

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

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Metals-Trace									
	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		861.0	ug/L	INAB	
	Mercury		EM130	0.020		0.10	ug/L	INAB	
	Manganese		EM130	1.000		814.8	ug/L	INAB	
	Nickel		EM130	0.500		8.5	ug/L	INAB	
	Lead		EM130	0.300		0.4	ug/L	INAB	
	Antimony		EM130	0.100		<0.1	ug/L	INAB	
	Selenium		EM130	0.200		1.3	ug/L	INAB	
	Boron		EM130	0.020		0.31	mg/L	INAB	
	Copper		EM130	0.003		0.014	mg/L	INAB	
	Sodium		EM130	0.500		141.8	mg/L	INAB	

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DVLF
Pond 3
8/7/13

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

D V L F
Pond 4
8/7/13

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Metals-Trace									
	Aluminium		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		2.64	ug/L	INAB	
	Manganese		EM130	1.000		549.7	ug/L	INAB	
	Nickel		EM130	0.500		8.0	ug/L	INAB	
	Lead		EM130	0.300		2.7	ug/L	INAB	
	Antimony		EM130	0.100		<0.1	ug/L	INAB	
	Selenium		EM130	0.200		1.7	ug/L	INAB	
	Boron		EM130	0.020		0.27	mg/L	INAB	
	Copper		EM130	0.003		0.004	mg/L	INAB	
	Sodium		EM130	0.500		136.7	mg/L	INAB	

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Contact Name	Paul Carroll	Report Number	69219 - 1
Address	Waterford County Council Water Laboratory Kilmeaden	Sample Number	69219/007
Tel No	051-384393	Date of Receipt	02/09/2013
Fax No		Date Started	02/09/2013
Customer PO	400138873	Received or Collected	An Post
Quotation No	QN000915	Condition on Receipt	Good
Customer Ref	20130642	Date of Report	05/09/2013
		Sample Type	Surface Waters

*DVLF
pond 5 in
8/7/13*

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Metals-Trace									
	Aluminium		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		1974.0	ug/L	INAB	
	Mercury		EM130	0.020		<0.02	ug/L	INAB	
	Manganese		EM130	1.000		999.5	ug/L	INAB	
	Nickel		EM130	0.500		5.1	ug/L	INAB	
	Lead		EM130	0.300		<0.3	ug/L	INAB	
	Antimony		EM130	0.300		<0.1	ug/L	INAB	
	Selenium		EM130	0.200		1.6	ug/L	INAB	
	Boron		EM130	0.020		0.19	mg/L	INAB	
	Copper		EM130	0.003		<0.003	mg/L	INAB	
	Sodium		EM130	0.500		95.3	mg/L	INAB	

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Contact Name	Paul Carroll	Report Number	69219 - 1
Address	Waterford County Council Water Laboratory Kilmeaden	Sample Number	69219/008
Tel No	051-384393	Date of Receipt	02/09/2013
Fax No		Date Started	02/09/2013
Customer PO	400138873	Received or Collected	An Post
Quotation No	QN000915	Condition on Receipt	Good
Customer Ref	20130643	Date of Report	05/09/2013
		Sample Type	Surface Waters

D V L F
Pond 5 out
2/7/13

CERTIFICATE OF ANALYSIS

TEST	ANALYTE	SUB	METHOD	LOQ	SPEC	RESULT	UNITS	ACCRED.	OOS
Metals-Trace									
	Aluminium		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		<0.02	ug/L	INAB	
	Manganese		EM130	1.000		160.7	ug/L	INAB	
	Nickel		EM130	0.500		3.9	ug/L	INAB	
	Lead		EM130	0.300		1.5	ug/L	INAB	
	Antimony		EM130	0.100		0.2	ug/L	INAB	
	Selenium		EM130	0.200		2.6	ug/L	INAB	
	Boron		EM130	0.020		0.17	mg/L	INAB	
	Copper		EM130	0.003		0.013	mg/L	INAB	
	Sodium		EM130	0.500		68.3	mg/L	INAB	

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