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June 25, 2013

Mrs. Carla M. Jordan Casella Waste Services of Ontario, LLC Ontario County Landfill 1879 State Routes 5 & 20 Stanley, New York 14561

RECEIVED JUL 2420

Division of Materials Management NYSDEC - Region 8 Avon

(a)

Re: Chemung County Landfill January 2013 Radionuclide Monitoring Event

File: 574.129.001

Dear Mrs. Jordan:

This letter report summarizes our January 2013 Radionuclide Monitoring event, which was conducted in accordance with the Site EMP Appendix F – Additional Considerations for Radionuclide Sampling. Included as attachments to this letter are the following supporting documents:

- Attachment A Pace Analytical Services, Inc. Report (3085680)
- Table 1 Chemung County Landfill Radionuclide Leachate Data Results

Barton & Loguidice, P.C. (B&L) conducted the required sampling on January 9, 2013. Primary leachate samples of both filtered and non-filtered media were collected from the Cell I/II/III and Cell IV leachate collection systems. A sample was also collected from the leachate lagoon. The samples were submitted to Pace Analytical Services, Inc. (Pace) located in Greensburg, Pennsylvania for the following analysis in accordance with the EMP:

- Radium-226 per EPA 903.1
- Radium-228 per EPA 904.0
- Total Uranium per EPA 908.0
- Gamma Spectrum per EPA 901.1

Included in the attached Table 1 are the results for each leachate monitoring location compared to relevant Nuclear Regulatory Commission (NRC) and DEC effluent and sewer discharge standards. Also included in Table 1 are historical data from the May 2010 sampling event for both the Cell I/II/III and Cell IV primary leachate monitoring locations. Although some of the methods utilized in the May 2010 event do not directly compare with the current requirement set forth by the EMP, this data is considered useful as a historical reference.

574,129,001 January 2013 Radionactide Monitoring Report

290 Fiwood Davis Road - Roy 3407 - Synacuse, New York 13229 Telephone: 348-457-5300 - haesmilt, 348-454-0052 - www.Barionandi.ogundee.co. -

Mrs. Carla M. Jordan Casella Waste Services of Ontario, LLC June 25, 2013 Page 2

The results indicate that radionuclide concentrations for the leachate lagoon, Cell J/II/III primary leachate and the Cell IV primary leachate have remained generally consistent with historical data. More importantly, the results remain far below applicable effluent and sewer discharge criteria established by the federal Nuclear Regulatory Commission (NRC) and/or NYSDEC. As we conduct further radionuclide monitoring and gain more analytical data from the required monitoring network, we will be better able to assess the data for potential changes/trends over time.

Please contact me if you have any questions regarding this letter summary report.

Very truly yours,

BARTON & LOGUIDICE, P.C.

Michael R. Brother

Michael R. Brother Senior Managing Hydrogeologist

MRB/akg

Attachments cc: Mark Domagala, NYSDEC

Attachment A

Pace Analytical Services, Inc.



February 06, 2013

Mr. Brian J. McGrath Barton & Loguidice 11 Centre Park, Suite 203 Rochester, NY 14614

RE: Project: Chemung Cnty Radionuclide Pace Project No.: 3085680

Dear Mr. McGrath:

Enclosed are the analytical results for sample(s) received by the laboratory on January 16, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sugardylettin,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Chemung Cnty Radionuclide Pace Project No.: 3085680

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601 ACLASS DOD-ELAP Accreditation #: ADE-1544 Alabama Certification #: 41590 Arizona Certification #: AZ0734 Arkansas Certification California/TNI Certification #: 04222CA Colorado Certification Connecticut Certification #: PH-0694 Delaware Certification Florida/TNI Certification #: E87683 Guam/PADEP Certification Hawaii/PADEP Certification Idaho Certification Indiana/PADEP Certification lowa Certification #: 391 Kansas/TNI Certification #: E-10358 Kentucky Certification #: 90133 Louisiana/TNI Certification #: LA080002 Louisiana/TNI Certification #: 4086 Maine Certification #: PA0091 Maryland Certification #: 308 Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082 Nevada Certification New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification New York/TNI Certification #: 10888 North Carolina Certification #: 42706 Oregon/TNI Certification #: PA200002 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 South Dakota Certification Tennessee Certification #: TN2867 Texas/TNI Certification #: T104704188 Utah/TNI Certification #: ANTE Virgin Island/PADEP Certification Virginia Certification #: 00112 Virginia/VELAP Certification #: 460198 Washington Certification #: C868 West Virginia Certification #: 143 Wisconsin/PADEP Certification Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project:Chemung Cnty RadionuclidePace Project No.:3085680

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3085680001	Cell IV (unfiltered)	Water	01/09/13 13:55	01/16/13 08:55
3085680002	Cell IV (filtered)	Water	01/09/13 14:05	01/16/13 08:55
3085680003	Cell i, II, III (unfiltered)	Water	01/09/13 14:20	01/16/13 08:55
3085680004	Cell I, II, III (filtered)	Water	01/09/13 14:30	01/16/13 08:55
3085680005	Leachate Lagoon (unfiltered)	Water	01/09/13 14:40	01/16/13 08:55
3085680006	Leachate Lagoon (filtered)	Water	01/09/13 14:50	01/16/13 08:55

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SAMPLE ANALYTE COUNT

Project: Chemung Cnty Radionuclide Pace Project No.: 3085680

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3085680001	Cell IV (unfiltered)	EPA 901.1m	AEH	2
		EPA 903.1	\$LA	1
		EPA 904.0	MAW	1
		EPA 908.0	LAL	1
3085680002	Cell IV (filtered)	EPA 901.1m	AEH	2
		EPA 903.1	SLA	1
		EPA 904.0	MAW	1
•		EPA 908.0	LAL	1
3085680003	Cell I, II, III (unfiltered)	EPA 901.1m	AEH	2
		EPA 903.1	\$LA	1
		EPA 904.0	MAW	. 1
		EPA 908.0	' LAL	1
3085680004	Cell I, II, III (filtered)	EPA 901.1m	AEH	2
		EPA 903.1	\$LA	1
		EPA 904.0	MAW	1
	ς.	EPA 908.0	LAL	1
3085680005	Leachate Lagoon (unfiltered)	EPA 901.1m	AEH	2
		EPA 903.1	SLA	1
	·	EPA 904.0	MAW	1
		EPA 908.0	LAL	1
3085680006	Leachate Lagoon (filtered)	EPA 901.1m	AEH	2
	• •	EPA 903.1	SLA	1
		EPA 904.0	MAW	1
		EPA 908.0	LAL	1

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PROJECT NARRATIVE

 Project:
 Chemung Cnty Radionuclide

 Pace Project No.:
 3085680

Method:EPA 901.1mDescription:901.1 Gamma SpecClient:Barton & LoguidiceDate:February 06, 2013

General Information:

6 samples were analyzed for EPA 901.1m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Chemung Cnty Radionuclide Pace Project No.: 3085680

Method:EPA 903.1Description:903.1 Radium 226Client:Barton & LoguidiceDate:February 06, 2013

General Information:

6 samples were analyzed for EPA 903.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Pace Proiect	No.:	Chemung Cnty Radionuclide 3085680			
Method: Description: Client: Date:	EPA 904.0 Barto Febru	904.0 Radium 228 n & Loguidice lary 06, 2013	 		

General Information:

6 samples were analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Project:

Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

PROJECT NARRATIVE

Pace Project	No.: 3085680
Method:	EPA 908.0
Description:	908.0 Total Uranium
Client:	Barton & Loguidice
Date:	February 06, 2013
General Info 6 samples we	mation: re analyzed for EPA 908.0. All samples were received in acceptable condition with any exceptions noted below.
Hold Time: The samples	were analyzed within the method required hold times with any exceptions noted below.

Method Blank: All analytes were below the report limit in the method blank with any exceptions noted below.

Chemung Cnty Radionuclide

Laboratory Control Spike: All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project;	Chemung Cnt	y Radionuclide						
Pace Project No.:	3085680			1				
Sample: Cell IV (un PWS:	filtered)	Lab ID: 308 Site ID:	5680001	Collected: 01/09/13 13 Sample Type:	:55 Received:	01/16/13 08:55	Matrix: Water	
· Paramete	ers	Method		Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Cesium-137		EPA 901.1m	0.97	3 ± 2.803 (4.864)	pCi/L	02/04/13 12:2	6 10045-97-3	
Uranium-235		EPA 901.1m	2.52	1 ± 4.534 (7.624)	pCi/L	02/04/13 12:20	6 15117-96-1	
Radium-226		EPA 903.1	2.51	± 1.96 (2.30)	pCi/L	01/29/13 15:1	3 13982-63-3	
Radium-228		EPA 904.0	4.43	± 2.24 (3.88)	pCi/L	01/24/13 15:1	3 15262-20-1	
Total Uranium		EPA 908.0	0.02	26 ± 0.363 (0.665)	pCi/L	01/28/13 16:4	1 7440-61-1	
Sample: Cell IV (filte PWS:	ered)	Lab ID: 3085 Site ID:	680002	Collected: 01/09/13 14 Sample Type:	:05 Received:	01/16/13 08:55	Matrix: Water	
Paramete	ers	Method		Act ± Unc (MDC)	Uņits	Analyzed	CAS No.	Qual
Cesium-137		EPA 901.1m	-0.09)7 ± 3.114 (5.550)	pCi/L	02/04/13 13:3	1 10045 - 97-3	
Uranium-235		EPA 901.1m	-0.10)6 ± 9.929 (10.330)	pCi/L	02/04/13 13:3	1 _15117-96-1	
Radium-226		EPA 903.1	0.88	7±0.794 (0.969)	pCi/L	01/29/13 15:2	8 13982-63-3	
Radium-228		EPA 904.0	2.98	±0.830 (0.966)	pÇi/L	01/24/13 15:1	3 15262-20-1	
Total Uranium		EPA 908.0	0.37	8±0.342 (0.535)	pCi/L	01/28/13 16:4	1 7440-61-1	
Sample: Cell I, II, III	(unfiltered)	Lab ID: 3085	6800 03	Collected: 01/09/13 14	:20 Received:	01/16/13 08:55	Matrix: Water	
PWS:		Site ID:		Sample Type:		,		
Paramete	ers	Method		Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Cesium-137		EPA 901.1m	-3.19	93 ± 6.036 (10.080)	pCi/L	02/04/13 14:3	2 10045-97-3	
Uranium-235		EPA 901.1m	-1.04	19 ± 23.195 (16.330)	pCi/L	02/04/13 14:3	2 15117-96-1	
Radium-226		EPA 903.1	7.00	± 2.01 (0.989)	pCI/L	01/29/13 15:1	3 13982-63-3	
Radium-228		EPA 904.0	-0.38	38 ± 2.16 (5.19)	pCi/L	01/24/13 15:1	3 15262-20-1	
Total Uranium		EPA 908.0	0.74	2±0.449 (0.643)	pCi/L	01/28/13 16:4	1 7440-61-1	
Sample: Ceti I, II, III PWS:	(fiitered)	Lab ID: 308 Site ID:	5680004	Collected: 01/09/13 14 Sample Type:	:30 Received:	01/16/13 08:55	Matrix: Water	
Paramete	ers	Method		Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Cesium-137		EPA 901.1m	0.78	1 ± 2.847 (4.977)	pCi/L	02/04/13 15:3	37 10045-97-3	
Uranium-235		EPA 901.1m	-0.3(03 ± 24.358 (7.484)	pCi/L	02/04/13 15:3	7 151 17 -96-1	
Radium-226		EPA 903.1	1.91	± 0.975 (0.963)	pCi/L	01/29/13 15:2	8 13982-63-3	
Radium-228		EPA 904.0	1.43	± 0.652 (1.01)	pCi/L	01/24/13 15:1	4 15262-20-1	
Total Uranium		EPA 908.0	0.38	3 ± 0.602 (1.02)	pCi/L	01/28/13 16:4	1 7440-61-1	
Sample: Leachate L	agoon	Lab iD: 308	5680005	Collected: 01/09/13 14	40 Received	01/16/13 08:55	Matrix: Water	
(unfiltered PWS:)	Site ID:		Sample Type:				
Paramete	ers	Method		Act ± Unc (MDC)	, Units	Analyzed	CAS No.	Qual
Cesium-137	·····	EPA 901.1m	0.74	9 ± 3.123 (5.451)	pCi/L	02/04/13 16:4	19 10045-97-3	· · · · · · · · · · · · · · · · · · ·
Uranium-235		EPA 901.1m	-3.2	95 ± 6.267 (8.111)	pCi/L	02/04/13 16:4	19 15117-96-1	
Radium-226		EPA 903.1	3.63	± 1.40 (0.985)	pCi/L	01/29/13 15:	57 13982-63-3	
—		,			-			

Date: 02/06/2013 03:46 PM

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Pace Pro	ject No.: 0	Chemung Cnty F 1085680	ladionuclide							
Sample:	Leachate L	agoon	Lab ID:	3085680005	Collected	I: 01/09/13 14:4	0 Received:	01/16/13 08:55	Matrix: Water	
PWS:	(unniterea)		Site ID:		Sample *	Гуре:				
	Paramete	rs	- Method	ł	Act ± Ur	ic (MDC)	Units	Analyzed	CAS No.	Quai
Radium-2	28	E	PA 904.0	1.77 ±	0.852 (1	.36)	pCi/L	01/24/13 15:1	4 15262-20-1	
Total Urar	nium	E	PA 908.0	1.00 ±	0.498 (0).665)	pCi/L	01/28/13 16:4	1 7440-61-1	
Sample: PWS:	Leachate L	agoon (filtered)	Lab ID: 3 Site (D:	3085680006	Collected Sample	i: 01/09/13 14:5 Type:	0 Received:	01/16/13 08:55	Matrix: Water	
	Paramete	rs	Method	l -	Act ± Ur	nc (MDC)	Units	Analyzed	CAS No.	Qual
Cesium-1	37	E	PA 901.1m	-0.631	± 3.470	(6.055)	pCi/L	02/04/13 18:1	4 10045-97-3	· · · ·
Uranium-2	235	E	PA 901:1m	2.184	± 4.167	(7.041)	pCi/L	02/04/13 18:1	4 15117-96-1	
Radium-2	26	E	PA 903.1	1.12 ±	0.830 (0	.942)	pCi/L	01/29/13 15:2	8 13982-63-3	
Radium-2	28	E	PA 904.0	0.799	± 0.591	(1.02)	pCi/L	01/24/13 15:1	4 15262-20-1	
Total Uran	nium	E	PA 908.0	0.156	± 0.393	(0.689)	pCi/L	01/28/13 16:4	1 7440-61-1	

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QUALITY CONTROL DATA

Project: Pace Project No.:	Chemung Cnty Radionuclide 3085680	•		••
QC Batch:	RADC/14443	Analysis Method:	EPA 904.0	<u></u>
QC Batch Method:	EPA 904.0	Analysis Description:	904.0 Radium 228	
Associated Lab Sar	nples: 3085680001, 30856	80002, 3085680003, 3085680004, 30	085680005, 3085680006	
METHOD BLANK:	535446	Matrix: Water		

Associated Lab Samples: 3085680001, 3085680002, 3085680003, 3085680004, 3085680005, 3085680006

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Radium-228	0.345 ± 0.316 (0.641)	pCi/L	01/24/13 11:38	

Date: 02/06/2013 03:46 PM

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QUALITY CONTROL DATA

Project:	Chemung Cnty Radionuclide			
Pace Project No.:	3085680			
QC Batch:	RADC/14441	Analysis Method:	EPA 903.1	
QC Batch Method:	EPA 903.1	Analysis Description:	903.1 Radium-226	
Associated Lab Sar	nples: 3085680001, 308568	30002, 3085680003, 3085680004, 30	085680005, 3085680006	
METHOD BLANK:	535444	Matrix: Water	· · · · · · · · · · · · · · · · · · ·	
Associated Late Co.				

Associated Lab Samples: 3085680001, 3085680002, 3085680003, 3085680004, 3085680005, 3085680006

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Radium-226	-0.194 ± 0.405 (0.911)	pCi/L	01/29/13 14:53	

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Total Uranium

01/28/13 11:28

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QUALITY CONTROL DATA

Project:	Chemung Cnty Radio	nuclide				
	3063060					
QC Batch:	RADC/14467	Analysis Method:	EPA 908.0			
QC Batch Method:	EPA 908.0	Analysis Description:	908.0 Total U	ranium		
Associated Lab San	nples: 3085680001,	3085680002, 3085680003, 3085680004, 30	85680005, 3085	5680006		
METHOD BLANK:	536637	Matrix: Water				<u> </u>
Associated Lab San	nples: 3085680001, 3	3085680002, 3085680003, 3085680004, 30	85680005, 3085	5680006		
Paran	neter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers	

pCi/L

-0.00753 ± 0.217 (0.594)

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QUALITY CONTROL DATA

 Project:
 Chemung Cnty Radionuclide

 Pace Project No.:
 3085680

 QC Batch:
 RADC/14425
 Analysis Method:
 EPA 901.1m

 QC Batch Method:
 EPA 901.1m
 Analysis Description:
 901.1 Gamma Spec

 Associated Lab Samples:
 3085680001, 3085680002, 3085680003, 3085680004, 3085680005, 3085680006
 3085680005, 3085680006

METHOD BLANK: 535011

Matrix: Water

Associated Lab Samples: 3085680001, 3085680002, 3085680003, 3085680004, 3085680005, 3085680006

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Cesium-137	0.777 ± 2.884 (5.041)	pCi/L	02/04/13 10:33	
Uranium-235	0.796 ± 3.342 (5.841)	p C i/L	02/04/13 10:33	
•				

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QUALIFIERS

Project: Chemung Cnty Radionuclide Pace Project No .: 3085680

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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Table 1

Chemung County Landfill Radionuclide Leachate Data Results

	Table 1 - Chemung County Landfill Radionuclide Leachate Data Results																		
	<u> </u>		· · · · ·	_	<u> </u>	<u></u>			winty (- autoru	0,000			10301		<u> </u>		
		Cosium		Total	Radium		Total	Radium		Total	Uranium		Total	Liranium		T -1-1	Liropium		-
	1	200		rotar	000		1000			7018/			rolar			i otai	Oranium		Totar
		137	Qual.	uncert.	226	Quai.	 uncert. 	228	Qual.	uncert.	234	Qual.	uncert.	235	Qual.	uncert.	235	Qual.	uncert.
		(pCi/L)	· · · ·		(pCi/L)			(pCi/L)		<i></i>	(pCi/L)			(pCi/L)			(pCi/L)		
NRC/DEC	efficient limit	1000			60			60			300			300			300		
NRC/DEC	sewer limit	10000			600		· · · · · · · · · · · · · · · · · · ·	600			3000			3000			3000		
RL FDA Marth and	·····	20.0			1.00			1.0			1.00			1.00			1.00		
EPA Meinoa		901.1			903.1			904.0			HSL-300		<u></u>	901.1			HSL-300		
Leachate Monitoring	Total Vs.													l.					
Location	Filtered																		
		1															1		
Cell 1/11/11		[1								
13-May-10	Total	-		-	3.3		1.8	12.3		7.2	1.6	U	1.3	-		-	-0.22	U	0.22
31-Jan-12	Total	<20	U	4.9	1.72		0.55	1.4		1.3	- 1		-	-		-	-		- '
31-Jan-12	Total - Dupe	0.07	U	7.9	-		-	-		-	-		-	-		-	-		-
31-Jan-12	Filtered	<20	U	2.4	1.59		0.46	7.76		0.99	- 1		-	-		-	-		-
9-Jan-13	lotal	-3.193		6.036	1 1 1		2.07	-0.388		2.16	- 1		-	-1.049		23.2	-		-
9-Jan-13	Filtered	0.781		2.847	7.91		0.975	1.43		0.652	-		-	-0.303		24.30	- -		-
0-11.04	•		•																
Lett IV	Total				0.7		0.22	0.74	1	042	0.73	1	0.08	_		_	0.042	11	0.085
13-May-10	Total			72	2 42	J	0.22	1.8	11	15	0.75	4	-	-		-	0.042	U	0.000
31-Jan-12	Filtorad	20	Ц	9.2 9.0	1.80		0.00	1 01	Ŭ	0.04			_	_			-		_
20- Jun-12	Total	-0.435	0	3.35	1:04		0.71	7.01		4.92	15.7		281	-12		47	0.093		0 4 2 4
29-Jun-12	Filtered	0.085		2.52	0.811		0.654	4.91		3.02	2.25		1 76	-4.53		154 .	0.490		1 12
9-lan-13	Total	0.973		2.803	2.51		1.96	4.43		2.24			-	2.521		4.534	-		-
9-Jan-13	Filtered	-0.097		3.114	0.887		0.794	0.387		0.342	- 1		-	-0.106		9.929	-		-
											Į								
Leachate Lagoon																			
31-Jan-12	Total	1	U	6.0	0.74		0.21	0.39	U	0.46	-		-	-			-		-
31-Jan-12	Total - Dupe	-		-	0.59		0.2	0.73	U	0.57	-			-		-	-		-
31-Jan-12	Filtered	-1.6	υ	7.0	0.39		0.16	Q.77		0.5	- 1		•	-		-	-		-
9-Jan-13	Total	0.749		3.123	3.63		1.4	1.77		0.852	-		-	-3.295		6.267	•		-
9-Jan-13	Filtered	-0.631		3.5	1.12		0.83	0.799		0.6	-			2.184		4.167	-		-
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Notes:	l	=	Ouali	fer							L								
H0(63.	EI	-	Regul	t ie loee	than detec	tion li	insif				•								

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Lab estimated result

Lab estimated result; result is less than reporting limit

Total Uncert. =

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Total uncertainty (2 σ +/-)

		Page 2 of 2														
		Table 1 - Chemung County Landfill Radionuclide Leachate Data Results														
		Uranium		Total	Total		Total	Thorium		Total	Thorium		Tota!	Thorium		Total
		238	Qual.	uncert.	Uranium	Qual.	uncert.	228	Qual,	uncert.	230	Qual.	uncert,	232	Qual.	uncer
		(DCI/L)			DCi/L			(pCi/L)			(pCi/L)			(nCi/L)		
NRC/DEC	effluent limit	300	-					200			100			30		
NRC/DEC	sewer limit	3000						2000			1000			300		
RL		1.00						1.00			1.00			1.00		
EPA Method		HSL-300			908.0			HSL-300			HSL-300			HSL-300	·	
Leachate Monitoring Location	Total Vs. Filtered											-				
Cell 1/11/1/1																
13-May-10	Total	0.33	υ	0:67	-			0.18	U	0.41	0.68	U	0.7	0.0	U	0.12
31-Jan-12	Total			-	-1.34		3.73	-		-	-		-	-		-
31-Jan-12	Total - Dupe	-		-	-			-		-	-		-	-		-
31-Jan-12	Filtered	- 1		-	3.65		3.52	-		-	-	· .	-	-		-
9-Jan-13	Total	-		-	0.742		0.449	-		-	-	-	-	-		-
9-Jan-13	Filtered	-		-	0.383		0.602	-		-	•		-	- 1		•
Celí IV																
, 13-May-10	Total	0.46	J	0.22				~0.008	U	0.012	0.081	J	0.085	0.0	υ	0.019
31-Jan-12	Total	-		-	1.65		3.03	-		-	-		-	-		
31-Jan-12	Filtered	-		-	-1.44		3.43	*		-			-	-		-
29-Jun-12	Total	0.000		0.325	0.403		2.75	1.012		1.02	1.093		0.669	-0.199		0.455
29-Jun-12	Filtered	0.563		0.861	3.88		3.09	2.88		2.08	0.605		0.923	0.242		0.672
9-Jan-13	Total	-		•	0.0226		0.363	-		-			-	-		-
9-Jan-13	Filtered	-		-	0.378		0.342	-		-	-		-	-		-
Leachate Lagoon					ļ								i			
31-Jan-12	Total	-		-	1.34		3.08	-		-	-		-	-		•
31-Jan-12	Total - Dupe	•		-	-			-		-	-		•	-		-
31-Jan-12	Filtered			-	2.75		3.47	-		-	-		-	-		-
9-Jan-13	Total	-		-	1		0.498	-		-	-		-	-		-
9-Jan-13	Filtered	-		-	0.156		0.393	-		-	-		-			-
Notes	Qual		Ouali	fer		,										
notes.	U	=	Resu	It is less	s than detec	lion lir	nit									
	-	=	labe	stimate	d result											
	~	-														

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Lab estimated result; result is less than reporting limit =

Total Uncert.

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Total uncertainty (2 o +/-) =