

January 11, 2011



Attn: Jeffrey E. Trad, P.E.

Environmental Engineer II

Re:

Sonia Road Landfill Remediation Program

Site Registry No. 152013 Post Closure Program

Dear Mr. Trad:

Transmitted herewith is the Fourth Quarter Sonia Road Post Closure Monitoring Report for 2010. Also included (as Appendices A, B, C, D & E) are 1) a field photograph; 2) the July, August, September, October, November, & December 2010 FPM Gas Migration Monitoring Reports; 3) the February, 2010 H2M Well Condition Report; 4) Omntec field test results; and 5) the total number of cars stored on site (provided by the leasee).

Sincerely,

Anthony J. Varrichio, P.E.

Chief Engineer

Islip Resource Recovery Agency

cc: Christopher A. Andrade, Agency President

R.M. Brick, Executive Assistant to Mr. Andrade

Fazil Rahaman, Asst. Groundwater Treatment Plant Operator

File

TOWN OF ISLIP SUFFOLK COUNTY, NEW YORK

SONIA ROAD LANDFILL WEST BRENTWOOD, NEW YORK SITE REGISTRY NO. 152013



POST CLOSURE MONITORING AND MAINTENANCE REPORT

OCTOBER THROUGH DECEMBER 2010

POST-CLOSURE MONITORING AND MAINTENANCE REPORT SONIA ROAD LANDFILL BRENTWOOD, NEW YORK

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SITE INSPECTION CHECKLIST



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Vegetative Co	ver
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GRID NO	PROBLEM	PRIOTITY	РНОТО	COMMEN	ITS	DATE	INSPECTED BY:
	F 7 Winter condition		ditions.	12/09/2010	Fazil Rahaman		
	PROBL	EM CODE			PRIORITY CODE		
С	Undesirable	e growth		4	Correct within 3 months		
E	Litter			5	Correct within 6 months		
F	Others			7	Being Monitored		
				8	Other		

If entire site V	egetative Cover is acceptable, check box and sign	
Signature		



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Soil Cove	r			Report Date: 12/15/2010		
GRID NO	PROBLEM CODE	PRIOTITY CODE	рното	COMMENTS	DATE	INSPECTED BY:
					12/09/2	010 F. Rahaman
PROBLEM CODE C Ponding (>10'x10')				PRIORITY CODE 7 Being Monitored 8 Other		
If entire s			ble, check box	and sign - F. Rahaman		



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Revetment Matting Side Slopes & Gabion Curb

GRID NO	PROBLEM CODE	PRIOTITY	РНОТО	COMMENTS	DATE	INSPECTED BY:
В3	L	7		Beside Gabion Curb.	12/09/2010	Fazil Rahaman
H1.H5	F	7		The state of the s	12/09/2010	Fazil Rahaman

	PROBLEM CODE	
В	Slope movement	
F	Settlement	
J	Damaged baskets	
L	Depression	

	PRIORITY CODE
4	Correct within 3 months
	Being Monitored

If entire site Revetment Matting is acceptable, check box and sign	
Signature	***************************************



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Accose	D	
DEFE	ROSOS	2

GRID NO	PROBLEM CODE	PRIOTITY CODE	РНОТО	COMMEN	ITS	DATE	INSPECTED BY:
A3	E	7	Between perimeter fence & access rd.		12/09/2010	Fazil Rahaman	
	PROBLE	EM CODE			PRIORITY CODE		
С	Potholes			1	Immediate		
E	Erosion gullies			4	Correct within 3 months		
F	Loss of stone cover		5	Correct within 6 months			
Н	Ponding			7	Being Monitored		
I	Depressions	3		Alexander	***************************************	-	

If entire site Access roads is acceptable, check box and sign	
Signature	



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Stormwater Collection System 1 of 4 Perimeter Swale & Diversion Swale

GRID NO	PROBLEM	PRIOTITY	РНОТО	COMMEN	ITS	DATE	INSPECTED BY:
H1.H5	L	7		Swale need settlement	ds attention (due to	12/09/2010	Fazil Rahaman
	PROBLE	EM CODE			PRIORITY CODE		
В	Slope move	ment		1	Immediate		
С	Silt accumu	lation		4	Correct within 3 months	3	
D	Ponded wat	Ponded water					
E	Vegetative of	cover		7	Being Monitored		
F	Debris/clogg	ging		M			
L	Other (see	comments abo	ve)				

If entire site Stormwater Collection System 1 of 4 is acceptable, check box and sign	
Signature	



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Storn	nwater	Colle	ection	Sys	stem	2 of	4
Inlet	Structu	ire 8	Rip-I	Rap	Drai	nwa	7

		12/09/20	10 F. Rahama
PROBLEM CODE	PRIORITY COL	ÞΕ	
Debris/clogging Woody vegetation	4 Correct within 3	months	



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Stormy	<i>r</i> ater	Collect	ioi	n S	yster	n 3	of	4
Energy	Dissi	pators	&	Do	wn-C	hu	tes	

	7.000		Report Date. 12/13/2010	,	
PROBLEM CODE	PRIOTITY CODE	рното	COMMENTS	DATE	INSPECTED BY:
				12/09/20	10 F. Rahaman
PROBLE	M CODE		PRIORITY CODE		
Woody Vege	etation		4 Correct within 3 months	S	
	ter Collection	n System 3 of			
•	PROBLEM CODE PROBLE Woody Vege	PROBLEM PRIOTITY CODE CODE PROBLEM CODE Woody Vegetation ite Stormwater Collection	PROBLEM CODE Woody Vegetation ite Stormwater Collection System 3 of 4	PROBLEM PRIOTITY PHOTO COMMENTS PROBLEM CODE PROBLEM CODE PRIORITY CODE Woody Vegetation A Correct within 3 months ite Stormwater Collection System 3 of 4 is acceptable,	PROBLEM PRIOTITY PHOTO COMMENTS DATE CODE CODE PROBLEM CODE PROBLEM CODE PROBLEM CODE PRIORITY CODE 4 Correct within 3 months ite Stormwater Collection System 3 of 4 is acceptable, and sign



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Stormwater Collection System 4 of 4 Drywells & Culverts/Outlets

GRID NO	PROBLEM CODE	PRIOTITY CODE	РНОТО	COMMENTS	DATE	INSPECTED BY:
					12/09/201	0 F. Rahamar
	PROBLE	M CODE		PRIORITY CODE		
С	Silt accumula	ition		4 Correct within 3 months		
E	Vegetative co	over		7 Being Monitored		
Н	Soil erosion a	around				
K	Others					

If entire site Sto		ction System	4 of 4 i	s acce	ptable,	
check box and s	ign	0				_
Signature	R.M.	Brich	for	F.	Rahaman	



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Recharge	e Basins			Report Date: 12/15/201	0	
GRID NO	PROBLEM CODE	PRIOTITY CODE	РНОТО	COMMENTS	DATE	INSPECTED BY:
					12/09/201	0 F. Rahaman
	PROBLE	EM CODE		PRIORITY CODE		
A	Vegetation			4 Correct within 3 month	ns	
G	Others					
If entire	site Recharge	Basins is ac	ceptable, chec	k box and sign		
	122		1 -			
Signature	e	L.M. D	weh for	F. Rahaman		



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Monitoring Well	S
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ITEM ID	PROBLEM CODE	PRIOTITY CODE	РНОТО	COMMENTS	DATE	INSPECTED BY:		
	F	8		See well condition report prepared by town consultant H2M <i>Feb. 2010</i> (attached).	12/09/2010	Fazil Rahaman		
	F	8		See well condition reports prepared by town consultant FPM, July through November (attached).	12/09/2010	Fazil Rahaman		
	PROBL	EM CODE		PRIORITY CODE				
A	Damage			3 Correct within 1 month				
С	Settlement			4 Correct within 3 months				
E	Gasket Dar	nage		7 Being Monitored				
F	Others			8 Other – see comments a	bove			

If entire site Monitoring wells is acceptable, check box and sign	
Signature	



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Landfill G	as Collec	ction System
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ITEM	PROBLEM	PRIOTITY	рното	COMMENTS	DATE	INSPECTED BY:
	N	8		See comments on page 14.	11/04/2010	Fazil Rahaman
Vault 18	D	7	1		11/04/2010	Fazil Rahaman
	PROBLE	M CODE		PRIORITY CO	DE	
-	Settlement			1 Immediate		
D	Soil erosion	around		4 Correct within 3	months	
K	3011 61031011					
	Access restr	icted		7 Being Monitored		

If entire site Landfill gas collection system is acceptable, check box and sign	
Signature	



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

L	an	dfi	11	Gas	Com	no	und
		~		uu 3			ullu

ITEM ID	PROBLEM CODE	PRIOTITY CODE	РНОТО	COMMENTS	DATE	INSPECTED BY:
Blower	к	7		104A; between pulley & housing.	12/09/2010	Fazil Rahaman
Gas Condensate	М	7		Panel: Printer out of service (status normal NO ALARMS).	12/09/2010	Fazil Rahaman
Flare	M	8		Used for venting only.	12/09/2010	Fazil Rahaman

	PROBLEM CODE	
F	Alarms	
J	Gauges	
K	Oil leak	
M	Other	

	PRIORITY CODE
1	Immediate
4	Correct within 3 months
7	Being Monitored
8	Other

If entire site Landfill gas compound is acceptable, check box and sign	
Signature	



12/15/2010 2:01:54PM

TOWN OF ISLIP SONIA ROAD LANDFILL

POST CLOSURE MONITORING AND MAINTENANCE PLAN

SITE INSPECTION CHECK LIST

Site	_	- *1		
SITE	-2		1171	96

GRID ID	PROBLEM CODE	PRIOTITY CODE	РНОТО	COMMENTS	DATE	INSPECTED BY:
Flare Control Panel	L	7		'Flare arrestor over range Al' reflected on digital screen.(Note: FLARE USED FOR VENTING ONLY).	12/09/2010	Fazil Rahaman
E1	K	7		Due to settlement	12/09/2010	Fazil Rahaman
F1	K	7		Due to settlement	12/09/2010	Fazil Rahaman

	PROBLEM CODE
A	Damage
G	Replace indicator lights
J	Slope Movement
K	Fence Movement
L	Other

	PRIORITY CODE
1	Immediate
4	Correct within 3 months
7	Being Monitored
8	Other

If entire site Site Facilities are acceptable, check box and sign	
Signature	



12/15/2010 2:01:54PM

TOWN OF ISLIP **SONIA ROAD LANDFILL**

POST CLOSURE MONITORING AND MAINTENANCE PLAN

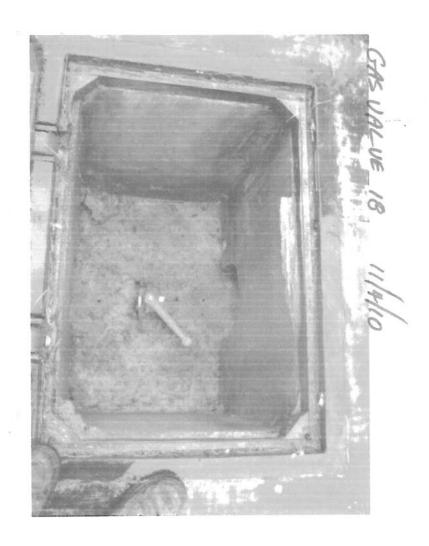
SITE INSPECTION CHECK LIST

GRID PROBLEM NO CODE	PRIOTITY				
	CODE	РНОТО	COMMENTS *see below*	DATE	INSPECTED BY:
				11/04/20	10 F. Rahaman
PROBL	EM CODE		PRIORITY CODE		
If entire site General	Comments is	acceptable, ch	eck box and sign		
Signature					

Gas Valve Vaults #10 through #14 scheduled for inspection during first half of 2011.

APPENDIX A FIELD PHOTOGRAPH





APPENDIX B GAS MIGRATION MONITORING REPORTS (6)





FPM Group, Ltd. FPM Engineering Group, P.C. formerly Fanning, Phillips and Molnar

CORPORATE HEADQUARTERS 909 Marconi Avenue Ronkonkoma, NY 11779 631/737-6200 Fax 631/737-2410

August 5, 2010

Mr. Alan R. Sanchez Vice President of Operations Islip Resource Recovery Agency 401 Main Street Islip, New York 11751

Re:

Sonia Road Landfill

July 2010 Landfill Gas Monitoring Results

FPM File No. 631-08-11

Dear Mr. Sanchez:

On July 27, 2010, FPM Group (FPM) performed landfill gas monitoring at the above-referenced site. Monitoring was performed with a Landtec GA-90 Gas Analyzer, model GA1/1

Oxygen (O2) gas and methane (CH4) gas were zeroed according to the manufacturer's specifications. The gas analyzer was calibrated with 15 percent (%) CH4 and 15% carbon dioxide (CO₂) with the balance nitrogen (N₂) gas, and 4% O₂ with the balance N₂ gas according to the manufacturer's recommendation prior to sampling

The landfill gas monitoring results are provided in Table 1. The next landfill gas monitoring event is tentatively scheduled for August 24, 2010. Jim Jahnke will be notified several days in advance of the sampling event. Prior to the next monitoring event, it is requested that all wells be cleared of overgrown vegetation.

Should you have any questions, please do not hesitate to call me at (631) 737-6200, ext. 229.

Sincerely,

Jessica K. Bluth

Hydrogeologist

JKB:tac Attachment

Jim Jahnke (via fax)

Fazil Rahaman (via fax)

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TABLE 1 LANDFILL GAS MONITORING RESULTS SONIA ROAD LANDFILL ISLIP, NEW YORK

Gas Monitoring Wells

Location ID	Well Condition	Time & Date	CH₄	CO2	O ₂	Atmospheric Pressure	Relative Pressure
SONIBLOW	OK	7/27/2010 12:01	3.6	12.4	6.8	29.9	-29.40
GM-01	OK	7/27/2010 12:03	0.0	1.1	15.6	29.9	0.00
GM-02	OK	7/27/2010 12:07	0.0	4.0	13.3	29.9	0.00
GM-03	OK	7/27/2010 12:10	0.0	0.1	16.2	29.9	0.00
GM-04	OK	7/27/2010 12:17	0.0	0.1	16.5	29.9	0.00
GM-05	OK	7/27/2010 11:26	0.0	0.1	17.0	30.0	-0.30
GM-06	OK	7/27/2010 12:13	0.0	0.0	16.5	29.9	0.00
GM-07	OK	7/27/2010 11:31	0.0	0.7	16.2	30.0	-0.20
GM-08	OK	7/27/2010 11:34	0.0	1.0	16.1	30.0	-0.10
GM-09	OK	7/27/2010 11:36	0.0	0.5	16.2	30.0	-0.10
GM-10	OK	7/27/2010 11:38	0.0	0.7	16.2	30.0	0.00
GM-11	OK	7/27/2010 11:42	0.0	1.2	15.9	30.0	0.00
GM-12	OK	7/27/2010 11:45	0.0	0.1	16.5	29.9	0.00
GM-13	OK	7/27/2010 11:47	0.0	2.0	15.0	29.9	0.00
GM-14	OK	7/27/2010 11:49	0.0	1.2	15.3	29.9	-0.10
GM-15	OK	7/27/2010 11:52	0.0	0.1	16.5	29.9	0.00
GM-16	OK	7/27/2010 11:54	0.0	1.1	15.5	29.9	-0.10
GM-17	OK	7/27/2010 11:57	0.0	0.5	16.1	29.9	0.00

Notes:

 ${\rm CH_4,\ CO_2,\ and\ O_2}$ are reported in percent gas. Relative well head pressure is reported in inches of water. Atmospheric pressure is reported in inches of mercury. Recovery System Status - On Weather - Partly cloudy, $85^{\circ}{\rm F}$





FPM Group, Ltd.
FPM Engineering Group, P.C.
formerly Fanning, Phillips and Molnar

CORPORATE HEADQUARTERS 909 Marconi Avenue Ronkonkoma, NY 11779 631/737-6200 Fax 631/737-2410

September 8, 2010

Mr. Alan R. Sanchez Vice President of Operations Islip Resource Recovery Agency 401 Main Street Islip, New York 11751

Re:

Sonia Road Landfill

August 2010 Landfill Gas Monitoring Results

FPM File No. 631-08-11

Dear Mr. Sanchez:

On August 20, 2010, FPM Group (FPM) performed landfill gas monitoring at the above-referenced site. Monitoring was performed with a Landtec GA-90 Gas Analyzer, model GA1/1.

Oxygen (O_2) gas and methane (CH_4) gas were zeroed according to the manufacturer's specifications. The gas analyzer was calibrated with 15 percent (%) CH_4 and 15% carbon dioxide (CO_2) with the balance nitrogen (N_2) gas, and 4% O_2 with the balance N_2 gas according to the manufacturer's recommendation prior to sampling.

The landfill gas monitoring results are provided in Table 1. The next landfill gas monitoring event is tentatively scheduled for September 22, 2010. Jim Jahnke will be notified several days in advance of the sampling event. Prior to the next monitoring event, it is requested that all wells be cleared of overgrown vegetation.

Should you have any questions, please do not hesitate to call me at (631) 737-6200, ext. 229.

Sincerely,

Jessica K. Bluth Hydrogeologist

Jessen Blod

JKB:tac Attachment

CC.

Jim Jahnke (via fax)

Fazil Rahaman (via fax)

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TABLE 1 LANDFILL GAS MONITORING RESULTS SONIA ROAD LANDFILL ISLIP, NEW YORK

Gas Monitoring Wells

Location ID	Well Condition	Time & Date	CH₄	CO2	O ₂	Atmospheric Pressure	Relative Pressure
SONIBLOW	OK	8/20/2010 13:02	0.0	0.3	16.3	29.7	-24.50
GM-01	OK	8/20/2010 13:04	0.0	1.0	15.7	29.7	0.00
GM-02	OK	8/20/2010 13:07	0.0	1.9	14.9	29.7	0.00
GM-03	*	8/20/2010 13:10	0.0	0.0	16.3	29.7	0.00
GM-04	OK	8/20/2010 13:13	0.0	0.0	16.4	29.7	0.00
GM-05	OK	8/20/2010 12:15	0.0	0.0	16.5	29.7	-0.20
GM-06	OK	8/20/2010 12:18	0.0	0.6	16.0	29.7	-0.10
GM-07	OK	8/20/2010 12:20	0.0	0.5	15.9	29.7	-0.10
GM-08	OK	8/20/2010 12:23	0.0	1.0	15.5	29.7	0.00
GM-09	OK	8/20/2010 12:28	0.0	0.5	15.8	29.7	0.00
GM-10	OK	8/20/2010 12:30	0.0	0.3	16.2	29.7	0.00
GM-11	OK	8/20/2010 12:34	0.0	1.0	15.8	29.7	0.00
GM-12	OK	8/20/2010 12:37	0.0	0.1	16.3	29.7	-0.10
GM-13	OK	8/20/2010 12:47	0.0	1.6	15.1	29.7	0.00
GM-14	OK	8/20/2010 12:49	0.0	0.9	15.6	29.7	0.00
GM-15	OK	8/20/2010 12:53	0.0	0.0	16.4	29.7	0.00
GM-16	OK	8/20/2010 12:55	0.0	0.7	15.9	29.7	0.00
GM-17	OK	8/20/2010 12:58	0.0	0.2	16.3	29.7	0.00

Notes:

CH₄, CO₂, and O₂ are reported in percent gas.
Relative well head pressure is reported in inches of water.
Atmospheric pressure is reported in inches of mercury.
Recovery System Status - On
Weather - Partly cloudy, 86°F

*GM-03 - Broken sample nozzle





PM Group, Ltd.
FPM Engineering Group, P.C.
formerly Fanning, Phillips and Molnar

CORPORATE HEADQUARTERS 909 Marconi Avenue Ronkonkoma, NY 11779 631/737-6200 Fax 631/737-2410

October 5, 2010

Mr. Alan R. Sanchez Vice President of Operations Islip Resource Recovery Agency 401 Main Street Islip, New York 11751

Re:

Sonia Road Landfill

September 2010 Landfill Gas Monitoring Results

FPM File No. 631-08-11

Dear Mr. Sanchez:

On September 22, 2010, FPM Group (FPM) performed landfill gas monitoring at the above-referenced site. Monitoring was performed with a Landtec GA-90 Gas Analyzer, model GA1/1.

Oxygen (O_2) gas and methane (CH_4) gas were zeroed according to the manufacturer's specifications. The gas analyzer was calibrated with 15 percent (%) CH_4 and 15% carbon dioxide (CO_2) with the balance nitrogen (N_2) gas, and 4% O_2 with the balance N_2 gas according to the manufacturer's recommendation prior to sampling.

The landfill gas monitoring results are provided in Table 1. The next landfill gas monitoring event is tentatively scheduled for October 21, 2010. Jim Jahnke will be notified several days in advance of the sampling event.

Should you have any questions, please do not hesitate to call me at (631) 737-6200, ext. 229.

Sincerely.

Jessica K. Bluth Hydrogeologist

JKB:tac Attachment

CC:

Jim Jahnke (via fax)

Fazil Rahaman (via fax)

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TABLE 1 LANDFILL GAS MONITORING RESULTS SONIA ROAD LANDFILL ISLIP, NEW YORK

Gas Monitoring Wells

Location ID	Well Condition	Time & Date	CH₄	CO2	O ₂	Atmospheric Pressure	Relative Pressure
SONIBLOW	OK	9/22/2010 12:48	2.7	6.7	11.2	29.9	0.00
GM-01	OK	9/22/2010 12:50	0.0	2.1	14.5	29.9	0.00
GM-02	OK	9/22/2010 12:53	0.0	2.8	13.3	29.9	0.00
GM-03	OK	9/22/2010 12:55	0.0	0.9	12.6	29.9	0.00
GM-04	ОК	9/22/2010 12:57	0.0	3.1	11.7	29.9	0.00
GM-05	ОК	9/22/2010 12:10	0.0	0.7	15.7	29.9	0.00
GM-06	ОК	9/22/2010 12:12	0.0	1.2	14.0	29.9	0.00
GM-07	OK	9/22/2010 12:15	0.0	16.8	0.4	29.9	0.00
GM-08	OK	9/22/2010 12:17	0.0	11.1	5.6	29.9	0.00
GM-09	OK	9/22/2010 12:19	0.0	5.5	9.0	29.9	0.00
GM-10	OK	9/22/2010 12:22	0.0	0.8	15.4	29.9	0.00
GM-11	OK	9/22/2010 12:25	0.0	1.1	15.8	29.9	0.00
GM-12	OK	9/22/2010 12:29	0.0	1.3	14.7	29.9	0.00
GM-13	OK	9/22/2010 12:32	0.0	11.5	5.0	29.9	0.00
GM-14	OK	9/22/2010 12:37	0.0	17.4	1.9	29.9	0.00
GM-15	OK	9/22/2010 12:40	0.0	0.2	16.0	29.9	0.00
GM-16	OK	9/22/2010 12:42	0.0	6.2	8.2	29.9	0.00
GM-17	OK	9/22/2010 12:45	0.0	0.9	15.4	29.9	0.00

Notes:

CH₄, CO₂, and O₂ are reported in percent gas.
Relative well head pressure is reported in inches of water.
Atmospheric pressure is reported in inches of mercury.
Recovery System Status - Off
Weather - Partly cloudy, 76°F





FPM Group, Ltd.
FPM Engineering Group, P.C.
formerly Fanning, Phillips and Molnar

CORPORATE HEADQUARTERS 909 Marconi Avenue Ronkonkoma, NY 11779 631/737-6200 Fax 631/737-2410

November 4, 2010

Mr. Alan R. Sanchez Vice President of Operations Islip Resource Recovery Agency 401 Main Street Islip, New York 11751

Re:

Sonia Road Landfill

October 2010 Landfill Gas Monitoring Results

FPM File No. 631-08-11

Dear Mr. Sanchez:

On October 27, 2010, FPM Group (FPM) performed landfill gas monitoring at the above-referenced site. Monitoring was performed with a Landtec GA-90 Gas Analyzer, model GA1/1.

Oxygen (O_2) gas and methane (CH_4) gas were zeroed according to the manufacturer's specifications. The gas analyzer was calibrated with 15 percent (%) CH_4 and 15% carbon dioxide (CO_2) with the balance nitrogen (N_2) gas, and 4% O_2 with the balance N_2 gas according to the manufacturer's recommendation prior to sampling.

The landfill gas monitoring results are provided in Table 1. The next landfill gas monitoring event is tentatively scheduled for November 22, 2010. Jim Jahnke will be notified several days in advance of the sampling event.

Should you have any questions, please do not hesitate to call me at (631) 737-6200, ext. 229.

Sincerely,

Jessica K. Bluth Hydrogeologist

JKB:tac Attachment

CC:

Jim Jahnke (via fax) Fazil Rahaman (via fax)

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TABLE 1 LANDFILL GAS MONITORING RESULTS SONIA ROAD LANDFILL ISLIP, NEW YORK

Gas Monitoring Wells

Location ID	Well Condition	Time & Date	CH₄	CO2	O ₂	Atmospheric Pressure	Relative Pressure
SONIBLOW	OK	10/27/2010 13:31	5.7	13.8	6.8	29.8	4.20
GM-01	OK	10/27/2010 13:33	0.0	1.7	14.7	29.8	0.00
GM-02	OK	10/27/2010 13:36	0.0	0.9	15.8	29.8	0.00
GM-03	OK	10/27/2010 13:38	0.0	0.1	16.2	29.8	0.00
GM-04	OK	10/27/2010 13:40	0.0	0.1	16.3	29.8	0.00
GM-05	OK	10/27/2010 12:57	0.0	0.1	16.6	29.8	-0.40
GM-06	OK	10/27/2010 12:59	0.0	0.5	16.2	29.8	0.00
GM-07	OK	10/27/2010 13:01	0.0	1.0	16.1	29.8	-0.10
GM-08	OK	10/27/2010 13:04	0.0	1.4	15.3	29.8	0.00
GM-09	OK	10/27/2010 13:07	0.0	2.1	14.6	29.8	0.00
GM-10	OK	10/27/2010 13:09	0.0	0.6	16.1	29.8	0.00
GM-11	OK	10/27/2010 13:13	0.0	1.2	15.7	29.8	-0.10
GM-12	OK	10/27/2010 13:15	0.0	0.2	16.2	29.8	0.00
GM-13	OK	10/27/2010 13:17	0.0	0.1	16.4	29.8	0.00
GM-14	OK	10/27/2010 13:19	0.0	0.1	16.4	29.8	0.00
GM-15	*	10/27/2010 13:21	0.0	0.1	16.4	29.8	0.00
GM-16	OK	10/27/2010 13:24	0.0	0.9	15.6	29.8	0.00
GM-17	OK	10/27/2010 13:26	0.0	0.3	16.2	29.8	0.00

Notes:

 ${\rm CH_4,\ CO_2,\ and\ O_2}$ are reported in percent gas. Relative well head pressure is reported in inches of water. Atmospheric pressure is reported in inches of mercury. Recovery System Status - Off Weather - Overcast, 66 °F

*GM-15 - Sample tubing disconnected from well







FPM Group, Ltd.
FPM Engineering Group, P.C.
formerly Fanning, Phillips and Molnar

CORPORATE HEADQUARTERS 909 Marconi Avenue Ronkonkoma, NY 11779 631/737-6200 Fax 631/737-2410

December 3, 2010

Mr. Alan R. Sanchez Vice President of Operations Islip Resource Recovery Agency 401 Main Street Islip, New York 11751

Re:

Sonia Road Landfill

November 2010 Landfill Gas Monitoring Results

FPM File No. 631-08-11

Dear Mr. Sanchez:

On November 24, 2010, FPM Group (FPM) performed landfill gas monitoring at the above-referenced site. Monitoring was performed with a Landtec GA-90 Gas Analyzer, model GA1/1.

Oxygen (O_2) gas and methane (CH_4) gas were zeroed according to the manufacturer's specifications. The gas analyzer was calibrated with 15 percent (%) CH_4 and 15% carbon dioxide (CO_2) with the balance nitrogen (N_2) gas, and 4% O_2 with the balance N_2 gas according to the manufacturer's recommendation prior to sampling.

The landfill gas monitoring results are provided in Table 1. The next landfill gas monitoring event is tentatively scheduled for December 23, 2010. Jim Jahnke will be notified several days in advance of the sampling event.

Should you have any questions, please do not hesitate to call me at (631) 737-6200, ext. 229.

Sincerely,

Jessica K. Bluth Hydrogeologist

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Jim Jahnke (via fax)

Fazil Rahaman (via fax)

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TABLE 1 LANDFILL GAS MONITORING RESULTS SONIA ROAD LANDFILL ISLIP, NEW YORK

Gas Monitoring Wells

Location ID	Well Condition	Time & Date	CH₄	CO2	O ₂	Atmospheric Pressure	Relative Pressure
SONIBLOW	OK	11/24/2010 11:48	5.0	12.7	7.3	30.1	-36.40
GM-01	OK	11/24/2010 11:50	0.0	1.4	15.1	30.1	0.00
GM-02	OK	11/24/2010 11:53	0.0	0.7	15.9	30.1	0.00
GM-03	OK	11/24/2010 11:55	0.0	0.1	16.3	30.1	0.00
GM-04	OK	11/24/2010 11:58	0.0	0.1	16.4	30.1	0.00
GM-05	OK	11/24/2010 11:08	0.0	0.1	16.5	30.1	-0.30
GM-06	OK	11/24/2010 11:10	0.0	0.3	16.3	30.1	-0.10
GM-07	OK	11/24/2010 11:12	0.0	2.6	15.1	30.1	-0.10
GM-08	OK	11/24/2010 11:15	0.0	1.1	15.8	30.1	0.00
GM-09	OK	11/24/2010 11:20	0.0	2.0	14.8	30.1	-0.10
GM-10	OK	11/24/2010 11:22	0.0	0.6	16.3	30.1	0.00
GM-11	OK	11/24/2010 11:26	0.0	0.9	16.0	30.1	-0.10
GM-12	OK	11/24/2010 11:29	0.0	0.1	16.4	30.1	-0.20
GM-13	OK	11/24/2010 11:31	0.0	0.1	16.4	30.1	0.00
GM-14	OK	11/24/2010 11:34	0.0	1.1	15.8	30.1	0.00
GM-15	OK	11/24/2010 11:37	0.0	0.9	15.9	30.1	0.00
GM-16	OK	11/24/2010 11:39	0.0	0.3	16.1	30.1	-0.10
GM-17	OK	11/24/2010 11:41	0.0	0.2	16.4	30.1	-0.10

Notes:

CH₄, CO₂, and O₂ are reported in percent gas.
Relative well head pressure is reported in inches of water.
Atmospheric pressure is reported in inches of mercury.
Recovery System Status - Off
Weather - Partly cloudy, 48°F







FPM Group, Ltd.
FPM Engineering Group, P.C.
formerly Fanning, Phillips and Molnar

CORPORATE HEADQUARTERS 909 Marconi Avenue Ronkonkoma, NY 11779 631/737-6200 Fax 631/737-2410

January 5, 2011

Mr. Alan R. Sanchez Vice President of Operations Islip Resource Recovery Agency 401 Main Street Islip, New York 11751

Re:

Sonia Road Landfill

December 2010 Landfill Gas Monitoring Results

FPM File No. 631-08-11

Dear Mr. Sanchez:

FPM Group (FPM) performed landfill gas monitoring at the above-referenced site on January 3, 2011. This monitoring event was performed to satisfy the monthly monitoring requirements for December 2010. It should be noted that holiday schedules (including landfill closures) and heavy snow cover precluded site access during the latter portion of December 2010; therefore, the monthly monitoring event was conducted at the first available opportunity thereafter.

Monitoring was performed with a Landtec GA-90 Gas Analyzer, model GA1/1. Oxygen (O_2) gas and methane (CH_4) gas were zeroed according to the manufacturer's specifications. The gas analyzer was calibrated with 15 percent (%) CH_4 and 15% carbon dioxide (CO_2) with the balance nitrogen (N_2) gas, and 4% O_2 with the balance N_2 gas according to the manufacturer's recommendation prior to sampling.

The landfill gas monitoring results are provided in Table 1. The next landfill gas monitoring event is tentatively scheduled for January 21, 2011. Jim Jahnke will be notified several days in advance of the sampling event.

Should you have any questions, please do not hesitate to call me at (631) 737-6200, ext. 229.

Sincerely,

Jessica K. Bluth Hydrogeologist

JKB:tac Attachment

CC:

Jim Jahnke (via fax) Fazil Rahaman (via fax)

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TABLE 1 LANDFILL GAS MONITORING RESULTS SONIA ROAD LANDFILL ISLIP, NEW YORK

Gas Monitoring Wells

Location ID	Well Condition	Time & Date	CH₄	CO2	O ₂	Atmospheric Pressure	Relative Pressure
SONIBLOW	OK	1/3/2011 14:20	0.0	0.2	16.6	30.2	-34.90
GM-01	OK	1/3/2011 14:23	0.0	0.9	16.0	30.2	0.00
GM-02	*	NS	NS	NS	NS	NS	NS
GM-03	OK	1/3/2011 14:33	0.0	0.2	16.4	30.2	0.00
GM-04	OK	1/3/2011 14:44	0.0	0.2	16.4	30.2	0.00
GM-05	OK	1/3/2011 13:03	0.0	0.1	16.9	30.1	-0.40
GM-06	OK	1/3/2011 13:07	0.0	0.2	16.7	30.1	-0.10
GM-07	OK	1/3/2011 13:11	0.0	1.0	16.4	30.1	-0.10
GM-08	OK	1/3/2011 13:17	0.0	0.7	16.4	30.1	-0.10
GM-09	ОК	1/3/2011 13:22	0.0	1.8	15.3	30.1	0.00
GM-10	OK	1/3/2011 13:26	0.0	0.3	16.5	30.1	0.00
GM-11	OK	1/3/2011 13:33	0.0	0.8	16.3	30.2	-0.10
GM-12	OK	1/3/2011 13:43	0.0	0.1	16.7	30.2	0.00
GM-13	OK	1/3/2011 13:49	0.0	0.8	16.4	30.2	0.00
GM-14	OK	1/3/2011 13:53	0.0	0.7	16.4	30.2	0.00
GM-15	ОК	1/3/2011 13:58	0.0	0.5	16.5	30.2	0.00
GM-16	OK	1/3/2011 14:05	0.0	1.1	16.2	30.2	-0.10
GM-17	OK	1/3/2011 14:10	0.0	0.2	16.7	30.2	0.00

Notes:

 ${\rm CH_4,\ CO_2,\ and\ O_2}$ are reported in percent gas. Relative well head pressure is reported in inches of water. Atmospheric pressure is reported in inches of mercury. Recovery System Status - On NS = Not Sampled Weather - Clear, 35°F

*GM-02 - Inaccessible due to snow cover



APPENDIX C GROUNDWATER WELL CONDITION REPORT



Engineers | Architects | Scientists | Planners | Surveyors

175 Pinelawn Road | Suite 308 Melville, New York 11747 v 631.756.8000 f 631.393.6322 www.h2m.com

ISLIP RESOURCE RECOVERY AGENCY

Holzmacher, McLendon & Murrell, P.C. I H2M Associates, Inc. H2M Labs, Inc. I H2M Architects & Engineers, Inc.

February 11, 2009

Anthony Varrichio, P.E., Chief Engineer Islip Resource Recovery Agency 401 Main Street Islip, New York 11751

Re:

Well Condition Report, First Semi-Annual 2010 Report

Sonia Road Landfill, H2M No. ISLP1001

Dear Mr. Varrichio:

The purpose of this letter is to provide the First Semi-Annual 2010 well inspection summary report for the 35 monitoring wells at the Sonia Road Landfill. The completed well inspection checklists are enclosed. The well inspection did not reveal any significant damage, security issues or other concerns related to the sampled monitoring wells that would require corrective action, except at 12 wells. The following concerns were noted during the inspection:

- The vaults to monitoring wells MW-02D and MW-02I could not be closed due to contact between the well caps and vault covers.
- The rubber gaskets on the vaults for monitoring wells MW-06S and MW-06I were damaged.
- The casings for monitoring wells MW-05S, MW-13S and MW-14S are straight, but not vertical.
- The manhole cover for monitoring MW-07D could not be closed completely due to contact with the well cap.
- The PVC casing for monitoring wells MW-11S, MW-14S, MW-14I and MW-14D appeared to have been recently cut, and may need to be resurveyed.
- The well cap for monitoring well MW-11I was damaged.
- Sediment accumulation found beneath manhole cover for monitoring well MW-11D.
- The manhole cover for monitoring well MW-13S was missing.
- Monitoring well MW-13I was apparently buried beneath substantial landscaping debris, and could not be located during this sampling event.

If you have any questions or require any additional information, please call me at (631) 756-8000, extension 1606.

Very truly yours,

HOLZMACHER, McLENDON & MURRELL, P.C.

Kenneth P. Wenz, Jr., PG Senior Project Manager

 $X:\LP (Town of Islip) - 10560\2010\Sonia Rd 2010\Well Condition Logs\Well condition Logs\First Semi-Annual Well Condition Report 2010.docx$







Table 1
WELL INSPECTION SUMMARY – FIRST SEMI-ANNUAL 2010
SONIA ROAD LANDFILL

Well Protected?	Yes	Yes	Ves		No.	Yes	Yes	Yes	Vec	Vec	Ves	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	2		Yes	Yes	Yes	
Well Labeled?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	
Survey Point	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	Marked	PVC casing recently cut	Marked	Marked	Marked	Marked	Marked	Marked	e to landscaping de	Marked	PVC casing recently cut	PVC casing recently cut	Contraction of the last of the
Casing Alignment	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight, not vertical	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight, not vertical	the time of the inspection due to landscaping debris	Straight	Straight, not vertical	Straight	
Lock Intact?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	ell at	Yes	Yes	Yes	
Cover/Standpipe	Intact	Intact	Intact	Vault could not be closed	Vault could not be closed	Intact	Intact	Intact	Gasket damaged	Gasket damaged	Intact	Intact	Intact	Manhole cover not flush	Intact	Intact	Intact	Intact	Well cap damaged	Intact	Intact	Intact	Intact	Missing manhole cover	Unable	Intact	Intact	Intact							
Surface Seal	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact		Intact	Intact	Intact	
Well	MW-01S	MW-011	MW-01D	MW-02I	MW-02D	MW-03S	MW-031	MW-03D	MW-04S	MW-04I	MW-04D	MW-05S	MW-051	MW-05D	MW-06S	MW-061	MW-06D	MW-07S	MW-071	MW-07D	MW-10S	MW-101	MW-10D	MW-11S	MW-III	MW-IID	MW-12S	MW-121	MW-12D	MW-13S	MW-131	MW-13D	MW-14S	MW-141	

APPENDIX D OMNTEC FIELD TEST RESULTS

12/9/10

PRINTER 0/5

SEE NOTES 11/23/10

CONDENSATE LEVEL

81/2"= 400 GAL

STATUS NORTAL

APPENDIX E CARS STORED ON SITE

ATLANTIC CENTRAL STORAGE

November 30, 2010

DEALERSHIPS	UNITS ON HILL	UNITS AT LE	EXUS PDI
ATLANTIC HYUNDAI	568		0
ADVANTAGE TOYOTA	318		0
ATLANTIC AUDI	3		0
ATLANTIC CADDY	52		0
ATLANTIC CHEVY	209	(0
HUNTINGTON TOYOTA	336	l.	0
ATLANTIC NISSAN	567		0
ATLANTIC TOYOTA	396	i	0
ATLANTIC HONDA	414		0
LEXUS OF MASSAPEQUA	0	l	208
LEXUS OF R.V.C	0	ı	187
MILLENNIUM HONDA	210	ĺ	0
MASSAPEQUA NISSAN	210	ĺ	0
WESTBURY NISSAN	163	(0
TOTALS	3446	;	395