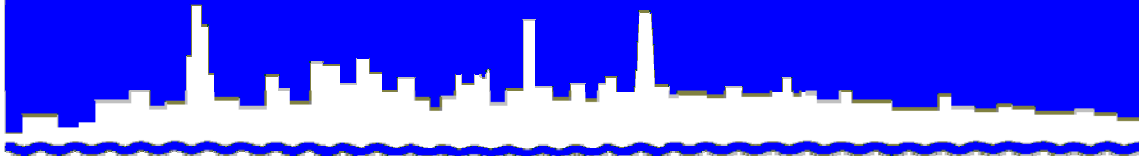


*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***RESEARCH AND DEVELOPMENT  
DEPARTMENT***

*REPORT NO. 06-80*

*RIDGELAND AVENUE SOLIDS MANAGEMENT AREA*

*MONITORING DATA FOR*

*THIRD QUARTER 2006*

*DECEMBER 2006*

**Metropolitan Water Reclamation District of Greater Chicago**

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312-751-5600

Louis Kollias, P.E., BCEE  
*Director of Research and Development*

December 22, 2006

312-751-5190

Mr. S. Alan Keller, P.E.  
Manager, Permit Section  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794 -9276

Dear Mr. Keller:

Subject: Ridgeland Avenue Solids Management Area - Stickney WRP, Contract No. 89-202-2P, IEPA Permit No. 2005-AO-4283, Monitoring Report for July, August, and September 2006

The attached seven tables contain the monitoring data for the Ridgeland Avenue Solids Management Area for July, August, and September 2006 as required by IEPA Operating Permit No. 2005-AO-4283. The District has submitted a request to the IEPA for approval to terminate monitoring of the old lysimeters L-1, L-2, L-3, and L-4.

The data reported are as follows:

Table 1, Analysis of Water from Lysimeters L-1 through L-4N at the Ridgeland Avenue Solids Management Area Sampled on July 5, 2006

Table 2, Analysis of Water from Lysimeters L-1 through L-4N at the Ridgeland Avenue Solids Management Area Sampled on July 19, 2006

Table 3, Analysis of Water from Lysimeters L-1 through L-4N at the Ridgeland Avenue Solids Management Area Sampled on August 2, 2006

Table 4, Analysis of Water from Lysimeters L-1 through L-4N at the Ridgeland Avenue Solids Management Area Sampled on August 16, 2006

Table 5, Analysis of Water from Lysimeters L-1 through L-4N at the Ridgeland Avenue Solids Management Area Sampled on August 30, 2006

Subject: Ridgeland Avenue Solids Management Area - Stickney WRP, Contract No. 89-202-2P, IEPA Permit No. 2005-AO-4283, Monitoring Report for July, August, and September 2006

Table 6, Analysis of Water from Lysimeters L-1 through L-4N at the Ridgeland Avenue Solids Management Area Sampled on September 13, 2006

Table 7, Analysis of Water from Lysimeters L-1 through L-4N at the Ridgeland Avenue Solids Management Area Sampled on September 27, 2006

No biosolids were placed in or removed from the solids drying area during the period of July to September.

Very truly yours,

Louis Kollias  
Director  
Research and Development

LK:PL:spy  
Attachments

cc w/att: Mr. Sulski, IEPA  
Records Unit, IEPA  
Mr. S. Levy  
Ms. M. Sharma  
Mr. W. Stuba  
Dr. T. Granato  
Dr. A. Cox  
Dr. P. Lindo  
Ms. M. Patel

TABLE 1: ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON JULY 5, 2006

Parameter	Unit	Lysimeter No.				
		L-1	L-2	L-3	L-4	L-1N
pH <sup>1</sup>						7.6
EC	mS/m					396
Total Dissolved Solids	mg/L					4,908
Total Dissolved Organic Carbon	"					4
Cl <sup>-</sup>	"					759
SO <sub>4</sub> <sup>=</sup>	"					730
TKN	"					1.7
NH <sub>3</sub> -N	"					0.85
NO <sub>2</sub> + NO <sub>3</sub> -N	"					0.03
Total P	"	L	L	L	L	< 0.05
Alkalinity as CaCO <sub>3</sub>	"	Y	Y	Y	Y	576
		S	S	S	S	
Al	"	I	I	I	I	0.057
As	"	M	M	M	M	< 0.01
Ca	"	E	E	E	E	496
Cd	"	T	T	T	T	0.0009
Cr	"	E	E	E	E	< 0.0005
		R	R	R	R	
Cu	"					< 0.002
Fe	"	D	D	D	D	0.585
Hg	μg/L	R	R	R	R	< 0.05
K	mg/L	Y	Y	Y	Y	8
Mg	"					259
Mn	"					0.1149
Na	"					126
Ni	"					0.0006
Pb	"					0.004
Se	"					< 0.02
Zn	"					0.010

TABLE 1 (Continued): ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON JULY 5, 2006

Parameter	Unit	Lysimeter No.		
		L-2N	L-3N	L-4N
pH <sup>1</sup>		7.5	7.6	7.9
EC	mS/m	221	216	112
Total Dissolved Solids	mg/L	1,834	1,862	754
Total Dissolved Organic Carbon	"	7	2	5
Cl <sup>-</sup>	"	224	389	195
SO <sub>4</sub> <sup>=</sup>	"	220	241	75
TKN	"	35	0.75	1.4
NH <sub>3</sub> -N	"	33	0.35	0.87
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.04	0.09	< 0.02
Total P	"	< 0.05	< 0.05	2.1
Alkalinity as CaCO <sub>3</sub>	"	751	333	182
Al	"	0.030	0.019	0.010
As	"	< 0.01	< 0.01	< 0.01
Ca	"	215	183	63
Cd	"	0.0005	0.0006	< 0.0004
Cr	"	< 0.0005	< 0.0005	0.0010
Cu	"	< 0.002	< 0.002	< 0.002
Fe	"	2.01	0.097	0.035
Hg	μg/L	< 0.05	< 0.05	< 0.05
K	mg/L	13	5	3
Mg	"	132	76.3	17.6
Mn	"	0.1765	0.1521	0.1906
Na	"	80	222	160
Ni	"	< 0.0004	< 0.0004	< 0.0004
Pb	"	0.008	0.010	0.009
Se	"	< 0.02	< 0.02	< 0.02
Zn	"	0.009	0.009	0.007

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.

TABLE 2: ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON JULY 19, 2006

Parameter	Unit	Lysimeter No.				
		L-1	L-2	L-3	L-4	L-1N
pH <sup>1</sup>						7.4
EC	mS/m					395
Total Dissolved Solids	mg/L					4,318
Total Dissolved Organic Carbon	"					4
Cl <sup>-</sup>	"					728
SO <sub>4</sub> <sup>=</sup>	"					790
TKN	"					1.8
NH <sub>3</sub> -N	"					0.84
NO <sub>2</sub> + NO <sub>3</sub> -N	"					0.04
Total P	"	L	L	L	L	< 0.05
Alkalinity as CaCO <sub>3</sub>	"	Y	Y	Y	Y	588
		S	S	S	S	
Al	"	I	I	I	I	0.047
As	"	M	M	M	M	< 0.01
Ca	"	E	E	E	E	482
Cd	"	T	T	T	T	0.0012
Cr	"	E	E	E	E	< 0.0005
		R	R	R	R	
Cu	"					< 0.002
Fe	"	D	D	D	D	4.24
Hg	μg/L	R	R	R	R	< 0.05
K	mg/L	Y	Y	Y	Y	8
Mg	"					258
Mn	"					0.1258
Na	"					122
Ni	"					< 0.0004
Pb	"					0.005
Se	"					< 0.02
Zn	"					0.021

TABLE 2 (Continued): ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON JULY 19, 2006

Parameter	Unit	Lysimeter No.		
		L-2N	L-3N	L-4N
pH <sup>1</sup>		7.6	7.6	7.9
EC	mS/m	226	230	113
Total Dissolved Solids	mg/L	1,876	1,838	706
Total Dissolved Organic Carbon	"	7	2	5
Cl <sup>-</sup>	"	204	409	177
SO <sub>4</sub> <sup>=</sup>	"	223	277	58
TKN	"	38	0.87	1.6
NH <sub>3</sub> -N	"	32	0.22	0.78
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.04	0.10	0.16
Total P	"	0.05	< 0.05	2.1
Alkalinity as CaCO <sub>3</sub>	"	706	349	189
Al	"	0.023	0.025	0.012
As	"	< 0.01	< 0.01	< 0.01
Ca	"	214	175	59
Cd	"	0.0004	0.0006	0.0004
Cr	"	< 0.0005	< 0.0005	0.0010
Cu	"	< 0.002	< 0.002	< 0.002
Fe	"	1.58	0.074	0.045
Hg	μg/L	< 0.05	< 0.05	< 0.05
K	mg/L	13	4	3
Mg	"	132	74.9	16.5
Mn	"	0.1762	0.1433	0.1320
Na	"	81	219	155
Ni	"	< 0.0004	< 0.0004	< 0.0004
Pb	"	0.008	0.010	0.007
Se	"	< 0.02	< 0.02	< 0.02
Zn	"	0.011	0.008	0.009

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.

TABLE 3: ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 2, 2006

Parameter	Unit	Lysimeter No.				
		L-1	L-2	L-3	L-4	L-1N
pH <sup>1</sup>						7.5
EC	mS/m					367
Total Dissolved Solids	mg/L					4,938
Total Dissolved Organic Carbon	"					5
Cl <sup>-</sup>	"					731
SO <sub>4</sub> <sup>=</sup>	"					565
TKN	"					2.2
NH <sub>3</sub> -N	"					1.1
NO <sub>2</sub> + NO <sub>3</sub> -N	"					0.03
Total P	"	L	L	L	L	< 0.05
Alkalinity as CaCO <sub>3</sub>	"	Y	Y	Y	Y	576
		S	S	S	S	
Al	"	I	I	I	I	0.059
As	"	M	M	M	M	< 0.01
Ca	"	E	E	E	E	484
Cd	"	T	T	T	T	0.0005
Cr	"	E	E	E	E	< 0.0005
		R	R	R	R	
Cu	"					< 0.002
Fe	"	D	D	D	D	4.35
Hg	μg/L	R	R	R	R	< 0.05
K	mg/L	Y	Y	Y	Y	8
Mg	"					254
Mn	"					0.0886
Na	"					123
Ni	"					< 0.0004
Pb	"					< 0.004
Se	"					< 0.02
Zn	"					0.018



TABLE 3 (Continued): ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 2, 2006

Parameter	Unit	Lysimeter No.		
		L-2N	L-3N	L-4N
pH <sup>1</sup>		7.5	7.6	8.0
EC	mS/m	206	225	115
Total Dissolved Solids	mg/L	1,936	1,956	820
Total Dissolved Organic Carbon	"	7	2	6
Cl <sup>-</sup>	"	225	397	204
SO <sub>4</sub> <sup>=</sup>	"	222	253	78
TKN	"	34	2.5	1.7
NH <sub>3</sub> -N	"	32	1.8	0.92
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.04	0.06	0.04
Total P	"	0.28	< 0.05	3.0
Alkalinity as CaCO <sub>3</sub>	"	767	356	239
Al	"	0.032	0.030	< 0.007
As	"	< 0.01	< 0.01	< 0.01
Ca	"	210	191	71
Cd	"	< 0.0004	< 0.0004	< 0.0004
Cr	"	< 0.0005	< 0.0005	0.0006
Cu	"	< 0.002	< 0.002	< 0.002
Fe	"	2.87	0.498	0.078
Hg	μg/L	< 0.05	< 0.05	< 0.05
K	mg/L	13	5	3
Mg	"	130	77.9	21.5
Mn	"	0.1721	0.1927	0.3101
Na	"	80	223	161
Ni	"	< 0.0004	0.0004	0.0006
Pb	"	< 0.004	< 0.004	< 0.004
Se	"	< 0.02	< 0.02	< 0.02
Zn	"	0.007	0.008	0.005

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.

TABLE 4: ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 16, 2006

Parameter	Unit	Lysimeter No.				
		L-1	L-2	L-3	L-4	L-1N
pH <sup>1</sup>						7.5
EC	mS/m					420
Total Dissolved Solids	mg/L					4,900
Total Dissolved Organic Carbon	"					5
Cl <sup>-</sup>	"					694
SO <sub>4</sub> <sup>=</sup>	"					881
TKN	"					2.6
NH <sub>3</sub> -N	"					1.7
NO <sub>2</sub> + NO <sub>3</sub> -N	"					0.34
Total P	"	L	L	L	L	< 0.05
Alkalinity as CaCO <sub>3</sub>	"	Y	Y	Y	Y	543
		S	S	S	S	
Al	"	I	I	I	I	0.044
As	"	M	M	M	M	< 0.01
Ca	"	E	E	E	E	475
Cd	"	T	T	T	T	0.0031
Cr	"	E	E	E	E	< 0.0005
		R	R	R	R	
Cu	"					< 0.002
Fe	"	D	D	D	D	2.50
Hg	μg/L	R	R	R	R	< 0.05
K	mg/L	Y	Y	Y	Y	8
Mg	"					249
Mn	"					0.1499
Na	"					124
Ni	"					< 0.0004
Pb	"					< 0.004
Se	"					< 0.02
Zn	"					0.008

TABLE 4 (Continued): ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 16, 2006

Parameter	Unit	Lysimeter No.		
		L-2N	L-3N	L-4N
pH <sup>1</sup>		7.6	7.7	8.0
EC	mS/m	252	245	105
Total Dissolved Solids	mg/L	2,168	2,002	828
Total Dissolved Organic Carbon	"	7	3	6
Cl <sup>-</sup>	"	236	385	172
SO <sub>4</sub> <sup>=</sup>	"	271	272	191
TKN	"	36	2.1	1.7
NH <sub>3</sub> -N	"	34	1.6	0.83
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.22	0.34	0.07
Total P	"	0.11	< 0.05	1.5
Alkalinity as CaCO <sub>3</sub>	"	702	339	212
Al	"	0.016	0.019	< 0.007
As	"	< 0.01	< 0.01	< 0.01
Ca	"	226	189	72
Cd	"	0.0007	0.0066	0.0005
Cr	"	< 0.0005	< 0.0005	0.0007
Cu	"	< 0.002	< 0.002	< 0.002
Fe	"	2.12	0.539	0.081
Hg	μg/L	< 0.05	< 0.05	< 0.05
K	mg/L	13	5	3
Mg	"	140	75.8	20.9
Mn	"	0.1527	0.1568	0.1239
Na	"	86	224	164
Ni	"	< 0.0004	0.0005	< 0.0004
Pb	"	0.007	0.008	0.008
Se	"	< 0.02	< 0.02	< 0.02
Zn	"	0.005	0.005	0.003

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.

TABLE 5: ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 30, 2006

Parameter	Unit	Lysimeter No.				
		L-1	L-2	L-3	L-4	L-1N
pH <sup>1</sup>						7.4
EC	mS/m					469
Total Dissolved Solids	mg/L					4,596
Total Dissolved Organic Carbon	"					5
Cl <sup>-2</sup>	"					NA
SO <sub>4</sub> <sup>=</sup>	"					848
TKN	"					1.7
NH <sub>3</sub> -N	"					0.74
NO <sub>2</sub> + NO <sub>3</sub> -N	"					0.29
Total P	"	L	L	L	L	0.06
Alkalinity as CaCO <sub>3</sub>	"	Y	Y	Y	Y	630
		S	S	S	S	
Al	"	I	I	I	I	0.085
As	"	M	M	M	M	< 0.01
Ca	"	E	E	E	E	496
Cd	"	T	T	T	T	< 0.0004
Cr	"	E	E	E	E	< 0.0005
		R	R	R	R	
Cu	"					< 0.002
Fe	"	D	D	D	D	2.79
Hg	μg/L	R	R	R	R	0.21
K	mg/L	Y	Y	Y	Y	8
Mg	"					256
Mn	"					0.1762
Na	"					127
Ni	"					< 0.0004
Pb	"					< 0.004
Se	"					0.04
Zn	"					0.009

TABLE 5 (Continued): ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON AUGUST 30, 2006

Parameter	Unit	Lysimeter No.		
		L-2N	L-3N	L-4N
pH <sup>1</sup>		7.5	7.6	7.9
EC	mS/m	267	275	140
Total Dissolved Solids	mg/L	2,134	1,892	746
Total Dissolved Organic Carbon	"	7	3	6
Cl <sup>-2</sup>	"	297	494	197
SO <sub>4</sub> <sup>=</sup>	"	263	249	86
TKN	"	37	1.1	1.6
NH <sub>3</sub> -N	"	33	0.51	0.77
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.19	0.36	0.39
Total P	"	0.08	0.06	1.2
Alkalinity as CaCO <sub>3</sub>	"	927	386	264
Al	"	0.037	0.032	0.010
As	"	< 0.01	< 0.01	< 0.01
Ca	"	227	183	69
Cd	"	< 0.0004	< 0.0004	< 0.0004
Cr	"	< 0.0005	< 0.0005	0.0006
Cu	"	< 0.002	< 0.002	< 0.002
Fe	"	2.51	0.440	0.085
Hg	μg/L	0.12	0.13	0.10
K	mg/L	13	5	3
Mg	"	141	70.7	18.9
Mn	"	0.1565	0.1475	0.0899
Na	"	87	222	156
Ni	"	< 0.0004	0.0004	< 0.0004
Pb	"	< 0.004	0.004	0.005
Se	"	0.03	0.03	0.02
Zn	"	0.006	0.006	0.004

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.

<sup>2</sup>Cl data qualified due to faulty electrode. No re-runs performed due to insufficient sample.

NA = No analysis; insufficient sample.

TABLE 6: ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON SEPTEMBER 13, 2006

Parameter	Unit	Lysimeter No.				
		L-1	L-2	L-3	L-4	L-1N
pH <sup>1</sup>						7.6
EC	mS/m					329
Total Dissolved Solids	mg/L					3,372
Total Dissolved Organic Carbon	"					4
Cl <sup>-</sup>	"					725
SO <sub>4</sub> <sup>=</sup>	"					664
TKN	"					2.8
NH <sub>3</sub> -N	"					2.0
NO <sub>2</sub> + NO <sub>3</sub> -N	"					0.62
Total P	"	L	L	L	L	0.09
Alkalinity as CaCO <sub>3</sub>	"	Y	Y	Y	Y	622
		S	S	S	S	
Al	"	I	I	I	I	0.044
As	"	M	M	M	M	< 0.01
Ca	"	E	E	E	E	382
Cd	"	T	T	T	T	0.0004
Cr	"	E	E	E	E	< 0.0005
		R	R	R	R	
Cu	"					< 0.002
Fe	"	D	D	D	D	2.46
Hg	μg/L	R	R	R	R	0.09
K	mg/L	Y	Y	Y	Y	8
Mg	"					207
Mn	"					0.1192
Na	"					122
Ni	"					< 0.0004
Pb	"					< 0.004
Se	"					< 0.02
Zn	"					0.009

TABLE 6 (Continued): ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON SEPTEMBER 13, 2006

Parameter	Unit	Lysimeter No.		
		L-2N	L-3N	L-4N
pH <sup>1</sup>		7.7	7.7	8.0
EC	mS/m	214	208	115
Total Dissolved Solids	mg/L	1,628	1,856	784
Total Dissolved Organic Carbon	"	7	3	8
Cl <sup>-</sup>	"	275	506	175
SO <sub>4</sub> <sup>=</sup>	"	219	222	70
TKN	"	36	0.76	1.8
NH <sub>3</sub> -N	"	34	0.31	0.99
NO <sub>2</sub> + NO <sub>3</sub> -N	"	2.4	0.42	0.42
Total P	"	0.16	0.18	2.3
Alkalinity as CaCO <sub>3</sub>	"	857	388	326
Al	"	0.025	0.030	0.017
As	"	< 0.01	< 0.01	< 0.01
Ca	"	210	180	75
Cd	"	0.0006	0.0005	0.0006
Cr	"	< 0.0005	< 0.0005	< 0.0005
Cu	"	< 0.002	< 0.002	< 0.002
Fe	"	5.73	0.311	0.396
Hg	μg/L	0.10	0.10	0.09
K	mg/L	13	5	3
Mg	"	131	68.1	25.7
Mn	"	0.2101	0.2508	0.2225
Na	"	90	232	145
Ni	"	< 0.0004	< 0.0004	0.0004
Pb	"	< 0.004	< 0.004	< 0.004
Se	"	< 0.02	< 0.02	< 0.02
Zn	"	0.009	0.007	0.004

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.

TABLE 7: ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON SEPTEMBER 27, 2006

Parameter	Unit	Lysimeter No.				
		L-1	L-2	L-3	L-4	L-1N
pH <sup>1</sup>						7.5
EC	mS/m					300
Total Dissolved Solids	mg/L					3,394
Total Dissolved Organic Carbon	"					5
Cl <sup>-</sup>	"					664
SO <sub>4</sub> <sup>=</sup>	"					3,053
TKN	"					1.6
NH <sub>3</sub> -N	"					0.67
NO <sub>2</sub> + NO <sub>3</sub> -N	"					0.43
Total P	"	L	L	L	L	< 0.05
Alkalinity as CaCO <sub>3</sub>	"	Y	Y	Y	Y	586
		S	S	S	S	
Al	"	I	I	I	I	0.045
As	"	M	M	M	M	< 0.01
Ca	"	E	E	E	E	389
Cd	"	T	T	T	T	0.0006
Cr	"	E	E	E	E	< 0.0005
		R	R	R	R	
Cu	"					< 0.002
Fe	"	D	D	D	D	2.82
Hg	μg/L	R	R	R	R	0.09
K	mg/L	Y	Y	Y	Y	7
Mg	"					206
Mn	"					0.0781
Na	"					120
Ni	"					< 0.0004
Pb	"					< 0.004
Se	"					< 0.02
Zn	"					0.024



TABLE 7 (Continued): ANALYSIS OF WATER FROM LYSIMETERS  
L-1 THROUGH L-4N AT THE RIDGELAND AVENUE  
SOLIDS MANAGEMENT AREA SAMPLED ON SEPTEMBER 27, 2006

Parameter	Unit	Lysimeter No.		
		L-2N	L-3N	L-4N
pH <sup>1</sup>		7.6	7.6	8.0
EC	mS/m	207	205	101
Total Dissolved Solids	mg/L	1,686	1,714	690
Total Dissolved Organic Carbon	"	7	2	6
Cl <sup>-</sup>	"	242	471	153
SO <sub>4</sub> <sup>=</sup>	"	612	609	308
TKN	"	36	0.70	1.6
NH <sub>3</sub> -N	"	33	0.19	0.72
NO <sub>2</sub> + NO <sub>3</sub> -N	"	0.06	0.08	0.02
Total P	"	< 0.05	< 0.05	2.7
Alkalinity as CaCO <sub>3</sub>	"	840	359	268
Al	"	0.029	0.025	0.007
As	"	< 0.01	< 0.01	< 0.01
Ca	"	203	178	64
Cd	"	0.0005	0.0006	0.0005
Cr	"	< 0.0005	< 0.0005	< 0.0005
Cu	"	< 0.002	< 0.002	< 0.002
Fe	"	4.51	0.081	0.073
Hg	μg/L	0.07	0.08	0.08
K	mg/L	13	4	3
Mg	"	128	66.7	16.6
Mn	"	0.1486	0.1756	0.2529
Na	"	79	222	132
Ni	"	< 0.0004	0.0009	< 0.0004
Pb	"	< 0.004	< 0.004	< 0.004
Se	"	< 0.02	< 0.02	< 0.02
Zn	"	0.015	0.012	0.006

<sup>1</sup>pH analyzed beyond recommended holding time of 15 minutes.