BUZZI UNICEM USA

Independence Plant

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February 26, 2016

Mr. Kenneth Herstowski
Project Manager
RCRA Corrective Action & Permits Branch
EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219

Subject: Heartland Cement Company, dba Buzzi Unicem USA, Independence, Kansas
RCRA ID #KSD98073999, RCRA HSWA Permit
Correctives Measures Implementation Annual Report, 2015

Mr. Herstowski:

Enclosed is a Correctives Measures Implementation Annual Report per section III.L.4 of the RCRA HSWA Permit. The report covers the period of January 1, 2015 through December 31, 2015.

Please contact me at 636-931-2511 if you need additional information or have any questions.

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Mostafa Kamal, KDHE

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February 25, 2016

Corrective Measure Implementation Annual Report
Heartland Cement Company dba Buzzi Unicem USA
RCRA HSWA Permit, ID, KSD980739999

Heartland Cement Company dba Buzzi Unicem USA (Heartland) formerly operated a portland cement manufacturing facility in Independence, Kansas. In the cement manufacturing operations, hazardous waste fuels were burned in the cement kilns. To facilitate the use of the waste fuels, hazardous waste was received, stored and blended prior to use in the kilns as a fuel. A permit to store and handle the waste was issued in 1989. As a condition for the permit a RCRA Facility Assessment (RFA) was completed. As a result of the RFA a number of Solid Waste Management Units (SWMUs) were identified. The permit required that a RCRA Facility Investigation (RFI) be conducted and additional SWMUs were identified. In July 2013, EPA renewed the RCRA HSWA Permit for the purpose of continuing corrective actions that were still in progress. The permit requires an Annual Corrective Measures Implementation Report be submitted each year by March 1. This report covers the reporting period of January 1, 2015 to December 31, 2015

Corrective measures have been completed on all of the SWMUs and AOCs. Engineering controls and groundwater monitoring programs are required for the CKD landfill (SWMU 11) and the industrial landfill (SWMU 10). Under the renewed RCRA permit, EPA maintains oversight for SWMU 11 but KDHE will maintain oversight for SWMU 10.

Engineering Control

SWMU 11 (CKD Landfill)

Capping of the CKD landfill was completed in March 2013 and the final closure report was approved by KDHE in July 2013. Periodic inspections of the cap is performed at least twice a year.
Maintenance performed in 2015 included replacement of about 1800 cubic yards of soil on an eroded area located on the north-west edge of the landfill. The area was re-seeded and vegetation re-established.

SWMU 10 (Industrial Landfill)
Capping of the industrial landfill was completed in March 2014 and a final closure report was approved by KDHE in September 2014. Periodic inspection is performed at least twice a year and no maintenance was required.

Institutional Control for SWMU 10 and SWMU 11

Restrictive covenants were filed with Montgomery County, Kansas Register of Deeds in September 2011 identifying the parcels of land containing the landfills. The land use restrictions in the covenant require any use of the identified property must be approved by KDHE and that no use can disturb the clay and vegetative soil covers that have been placed over the landfills.

Monitoring and Performance Evaluation

SWMU 11 is comprised of two CKD landfills known as the Old CKD landfill and the New CKD landfill. A ground water monitoring plan for SWMU 11 was submitted to EPA in September 2013. In October 2015, EPA provided comments to the monitoring plan and requested some revisions to the plan including addition of another groundwater monitoring well to the area designated as New CKD landfill. A Landfill Cap Maintenance Plan was also requested.

The new well, designated as NLGW-4 was drilled on December 11, 2015. A Landfill Cap Maintenance Plan (SWMU 11) was developed and the requested revisions were made to the Groundwater Monitoring Plan (SWMU 11). The Plans were submitted to EPA and KDHE on December 3, 2015 along with estimated post closure cost for the SWMU 11.

Groundwater samples for the New Kiln Dust Landfill and the Industrial Landfill were collected and analyzed in February and in August 2015. The February sample still indicated high levels of arsenic attributed to the disturbed landfill but the August samples indicated the arsenic was back to below the MCL of 10 µg/l. Ground water sampling of five monitoring wells in the "Old CKD landfill portion of SWMU 11 will begin in 2016.

Next Actions

Finalize financial assurance instrument for post closure costs.
Finalize any revisions to Ground Water Monitoring Plan.
Complete Groundwater monitoring activity.
Complete Landfill inspections and any needed maintenance.

Sample Date	Static Level ft	Total Depth ft	pH SU	Conductivity µmho/cm	Temp ° C	Sb µg/l	As µg/l	Ba µg/l	Be µg/l	Cd µg/l	Ca µg/l	Cr µg/l	Co µg/l	Cu µg/l	Pb µg/l	Ni µg/l	K µg/l	Se µg/l	Ag µg/l	Na µg/l	Th µg/l	Vn µg/l	Zn µg/l	TDS µg/l	Chloride mg/l	Sulfate mg/l	Alkalinity mg/l
3/29/2005	10.65	29.76	6.7	2000	17	ND	17	74.2	ND	ND	268000	ND	ND	ND	ND	5.69	2780	ND	ND	154000	ND	ND	ND	1490	203	505	446
6/24/2005	9.06	29.76	6.7	2030	19	ND	ND	74	ND	ND	325000	ND	ND	ND	ND	ND	2120	ND	ND	158000	ND	ND	ND	1630	154	424	430
8/15/2005	11.11	29.76	6.6	2110	20	ND	ND	79.5	ND	ND	293000	ND	ND	ND	ND	6.38	3510	ND	ND	151000	ND	ND	ND	1590	204	392	491
11/15/2005	10.9		6.7	590	19	ND	ND	80.4	ND	ND	309000	ND	ND	ND	ND	9.4	3820	ND	ND	160000	ND	ND	ND	1510	212	476	544
2/10/2006	11.52		6.6	2090	16	ND	ND	75.4	ND	ND	275000	ND	ND	ND	ND	5.7	3740	ND	ND	145000	ND	ND	ND	1530	216	412	622
5/26/2006	11.29		6.7	2070	18	ND	ND	88.9	ND	ND	294000	ND	ND	ND	ND	6.5	5130	ND	ND	163000	ND	ND	ND	1440	200	397	484
2/9/2007	12.6		6.7	1897	16	ND	ND	110	ND	ND	305000	5.0	ND	ND	ND	11.5	11700	ND	ND	173000	ND	ND	ND	1520	219	339	598
6/1/2007	10.2		6.6	3940	18	ND	ND	84.6	ND	ND	280000	ND	ND	ND	ND	9.7	15100	ND	ND	168000	ND	ND	ND	1460	160	425	488
8/10/2007	14.88		6.8	2380	20	ND	ND	100	ND	ND	270000	5.2	ND	ND	7.2	10.8	13500	ND	ND	150000	ND	ND	ND	1580	183	459	479
11/30/2007	15.85	29.75	6.9	2280	17.8	ND	ND	109	ND	ND	291000	5.5	ND	ND	7.9	14.8	12500	ND	ND	176000	ND	ND	ND	1290	195	298	636
3/1/2008	13.9	29.78	6.8	2650	17.3	ND	ND	104	ND	ND	296000	ND	ND	ND	5.7		18500	ND		163000				1590	202	367	583
5/23/2008	13.82		6.8	2010	17.7	ND	ND	105	ND	ND	282000	ND	ND	ND	ND	12.3	14900	ND	ND	170000	ND	ND	ND	1700	186	304	572
8/15/2009	13.03		6.6	2360	20	ND	ND	103	ND	ND	288000	ND	ND	ND	9.1	10.0	9790	ND	ND	157000	ND	ND	ND	1490	206	432	535
11/24/2008	11.99		6.7	2190	18.1	ND	ND	83	ND	ND	277000	ND	ND	ND	ND	6.9	9010	ND	ND	154000	ND	ND	ND	2190	187	342	536
2/27/2009	15.69	29.76	6.9	1940	15.8	ND	ND	104	ND	ND	281000	ND	ND	ND	ND	11.7	10600	ND	ND	164000	ND	ND	ND	1440	193	327	619
5/22/2009	14.7	29.77	6.7	1800	17.6	ND	ND	90.6	ND	ND	276000	ND	ND	ND	ND	8.7	8480	ND	ND	163000	ND	ND	ND	1440	167	366	524
8/21/2009	12.3	29.78	6.6	1900	18.0	ND	ND	110	ND	ND	297000	ND	ND	ND	ND	11.9	11300	ND	ND	179000	ND	ND	ND	1680	189	349	579
11/20/2009	14.13	29.77	6.7	2000	18.0	ND	ND	125	ND	ND	290000	6.1	ND	ND	9.5	12.7	14400	ND	ND	156000	ND	ND	ND	1400	163	299	544
2/12/2010	14.18	29.77	6.8	2000	16.1	ND	ND	117	ND	ND	266000	ND	ND	ND	ND	13.2	14300	ND	ND	164000	ND	ND	ND	1500	190	321	603
5/25/2010	12.25		7	1820	18.6	ND	ND	104	ND	ND	269000	ND	ND	ND	ND	9.5	9580	ND	ND	154000	ND	ND	ND	1510	198	359	524
8/20/2010	12.62		6.8	1800	18.3	ND	ND	115	ND	ND	256000	ND	ND	ND	5.7	11.5	14400	ND	ND	149000	ND	ND	ND	1360	171	342	516
10/22/2010	12.82		6.8	1950	17.2	ND	ND	110	ND	ND	271000	ND	ND	ND	ND	10.6	12200	ND	ND	167000	ND	ND	ND	1420	197	334	516
2/18/2011	13.05		6.8	1800	16.9	ND	ND	108	ND	ND	282000	ND	ND	ND	ND	10.9	10700	ND	ND	158000	ND	ND	ND	1460	208	384	498
4/29/2011	12.49		6.7	1720	16.6	ND	ND	110	ND	ND	255000	ND	ND	ND	ND	11.5	10900	ND	ND	153000	ND	ND	ND	1550	200	349	536
8/23/2011	13.43		6.7	1900	17.6	ND	ND	99.3	ND	ND	280000	ND	ND	ND	ND	10.1	8330	ND	ND	159000	ND	ND	ND	1510	186	338	532
10/21/2011	14.31		6.7	1800	16.7	ND	ND	109	ND	ND	290000	ND	ND	ND	ND	11.7	9440	ND	ND	170000	ND	ND	ND	1340	192	342	580
1/31/2012	13.24	29.74	6.7	2000	16.5	ND	ND	97.6	ND	ND	261000	ND	ND	ND	ND	9.8	8310	ND	ND	160000	ND	ND	ND	1420	194	367	610
5/4/2012	9.78		6.7	1900	16.5	ND	ND	95.4	ND	ND	261000	ND	ND	ND	6.9	9.9	8150	ND	ND	167000	ND	ND	ND	1390	193	334	521
8/17/2012	15.53		6.8	1720	17.8	ND	ND	85.4	ND	ND	278000	ND	ND	ND	6.6	9.0	7980	ND	ND	151000	ND	ND	ND	1420	193	361	536
11/19/2012	13.47		6.8	1800	16.2	ND	ND	108	ND	ND	250000	ND	ND	11	6.6	11.0	8660	ND	ND	170000	ND	ND	ND	1400	181	344	500
2/8/2013	12.82		6.7	1900	15.9	ND	ND	95.5	ND	ND	258000	ND	ND	ND	7.8	10.4	6840	ND	ND	157000	ND	ND	ND	1280	179	356	506
5/17/2013	11.93		6.7	1800	18.1	ND	124	94.2	ND	ND	281000	ND	ND	12	4.1	10.8	8090	ND	ND	165000	ND	ND	ND	1340	165	324	490
8/16/2013	9.61		6.9	1500	20.6	ND	ND	147	ND	ND	183000	ND	ND	ND	ND	7.7	14300	ND	ND	113000	ND	ND	ND	1040	103	242	446

Sample Date	Static Level ft	Total Depth ft	pH SU	Conductivity µmho/cm	Temp ° C	Sb µg/l	As µg/l	Ba µg/l	Be µg/l	Cd µg/l	Ca µg/l	Cr µg/l	Co µg/l	Cu µg/l	Pb µg/l	Ni µg/l	K µg/l	Se µg/l	Ag µg/l	Na µg/l	Th µg/l	Vn µg/l	Zn µg/l	TDS µg/l	Chloride mg/l	Sulfate mg/l	Alkalinity mg/l
8/18/2006	17.1		6.8	2470	19	ND	15	125	ND	ND	293000	20.3	5.3	17	ND	22.4	3450	ND	ND	190000	ND	ND	60.9	1790	169	415	541
11/17/2006	17.0		6.8	2410	19	0.11	6.3	81	0.23	0.1	296000	8.6	2.8	7.4	3.5	20.1	1290	10	ND	216000	ND	8.7	20.3	1790	134	516	636
2/9/2007	13.5		6.8	1760	14	ND	16	229	1.5	ND	356000	44.6	11	31	23.4	48.1	4840	ND	ND	195000	ND	43.3	103	1740	161	591	580
6/1/2007	11.3		6.4	4260	17	ND	ND	95.5	ND	ND	299000	12.8	ND	28	7.1	19.2	2260	ND	ND	201000	ND	15.8	ND	1780	162	578	517
8/10/2007	16.1		6.7	2490	19	ND	ND	128	ND	ND	288000	13.7	ND	27.8	10.6	19.1	3350	ND	ND	179000	ND	16.1	ND	1760	154	591	530
11/30/2007	15.7	24.08	6.8	2480	17.1	ND	12.2	259	1.0	ND	340000	27.8	7.9	49.5	18.6	40.1	3970	ND	ND	204000	ND	29.6	90.5	1620	137	499	642
3/1/2008	14.66	24.07	6.8	2670	14.7	ND	ND	157	ND	ND	330000	19.6	5.5	21.9	14.2		2330	ND		188000				1780	141	505	596
5/23/2008	15.0		6.8	2050	16.1	ND	ND	155	ND	ND	300000	18	ND	20	9.0	17.6	2500	ND	ND	182000	ND	16.7	ND	1930	152	484	598
8/15/2009	13.3		6.6	2290	19.5	ND	ND	192	ND	ND	250000	6.5	ND	ND	7.2	12.7	1650	ND	ND	158000	ND	ND	ND	1450	117	409	606
1/24/2008	16.3		6.7	2370	16.8	ND	ND	115	ND	ND	284000	ND	ND	ND	ND	10.9	1450	ND	ND	168000	ND	ND	ND	1520	167	449	598
2/27/2009	15.78	24.12	6.9	1860	12.1	ND	ND	97	ND	ND	284000	14	ND	ND	6.4	13.9	1600	ND	ND	185000	ND	ND	ND	1510	153	490	604
5/22/2009	14.90	24.10	6.8	1850	17.4	ND	ND	88.7	ND	ND	272000	6.2	ND	ND	ND	7.0	1170	ND	ND	186000	ND	ND	ND	1580	136	428	586
8/21/2009	12.86	24.08	6.7	1980	18.5	ND	ND	66.5	ND	ND	282000	ND	ND	ND	ND	8.2	1480	ND	ND	196000	ND	ND	ND	1900	157	500	577
11/20/2009	12.55	14.07	6.7	2200	16.5	ND	ND	87.9	ND	ND	300000	5.0	ND	ND	ND	9.1	1490	ND	ND	186000	ND	ND	ND	1610	154	447	561
2/12/2010	12.45	24.08	6.9	2100	13.2	ND	ND	70.4	ND	ND	275000	7.7	ND	ND	ND	8.2	1240	ND	ND	185000	ND	ND	ND	1550	160	489	561
5/25/2010	12.99		6.9	1850	16.2	ND	ND	64.3	ND	ND	254000	8.1	ND	ND	ND	7.8	1640	ND	ND	170000	ND	ND	ND	1660	464	165	584
8/20/2010	17.66		6.8	1500	18.7	ND	ND	232	ND	ND	191000	6.1	ND	ND	7.2	12.9	1780	ND	ND	137000	ND	ND	ND	1170	105	300	483
10/22/2010	13.78		6.8	1900	17.4	ND	ND	119	ND	ND	259000	6	ND	ND	ND	10.3	2240	ND	ND	190000	ND	ND	ND	1510	179	438	503
2/18/2011	13.37		6.8	1900	14.6	ND	16	168	ND	ND	299000	25	5.7	20	15.3	29.8	3600	ND	ND	176000	ND	26.8	79.1	1580	170	572	536
4/29/2011	12.70		6.6	800	15.1	ND	ND	91.3	ND	ND	253000	16	ND	ND	5.2	12.0	2400	ND	ND	169000	ND	ND	ND	1600	182	504	559
8/23/2011	14.80		6.6	1880	17.8	ND	ND	66.9	ND	ND	263000	7	ND	ND	7.3	10.4	1600	ND	ND	175000	ND	ND	ND	1090	158	447	551
10/21/2011	15.88		6.8	1880	15.8	ND	ND	67.9	ND	ND	271000	9.3	ND	ND	ND	9.6	2020	ND	ND	191000	ND	ND	ND	1340	161	488	564
1/31/2012	14.32	24.06	6.8	2050	15.1	ND	12	133	ND	ND	280000	26	6.8	16	16.8	28	3120	ND	ND	173000	ND	27	63.8	1570	164	536	630
5/4/2012	14.39		6.8	1450	16.4	ND	ND	138	ND	ND	180000	8.2	ND	12	7.9	9.3	2710	ND	ND	121000	ND	ND	ND	1080	93	348	355
8/17/2012	15.95		6.7	1700	17	ND	ND	55.4	ND	ND	277000	ND	ND	ND	8.1	7.3	2390	ND	ND	175000	ND	ND	ND	1500	136	505	525
10/19/2012	14.43		6.7	1950	15.5	ND	25	200	1.1	ND	282000	41	12	28	24.6	44.7	4910	ND	39	196000	ND	39.2	98.4	1520	150	486	512
2/8/2013	13.95		6.8	2100	13.9	ND	ND	115	ND	ND	280000	18	5.7	14	15.5	23.5	2740	ND	ND	172000	m	15.5	ND	1470	159	505	494
5/17/2013	13.01		6.8	2080	15.9	ND	95	145	ND	ND	324000	29	6.8	20	11.8	31.4	2860	ND	ND	188000	ND	28.6	67.8	1650	152	502	502
8/16/2013	10.58		7.1	875	19.9	ND	ND	145	ND	ND	122000	ND	ND	ND	ND	5.9	1950	ND	ND	72200	ND	ND	ND	750	56.1	192	322
0/18/2013	11.79		6.7	850	15.6	ND	66	148	ND	ND	223000	ND	ND	ND	ND	19.2	816	ND	ND	165000	ND	ND	ND	1210	106	378	548
2/21/2014	13.05		6.6	2000	14.4	ND	93	67.4	ND	ND	246000	ND	ND	ND	ND	5	633	ND	ND	182000	ND	ND	ND	1470	131	409	555
8/22/2014	14.57		6.7	1900	17.6	ND	69	52.4	ND	ND	230000	ND	ND	ND	ND	6.6	747	ND	ND	177000	ND	ND	ND	1460	136	409	564
2/13/2015			6.6	2100	13.5	ND	76	56.7	ND	ND	244000	ND	ND	ND	ND	5.2	720	ND	ND	185000	ND	ND	ND	1390	137	458	543
8/21/2015	11.74		6.7	2020	17.4	ND	2.1	63.5	ND	ND	238000	ND	ND	10	ND	5.6	570	ND	ND	161000	ND	ND	ND	1490	130	489	549
Industrial Landfill Well 4				(ILGW-4)																							
12/17/2004	10.68		6.9	2200	19	ND	ND	75.7	ND	ND	291000	ND	ND	ND	ND	5.53	2200	ND	ND	146000	ND	ND	ND	1460	177	453	415
1/21/2005	10.3		6.9	2350	16	ND	ND	79	ND	ND	287000	ND	ND	ND	9.08	ND	2810	25	ND	144000	10.2	ND	ND	1500	177	449	435
2/11/2005	18.4	29.76	6.8	2150	18	ND	119	85.9	ND	ND	285000	ND	ND	ND	ND	ND	2630	35	ND	137000	ND	ND	ND	510	194	451	437
2/25/2005	10.61	29.77	6.6	2100	17	ND	ND	72.8	ND	ND	304000	ND	ND	ND	5.17	5.67	2700	81	ND	145000	ND	ND	ND	1410	219	469	458

Sample Date	Static Level ft	Total Depth ft	pH SU	Conductivity µmho/cm	Temp ° C	Sb µg/l	As µg/l	Ba µg/l	Be µg/l	Cd µg/l	Ca µg/l	Cr µg/l	Co µg/l	Cu µg/l	Pb µg/l	Ni µg/l	K µg/l	Se µg/l	Ag µg/l	Na µg/l	Th µg/l	Vn µg/l	Zn µg/l	TDS µg/l	Chloride mg/l	Sulfate mg/l	Alkalinity mg/l
5/23/2008	0.91		7.2	2230	18.2	ND	11	219	ND	ND	97200	ND	ND	ND	ND	8.0	386000	ND	ND	151000	ND	ND	ND	2090	86.8	113	935
8/15/2009	0.69		7.0	2670	24	ND	ND	201	ND	ND	83800	ND	ND	ND	ND	ND	416000	ND	ND	170000	ND	ND	ND	1670	88	146	876
11/24/2008	1.03		7.2	2520	12.6	ND	12	226	ND	ND	102000	ND	ND	ND	ND	ND	407000	ND	ND	143000	ND	ND	ND	1440	100	61.7	1060
2/27/2009	1.46	20.4	7.3	2040	10.5	ND	11	271	ND	ND	93100	ND	ND	12.3	ND	7.2	426000	ND	ND	156000	ND	ND	ND	1560	81	39.2	1150
5/22/2009	0.98	20.4	7.2	2100	21.1	ND	ND	269	ND	ND	85300	ND	ND	ND	5.1	8.4	408000	ND	ND	173000	ND	ND	ND	1490	81.9	93.1	937
8/21/2009	11.31	20.4	7.1	2100	23.7	ND	14.4	269	ND	ND	82500	ND	ND	ND	ND	7.3	439000	ND	ND	177000	ND	ND	ND	2190	81.1	56.6	1160
11/20/2009	0.83	20.40	7.3	1650	15.1	ND	10	329	ND	ND	70000	ND	ND	ND	6.9	9.4	281000	ND	ND	101000	ND	ND	ND	1030	48.1	50.5	586
2/12/2010	0.75	20.38	7.4	2100	9.9	ND	21	496	ND	ND	88800	ND	ND	ND	ND	8.3	373000	ND	ND	139000	ND	ND	ND	1280	65.4	26.7	959
5/25/2010	0.81		7.3	1950	20.8	ND	11	421	ND	ND	82800	ND	ND	ND	ND	6.7	389000	ND	ND	132000	ND	ND	ND	1490	27.4	66.1	1020
/20/2010	0.8		7.2	1800	25.7	ND	15	411	ND	ND	66100	ND	ND	ND	ND	7.3	327000	ND	ND	137000	ND	ND	ND	1380	61	89.6	741
10/22/2010	0.75		7.2	2250	18.4	ND	13	504	ND	ND	91000	ND	ND	ND	6.6	7.8	437000	ND	ND	152000	ND	ND	ND	1440	69.3	29.2	963
2/18/2011	0.77		7.2	2150	11.6	ND	73	1130	ND	ND	102000	ND	ND	12.9	ND	6.5	393000	ND	ND	132000	ND	ND	ND	1400	83	14.7	916
4/29/2011	0.79		7.1	2100	15.3	ND	11	570	ND	ND	89900	ND	ND	ND	ND	6.8	438000	ND	ND	133000	ND	ND	ND	1630	68.4	24.9	1090
8/23/2011	2.01		7.1	2220	23	ND	19	524			82200	8.3	ND	ND	10.4	10.8	460000	ND	ND	129000	ND	ND	ND	1730	66.7	34.3	1080
10/21/2011	2.47		7.1	2100		ND	21	646	ND	ND	88600	ND	ND	ND	ND	7.1	492000	ND	ND	136000	ND	ND	ND	1260	61.4	19.8	1140
1/31/2012	1.37	20.39	7.2	2200	12.2	ND	36	1040	ND	ND	85100	6.7	ND	ND	5.4	7.4	404000	ND	ND	122000	ND	ND	ND	1360	56.9	19.4	1100
5/4/2012	0.92		7.2	2100	17.6	ND	19	611	ND	ND	88200	ND	ND	ND	5.9	6.5	392000	ND	ND	128000	ND	ND	ND	1310	55.2	76.4	363
8/17/2012	2.68		7.3	1800	23.1	ND	12	424	ND	ND	62200	ND	ND	ND	5.1	5.8	359000	ND	ND	124000	ND	ND	ND	1300	64.8	96.5	800
10/19/2012	2.16		7.4	1900	19.7	ND	18	498	ND	ND	59700	ND	ND	ND	ND	7.6	453000	ND	ND	118000	ND	ND	ND	1250	53.5	95.2	760
2/8/2013	1.72		7.4	1900	12.6	ND	18	584	ND	ND	67700	ND	ND	ND	7.6	6.1	385000	ND	ND	109000	ND	ND	ND	1250	63.7	17.3	868
5/17/2013	1.31		7.3	1780	17.5	ND	38	502	ND	ND	72200	9.9	ND	ND	6.3	7.8	387000	ND	ND	130000	ND	ND	ND	1360	58.5	64.2	774
8/16/2013																											
10/18/2013																											
2/21/2014																											
8/22/2014	5.84		7.4	1400	21.9	ND	19	289	ND	ND	52000	ND	ND	ND	ND	5.9	221000	ND	ND	135000	ND	ND	ND	1030	46.6	78.8	632
2/13/2015			7.5	1400	12.2	ND	16	226	ND	ND	50500	ND	ND	ND	ND	ND	204000	ND	ND	121000	ND	ND	ND	830	40.5	60.6	589
8/21/2015	4.38		7.3	1400	20.9	ND	6.6	219	ND	ND	47100	ND	ND	11	ND	5.2	207000	ND	ND	120000	ND	ND	ND	876	36.5	77.8	585

Industrial Landfill Well 3 (ILGW-3)

12/17/2005	12.1		6.8	2600	16	ND	ND	73.6	ND	ND	314000	7.6	ND	ND	ND	10.0	1860	ND	ND	186000	ND	ND	ND	1700	112	619	609
1/21/2005	11.1		7	2650	13	ND	ND	81	ND	ND	336000	14.6	ND	ND	11.2	10.1	2480	ND	ND	186000	16.1	ND	ND	1950	120	660	580
2/11/2005	11.6	24.1	6.8	2500	14	ND	143	127	ND	ND	316000	20.3	5.7	15	ND	18.4	2590	27	ND	123000	ND	16.3	ND	1970	142	730	566
2/25/2005	11.2	24.1	6.6	2500	14	ND	ND	92.3	ND	ND	338000	15.5	ND	13	7.39	13.9	2350	89	ND	190000	10	ND	ND	1830	163	736	595
3/29/2005	11.4	24.1	6.7	2400	15	ND	22	88.5	ND	ND	313000	15.9	ND	12	ND	13.4	2160	18	ND	192000	ND	ND	ND	1860	175	739	591
6/24/2005	9.2	24.1	6.6	2390	18	ND	ND	96.5	ND	ND	317000	11.5	ND	12	ND	13.9	2590	ND	ND	179000	ND	ND	ND	2050	150	572	595
8/15/2005	12.7	24.1	6.6	2410	20	ND	12	122	ND	ND	326000	20.8	ND	14	6.14	19.9	3920	ND	ND	189000	ND	18.1	ND	1940	152	524	660
11/15/2005	14.6		6.7	710	18	ND	ND	95.8	ND	ND	321000	12.7	ND	ND	5.1	17.6	2450	ND	ND	196000	ND	14.6	ND	1850	173	590	725
2/10/2006	12.3		6.7	2300	13	ND	14	111	ND	ND	302000	18.9	ND	10	ND	12.8	3920	ND	ND	189000	ND	ND	ND	1690	171	508	830
5/26/2006	12.5		6.7	2090	16	ND	ND	187	ND	ND	315000	34.0	6.1	19	13.1	23.0	7010	ND	ND	189000	ND	28.6	74	1440	147	526	617

Sample Date	Static Level ft	Total Depth ft	pH SU	Conductivity µmho/cm	Temp ° C	Sb µg/l	As µg/l	Ba µg/l	Be µg/l	Cd µg/l	Ca µg/l	Cr µg/l	Co µg/l	Cu µg/l	Pb µg/l	Ni µg/l	K µg/l	Se µg/l	Ag µg/l	Na µg/l	Th µg/l	Vn µg/l	Zn µg/l	TDS µg/l	Chloride mg/l	Sulfate mg/l	Alkalinity mg/l
2/12/2010	5.45	26.99	6.9	900	9.9	ND	ND	104	ND	ND	135000	ND	ND	ND	ND	ND	ND	ND	ND	29800	ND	ND	ND	538	17.6	50.5	323
5/25/2010	7.82		7.0	800	16	ND	ND	112	ND	ND	134000	ND	ND	12	5.4	ND	ND	ND	ND	26700	ND	ND	ND	553	47.4	18.6	321
8/20/2010	8.01		6.8	1780	18.4	ND	ND	109	ND	ND	135000	ND	ND	ND	ND	ND	ND	ND	ND	28900	ND	ND	ND	555	19.9	51.6	328
10/22/2010	9.55		6.9	1800	17.6	ND	ND	114	ND		135000	ND	ND	ND	ND	ND	ND	ND	ND	29900	ND	ND	ND	557	20.1	47.7	310
2/18/2011	12.55		6.9	850	13.1	ND	ND	109	ND	ND	148000	ND	ND	ND	ND	ND	ND	ND	ND	29400	ND	ND	ND	524	18.8	55	319
4/29/2011	7.69		6.7	775	14	ND	ND	109	ND	ND	132000	ND	ND	ND	ND	ND	862.0	ND	ND	28800	ND	ND	ND	517	18.2	50.2	308
8/23/2011	9.65		6.8	800	16.9	ND	ND	101	ND	ND	138000	ND	ND	ND	708	10.9	1490	ND	ND	27500	ND	ND	ND	548	17.6	51.6	
10/21/2011	11.98		6.8	800	15.2	ND	ND	110	ND	ND	140000	ND	ND	11	ND	ND	ND	ND	ND	28200	ND	ND	ND	509	17.5	51	324
1/31/2012	10.88	26.97	6.8	850	13.5	ND	ND	112	ND	ND	134000	ND	ND	13	ND	ND	ND	ND	ND	27600	ND	ND	ND	529	18.1	51.2	348
5/4/2012	6.5		6.8	850	16.6	ND	ND	102	ND	ND	132000	ND	ND	ND	5.1	ND	1010	ND	ND	27800	ND	ND	ND	523	15.1	46.4	321
8/17/2012	11.87		6.7	800	16.7	ND	ND	96.4	ND	ND	147000	ND	ND	ND	ND	ND	ND	ND	ND	27200	ND	ND	ND	529	15.1	49	329
10/19/2012	11.16		6.9	800	15.3	ND	ND	113	ND	ND	130000	ND	ND	ND	ND	ND	641	ND	ND	30500	ND	ND	ND	492	15.3	51.1	313
2/8/2013	11.95		6.8	800	13.4	ND	ND	108	ND	ND	133000	ND	ND	n	5.4	ND	ND	ND	ND	26400	ND	ND	ND	534	15.8	51.9	293
5/17/2013	5.83		6.7	800	15.2	ND	ND	106	ND	ND	145000	ND	ND	ND	2.4	ND	ND	ND	ND	27200	ND	ND	ND	522	14.5	45.9	320
8/16/2013	4.03		6.9	875	20.7	ND	ND	94.9	ND	ND	129000	ND	ND	ND	ND	ND	ND	ND	ND	25800	ND	ND	ND	538	15.2	46.8	348
10/18/2013	6.61		6.8	800	16.3	ND	1.5	102	ND	ND	134000	ND	ND	ND	1.6	ND	ND	ND	ND	27100	ND	ND	ND	507	13.6	46.2	332
2/21/2014	7.68		6.7	875	12.5	ND	1.8	100	ND	ND	137000	ND	ND	ND	ND	ND	ND	ND	ND	27000	ND	ND	ND	548	13.4	49.3	338
8/22/2014	8.04		6.9	850	18.2	ND	ND	98.3	ND	ND	134000	ND	ND	ND	ND	ND	ND	ND	ND	28500	ND	ND	ND	533	13.4	51.8	336
2/13/2015			6.8	850	11.8	ND	1.4	92	ND	ND	116000	ND	ND	ND	ND	ND	ND	ND	ND	25700	ND	ND	ND	509	13	51.4	338
8/21/2015	5.58		6.9	800	17.8	ND	ND	89.6	ND	ND	126000	ND	ND	ND	ND	ND	ND	ND	ND	25100	ND	ND	ND	492	13.4	51.3	314

Industrial Landfill Well 2 (ILGW-2)

12/17/2005	2.6		7.2	3400	12	ND	ND	206	ND	ND	157000	ND	ND	ND	ND	7.6	590000	ND	ND	197000	16.4	ND	ND	2090	134	268	1100
1/21/2005																											
2/11/2005	1.71	20.4	7.0	3100	11	ND	113	136	ND	ND	128000	ND	ND	ND	ND	5.2	487000	57	ND	162000	ND	ND	ND	1700	157	343	981
2/25/2005	0.99	20.4	6.9	3000	11	ND	ND	122	ND	ND	143000	ND	ND	ND	ND	6.4	524000	44	ND	161000	19.3	ND	ND	1920	152	316	1010
3/29/2005	1.14	20.4	7.0	2800	14	ND	ND	111	ND	ND	130000	ND	ND	ND	ND	6.8	509000	21	ND	181000	ND	ND	ND	1940	156	408	885
5/24/2005	0.68	20.4	7.0	2370	25	ND	12	183	ND	ND	151000	ND	ND	ND	ND	5.6	525000	ND	ND	195000	ND	ND	ND	2330	121	327	889
8/15/2005	1.44	20.4	7.1	2600	24	ND	13	135	ND	ND	153000	ND	ND	ND	ND	19.9	375000	ND	ND	193000	ND	ND	ND	1800	128	334	824
11/15/2005	1.56		7.1	855	15	ND	19	150	ND	ND	193000	9.9	5.6	19	10.6	17.8	39500	ND	ND	205000	ND	ND	70	1930	120	284	887
2/10/2006	1.85		7.2	2580	9	ND	11	111	ND	ND	153000	ND	ND	ND	ND	8.3	472000	ND	ND	164000	ND	ND	ND	1800	116	212	1370
5/26/2006	1.1		7.1	2500	20	ND	10	111	ND	ND	130000	ND	ND	ND	ND	9.9	549000	ND	ND	162000	ND	ND	ND	1310	95.2	197	962
8/18/2006	1.77		7.1	2910	25	ND	13	132	ND	ND	118000	ND	ND	ND	ND	12.6	495000	ND	ND	146000	ND	ND	ND	2200	113	87.3	1150
11/17/2006	2.05		7.1	2820	15	0.19	15	221	ND	0.11	140000	2.1	3.0	2.5	2.1	15.1	589000	28	ND	166000	ND	2.3	7.9	1890	95.5	60.2	1200
2/9/2007	1.89		7.2	2240	9	ND	ND	226	ND	ND	142000	ND	ND	ND	ND	10.1	515000	ND	ND	163000	ND	ND	ND	1720	108	64.9	1240
6/1/2007	0.5		6.4	2390	18	ND	ND	244	ND	ND	102000	ND	ND	ND	ND	8.6	518000	ND	ND	169000	ND	ND	ND	1810	107	89.9	999
8/10/2007	0.92		7.1	2720	26	ND	11.5	213	ND	ND	77600	ND	ND	ND	ND	7.5	410000	ND	ND	154000	ND	ND	ND	1800	112	156	804
11/30/2007	1.53	20.4	7.2	2580	13.1	ND	14.6	250	ND	ND	98800	5.0	ND	ND	ND	9.7	473000	ND	ND	175000	ND	ND	ND	1570	95.9	63.4	1070
3/1/2008	1.38	20.41	7.2	2700	11.1	ND	ND	242	ND	ND	98700	ND	ND	ND	ND		47300	ND		158000				1600	89.7	73.0	1020

Sample Date	Static Level ft	Total Depth ft	pH SU	Conductivity µmho/cm	Temp ° C	Sb µg/l	As µg/l	Ba µg/l	Be µg/l	Cd µg/l	Ca µg/l	Cr µg/l	Co µg/l	Cu µg/l	Pb µg/l	Ni µg/l	K µg/l	Se µg/l	Ag µg/l	Na µg/l	Th µg/l	Vn µg/l	Zn µg/l	TDS µg/l	Chloride mg/l	Sulfate mg/l	Alkalinity mg/l
8/23/2011	20.75		7	1400	17.8	ND	ND	151.0	ND	ND	151000	ND	ND	ND	ND	ND	ND	ND	ND	137000	ND	ND	ND	1080	243	183	205
10/21/2011	23.99		6.7	2300	16.3	ND	ND	102.0	ND	ND	578000	19	ND	12	12.8	17.7	2530	ND	ND	110000	ND	15.1	ND	2230	189	1160	552
1/31/2012	21.2	29.76	7	1600	16.3	ND	ND	174.0	ND	ND	151000	ND	ND	ND	ND	ND	ND	ND	ND	143000	ND	ND	ND	1050	293	210	176
5/4/2012	17.75		6.9	1580	17.3	ND	ND	172	ND	ND	152000	ND	ND	ND	ND	ND	ND	ND	ND	150000	ND	ND	ND	1070	280	205	192
8/17/2012	22.26		6.9	1420	16.5	ND	ND	152.0	ND	ND	162000	ND	ND	ND	ND	ND	ND	ND	ND	137000	ND	ND	ND	1090	296	206	193
10/19/2012	21.82		6.9	1620	15.4	ND	ND	188.0	ND	ND	152000	ND	ND	ND	ND	ND	766	ND	ND	166000	ND	ND	ND	968	310	215	188
2/8/2013	22.28		7.1	1650	16.1	ND	ND	185	ND	ND	162000	ND	ND	12	7.4	ND	952	ND	ND	147000	ND	ND	ND	1090	319	217	178
5/17/2013	19.55		7.1	1620	18.2	ND	175	171	ND	ND	166000	ND	ND	ND	1.3	ND	ND	1.6	ND	149000	ND	ND	ND	1100	285	203	183
8/16/2013	16.72		7.1	1620	18.9	ND	234	170	ND	ND	152000	ND	ND	ND	ND	ND	ND	ND	ND	146000	ND	ND	ND	1130	305	198	223
/18/2013	19.41		7	1700	15.9	ND	169	180	ND	ND	161000	ND	ND	ND	ND	ND	ND	ND	ND	154000	ND	ND	ND	1070	293	198	201
2/21/2014	20.21		7	1780	16.7	ND	235	169	ND	ND	161000	ND	ND	ND	ND	ND	ND	ND	ND	150000	ND	ND	ND	1080	301	195	200
8/22/2014	22.03		7	1550	18.4	ND	166	153	ND	ND	153000	ND	ND	ND	ND	ND	ND	1.3	ND	149000	ND	ND	ND	1120	295	191	214
2/13/2015			7.1	1800	15	ND	161	152	ND	ND	134000	ND	ND	ND	ND	ND	ND	ND	ND	139000	ND	ND	ND	922	278	183	210
8/21/2015	20.37		7.1	1500	16.8	ND	3.6	133	ND	ND	138000	ND	ND	ND	ND	ND	ND	ND	ND	131000	ND	ND	ND	915	231	169	222
Industrial Landfill Well 1				(ILGW-1)																							
12/17/2004	11.6		7	800	15	ND	ND	106	ND	ND	128000	ND	ND	ND	ND	ND	647	ND	ND	27800	ND	ND	ND	449	8.2	54	339
1/21/2005	10.51		7	850	13	ND	ND	104	ND	ND	127000	5.5	ND	ND	ND	ND	ND	ND	ND	27600	ND	ND	ND	491	7.88	52	345
2/11/2005	10.35	26.9	6.9	800	13	ND	15	128	ND	ND	132000	9.7	ND	ND	ND	ND	650	19	ND	27000	ND	ND	ND	1410	8.1	87	334
2/25/2005	9.87	27	6.7	800	13	ND	ND	111	ND	ND	134000	5.6	ND	ND	ND	ND	656	ND	ND	30900	ND	ND	ND	534	11.6	53	350
3/29/2005	9.28	26.99	6.0	800	13	ND	ND	113	ND	ND	121000	5.7	ND	ND	ND	ND	761	ND	ND	28900	ND	ND	ND	480	9.9	63	336
6/24/2005	9.2	26.98	6.8	746	16	ND	ND	111	ND	ND	146000	ND	ND	ND	ND	ND	504	ND	ND	31700	ND	ND	ND	478	9.5	45	340
8/15/2005	11.91	26.95	6.7	746	18	ND	ND	104	ND	ND	128000	ND	ND	ND	ND	ND	624	ND	ND	28700	ND	ND	ND	481	8.5	51	358
11/15/2005	11.15		6.9	776	16	ND	ND	106	ND	ND	140000	7.1	ND	ND	ND		821	ND	ND	29000	ND	ND	ND	528	34.4	48	307
2/10/2006	16.16		6.7	459	13	ND	ND	95.7	ND	ND	124000	9	ND	ND	ND	ND	ND	ND	ND	27600	ND	ND	ND	459	8.9	48	442
5/26/2006	9.35		6.9	706	15	ND	ND	107	ND	ND	125000	6.2	ND	ND	ND	ND	519	ND	ND	27800	ND	ND	81.3	248	7.1	52	326
8/18/2006	15.77		6.8	892	17	ND	ND	104	ND	ND	125000		ND	ND	ND	ND	652	ND	ND	27400	ND	ND	ND	502	33.7	40	20
11/17/2006	18.44		6.8	779	16	ND	1.0	101	ND	ND	117000	3.9	0.8	2.2	1.5	6.4	512	ND	ND	31900	ND	3.8	9.2	598	9.3	55	352
2/9/2007	13.39		6.8	609	14	ND	ND	181	ND	ND	190000	31	ND	ND	11.9	15.3	1940.0	ND	ND	31000	ND	19.9	ND	434	10.3	49	350
6/1/2007	6.24		6.4	1437	16	ND	ND	99.6	ND	ND	130000	ND	ND	ND	ND	ND	532	ND	ND	28500	ND	ND	ND	447	11.1	45	322
8/10/2007	14.71		6.9	894	19	ND	ND	131.0	ND	ND	115000	7.7	ND	ND	6.8	5.4	1570	ND	ND	29000	ND	ND	ND	500	26.9	46.8	320
11/30/2007	12.06	26.96	6.9	853	15.9	ND	ND	98.8	ND	ND	123000	ND	ND	ND	ND	ND	624	ND	ND	26800	ND	ND	ND	485	12.9	46.6	351
3/1/2008	7.89	26.98	6.9	967	11.2	ND	ND	105	ND	ND	133000	ND	ND	ND	ND		536	ND		28200				514	1.0	1.0	318
5/23/2008	10.95		6.9	788	15	ND	ND	110	ND	ND	138000	ND	ND	ND	ND	ND	636	ND	ND	27900	ND	ND	ND	529	16.1	41.1	324
8/15/2009	7.22		6.7	1020	20.5	ND	ND	94	ND	ND	132000	ND	ND	ND	ND	ND	ND	ND	ND	26900	ND	ND	ND	537	16.2	46.7	328
11/24/2008	9.1		6.8	943	14.2	ND	ND	102	ND	ND	147000	ND	ND	ND	ND	ND	ND	ND	ND	27500	ND	ND	ND	512	17.8	42.1	331
2/27/2009	9.34	26.99	6.8	730	10	ND	ND	106	ND	ND	133000	ND	ND	ND	ND	ND	ND	ND	ND	28400	ND	ND	ND	554	19.7	49.1	340
5/22/2009	8.7	27	6.8	725	17.6	ND	ND	105	ND	ND	128000	ND	ND	ND	ND	ND	ND	ND	ND	29200	ND	ND	ND	556	18.1	45.0	323
8/21/2009	12.06	26.96	6.7	800	17.5	ND	ND	113	ND	ND	146000	ND	ND	ND	ND	ND	ND	ND	ND	31300	ND	ND	ND	617	17.4	46.5	329
11/20/2009	8.34	26.99	6.8	875	14.9	ND	ND	108	ND	ND	152000	ND	ND	ND	ND	ND	ND	ND	ND	29700	ND	ND	ND	564	28.8	76.2	320

Sample Date	Static Level ft	Total Depth ft	pH SU	Conductivity µmho/cm	Temp ° C	Sb µg/l	As µg/l	Ba µg/l	Be µg/l	Cd µg/l	Ca µg/l	Cr µg/l	Co µg/l	Cu µg/l	Pb µg/l	Ni µg/l	K µg/l	Se µg/l	Ag µg/l	Na µg/l	Th µg/l	Vn µg/l	Zn µg/l	TDS µg/l	Chloride mg/l	Sulfate mg/l	Alkalinity mg/l
2/8/2013	23.78		6.7	2900	15.7	ND	ND	119	ND	ND	588000	28	5.4	25	23	29.2	3020	ND	n	107000	ND	22.3	59.4	2210	179	1140	478
5/17/2013	20.88		6.6	2800	18.5	ND	36	63.7	ND	ND	616000	9.1	ND	ND	5.2	11.9	1320	ND	ND	114000	ND	ND	ND	2400	183	1070	509
8/16/2013	17.78		6.7	3000	21.1	ND	21	48	ND	ND	570000	ND	ND	ND	2.4	ND	ND	ND	ND	121000	ND	ND	ND	2420	187	1000	684
10/18/2013	21.25		6.7	2900	16.6	ND	30	48.6	ND	ND	578000	ND	ND	ND	ND	7.2	526	ND	ND	124000	ND	ND	ND	2180	171	936	687
2/21/2014	21.52		6.6	2900	16.6	ND	36	48	ND	0.6	563000	ND	ND	ND	ND	6.4	771	ND	ND	127000	ND	ND	ND	2460	175	977	693
8/22/2014	23.5		6.6	2750	20.3	ND	23	46.6	ND	ND	549000	ND	ND	ND	ND	6.4	507	ND	ND	120000	ND	ND	ND	2600	183	1020	647
2/13/2015			6.7	3000	14.9	ND	22	46.8	ND	ND	503000	ND	ND	ND	ND	5.9	619	ND	ND	120000	ND	ND	ND	2320	177	969	643
8/21/2015	21.81		6.7	2800	17.5	ND	1.4	43.1	ND	ND	532000	ND	ND	ND	ND	5.3	523	ND	ND	116000	ND	ND	ND	2420	175	1000	567
ew Kiln Dust Landfill Well 3				(NLGW-3																							
12/17/2004	19.64		7.4	900	17	ND	ND	86.9	ND	ND	68100	ND	ND	ND	ND	ND	741	ND	ND	112000	ND	ND	ND	524	21.6	102	293
1/21/2005	18.05		7.3	900	16	ND	ND	105	ND	ND	71100	5.5	ND	ND	5.6	7.7	1170	ND	ND	109000	ND	ND	ND	496	22	97.9	298
2/11/2005	18.66	29.78	7.4	850	18	ND	78	104	ND	ND	72000	ND	ND	11	ND	ND'	699	ND	ND	101000	ND	ND	ND	576	29.4	106	292
2/25/2005	18.62	29.76	7.3	850	17	ND	ND	89	ND	ND	71500	ND	ND	ND	ND	ND	569	ND	ND	119000	ND	ND	ND	14	27.2	124	310
3/29/2005	18.2		7.2	800	17	ND	ND	86.9	ND	ND	67300	ND	ND	ND	ND	5.21	773	ND	ND	121000	ND	ND	ND	544	29.7	134	302
6/24/2005	15.92	29.75	7.2	831	18	ND	ND	74.1	ND	ND	75300	ND	ND	ND	ND	ND	512	ND	ND	120000	ND	ND	ND	570	21	102	294
8/15/2005	19.77	29.76	7.1	832	19						66300						1080	ND		110000				540	28.6	107	287
11/15/2005	22.8		7.3	870	18	ND	ND	80	ND	ND	71200	ND	ND	ND	ND	ND	558	ND	ND	113000	ND	ND	ND	2470	28.6	123	336
2/10/2006	25.26		6.9	829	16	ND	ND	72.1	ND	ND	63400	ND	ND	ND	ND	ND	524	ND	ND	104000	ND	ND	ND	541	28.5	113	389
5/26/2006	22.18		7.2	811	18	ND	ND	84.8	ND	ND	66300	ND	ND	ND	ND	ND	ND	ND	ND	108000	ND	ND	ND	544	24.8	105	276
8/18/2006	25.02		7.2	978	19	ND	ND	87.1	ND	ND	65500	ND	ND	ND	ND	ND	712	ND	ND	106000	ND	ND	ND	604	52.4	85.5	307
11/17/2006	27.99		7.3	855	17	0.16	2.0	87.1	ND	ND	68400	2.6	1.1	4.3	3.2	6.3	546	3.0	ND	115000	ND	6.5	14.1	608	20.4	99.2	304
2/9/2007	22.36		7.2	647	15	ND	ND	92.4	ND	ND	69600	10	ND	ND	ND	6.3	926	ND	ND	112000	ND	ND	ND	509	22.6	98.6	300
6/1/2007	17.62		6.6	272	19	ND	ND	73.9	ND	ND	66800	ND	ND	ND	ND	5.6	ND	ND	ND	104000	ND	ND	ND	521	22.6	99.6	298
8/10/2007	20.81		7.2	876	19	ND	ND	98.9	ND	ND	64300	5.2	ND	ND	ND	6.8	1350	ND	ND	95400	ND	ND	ND	505	21.2	96.6	285
11/30/2007	19.25	29.76	7.4	859	17.7	ND	ND	71.0	ND	ND	62600	ND	ND	ND	ND	ND	ND	ND	ND	97500	ND	ND	ND	512	22.0	92.5	301
3/1/2008	20.22	29.77	7.3	995	17.7	ND	ND	79.6	ND	ND	68200	ND	ND	ND	ND		ND	ND		104000				532	16.7	43.6	279
5/23/2008	20.26		7.2	802	19.1	ND	ND	77.8	ND	ND	70400	ND	ND	ND	ND	ND	ND	ND	ND	112000	ND	ND	ND	532	29.6	97.1	284
8/15/2008	17.92		7	974	17.1	ND	ND	72.6	ND	ND	69400	ND	ND	ND	ND	ND	ND	ND	ND	99600	ND	ND	ND	514	23.4	111	287
11/24/2008	20		7.2	902	17.8	ND	ND	69.8	ND	ND	67700	ND	ND	11	ND	ND	ND	ND	ND	98600	ND	ND	ND	499	24.6	101	284
2/27/2009	19.68	29.76	7.4	720	16.3	ND	ND	75.4	ND	ND	62700	ND	ND	ND	ND	ND	ND	ND	ND	101000	ND	ND	ND	523	67.6	131	289
5/22/2009	18.0	29.80	7.2	800	18.5	ND	ND	77.5	ND	ND	61700	ND	ND	ND	ND	ND	ND	ND	ND	104000	ND	ND	ND	513	24.7	106	277
8/21/2009	18.5	29.77	7	775	18.5	ND	ND	84.4	ND	ND	74600	ND	ND	ND	ND	ND	ND	ND	ND	111000	ND	ND	ND	548	33	110	292
11/20/2009	19.9	29.78	7.3	950	17.8	ND	ND	83.9	ND	ND	81000	ND	ND	ND	ND	ND	ND	ND	ND	106000	ND	ND	ND	569	61.7	97.8	261
2/12/2010	16.6	29.76	7.4	1200	16.3	ND	ND	106.0	ND	ND	91300	ND	ND	17.5	ND	ND	ND	ND	ND	120000	ND	ND	ND	657	128	111	253
5/25/2010	18.57		7.2	1200	18.4	ND	ND	124	ND	ND	114000	ND	ND	ND	ND	ND	ND	ND	ND	124000	ND	ND	ND	856	193	161	243
8/20/2010	18.89		7	1320	17.8	ND	ND	151	ND	ND	129000	ND	ND	ND	ND	ND	ND	ND	ND	137000	ND	ND	ND	923	216	154	216
10/22/2010	19.57		7.1	1450	17.1	ND	ND	151	ND	ND	129000	ND	ND	ND	ND	ND	619	ND	ND	139000	ND	ND	ND	913	247	173	205
2/18/2011	21.52		6.8	2500	16.6	ND	ND	101.0	ND	ND	600000	13	ND	14	ND	13.3	2270	ND	ND	116000	ND	ND	ND	2420	188	1120	543
4/29/2011	17.71		6.8	1350	17.2	ND	ND	158	ND	ND	134000	ND	ND	ND	ND	ND	ND	ND	ND	135000	ND	ND	63.2	1100	272	192	194

Sample Date	Static Level ft	Total Depth ft	pH SU	Conductivity µmho/cm	Temp ° C	Sb µg/l	As µg/l	Ba µg/l	Be µg/l	Cd µg/l	Ca µg/l	Cr µg/l	Co µg/l	Cu µg/l	Pb µg/l	Ni µg/l	K µg/l	Se µg/l	Ag µg/l	Na µg/l	Th µg/l	Vn µg/l	Zn µg/l	TDS µg/l	Chloride mg/l	Sulfate mg/l	Alkalinity mg/l
2/21/2014	11.57		6.4	4500	13.6	ND	210	85.2	ND	ND	687000	5	ND	ND	ND	25	989	ND	ND	214000	ND	ND	ND	3200	1010	471	372
8/22/2014	13.87		6.5	4000	18.5	ND	131	64.8	ND	ND	551000	ND	ND	ND	ND	10	613	ND	ND	170000	ND	ND	ND	725	977	373	373
2/13/2015			6.5	4150	13.4	ND	137	74.4	ND	ND	552000	ND	ND	ND	ND	7.0	797	ND	ND	196000	ND	ND	ND	2650	982	441	340
8/21/2015	10.51		6.6	3580	17.4	ND	3.3	69.5	ND	ND	555000	ND	ND	ND	ND	12.5	717	ND	ND	161000	ND	ND	ND	3630	820	399	345
New Kiln Dust Landfill Well 2				(NLGW-2)																							
12/17/2004	21.17		6.9	3100	17	ND	ND	80	ND	ND	589000	12	ND	ND	ND	10.8	2050	ND	ND	105000	15	ND	ND	2240	245	992	533
1/21/2005	19.44		7	3350	15	ND	ND	80	ND	ND	621000	7.2	ND	ND	19.2	9.8	2260	93	ND	105000	15.7	ND	ND	2520	253	946	494
2/11/2005	20.09	33.9	6.8	3000	17	ND	118	107	ND	ND	622000	11	ND	15	ND	12.5	2390	ND	ND	97900	ND	ND	ND	2140	257	1050	523
2/25/2005	19.98	33.9	6.6	3100	17	ND	ND	78.6	ND	ND	628000	5.4	ND	ND	12.3	8.4	1670	ND	ND	118000	14.4	ND	ND	2390	295	944	503
3/29/2005	19.44	33.88	6.7	2600	18	ND	46	63.2	ND	ND	568000	ND	ND	ND	ND	7	1489	ND	ND	110000	ND	ND	ND	2440	342	1190	502
6/24/2005	16.98	33.88	6.7	2970	18	ND	ND	58.2	ND	ND	667000	ND	ND	ND	ND	ND	1200	ND	ND	120000	ND	ND	ND	2460	229	859	538
8/19/2005	26.15	33.88	6.6	2890	19	ND	ND	96.9	ND	ND	583000	16	ND	14	ND	15.5	2660	ND	ND	110000	ND	10	ND	2460	232	882	621
11/15/2005	24.63		6.8	1056	17	ND	ND	97.1	ND	ND	666000	17	ND	13	10	17.8	2760	ND	ND	108000	ND	16.5	ND	2370	278	1060	606
2/10/2006	22.6		6.7	2880	16	ND	ND	99.3	ND	ND	551000	17	ND	14	ND	13.7	2960	ND	ND	102000	ND	ND	ND	2450	270	960	969
5/26/2006	24.04		6.8	2770	18	ND	ND	73.9	ND	ND	573000	12	ND	11	10.7	8.7	2000	ND	ND	105000	ND	ND	60.3	2170	236	853	530
8/18/2006	26.95		6.8	2990	19	ND	ND	147	1.1	ND	540000	34	6.9	28	16.8	26.2	4670	ND	ND	106000	ND	22.6	92.3	2460	216	645	710
11/17/2006	28.07		6.8	2970	17	0.2	4.3	148	1.5	1.6	570000	24	12	38	25	40.8	4140	3.9	ND	110000	0.18	39.7	85.8	2740	227	847	600
2/9/2007	23.99		6.7	2500	16	ND	ND	196	1.7	ND	671000	48	7.5	39	29	41	5700	ND	ND	117000	ND	52.4	106	2290	280	950	550
6/1/2007	19.22		6.4	7250	18	ND	ND	73.8	ND	ND	623000	9.4	ND	ND	ND	10.6	1480	ND	ND	116000	ND	ND	ND	2360	225	860	603
8/10/2007	22.34		6.7	2600	19	ND	ND	451	1.4	ND	438000	36.0	8.8	29.4	21.9	36.2	5950	ND	ND	82700	ND	39.2	116.0	2000	198	784	335
11/30/2007	25.32	33.88	6.7	2930	16.9	ND	ND	244	ND	ND	496000	7.3	6.0	ND	ND	13.9	2060	ND	ND	96500	ND	ND	ND	2060	237	813	490
3/1/2008	21.76	33.86	6.8	3620	17.3	ND	ND	241	ND	ND	549000	20	7.7	18	12.7		3070	ND		107000	ND			2590	311	1050	454
5/23/2008	21.79		6.8	2550	17.9	ND	ND	183	ND	ND	590000	50	6.8	13	8.6	56.4	3090	ND	ND	108000	ND	17	58.9	2440	257	831	508
8/15/2008	19.79		6.6	3260	19.4	ND	ND	114	ND	ND	596000	ND	ND	ND	ND	10.6	1460	ND	ND	109000	ND	ND	ND	2480	218	888	662
11/24/2008	21.65		6.6	2970	17.9	ND	ND	85.6	ND	ND	568000	ND	ND	ND	ND	6.4	953	ND	ND	106000	ND	ND	ND	1980	216	760	677
2/27/2009	22.76	33.87	6.9	2400	12.3	ND	ND	94.2	ND	ND	534000	ND	ND	ND	ND	10	984	ND	ND	116000	ND	ND	ND	2380	309	916	648
5/22/2009	15.3	33.85	6.8	2500	18.4	ND	ND	90.1	ND	ND	530000	ND	ND	ND	ND	7.7	1390	ND	ND	116000	ND	ND	ND	2330	223	879	551
11/20/2009	17.74	33.89	6.7	2800	17.9	ND	ND	78.4	ND	ND	627000	ND	ND	ND	7.0	7.7	1050	ND	ND	116000	ND	ND	ND	2420	201	903	551
2/12/2010	17.98	33.86	6.9	2700	15.4	ND	ND	69	ND	ND	575000	ND	ND	ND	ND	7.0	878	ND	ND	111000	ND	ND	ND	2160	205	1010	554
5/25/2010	17.91		6.7	2500	18.1	ND	ND	69.1	ND	ND	496000	ND	ND	ND	ND	6.1	908	ND	ND	113000	ND	ND	ND	2380	191	845	686
8/20/2010	20.61		6.7	2500	18.7	ND	ND	96.9	ND	ND	600000	13	ND	16	9.8	14.9	1660	ND	ND	118000	ND	ND	ND	2490	200	963	596
10/22/2010	21.27		6.7	2500	17.9	ND	ND	82.9	ND	ND	538000	7.6	ND	16	5.8	9.4	1820	ND	ND	121000	ND	ND	ND	2490	201	1100	484
2/18/2011	21.52		6.8	2500	16.6	ND	ND	101	ND	ND	600000	13	ND	14	ND	13.3	2270	ND	ND	116000	ND	ND	ND	2420	188	1120	543
4/29/2011	14.13		6.7	2200	17.5	ND	ND	64.6	ND	ND	526000	6.6	ND	ND	ND	6.2	1450	ND	ND	113000	ND	ND	ND	2480	186	958	669
8/23/2011	22.45		6.6	2450	18.5	ND	ND	70.7	ND	ND	1220000	8.6	ND	ND	7.4	12	1550	ND	ND	114000	ND	ND	ND	2540	162	862	646
10/21/2011	23.99		6.7	2300	16.3	ND	ND	102	ND	ND	578000	19	ND	12	12.8	17.7	2530	ND	ND	110000	ND	15.1	ND	2230	189	1160	552
1/31/2012	22.71	33.89	7.7	2500	16.5	ND	ND	61.9	ND	ND	557000	6	ND	ND	7.1	9.6	1200	ND	n	114000	ND	ND	ND	2470	185	1100	540
5/4/2012	18.47		6.6	2500	17.5	ND	ND	69.9	ND	ND	581000	10	ND	ND	8	10.5	1650	ND	n	123000	ND	ND	ND	2340	174	875	703
8/17/2012	24.34		6.6	2350	17.2	ND	ND	50.3	ND	ND	589000	ND	ND	10	6.3	7.4	890	ND	ND	114000	ND	ND	ND	2480	179		581
10/19/2012	23.46		6.7	2300	15.5	ND	ND	90.8	ND	ND	565000	16	ND	12	10	15.6	2570	ND	ND	131000	ND	10.5	ND	2200	192	1110	499

Sample Date	Static Level ft	Total Depth ft	pH SU	Conductivity µmho/cm	Temp °C	Sb µg/l	As µg/l	Ba µg/l	Be µg/l	Cd µg/l	Ca µg/l	Cr µg/l	Co µg/l	Cu µg/l	Pb µg/l	Ni µg/l	K µg/l	Se µg/l	Ag µg/l	Na µg/l	Th µg/l	Vn µg/l	Zn µg/l	TDS µg/l	Chloride mg/l	Sulfate mg/l	Alkalinity mg/l
New Kiln Dust Landfill Well 1				(NLGW-1)																							
12/17/2004	11.71		6.6	2400	16	ND	ND	181	ND	ND	362000	9.2	ND	ND	ND	8.19	1860	ND	ND	106000	16.4	ND	ND	1340	390	165	421
1/21/2005	10.35		6.8	2700	13	ND	ND	253	ND	ND	382000	17	ND	ND	13.9	17.2	2860	ND	ND	99400	ND	14.0	ND	1590	377	148	478
2/11/2005	10.71	27.25	6.7	2500	14	ND	104	260	ND	ND	391000	15	ND	ND	ND	28.1	1800	ND	ND	103000	11.5	ND	ND	1740	469	171	413
2/25/2005	10.5	27.25	6.4	2400	14	ND	ND	227	ND	ND	389000	12	ND	ND	7.42	25.5	1930	ND	ND	107000	ND	ND	ND	1700	559	190	456
3/29/2005	10.34	27.26	6.6	2200	14	ND	30	216	ND	ND	382000	17	ND	ND	ND	22.4	2270	ND	ND	117000	ND	ND	ND	1610	541	206	473
6/24/2005	9.91	27.2	6.5	2320	16	ND	ND	179	ND	ND	405000	7.2	ND	ND	ND	10.3	1720	ND	ND	11300	ND	ND	ND	2340	407	144	433
8/15/2005	17.56	27.24	6.5	2490	17	ND	ND	296	ND	ND	450000	41	6.1	19	7.7	25.6	3550	ND	ND	104000	ND	22.7	ND	1840	467	150	427
11/18/2005	16.96		6.7	516	17	ND	ND	215	ND	ND	338000	16	ND	ND	5.7	16.1	2440	ND	ND	87600	ND	11.6	ND	1410	410	136	393
5/26/2006	15.87		6.6	1874	16	ND	ND	229	ND	ND	341000	19	5.6	10	8	26	3370	ND	ND	85100	ND	13.6	ND	1560	346	127	395
2/10/2006	17.36		6.7	2360	14	ND	ND	181	ND	ND	296000	10	ND	ND	ND	11	1660	ND	ND	77800	ND	ND	ND	1350	346	126	536
5/26/2006	15.87		6.6	1874	16	ND	ND	229	ND	ND	341000	19	5.6	10	8	26	3370	ND	ND	85100	ND	13.6	ND	1560	346	127	395
8/18/2006	19.56		6.6	2040	18	ND	ND	163	ND	ND	317000	9	ND	ND	ND	11	1600	ND	ND	85300	ND	ND	ND	1790	356	93.9	445
11/17/2006	20.65		6.6	1934	17	ND	3.0	181	ND	ND	307000	8	3	7.1	3	22	1760	3.6	ND	89400	ND	6.3	12.7	1460	294	112	432
2/9/2007	15.79		6.5	1472	15	ND	15	758	1.9	ND	625000	128	18	51	37	100	6340	ND	ND	79300	ND	57.9	129	1110	274	129	430
6/4/2007	9.85		6.2	7620	16	ND	ND	198	ND	ND	462000	8	ND	13	ND	18	1550	ND	ND	146000	ND	ND	ND	2890	659	219	395
8/10/2007	15.03		6.6	3700	19	ND	ND	184	ND	ND	572000	10	ND	10	7	14	1800	ND	ND	160000	ND	ND	ND	2900	792	249	410
11/30/2007	12.41	27.4	6.6	2910	17.5	ND	ND	137	ND	ND	421000	10.7	ND	22.0	ND	11.1	1290	ND	ND	131000	ND	ND	ND	1860	581	189	431
3/1/2008	11.03	27.24	6.6	3370	14.5	ND	ND	155	ND	ND	446000	21.2	ND	17.4	ND		1120	ND				ND	ND	2020	661	284	399
5/23/2008	12.13		6.6	2600	15.4	ND	ND	144	ND	ND	474000	19.4	ND	ND	ND	9.6	1500	ND	ND	155000	ND	ND	ND	3340	651	293	407
8/15/2008	11.18		6.4	3550	18.8	ND	ND	142	ND	ND	478000	8.4	ND	ND	5	7.0	1200	ND	ND	144000	ND	ND	ND	6420	600	358	411
11/24/2008	12.91		6.6	2970	16.5	ND	ND	107	ND	ND	475000	6.2	ND	ND	ND	ND	1120	ND	ND	137000	ND	ND	ND	1700	536	337	403
2/27/09	10.27	27.26	6.6	2580	12.6	ND	ND	118	ND	ND	498000	24	ND	ND	ND	11.2	1150	ND	ND	157000	ND	ND	ND	2440	754	445	422
5/22/2009	12.06	27.26	6.6	2900	15.3	ND	ND	117	ND	ND	481000	12	ND	ND	ND	10.1	1070	ND	ND	167000	ND	ND	ND	2830	600	423	398
8/21/2009	12.31	27.22	6.5	2500	16.5	ND	ND	97.2	ND	ND	465000	10.6	ND	ND	ND	8.2	1380	ND	ND	143000	ND	ND	ND	2910	549	394	403
11/20/2009	12.51	27.26	6.6	2700	16.6	ND	ND	104	ND	ND	473000	11	ND	ND	5.0	5.7	1090	ND	ND	136000	ND	ND	ND	2250	519	361	358
2/12/2010	11.12	27.26	6.7	3400	12.4	ND	ND	99.9	ND	ND	485000	10	ND	41	ND	6.8	1060	ND	ND	164000	ND	ND	ND	2070	681	475	368
5/25/2010	14.15		6.6	3100	14	ND	ND	95	ND	ND	539000	16.1	ND	ND	ND	5.1	947	ND	ND	162000	ND	ND	ND	2980	738	460	375
8/20/2010	14.34		6.6	2880	18	ND	ND	88.4	ND	ND	611000	ND	ND	ND	ND	ND	ND	ND	ND	168000	ND	ND	ND	3460	792	453	359
10/22/2010	14.86		6.6	2900	17.8	ND	ND	89	ND	ND	470000	16	ND	ND	ND	6	1420	ND	ND	155000	ND	ND	ND	2710	736	415	339
2/18/2011	11.62		6.6	2800	14.8	ND	ND	102	ND	ND	560000	14	ND	ND	ND	12	1200	ND	ND	159000	ND	ND	ND	2360	775	540	357
4/29/2011	9.7		6.4	2850	15	ND	ND	96.4	ND	ND	566000	6	ND	ND	ND	8	1280	ND	ND	176000	ND	ND	ND	2890	876	518	376
8/23/11	17.57		6.4	3000	17	ND	ND	82.5	ND	ND	1240000	9	ND	ND	5.7	8.5	867	ND	ND	175000	ND	ND	ND	3620	796	439	386
10/21/11	15.98		6.7	2700	15.5	ND	ND	76.6	ND	ND	551000	9	ND	ND	ND	9	787	ND	ND	159000	ND	ND	ND	2110	777	390	376
1/31/12	13.35	27.23	6.6	2750	14.7	ND	ND	108	ND	ND	477000	6.7	ND	ND	5.1	9	854	ND	ND	145000	ND	ND	ND	2350	678	367	332
5/4/2012	13.19		6.5	2900	15.5	ND	ND	94.7	ND	ND	555000	11	ND	ND	7	11	1050	ND	ND	183000	ND	ND	ND	2720	775	395	359
8/17/12	16.31		6.5	2900	16.2	ND	ND	69.7	ND	ND	298000	ND	ND	ND	ND	7.3	986	ND	ND	170000	ND	ND	ND	3000	973	428	360
10/19/12	15.65		6.6	2500	15.7	ND	ND	247	ND	ND	523000	121	5.2	22	9.5	35.3	3050	ND	ND	159000	ND	14.5	ND	2940	789	316	342
2/8/2013	16		6.4	2450	14.1	ND	ND	134	ND	ND	511000	19	ND	ND	ND	8	1440	ND	ND	134000	ND	ND	ND	2180	795	283	354
5/17/2013	10.1		6.6	3300	15.3	ND	117	130	ND	ND	607000	46	ND	ND	3	34	1060	ND	ND	156000	ND	ND	ND	3350	761	433	329
8/16/2013	7.45		6.6	3500	20.5	ND	158	143	ND	ND	498000	6	ND	ND	ND	5	842	ND	ND	168000	ND	ND	ND	3310	781	380	355
10/18/2013	10.43		6.5	4100	16.5	ND	141	98.8	ND	ND	631000	ND	ND	ND	ND	6	637	ND	ND	203000	ND	ND	ND	3460	952	492	360