Memorandum

MIAMI-DADE COUNTY

Date: August 19, 2015

To: Honorable Daniella Levine Cava
County Commissioner - District 8

From: Carlos A. Gimenez
Mayor

Subject: Notice of Environmental Contamination in Commission District 8

On March 3, 2009, the Board of County Commissioners adopted Resolution No. R-227-09 requiring that when environmental contamination is identified by the Department of Regulatory and Economic Resources Division of Environmental Resources Management (DERM), the Commissioner in whose District the environmental contamination is located shall be notified of such.

Pursuant to R-227-09, the attached correspondence was sent to the party responsible for site rehabilitation, the Parks, Recreation and Open Spaces Department (PROS), on August 3, 2015 due to documented soil contamination at Continental Park. Although groundwater has not been sampled, the Park is served by public water therefore, there is no threat to the drinking water supply. PROS must perform site rehabilitation action in order to bring the site into compliance with Chapter 24 of the Code of Miami-Dade County.

The summary of this case is noted below:

Subject	Environmental Contamination
Facility Name:	Continental Park
DERM File #:	HWR-830
Facility Address:	10100 SW 82 Ave. & 10001 SW 82 Ave, Florida in Miami-Dade County
Folio Number:	30-5003-000-1000 & 30-5003-000-1240
Description/Nature of Violation:	Environmental contamination requiring site rehabilitation action pursuant to Division 3, Contaminated Site Cleanups, Chapter 24, Code of Miami-Dade County, Florida.

Should you have any questions or require additional information, please contact Mr. Lee N. Hefty, Assistant Director, Division of Environmental Resources Management, Department of Regulatory and Economic Resources at (305) 372-6754 or by email at heftyl@miamidade.gov.

Attachment

c: Jack Osterholt, Deputy Mayor/Director, Department of Regulatory and Economic Resources
Lourdes M. Gomez, Deputy Director, Department of Regulatory and Economic Resources
Lee N. Hefty, Assistant Director, Division of Environmental Resources Management, Department of Regulatory and Economic Resources

Memorandum

MIAMI-DADE COUNTY

Date: August 3, 2015

To: George Navarrete
Deputy Director, PROS

From: Wilbur Mayorga, P.E., Chief
Environmental Monitoring and Restoration Division, ERM-RER

Subject: Contaminated Soils at the Continental Park (HWR-830) located at, near or in the vicinity of 10100 SW 82 Ave. & 10001 SW 82 Ave (Folio # 30-5003-000-1000 & Folio # 30-5003-000-1240)

On December 5, 2014 the Department of Regulatory and Economic Resources Division of Environmental Resources Management (DERM) inspected and obtained samples from the referenced park. The sampling was conducted pursuant to DERM's follow up effort, subsequent to the initial environmental screening evaluation of effort at all the accessible Miami-Dade County owned parks, to specifically evaluated soils at baseball fields. The initial composite sample collected from the baseball field at the park on December 5, 2014 indicated concentrations of arsenic above the soil screening criteria.

Between January 12 and May 15, 2015 DERM representatives conducted extended sampling throughout the park (baseball field and the grassy areas) and along right of ways in the vicinity of the park to delineate the extent of the arsenic contaminated soils and to determine consistency with localized background arsenic concentrations in the general vicinity of the park.

The sample results indicated the presence of arsenic contaminated soils within the upper two feet of soils at the baseball outfields, as well as west of the parking lot and adjacent to the tennis courts, as indicated in the attached Figures. The results of the background samples confirmed that the arsenic impacts documented at the park are not consistent with background concentrations for that locale.

Based on the above, DERM requires the implementation of a corrective action plan to address the contaminated soils documented at the park. DERM finds that source removal involving the excavation of a minimum of 12 inches of contaminated soils and replacing the excavated soils with a DERM approved liner and a minimum of 12 inches of clean fill is a feasible option for addressing the documented soil contamination.

DERM will work with PROS, in selecting an environmental consultant for the task of designing and implementing a corrective action appropriate for the Park. Therefore, please contact Julie Balogh of DERM's Airports & Contracts Section at (305) 372-6700 to request the use of the County's EDP contract for the required tasks.

Based on the above, within 120 days of receipt of this memo, a Corrective Action Plan (CAP) that addresses the above requirements shall be submitted to RER for review and approval. The CAP shall include an implementation timeline and a protocol for sampling the incoming fill material.

If you have any questions concerning the above please contact me via email at mayorw@miamidade.gov or via telephone at (305) 372-6700.

pc: Lee Hefty, DERM Director
Jorge Mora, PROS, jmora@miamidade.gov
Colin Henderson, PROS colinhe@miamidade.gov
Samir Elmir, FDOH-MDC, Samir.Elmir@flhealth.gov

TABLE 1 - METALS Continental Park - 10100 SW 82 Avenue

Parameter	Sampling Location	SB-1	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2	SB-3	SB-3	SB-3	SB-4	SB-4	SB-4	SB-5	SB
	Sample Depth	0-6"	6-24"	0-6"	6-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-1
	Bluecard			301647	301649	302285	302286	N/A	302433	302434	N/A	302249	N/A	N/A	302247	302
	Discrete/Composite	Composite	Composite	Composite	Composite	Discrete	Discrete	N/A	Discrete	Discrete	N/A	Discrete	N/A	N/A	Discrete	Disc
	Sample Date	4/19/2012	4/19/2012	12/5/2014	12/5/2014	1/20/2015	1/20/2015	N/A	1/27/2015	1/27/2015	N/A	1/13/2015	N/A	N/A	1/13/2015	1/13/
	Results Received Date	7/5/2012	7/5/2012	12/16/2014	12/16/2014	1/29/2015	1/29/2015	N/A	2/11/2015	2/3/2015	N/A	1/20/2015	N/A	N/A	1/20/2015	1/20/
Zinc		26.9	4.8	27.9	5.8	30	9	N/A	80	22	N/A	33	N/A	N/A	30.8	3.1 u
Cadmium		0.14	0.027 u	0.040 i	0.15 u D3	0.7	0.3 i	N/A	1.5	0.5 i	N/A	0.29	N/A	N/A	0.22	0.031 u
Lead		38.8	6.7	8.4	1.8	27	4.4	N/A	8.4	0.3 u	N/A	15.2	N/A	N/A	27.2	4.6
Nickel		1.2	1.1	0.77	1	1.6 i	1.2 i	N/A	1.0 i	1.2 i	N/A	0.75	N/A	N/A	0.62	0.7
Chromium		14.6	45	17	7.8	28.1	10.3	N/A	31.7	10	N/A	25.1	N/A	N/A	28.4 JM1 R1	4.
Copper		7.7	1.4	12.1	2.9	9	1.9	N/A	6.2	1.2 i	N/A	6.4	N/A	N/A	7.3	0.9
Arsenic		**29.7**	**10.3**	**71.2**	**34.2**	**14.8**	6.1	N/A	**72.1**	**22.4**	N/A	**31.5**	N/A	N/A	**31.7 JM1**	6.5
Aluminum		971	517	647	1200	1320	639	N/A	1810	1150	N/A	431	N/A	N/A	389 JM1	26
Barium		5.9	5.2	10.1	6	7.3	5.6	N/A	12.5	14.9	N/A	10	N/A	N/A	10.7	6.
Iron		945	277	2,130	1,180	1,830	437	N/A	8,950	2,790	N/A	1,410	N/A	N/A	1950 JM1	22
Manganese		30.5	5.6	76.7	19.2	40.6	11	N/A	84.5	24.2	N/A	55.6	N/A	N/A	79.5	6.
Silver		0.14 u	0.14 u	0.25 i	0.15 u	2	2.7	N/A	1.4 i	2.4 i	N/A	0.17 U	N/A	N/A	0.19 u JM1	0.1
Selenium		0.43 u	0.41 u	0.49 u	0.44 u	0.8 u	0.8 u	N/A	0.8 u	0.8 u	N/A	0.52 u	N/A	N/A	0.58 u	0.46 u
Antimony		n/a	n/a	0.67 i	0.44 u	1 u	1 u	N/A	1 u	1 u	N/A	0.53 i	N/A	N/A	0.58 u	0.46 u
Mercury		0.054	0.0098 u	0.13	0.042	0.3 u	0.3 u	N/A	0.3 u	0.3 u	N/A	0.27	N/A	N/A	0.22	0.0

Results in mg/kg / u- undetected at the Lab MDL / i-conc. between lab MDL and PQL / D3- Sample diluted due to presence of non-target analyte / JM1-Estimated / NA- Note

TABLE 1 - METALS Continental Park - 10100 SW 82 Avenue

Parameter	Sampling Location	SB-7	SB-7	SB-8	SB-8	SB-8	SB-9	SB-9	SB-9	SB-10	SB-10	SB-10	SB-11	SB-11	SB-11	SB
	Sample Depth	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-
	Bluecard	N/A	N/A	302243	302244	N/A	302251	302252	N/A	302240	302241	302242	302253	N/A	N/A	302
	Discrete/Composite	N/A	N/A	Discrete	Discrete	N/A	Discrete	Discrete	N/A	Discrete	Discrete	Discrete	Discrete	N/A	N/A	Disc
	Sample Date	N/A	N/A	1/13/2015	1/13/2015	N/A	1/13/2015	1/13/2015	N/A	1/13/2015	1/13/2015	1/13/2015	1/13/2015	N/A	N/A	1/27/
	Results Received Date	N/A	N/A	1/20/2015	1/20/2015	N/A	1/20/2015	1/20/2015	N/A	1/20/2015	1/20/2015	1/20/2015	1/20/2015	N/A	N/A	2/11/
Zinc		N/A	N/A	25.2	8.7	N/A	30.5	2.9 u d3	N/A	46	43.8	19.2 d3	21.8 D3	N/A	N/A	9
Cadmium		N/A	N/A	0.21	0.038 i	N/A	0.32	0.0259 uJ(IS)	N/A	0.32	0.19	0.15 u d3	0.27 I D3	N/A	N/A	0.1
Lead		N/A	N/A	11.6	10.7	N/A	12.7	2.7 I d3	N/A	24.4	127	20.4 d3	21.6 D3	N/A	N/A	3.
Nickel		N/A	N/A	0.57	0.49	N/A	0.78	0.72 u d3	N/A	0.67	1.5	0.83 I d3	0.83 U D3	N/A	N/A	0.5
Chromium		N/A	N/A	27.4	3.5	N/A	32.2	2.9	N/A	24.2	8.4	8	19.6	N/A	N/A	9.
Copper		N/A	N/A	7.4	3.7	N/A	12.2	1.1	N/A	8.9	7	3.4	17.7	N/A	N/A	0.7
Arsenic		N/A	N/A	**64.8**	**24.4**	N/A	**88.7**	**15 d3**	N/A	**71.6**	**37.4**	**20.6 d3**	**74 D3**	N/A	N/A	3.
Aluminum		N/A	N/A	1390	386	N/A	607	284	N/A	561	726	374	431	N/A	N/A	45
Barium		N/A	N/A	17.9	7.7	N/A	11.3	5.1	N/A	10.3	7.1	8.9	11.5	N/A	N/A	29

TABLE 1 - METALS Continental Park - 10100 SW 82 Avenue

Parameter	Sampling Location	SB-15	SB-15	SB-15	SB-16	SB-16	SB-16	SB-17	SB-17	SB--17	SB-18	SB-18	SB-18	SB-19	SB-19	SB
	Sample Depth	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-
	Bluecard	302431	302423	N/A	302238	302239	N/A	302166	302167	302168	302236	302237	N/A	302423	302424	302
	Discrete/Composite	Discrete	Discrete	N/A	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	N/A	Discrete	Discrete	Disc
	Sample Date	1/27/2015	1/27/2015	N/A	1/12/2015	1/12/2015	N/A	1/12/2015	1/12/2015	1/12/2015	1/12/2015	1/12/2015	N/A	1/23/2015	1/23/2015	1/23/
	Results Received Date	2/11/2015	2/11/2015	N/A	1/20/2015	1/20/2015	N/A	1/20/2015	1/20/2015	1/20/2015	1/20/2015	1/20/2015	N/A	2/11/2015	2/11/2015	2/11/
Zinc		35	6	N/A	38.6	7.1	N/A	32.2	33.8	7.8	36.9	14.3 d3	N/A	31	3 i	4
Cadmium		2.2	0.6	N/A	0.28	0.085	N/A	0.13	0.12	0.032 i	0.27	0.15 u d3	N/A	1.5	0.7 i	0.3
Lead		13.8	3.7	N/A	16.3	4.5	N/A	22.7	22.6	6.6	12.7	5.0 d3	N/A	1.5 i	0.3 u	0.3
Nickel		1.9 i	0.9 I	N/A	0.82	0.91	N/A	0.72	0.71	0.79	0.88	0.88 I d3	N/A	1.5 i	1.1 i	1.6
Chromium		27.8	5.4	N/A	26.6	11.6	N/A	9.1	7.4	6.9	30.9	10.9	N/A	54.4	5.9	8.
Copper		6.8	4.2	N/A	18.6	4.8	N/A	13.7	12.5	4.8	13.4	6.7	N/A	8	0.7 i	0.8
Arsenic		**116**	**25.1**	N/A	**74.5**	**53.7**	N/A	6.4	5.1	4	**87.5**	**39 d3**	N/A	**83.6**	**44.6**	**17**
Aluminum		6900	1420	N/A	724	1830	N/A	2080	1850	2160	828	544	N/A	2360	1900	26
Barium		17.8	9.7	N/A	10.9	8.9	N/A	14.3	13.9	9.2	11.2	8.8	N/A	10.7	4.6	6.
Iron		9,250	2,370	N/A	1530	1,610	N/A	3,270	3,030	2,210	1,670	691	N/A	2,270	1,120	1,6
Manganese		78	38.8	N/A	131	25.6	N/A	20.6	13.1	7.3	73.5	34.6	N/A	108.5	27.7	24
Silver		0.5 u	2	N/A	0.17 u	0.15 u	N/A	0.14 U	0.14 u	0.15 u	0.18 u	0.15 u	N/A	1.0 i	1.1 i	1.2
Selenium		0.8 u	0.8 u	N/A	0.50 u	0.45 u	N/A	0.42 U	0.42 u	0.45 u	0.53 u	0.46 u J(IS)	N/A	0.8 u	0.8 u	0.8
Antimony		1 u	1 u	N/A	0.59 i	0.45 u	N/A	0.42 U	0.43 i	0.45 u	0.68 i	0.46 u	N/A	1 i	1 u	1
Mercury		0.3 u	0.3 u	N/A	0.16	0.067	N/A	0.031	0.026	0.0099	0.096	0.037	N/A	0.3 u	0.3 u	0.3

Results in mg/kg / u- undetected at the Lab MDL / i-conc. between lab MDL and PQL / D3- Sample diluted due to presence of non-target analyte / JM1-Estimated / NA- Note

TABLE 1 - METALS Continental Park - 10100 SW 82 Avenue

Parameter	Sampling Location	SB-21	SB-22	SB-22	SB-22	SB-23	SB-23	SB-23	SB-24	SB-24	SB-24	SB-25	SB-25	SB-25	SB-26	SB
	Sample Depth	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-1
	Bluecard	N/A	302421	302422	N/A	302256	302257	302258	302232	302233	N/A	302169	N/A	N/A	302170	302
	Discrete/Composite	N/A	Discrete	Discrete	N/A	Discrete	Discrete	Discrete	Discrete	Discrete	N/A	Discrete	N/A	N/A	Discrete	Disc
	Sample Date	N/A	1/23/2015	1/23/2015	N/A	1/23/2015	1/23/2015	1/23/2015	1/12/2015	1/12/2015	N/A	1/12/2015	N/A	N/A	1/12/2015	1/12/
	Results Received Date	N/A	2/11/2015	2/11/2015	N/A	2/3/2015	2/11/2015	2/11/2015	1/20/2015	1/20/2015	N/A	1/20/2015	N/A	N/A	1/20/2015	1/20/
Zinc		N/A	18	8	N/A	41	6 I c11	3 i	49.7	17.7	N/A	58.2	N/A	N/A	92.8	42
Cadmium		N/A	1	0.8	N/A	1	0.8 c11	0.6 i	0.25	0.12	N/A	0.13	N/A	N/A	0.36	0.3
Lead		N/A	6.9	7.8	N/A	5.4	2.8 c11	2.1 i	12.5	6.2	N/A	116	N/A	N/A	24.7	33
Nickel		N/A	1.0 i	1.1 i	N/A	1.6 i	2.0 I c11	1.4 i	1	1	N/A	1.5	N/A	N/A	1.7	1.
Chromium		N/A	15.2	8	N/A	20.6	15 c11	11.2	25.3	16.3 JM1	N/A	8.5	N/A	N/A	39.9	30
Copper		N/A	5	3.6	N/A	8.6	1.9 I c11	0.8 i	15.8	7.2	N/A	14.4	N/A	N/A	21.9	38
Arsenic		N/A	**51.3**	**46.7**	N/A	**50.1**	**51.2 c11**	**44.4**	**85.6**	**56.2 JM1**	N/A	**15**	N/A	N/A	**102**	7
Aluminum		N/A	1050	1690	N/A	2120	4190 c11	3380	997	1510	N/A	1510	N/A	N/A	3930	27
Barium		N/A	6.8	7.7	N/A	10.3	8.1 c11	5.8	11.5	8.6	N/A	22.9	N/A	N/A	24.9	18

TABLE 1 - METALS Continental Park - 10100 SW 82 Avenue

Parameter															
	Sampling Location	SB-28	SB-28	SB-29	SB-29	SB-29	SB-30	SB-30	SB-30	SB-31	SB-31	SB-31	SB-32	SB-32	SB-32	SB
	Sample Depth	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-
	Bluecard	302235	N/A	302295	302254	302255	302259	302419	302420	302277	302278	302279	302293	302294	N/A	302
	Discrete/Composite	Discrete	N/A	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	N/A	Disc
	Sample Date	1/12/2015	N/A	1/23/2015	1/23/2015	1/23/2015	1/23/2015	1/23/2015	1/23/2015	1/20/2015	1/20/2015	1/20/2015	1/23/2015	1/23/2015	N/A	1/30/
	Results Received Date	1/20/2015	N/A	2/11/2015	2/11/2015	2/11/2015	2/3/2015	2/11/2015	2/11/2015	1/29/2015	1/29/2015	1/29/2015	2/11/2015	2/11/2015	N/A	2/11/
Zinc		23.7	N/A	21	3 i	3 i	29	3 i	3 i	33	5	2 i	33	5	N/A	4
Cadmium		0.19 i	N/A	1	0.4	0.5	0.9	0.4	0.3 i	0.6	0.2 i	0.1 u	0.6	0.2 i	N/A	0.1
Lead		10.1	N/A	2.9	0.3 u	0.3 u	13.8	0.3 u	0.3 u	12.2	1.1 i	0.8 i	21.6	0.9 i	N/A	14
Nickel		2.1	N/A	1.3 i	0.6 i	1.4 i	1.2 i	1.6 i	1.8 i	1.4 i	1.7 i	2.5	1.2 i	1.4 i	N/A	1.2
Chromium		15.5	N/A	10.4	4.1	6	30.5	7.3	8.4	22.1	8.1	8.8	49.1	8.3	N/A	10
Copper		11.5	N/A	5	1.4	0.6 i	7.4	0.7 i	0.5 i	7.2	0.8 i	0.3 u	8.6	1.6	N/A	4.
Arsenic		**15.8**	N/A	**51.9**	**17.8**	**30.9**	37	**21.6**	**18.3**	**23.2**	9.7	3.9	**20.2**	9.8	N/A	8.
Aluminum		1380	N/A	1490	563	2040	1200	2440	2300	1720	2400	3860	879	890	N/A	75
Barium		11.2	N/A	10.3	9	7.7	9.2	6.5	5.9	15.1	6.5	4.8	10	7.1	N/A	6.
Iron		1,350	N/A	3,400	740	1,260	3,640	1,920	2,300	7,120	3,530	2,780	1,900	692	N/A	65
Manganese		34	N/A	53.5	17.3	9.2	64.5	10.2	12.1	77.3	22.6	6.3	62	13	N/A	79
Silver		0.16 u	N/A	1.1 i	2.3	1.4 i	1.1 i	1.2 i	1.1 i	1.6 i	1.3 i	0.6 i	1.4 i	1.3 i	N/A	2.0
Selenium		0.47 u	N/A	0.8 u	0.8 u	0.8 u	0.8 u	0.8 u	0.8 u	0.8 u	0.8 u	0.8 u	0.8 u	0.8 u	N/A	0.8
Antimony		0.47 u	N/A	1 u	1 u	1 u	1 u	1 u	1 u	1 u	1 u	1 u	1 u	1 u	N/A	1
Mercury		0.23	N/A	0.3 u	0.3 u	0.3 u	0.3 u	0.3 u	0.3 u	0.3 u	0.3 u	0.3 u	0.3 u	0.3 u	N/A	0.3

Results in mg/kg / u- undetected at the Lab MDL / i-conc. between lab MDL and PQL / D3- Sample diluted due to presence of non-target analyte / JM1-Estimated / NA- Note

TABLE 1 - METALS Continental Park - 10100 SW 82 Avenue

Parameter																
	Sampling Location	SB-35	SB-35	SB-35	SB-36	SB-36	SB-36	SB-37	SB-37	SB-37	SB-38	SB-38	SB-38	SB-39	SB-39	SB
	Sample Depth	0-6"	6-12'	12-24"	0-6"	6-12'	12-24"	0-6"	6-12'	12-24"	0-6"	6-12'	12-24"	0-6"	6-12'	12-
	Bluecard	302527	302526	302525	302443	302444	302445	302524	302523	NA	302440	302441	302442	302438	302439	N
	Discrete/Composite	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	NA	Discrete	Discrete	Discrete	Discrete	Discrete	N
	Sample Date	2/2/2015	2/2/2015	2/2/2015	1/30/2015	1/30/2015	1/30/2015	2/2/2015	2/2/2015	NA	1/30/2015	1/30/2015	1/30/2015	1/30/2015	1/30/2015	N
	Results Received Date	2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015	NA	2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015	N
Zinc		39	13	17	30	16	12	42	35	NA	23	12	12	35	16	N
Cadmium		0.3 i	0.1 u	0.4	0.1 u	0.1 u	0.1 u	0.2 i	0.2 i	NA	0.1 u	0.1 u	0.1 u	0.1 u	0.1 u	N
Lead		19.4	4.8	19.6	24.1	18.5	38.7 j	24.4	31.9	NA	24.5	13.2	8.7	26	15.7	N
Nickel		1.2 i	0.7 i	1.5 i	1.7 i	1.3 i	1.9	1.3 i	1.4 i	NA	1.6 i	1.3 i	1.4 i	1.7 i	1.3 i	N
Chromium		11.4	4	7.3	9.6	6.9	5.1	21.3	11.7	NA	12.2	8.7	7.4	21.8	10.4	N
Copper		7.5	2.4	4.2	6.1	2.7	3	5.4	5.5	NA	4	2.1	1.8	7.9	3.6	N
Arsenic		3	1.3	11	**22.2**	**19.4**	**20.8**	3.4	4.7	NA	**22.6**	**20.2**	**13.3**	**15.2**	**13.9**	N

TABLE 1 - METALS Continental Park - 10100 SW 82 Avenue

Parameter	Sampling Location	SB-41	SB-42	SB-42	SB-42	SB-43	SB-43	SB-43	SB-44	SB-44	SB-44	SB-45	SB-45	SB-45	SB-46	SB
	Sample Depth	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-1
	Bluecard	302827	302835	302836	NA	302833	302834	NA	302537	302538	302539	302540	302541	NA	302533	302
	Discrete/Composite	Discrete	Discrete	Discrete	NA	Discrete	Discrete	NA	Discrete	Discrete	Discrete	Discrete	Discrete	NA	Discrete	Disc
	Sample Date	2/19/2015	2/19/2015	2/19/2015	NA	2/19/2015	2/19/2015	NA	2/3/2015	2/3/2015	2/3/2015	2/3/2015	2/3/2015	NA	2/3/2015	2/3/2
	Results Received Date	2/25/2015	2/25/2015	2/25/2015	NA	2/25/2015	2/25/2015	NA	2/11/2015	2/11/2015	2/11/2015	2/11/2015	2/11/2015	NA	2/11/2015	2/11/
Zinc		7	69	34	NA	22	7	NA	79	32	19	21	18	NA	34	3
Cadmium		0.2 i	0.6	0.4	NA	0.8	0.3 i	NA	0.4	0.2 i	0.1 u	0.8	0.8	NA	0.6	0.
Lead		2.9	22	14.5	NA	18.1	5.7	NA	28.2	12.6	6	14	9	NA	39.3	34
Nickel		2.2	1.4 i	1.7 i	NA	0.9 i	1.0 i	NA	1.9 i	1.9 i	2.6	1.4 i	2.5	NA	1.8 i	2.
Chromium		9.3	14	10.6	NA	12.9	4.7	NA	14.2	10.8	12.3	18.2	18.3	NA	16.5	1
Copper		1.7	9.2	7.4	NA	7.8	3.4	NA	7.9	3	1.5	6.6	5.2	NA	6.6	6.
Arsenic		9	**17.1**	**16.4**	NA	6.2	5.8	NA	7.3	4.8	2.9	**36.3**	**39.5**	NA	**27.2**	32
Aluminum		761	1390	1700	NA	810	1090	NA	1940	2320	3260	1250	963	NA	2260	24
Barium		5.2	9	8.4	NA	6.1	2.9	NA	7.4	6.4	5.2	6.6	6.2	NA	7.2	11
Iron		372	1,290	1,470	NA	959	831	NA	2,980	1,630	2,000	921	678	NA	2,760	2,1
Manganese		7.1	26	18	NA	19.4	6.2	NA	48.5	19.9	12.1	22.4	20	NA	37.6	39
Silver		0.9 i	0.8 i	0.9 i	NA	0.5 u	0.5 u	NA	1.5 i	1.6 i	0.9 i	2.2	2.7	NA	1.0 i	1.2
Selenium		0.8 u	0.8 u	0.8 u	NA	0.8 u	0.8 u	NA	0.8 u	0.8 u	0.8 u	0.8 u	0.8 u	NA	0.8 u	0.8
Antimony		1 u	1 u	1 u	NA	1 u	1 u	NA	1 u	1 u	1 u	1 u	1 u	NA	1 u	1
Mercury		0.3 u	0.3 u	0.3 u	NA	0.3 u	0.3 u	NA	0.3 u	0.3 u	0.3 u	0.3 u	0.3 u	NA	0.3 u	0.3

Results in mg/kg / u- undetected at the Lab MDL / i-conc. between lab MDL and PQL / D3- Sample diluted due to presence of non-target analyte / JM1-Estimated / NA- Note

TABLE 1 - METALS Continental Park - 10100 SW 82 Avenue

Parameter	Sampling Location	SB-48	SB-48	SB-49	SB-49	SB-49	SB-50	SB-50	SB-50	ROW 1	ROW 1	ROW 1	ROW 2	ROW 2	ROW 2	ROV
	Sample Depth	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-6"	6-12"	12-24"	0-
	Bluecard	302536	NA	302522	302521	302531	302826	302828	302829	303990	303991	NA	303992	303993	NA	303
	Discrete/Composite	Discrete	NA	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	NA	Discrete	Discrete	NA	Disc
	Sample Date	2/3/2015	NA	2/2/2015	2/2/2015	2/2/2015	2/19/2015	2/19/2015	2/19/2015	5/11/2015	5/11/2015	NA	5/11/2015	5/11/2015	NA	5/11/
	Results Received Date	2/11/2015	NA	2/11/2015	2/11/2015	2/2/2015	2/25/2015	2/25/2015	2/25/2015	6/25/2015	6/25/2015	NA	6/25/2015	6/25/2015	NA	6/25/
Zinc		11	NA	5	7	23	26	7	3 i	64.4	15.9	NA	68.4	28	NA	35
Cadmium		0.2 i	NA	0.1 u	0.1 u	0.1 u	0.9	0.4	0.2 i	0.4	0.2 i	NA	0.4	0.2 i	NA	0.2
Lead		14.3	NA	2.8	10.3	61.9	24.9	8.1	0.6 i	161	50	NA	304	65.4	NA	83
Nickel		1.3 i	NA	0.8 i	1.0 i	2.1	1.7 i	1.3 i	1.3 i	2.2	1.3 i	NA	2.8	1.5 i	NA	2.
Chromium		5.6	NA	15.1	12	9.6	15.9	6.3	5.8	11.9	3.9	NA	10.5	6.3	NA	7.
Copper		1.4	NA	0.7 i	1.3	5.4	9.3	2	0.9 i	8.9	3.5	NA	14.1	3.6	NA	8.
Arsenic		4.4	NA	2.7	3.8	4	**40.7**	**20.6**	7.7	3.2	1.7	NA	3	2.7	NA	1.
Aluminum		1700	NA	6060	4560	2990	2200	874	605	1520	673	NA	767	956	NA	19

Continental Park Soil Arsenic Concentration Map (0 to 6 Inches BLS)

Legend

- Soil Boring Location (0-6" BLS)
- Arsenic Concentration Exceeds Park Criteria (0-6" BLS)

2014 Digital Color Orthophotograph

0 100 200 400 600 800 Feet

N W E S

Continental Park Soil Arsenic Concentration Map (6-12 Inches BLS)

Legend

- Soil Boring Location (6-12" BLS)
- Arsenic Concentration Exceeds Park Criteria (6-12" BLS)

2014 Digital Color Orthophotograph

Continental Park Soil Arsenic Concentration Map (12-24 Inches BLS)