Environmental Resources Management

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La Central Manager LLC Residences – Site D Brownfield Site Cleanup Site Code C203086 Monthly Progress Report #4 Prepared By: Eugene Gabay/Brice Lynch

Period Covered: 9/1/2017 - 9/29/2017

This monthly progress report is being submitted pursuant to Section 4.4.2 of the March 2017 Remedial Investigation Report/Remedial Action Work Plan RIR/RAWP and includes the following elements:

- Activities relative to the Site during the previous reporting period and those anticipated for the next reporting period, including a quantitative presentation of work performed (i.e., tons of material exported and imported, etc.);
- Description of approved activity modifications, including changes of work scope and/or schedule;
- Sampling results received following internal data review and validation, as applicable; and,
- An update of the remedial schedule including the percentage of project completion, unresolved delays encountered or anticipated that may affect the future schedule, and efforts made to mitigate such delays.

Work Efforts Completed this Month

- August 29, ERM collected on-Site native soil reuse samples in accordance with Section 4.3 of the RIR/RAWP. The analytical data, photos of the on-Site native soil stockpile, a figure identifying where it originated from on-Site and where it will be reused as backfill were reviewed by the NYSDEC and the on-Site native soil for reuse was approved on September 20.
- September 1 through 8, Urban Foundation/Engineering, LLC (Urban) continued to excavate for the grade beam and pile caps in the cellar area (WC-1, WC-2 and WC-3) and drive sheet piles in the elevator pit in area WC-2.
- September 8, 11 through 15 and 18 Urban loaded soil out from WC-1 through WC-4. Soil from WC-1 through WC-4 initially was sent to Impact Reuse and Recovery Center in Lyndhurst, New Jersey where it was screened in order to remove the historic building materials such as brick and concrete. Afterwards the soil was sent to Former New Jersey Zinc-West Plant in Palmerton, Pennsylvania.
- September 11th ERM collected Bottom Documentation Samples (BDS-22 through BDS-26) in accordance with Section 5.2.1 of the RIR/RAWP. The results of the BDS samples will be included in the Final Engineering



Report (FER). ERM still has to collect BDS-27 and BDS-28 as well as the Sidewall Documentation Samples (SDS-1 through SDS-5).

- September 12, Monadnock and Urban began to dewater the elevator pit in order to install structural rebar and pour concrete. On September 25th Monadnock and Urban turned off the dewatering system because they completed the rebar installation and poured the elevator pit concrete slab and vertical walls.
- September 13 through September 20[,] Urban formed grade beams and pile caps and installed rebar in areas WC-1 through WC-4.
- September 21, Urban poured concrete in grade beams, pile caps and rat slab in areas WC-1 through WC-3.
- September 22, began to install waterproofing barrier (soil vapor barrier) in the cellar area (WC-1 through WC-3). Urban installed the approved waterproofing material (Preprufe 300R) in accordance with Section 7.1 of the RIR/RAWP. Urban continued to install the Preprufe 300R throughout the end of the month and the installation will continue into the month of October.
- September 25 through September 29, Urban continued to install rebar in grade beams and pile caps in the cellar area (WC-1 through WC-3) in order to pour the remaining concrete and rat slab.

Estimated Quantities through September, 2017

- Soil was excavated and sent off-site from areas WC-1 through WC-4. 36 trucks were sent off-site to Former New Jersey Zinc-West Plant via Impact Reuse and Recovery Center. Each truck holds approximately 16 cubic yards for an estimated total of 576 cubic yards of soil was sent off-site in September.
- Including the month of July which had approximately 256 cubic yards and August which had approximately 1,824 cubic yards of soil sent off-site, the current total at the end of September of soil sent off-site is 2,656 cubic yards.
- Four trucks of soil totaling 64 cubic yards from the SB-24 delineation area were sent off-site to Bayshore Soil Management in August.

Sampling Results

• August 29, ERM collected on-Site native soil reuse samples in accordance with Section 4.3 of the RIR/RAWP. The results of the on-Site native soil reuse samples are attached in Table 1.

Changes in Work Scope

• There has been no change to the scope of work.

Schedule Update

• Urban will continue to conduct Site grading, excavation, soil loadout, soil vapor/waterproofing installation and concrete slab pouring activities within the Building D Site until mid-October.

Anticipated Work Efforts for October 2017

- Continue grading activities and the installation of the waterproofing/soil vapor barrier.
- Continue pouring final concrete cellar slab (WC-1, WC-2 and WC-3) and slab on grade (WC-4)
- ERM will collect bottom and sidewall documentation soil samples once Urban has reached final grade.

				SP-WC-01-	SP-WC-01-	SP-WC-01-
Sample ID:		Track 4 Backfill/	SP-WC-01-082917	DISCRETE1-	DISCRETE2-	DISCRETE3-
·		Soil Reuse SCOs		082917	082917	082917
Date Sampled:			8/29/2017	8/29/2017	8/29/2017	8/29/2017
VOCs						
1,1,1-Trichloroethane	ug/kg	680	-	ND (0.65)	ND (0.64)	ND (0.59)
1,1-Dichloroethane	ug/kg	270	-	ND (0.29)	ND (0.28)	ND (0.26)
1,1-Dichloroethene	ug/kg	330	-	ND (0.79)	ND (0.78)	ND (0.71)
1,2,4-Trimethylbenzene	ug/kg	3600	-	ND (1.1)	ND (1.1)	ND (1.0)
1,3,5-Trimethylbenzene	ug/kg	8400	-	ND (1.1)	ND (1.1)	ND (1.0)
1,2-Dichlorobenzene	ug/kg	1100	-	ND (0.57)	ND (0.57)	ND (0.52)
1,2-Dichloroethane	ug/kg	20	-	ND (0.20)	ND (0.20)	ND (0.18)
1,3-Dichlorobenzene	ug/kg	2400	-	ND (0.32)	ND (0.32)	ND (0.29)
1,4-Dichlorobenzene	ug/kg	1800	-	ND (0.53)	ND (0.53)	ND (0.48)
2-Butanone (MEK)	ug/kg	120	-	ND (5.8)	ND (5.8)	ND (5.3)
Acetone	ug/kg	50	-	ND (7.1)	ND (7.1)	ND (6.5)
Benzene	ug/kg	60	-	ND (0.12)	ND (0.12)	ND (0.11)
n-Butylbenzene	ug/kg	12000	-	ND (0.41)	ND (0.40)	ND (0.37)
Carbon tetrachloride	ug/kg	760	-	ND (0.72)	ND (0.71)	ND (0.66)
Chlorobenzene	ug/kg	1100	-	ND (0.32)	ND (0.32)	ND (0.29)
Chloroform	ug/kg	370	-	0.39 J	0.39 J	0.56 J
cis-1,2-Dichloroethene	ug/kg	250	-	ND (0.45)	ND (0.44)	ND (0.41)
Ethylbenzene	ug/kg	1000	-	ND (0.32)	ND (0.32)	ND (0.29)
Methylene chloride	ug/kg	50	-	ND (2.8)	ND (2.8)	ND (2.5)
Methyl Tert Butyl Ether	ug/kg	930	-	ND (0.48) ^a	ND (0.47) ^a	ND (0.43) ^a
n-Propylbenzene	ug/kg	3900	-	ND (0.25)	ND (0.25)	ND (0.23)
sec-Butylbenzene	ug/kg	11000	-	ND (0.26)	ND (0.26)	ND (0.23)
tert-Butylbenzene	ug/kg	5900	-	ND (0.49)	ND (0.49)	ND (0.45)
Tetrachloroethene	ug/kg	1300	-	ND (0.71)	ND (0.70)	ND (0.64)
Toluene	ug/kg	700	-	ND (0.61)	ND (0.60)	ND (0.55)
trans-1,2-Dichloroethene	ug/kg	190	-	ND (0.65)	ND (0.64)	ND (0.59)
Trichloroethene	ug/kg	470	-	ND (0.61)	ND (0.60)	ND (0.55)
Vinyl chloride	ug/kg	20	-	ND (0.85)	ND (0.84)	ND (0.77)
o-Xylene	ug/kg	1600	-	ND (0.28)	ND (0.28)	ND (0.25)
m,p-Xylene	ug/kg	1600	-	ND (0.61)	ND (0.60)	ND (0.55)
Xylene (total)	ug/kg	1600	-	ND (0.28)	ND (0.28)	ND (0.25)
1,1,2,2-Tetrachloroethane	ug/kg	-	-	ND (0.28)	ND (0.28)	ND (0.26)
1,1,2-Trichloroethane	ug/kg	-	-	ND (0.47)	ND (0.46)	ND (0.42)
1,2,3-Trichlorobenzene	ug/kg	-	-	ND (1.1)	ND (1.1)	ND (1.0)
1,2,4-Trichlorobenzene	ug/kg	-	-	ND (1.1)	ND (1.1)	ND (1.0)
1,2-Dibromo-3-chloropropane	ug/kg	-	-	ND (0.75)	ND (0.74)	ND (0.68)
1,2-Dibromoethane	ug/kg	-	-	ND (0.27)	ND (0.27)	ND (0.25)
1,2-Dichloropropane	ug/kg	-	-	ND (0.44)	ND (0.44)	ND (0.40)
2-Hexanone	ug/kg	-	-	ND (3.1)	ND (3.1)	ND (2.8)
4-Methyl-2-pentanone(MIBK)	ug/kg	-	-	ND (2.0)	ND (2.0)	ND (1.8)
Bromochloromethane	ug/kg	-	-	ND (0.48)	ND (0.48)	ND (0.44)
Bromodichloromethane	ug/kg	-	-	ND (0.27)	ND (0.27)	ND (0.25)
Bromoform	ug/kg	-	-	ND (0.35)	ND (0.34)	ND (0.31)
Bromomethane	ug/kg	-	-	ND (0.78)	ND (0.77)	ND (0.71)
Carbon disulfide	ug/kg	-	-	ND (0.68)	ND (0.67)	ND (0.62)
Chloroethane	ug/kg	-	-	ND (1.0)	ND (0.99)	ND (0.91)
Chloromethane	ug/kg	-	-	ND (1.1)	ND (1.1)	ND (0.99)
cis-1,3-Dichloropropene	ug/kg	-	-	ND (0.43)	ND (0.42)	ND (0.39)
Cyclohexane	ug/kg	-	-	ND (0.38)	ND (0.38)	ND (0.35)
Dibromochloromethane	ug/kg	-	-	ND (0.42)	ND (0.42)	ND (0.38)
Dichlorodifluoromethane	ug/kg	-	-	ND (0.68)	ND (0.42)	ND (0.61)
Freon 113	ug/kg ug/kg	-	-	ND (0.75)	ND (0.74)	ND (0.68)
Isopropylbenzene	ug/kg ug/kg	-	-	ND (0.28)	ND (0.27)	ND (0.08) ND (0.25)
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				SP-WC-01-	SP-WC-01-	SP-WC-01-
Sample ID:		Track 4 Backfill/	SP-WC-01-082917	DISCRETE1-	DISCRETE2-	DISCRETE3-
		Soil Reuse SCOs		082917	082917	082917
Date Sampled:	-		8/29/2017	8/29/2017	8/29/2017	8/29/2017
Methyl Acetate	ug/kg	-	-	ND (2.8)	ND (2.8)	ND (2.6)
Methylcyclohexane	ug/kg	-	-	ND (0.61)	ND (0.60)	ND (0.55)
Styrene	ug/kg	-	-	ND (0.55)	ND (0.55)	ND (0.50)
trans-1,3-Dichloropropene	ug/kg	-	-	ND (0.26)	ND (0.26)	ND (0.24)
Trichlorofluoromethane	ug/kg	-	-	ND (0.53)	ND (0.53)	ND (0.48)
SVOCs	0 0			, ,	. ,	
2-Methylphenol	ug/kg	330	ND (24)	-	-	-
3&4-Methylphenol	ug/kg	330	ND (31)	-	-	-
Acenaphthene	ug/kg	98000	24.4 J	-	-	-
Acenaphthylene	ug/kg	100000	33.9 J	-	-	-
Anthracene	ug/kg	100000	84.7	-	_	-
Benzo(a)anthracene	ug/kg	10000	397	-	_	-
Benzo(a)pyrene	ug/kg ug/kg	1000	329	-	-	-
Benzo(b)fluoranthene	ug/kg ug/kg	1000	299	-	-	-
Benzo(g,h,i)perylene		10000	299	-	-	-
	ug/kg	1700				-
Benzo(k)fluoranthene	ug/kg		101	-	-	-
Chrysene	ug/kg	1000	466	-	-	-
Dibenzo(a,h)anthracene	ug/kg	330	55	-	-	-
Dibenzofuran	ug/kg	59000	ND (15)	-	-	-
Fluoranthene	ug/kg	100000	518	-	-	-
Fluorene	ug/kg	100000	28.7 J	-	-	-
Hexachlorobenzene	ug/kg	1200	ND (9.5)	-	-	-
Indeno(1,2,3-cd)pyrene	ug/kg	500	176	-	-	-
Naphthalene	ug/kg	12000	31.7 J	-	-	-
Phenanthrene	ug/kg	100000	380	-	-	-
Phenol	ug/kg	330	ND (20)	-	-	-
Pyrene	ug/kg	100000	826	-	-	-
1,4-Dioxane	ug/kg	100	ND (25)	-	-	-
2-Methylnaphthalene	ug/kg	-	15.0 J	-	-	-
1,1'-Biphenyl	ug/kg	-	ND (5.2)	-	-	-
1,2,4,5-Tetrachlorobenzene	ug/kg	-	ND (9.6)	-	-	-
2,3,4,6-Tetrachlorophenol	ug/kg	-	ND (25)	-	-	-
2,4,5-Trichlorophenol	ug/kg	-	ND (28)	-	-	-
2,4,6-Trichlorophenol	ug/kg	-	ND (22)	-	-	-
2,4-Dichlorophenol	ug/kg	-	ND (32)	-	-	-
2,4-Dimethylphenol	ug/kg	-	ND (67)	-	-	-
2,4-Dinitrophenol	ug/kg	-	ND (140)	-	-	-
2,4-Dinitrotoluene	ug/kg	-	ND (12)	-	-	-
2,6-Dinitrotoluene	ug/kg	-	ND (19)	-	-	-
2-Chloronaphthalene	ug/kg	-	ND (9.0)	-	-	-
2-Chlorophenol	ug/kg	-	ND (19)	-	-	-
2-Nitroaniline	ug/kg	-	ND (8.9)	-	-	-
2-Nitrophenol	ug/kg	_	ND (25)	-	-	-
3,3'-Dichlorobenzidine	ug/kg	-	ND (31)	-	-	-
3-Nitroaniline	ug/kg	-	ND (9.4)	-	-	-
4,6-Dinitro-o-cresol	ug/kg	-	ND (40)	-	-	-
4-Bromophenyl phenyl ether	ug/kg ug/kg	-	ND (40)	-	-	-
4-Chloro-3-methyl phenol		-		-		
	ug/kg		ND (23)		-	-
4-Chloroaniline	ug/kg	-	ND (14)	-	-	-
4-Chlorophenyl phenyl ether	ug/kg	-	ND (12)	-	-	-
4-Nitroaniline	ug/kg	-	ND (9.8)	-	-	-
4-Nitrophenol	ug/kg	-	ND (100)	-	-	-
Acetophenone	ug/kg	-	15.1 J	-	-	-
Atrazine	ug/kg	-	ND (16)	-	-	-

				SP-WC-01-	SP-WC-01-	SP-WC-01-
Sample ID:		Track 4 Backfill/	SP-WC-01-082917	DISCRETE1-	DISCRETE2-	DISCRETE3-
		Soil Reuse SCOs		082917	082917	082917
Date Sampled:	-	Soli Reuse SCOS	8/29/2017	8/29/2017	8/29/2017	8/29/2017
Benzaldehyde	ug/kg	-	38.6 J	0/23/2017		0/23/2017
bis(2-Chloroethoxy)methane	ug/kg ug/kg	-	ND (8.1)	-		-
bis(2-Chloroethyl)ether		-	ND (3.1) ND (16)	-	-	-
bis(2-Chloroisopropyl)ether	ug/kg ug/kg	-	ND (10)	-		-
bis(2-Ethylhexyl)phthalate	ug/kg	-	ND (14)	-	-	-
Butyl benzyl phthalate	ug/kg ug/kg	-	ND (8.8) ND (9.2)	-	-	-
Caprolactam	ug/kg ug/kg	-	ND (9.2) ND (15)	-		-
Carbazole	ug/kg ug/kg	-	ND (13)	-	-	-
Diethyl phthalate	ug/kg ug/kg	-	ND (5.5) ND (8.0)	-		-
Dimethyl phthalate		-	ND (8.0) ND (6.7)	-		-
Di-n-butyl phthalate	ug/kg	-	ND (6.1)	-	-	-
	ug/kg				-	
Di-n-octyl phthalate Hexachlorobutadiene	ug/kg ug/kg	-	ND (9.4) ND (15)	-	-	-
		-			-	-
Hexachlorocyclopentadiene Hexachloroethane	ug/kg	-	ND (15) ND (19)	-	-	-
	ug/kg				-	-
Isophorone Nitrobenzene	ug/kg	-	ND (8.1)	-	-	
	ug/kg		ND (15)	-	-	-
N-Nitroso-di-n-propylamine N-Nitrosodiphenylamine	ug/kg	-	ND (11) ND (14)	-	-	-
	ug/kg	-	ND (14)	-	-	-
Pesticides	1	2000				
2,4,5-TP (Silvex)	ug/kg	3800	ND (3.1)	-	-	-
4,4'-DDD	ug/kg	13000	3.5	-	-	-
4,4'-DDE	ug/kg	8900	10	-	-	-
4,4'-DDT	ug/kg	7900	47.9	-	-	-
Aldrin	ug/kg	97	ND (0.61)	-	-	-
alpha-BHC	ug/kg	20	ND (0.60)	-	-	-
alpha-Chlordane	ug/kg	2900	5.1 ^b	-	-	-
beta-BHC	ug/kg	90	ND (0.67)	-	-	-
delta-BHC	ug/kg	250	ND (0.71)	-	-	-
Dieldrin	ug/kg	100	5.2	-	-	-
Endosulfan-I	ug/kg	24000	ND (0.42)	-	-	-
Endosulfan-II	ug/kg	24000	ND (0.46)	-	-	-
Endosulfan sulfate	ug/kg	24000	ND (0.58)	-	-	-
Endrin	ug/kg	60	ND (0.57)	-	-	-
gamma-BHC (Lindane)	ug/kg	100	ND (0.54)	-	-	-
Heptachlor	ug/kg	380	ND (0.64)	-	-	-
Pentachlorophenol	ug/kg	800	ND (35)	-	-	-
2,4,5-T	ug/kg	-	ND (1.7)	-	-	-
2,4-D	ug/kg	-	ND (13)	-	-	-
Endrin aldehyde	ug/kg	-	ND (0.42)	-	-	-
Endrin ketone	ug/kg	-	ND (0.53)	-	-	-
gamma-Chlordane	ug/kg	-	4	-	-	-
Heptachlor epoxide	ug/kg	-	ND (0.52)	-	-	-
Methoxychlor	ug/kg	-	ND (0.59)	-	-	-
Toxaphene	ug/kg	-	ND (17)	-	-	-
PCBs						
Aroclor 1016	ug/kg	1000	ND (15)	-	-	-
Aroclor 1221	ug/kg	1000	ND (15)	-	-	-
Aroclor 1232	ug/kg	1000	ND (9.9)	-	-	-
Aroclor 1242	ug/kg	1000	ND (5.9)	-	-	-
Aroclor 1248	ug/kg	1000	ND (22)	-	-	-
Aroclor 1254	ug/kg	1000	ND (9.1)	-	-	-
Aroclor 1260	ug/kg	1000	ND (12)	-	-	-
	1					

				SP-WC-01-	SP-WC-01-	SP-WC-01-
		Tool (Dool (W)		DISCRETE1-	DISCRETE2-	DISCRETE3-
Sample ID:		I rack 4 Backfill/	SP-WC-01-082917			
		Soil Reuse SCOs		082917	082917	082917
Date Sampled:			8/29/2017	8/29/2017	8/29/2017	8/29/2017
Aroclor 1268	ug/kg	1000	ND (5.5)	-	-	-
Aroclor 1262	ug/kg	1000	ND (2.8)	-	-	-
Total PCB's	ug/kg	1000	ND	-	-	-
Metals						
Arsenic	mg/kg	16	2.8	-	-	-
Barium	mg/kg	400	116	-	-	-
Beryllium	mg/kg	47	0.39	-	-	-
Cadmium	mg/kg	4.3	<0.57	-	-	-
Chromium, Hexavalent	mg/kg	19	0.69	-	-	-
Chromium	mg/kg	180	23.7	-	-	-
Copper	mg/kg	270	19	-	-	-
Cyanide, Total	mg/kg	27	<0.56	-	-	-
Lead	mg/kg	400	127	-	-	-
Manganese	mg/kg	2000	299	-	-	-
Mercury	mg/kg	0.73	0.17	-	-	-
Nickel	mg/kg	130	15.9	-	-	-
Selenium	mg/kg	4	<2.3	-	-	-
Silver	mg/kg	8.3	<0.57	-	-	-
Zinc	mg/kg	2480	121	-	-	-
Aluminum	mg/kg	-	11100	-	-	-
Antimony	mg/kg	-	<2.3	-	-	-
Calcium	mg/kg	-	19100	-	-	-
Cobalt	mg/kg	-	7.7	-	-	-
Iron	mg/kg	-	17600	-	-	-
Magnesium	mg/kg	-	10800	-	-	-
Potassium	mg/kg	-	1340	-	-	-
Sodium	mg/kg	-	<1100	-	-	-
Thallium	mg/kg	-	<1.1	-	-	-
Vanadium	mg/kg	-	30.1	-	-	-
General Chemistry						
Redox Potential Vs H2	mv	-	375	-	-	-
Solids, Percent	%	-	86.4	86.4	87.4	85.4
рН	su	-	7.81	-	-	-
Footnotes:						
Leç	gend: Hit	Exceed				

* Results were compared to Table 15 of the March 2017 RIR/RAWP. It should be noted, the columns in Table 15 are reversed. The column listed as Track 1 in the Table are in actuality the Track 4 Backfill/Soil Reuse Soil Cleanup Objectives.