Stantec Consulting Services Inc.
61 Commercial Street, Suite 100
Rochester NY 14614-1009
Tel: (585) 475-1440
Fax: (585) 272-1814

June 10, 2014
File: 190500751

Todd Caffoe, P.E
New York State Department of Environmental Conservation
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, NY 14414

Reference: **Brownfield Cleanup Program**
Monthly Progress Report #15
Site #C828184
Former Carriage Factory
33 Litchfield Street
Rochester, Monroe County, New York

Dear Todd,

On behalf of Carriage Factory Special Needs Apartments, LP (CFSNA), Stantec Consulting Services Inc. (Stantec) has prepared this Monthly Progress Report #15 for the Brownfield Cleanup Program (BCP) at the Former Carriage Factory located at 33 Litchfield Street in the City of Rochester, Monroe County, New York (Site). This report covers activities that took place during the month of May 2014.

1. Actions During The Previous Month

- *Construction and Remediation-related Activities*:
  - On May 1, a site meeting was conducted with NYSDEC project manager Todd Caffoe.
  - On May 1 and 2, performed the injection of sodium lactate in onsite monitoring well B108MW and offsite monitoring well RW-6 (the most impacted well identified in prior sampling rounds) as part of the groundwater remediation program (injection began on April 21 as reported in last month's progress report). Injection in one additional onsite well (RW-4) could not be completed until the adjacent excavation is backfilled. See item No. 5 below.
  - On May 9, the exterior portion of the middle group of groundwater remediation injection pipes was extended approximately ten feet to the southwest from the south building wall to locate the pipe surface terminations within a planting bed adjacent to the building as proposed. The planter area was covered with mirafi fabric and backfilled with clean fill generated from onsite excavations which was sampled on April 28, 2014, and approved for onsite reuse by the Department on May 8.

Reference: **Brownfield Cleanup Program**
Monthly Progress Report #15
Site #C828184
Former Carriage Factory
33 Litchfield Street, Rochester, NY

- During the period May 12 through May 14 excavations were made for the foundation of the generator/trash storage out-building, and for installation of an adjacent drop inlet box and associated storm drainage piping. Additionally, the area confined by the out-building to the south, the grass slope to the west, the planter to the north, and the sign wall to the east, was excavated to box-grade. Much of the material removed from these excavations was gray-stained and had a petroleum odor. Readings taken with a photo-ionization detector (PID) ranged from 5 to 51 parts per million (ppm). This material was added to the existing onsite stockpile of contaminated soil.
- On May 13, 724.39 tons of soil was transported offsite to Mill Seat Landfill in Bergen, NY under waste profile 110956NY. The material was approved for off-site disposal as non-hazardous waste on May 6 by NYSDEC based on Contained-In Demonstration (CID) analytical results received on May 2, 2014 and submitted to NYSDEC as described below in Section 3.
- On May 14 the grass island in the southern central area of the proposed parking lot was excavated to a depth of 2 feet below proposed finished grade. This excavation resulted in the removal of approximately 4 to 6 inches of urban fill material, which was added to the the existing stockpile of contaminated soil. The area was covered with mirifi fabric and backfilled to current grade with clean fill generated from onsite excavations which was sampled on April 28, 2014. The following day, mirafi fabric was put in place and clean fill of the same source was added to the grass area that runs along the east side of the parking lot. The fill was placed to within 4 inches below the top of proposed curb/sidewalk elevation; topsoil will be placed above this material.
- On May 15 a small trench was excavated from the west side of the parking lot to the center of the parking lot to run electrical conduit to a light pole. All of the material removed was brown, sandy, native soil. No positive PID readings were observed. A new onsite stockpile of apparent clean soil for reuse onsite was started with this material. The trench was backfilled with crushed stone to meet compaction requirements.
- On May 15 the drummed cuttings from prior drilling activites were added to the current stockpile of contaminated soil. These included minimal amounts of decon plastic and PVC.
- On May 15 and May 20, the central portion of the parking lot area was covered with either geomesh or mirafi fabric and covered with approximately 1 foot of crushed stone as proposed. On May 19 much of the western half of this area was excavated from

Reference: **Brownfield Cleanup Program**
Monthly Progress Report #15
Site #C828184
Former Carriage Factory
33 Litchfield Street, Rochester, NY

between 6 to 18 inches below existing grade to meet sub-grade elevation prior to laying fabric and stone. The excavated soil was brown, sandy, native soil. The majority of the material exhibited no positive PID readings, however, some localized readings of less than 2 ppm were observed. The material was added to the existing stockpile of clean soils expected for reuse onsite. An excavation was made to install the remaining drop inlet box located in the northeastern entrance. The material removed was brown sandy soil that exhibited no positive PID response, and it was added to the existing clean soil pile.

- Sampled the existing contaminated soil stockpile on May 16. The stockpile was estimated to contain 450 cubic yards (CY) of urban fill and VOC-impacted soil was represented by grab samples LI-EXT-S7g1 through S7g5 and three-part composite samples LI-EXT-S7c1 and S7c2.
- Sampled the existing clean soil pile on May 21. The stockpile was estimated to contain 150 CY and was represented by grab samples LI-Y-S15g1 through S15g3 and three-part composite sample LI-Y-S15c.
- Throughout May groundwater continued to slowly infiltrate the elevator shaft pit. A suspected source of the water was identified in the northwest corner of the pit on May 12; accumulated water was periodically pumped out and discharged to the sewer under MCDES Short Term Discharge Permit #ST-256. To satisfy permit requirements two discharge samples were collected during the month of May and tested for the following list of analytes as approved by MCDES: Halogenated VOCs, Total Petroluem Hydrcarbons, Pesticides, pH, Cadmium, Copper, Lead, and Zinc. Sample LI-EL-W8 was taken on May 12 and sample LI-EL-W9 was taken May 27.
- On May 27 the suspected source of water infiltration was patched with concrete to attempt to address the infiltration.
- On May 28 and May 29, twelve groundwater monitoring wells were sampled as outlined in the Enhanced Reductive Dechlorination IRM Work Plan. The attached Table 1 sumarizes the recorded groundwater field parameters for both this event and the pre-injection sampling event. The data indicate the desired anaerobic, reducing conditions (low dissolved oxygen concentrations and negative oxidation-reduction potential values) are present in each of the wells that received complete injections of the sodium lactate solution.

Reference: **Brownfield Cleanup Program**
Monthly Progress Report #15
Site #C828184
Former Carriage Factory
33 Litchfield Street, Rochester, NY

2. Data Received or Generated in the Previous Month

- Laboratory results were received as follows (QA/QC samples are not included in this tally):
  - Wastewater samples LI-EL-W7 (May 16) and LI-EL-W8 (May 21) to obtain approval for elevator water discharge to the Monroe County sanitary sewer;
  - Stockpiled contaminated soil samples LI-EXT-S6g1-S6g4, S6c1, S6c2 (May 2) and LI-EXT-S7g1-S7g5, S7c1, S7c2 (May 23) to obtain CID approval for offsite disposal from NYSDEC; and
  - Stockpiled clean soil samples LI-Y-S14g1-S14g3, S14c (May 7) and LI-Y-S15g1-g3, S15c (May 29) to obtain NYSDEC approval for onsite reuse.

3. Deliverables Completed and Submitted during the Previous Month

- Submitted analytical results and descriptions of stockpiled soil to NYSDEC in Albany in accordance with the previously approved CIDWP on May 5 and May 27.
- Submitted Monthly Progress Report No. 14 to NYSDEC on May 9.
- On May 30, the Draft Environmental Easement package was submitted to the Department by Nixon Peabody LLP, environmental counsel to CFSNA.

4. Actions Scheduled for the Next Reporting Period

The following activities are anticipated to occur in June 2014:

- Monitoring of construction-related activities, which are expected to include elevator pit sump pump installation; off-site disposal of staged soil; and final site grading and soil stockpiling in the parking lot area south of the building.
- Completion of the ERD groundwater remediation injection activities.
- Ongoing preparation of the IRM Construction Completion Report, Alternatives Analysis Report, and Site Management Plan.

5. Completion, Delays and Future Schedule

Delay of the completion of the ERD injection program occurred for one monitoring well, due to the presence of an open excavation adjacent to the well, which required soil sample analysis before backfilling can be completed.

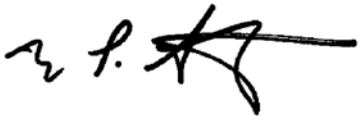
Reference: **Brownfield Cleanup Program**
Monthly Progress Report #15
Site #C828184
Former Carriage Factory
33 Litchfield Street, Rochester, NY

Closing

If you have any questions or require further information, please call me at any time..

Regards,

STANTEC CONSULTING SERVICES INC.



Michael P. Storonsky
Managing Principal
Phone: 585-413-5266
mike.storonsky@stantec.com

Attachments:

Table 1 – Summary of Groundwater Field Parameters

ec:
Bart Putzig (NYSDEC)
James Mahoney (NYSDEC)
Justin Deming (NYSDOH)
Stephanie Selmer (NYSDOH)
James Whalen (CFSNA)
Mark Fuller (CFSNA)
Gillian Conde (CFSNA)
Joy Cromwell (CFSNA)
Chris Betts (Betts Housing)
Al Floro (Nixon Peabody)
Jonathan Penna (Nixon Peabody)
Mark Gregor (City of Rochester)
Eleonora Bershadskaya (Goldman Sachs)
Daniel Alger (Goldman Sachs)
Linda Kaiser (Goldman Sachs)
Patrick Miller (CPC)
David Lent (IVI)

TABLE 1
Summary of Groundwater Field Parameters
Former Carriage Factory
33 Litchfield Street, Rochester, NY

Sample Location		B101-MW	B102-MW			B106-MW			B108-MW		
Purge Date		21-May-13	22-May-13	27-Mar-14	28-May-14	23-May-13	26-Mar-14	28-May-14	23-May-13	26-Mar-14	28-May-14
Purge Methodology		Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow
Purge Method		Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Sample Date		21-May-13	22-May-13	27-Mar-14	28-May-14	23-May-13	26-Mar-14	28-May-14	23-May-13	26-Mar-14	28-May-14
Sampling Method		Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Field Parameters	**Units**										
Conductivity	mS/cm	0.99	0.86	0.90	0.92	0.92	1.08	1.29	0.95	1.06	1.05
Dissolved Oxygen	mg/L	1.34	0.10	0.12	0.19	0.13	0.07	0.08	0.13	0.13	0.10
Oxidation Reduction Potential	mV	-25.0	13.3	73.6	-49.7	17.8	90.8	-96.3	29.1	137.1	-69.9
pH	S.U.	7.02	6.87	7.02	7.15	6.99	7.05	7.15	7.15	7.04	7.21
Temperature	deg C	13.4	20.5	3.7	18.4	16.1	3.0	18.3	13.6	10.6	19.5
Turbidity	NTU	0.68	4.07	11.71	1.87	4.77	1.84	1.48	0.62	0.28	3.54
Volume Purged	gal	0.8	1.2	0.5	2.6	1.1	0.7	1.8	0.5	0.7	1.8

Sample Location		RW-5			RW-6			RW-7			RW-8
Purge Date		21-May-13	27-Mar-14	29-May-14	20-May-13	27-Mar-14	28-May-14	20-May-13	27-Mar-14	28-May-14	20-May-13
Purge Methodology		Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow
Purge Method		Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Sample Date		21-May-13	27-Mar-14	29-May-14	20-May-13	27-Mar-14	28-May-14	20-May-13	27-Mar-14	28-May-14	20-May-13
Sampling Method		Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Field Parameters	**Units**										
Conductivity	mS/cm	0.89	1.08	1.40	0.93	1.07	1.72	1.02	1.21	1.30	1.04
Dissolved Oxygen	mg/L	0.28	0.00	0.06	0.08	0.01	0.07	0.08	0.38	0.31	1.06
Oxidation Reduction Potential	mV	-2.3	74.7	-95.6	-10.6	138.3	-69.0	29.4	92.6	-37.6	77.0
pH	S.U.	7.07	7.29	7.27	7.13	7.33	7.03	7.06	7.27	7.08	7.05
Temperature	deg C	16.2	5.7	22.8	19.0	6.1	17.6	16.8	6.7	20.3	14.4
Turbidity	NTU	2.98	1.22	7.10	7.08[a]	5.46	7.48	10.38	1.36	3.12	2.54
Volume Purged	gal	1.1	3.2	0.5	1.3	1.1	1.2	1.2	0.9	1.8	1.0

Notes:

deg c	degrees Celsius	degrees Celsius
gal	gallons	gallons
mg/l	milligrams per liter	milligrams per liter
mS/cm	milliSiemens per centimeter	milliSiemens per centimeter
mV	millivolts	millivolts
NTU	nephelometric turbidity unit	nephelometric turbidity unit
AU	attenuation unit (equivalent to NTU)	attenuation unit (equivalent to NTU)
S.U.	standard units	standard units
[a]	Sample turbidity measured approximately 10 minutes prior to sampling; subsequent measurements (-126 NTU) indicated that the turbidity meter was not functioning.	Sample turbidity measured approximately 10 minutes prior to sampling;
[b]	Sample turbidity measured approximately 5 minutes prior to sampling; subsequent measurement (-0.02 NTU) indicated that the turbidity meter was not functioning.	Sample turbidity measured approximately 5 minutes prior to sampling; su
[c]	Turbidity meter was not functioning; groundwater was clear and did not have an odor.	Turbidity meter was not functioning; groundwater was clear and did not

TABLE 1
Summary of Groundwater Field Parameters
Former Carriage Factory
33 Litchfield Street, Rochester, NY

Sample Location		RW-1			RW-2			RW-3			RW-4		
Purge Date		23-May-13	26-Mar-14	29-May-14	21-May-13	26-Mar-14	29-May-14	22-May-13	26-Mar-14	29-May-14	22-May-13	26-Mar-14	29-May-14
Purge Methodology		Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow
Purge Method		Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Sample Date		23-May-13	26-Mar-14	29-May-14	21-May-13	26-Mar-14	29-May-14	22-May-13	26-Mar-14	29-May-14	22-May-13	26-Mar-14	29-May-14
Sampling Method		Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Field Parameters	**Units**												
Conductivity	mS/cm	0.74	1.07	1.22	0.85	1.08	2.34	0.87	1.09	1.79	0.91	0.88	0.89
Dissolved Oxygen	mg/L	0.13	0.01	0.11	0.28	0.03	0.20	0.15	0.06	0.08	0.11	0.17	0.06
Oxidation Reduction Potential	mV	-94.3	179.0	-147.8	-30.3	156.8	-171.5	87.3	157.6	-132.8	38.6	132.4	29.3
pH	S.U.	7.19	7.05	7.16	7.36	7.11	6.94	7.39	7.07	7.45	6.91	7.08	7.10
Temperature	deg C	12.5	8.6	18.8	12.7	7.2	16.8	12.4	9.3	17.7	20.0	2.4	25.5
Turbidity	NTU	10.55	12.37	1.66	5.23	3.81	7.53	0.88	1.29	1.24	5.68	5.81	1.72
Volume Purged	gal	0.7	0.7	1.5	1.2	0.8	1.4	0.5	0.7	1.5	0.8	1.8	0.9

Sample Location		RW-9			RW-11		RW-12		RW-13	
Purge Date		21-May-13	27-Mar-14	29-May-14	22-May-13	27-Mar-14	20-May-13	28-May-14	20-May-13	27-Mar-14
Purge Methodology		Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow
Purge Method		Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Sample Date		21-May-13	27-Mar-14	29-May-14	22-May-13	27-Mar-14	20-May-13	28-May-14	20-May-13	27-Mar-14
Sampling Method		Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Field Parameters	**Units**									
Conductivity	mS/cm	0.94	1.05	0.68	0.79	0.82	1.02	1.76	1.08	1.12
Dissolved Oxygen	mg/L	2.48	2.45	5.52	2.36	1.62	0.06	0.06	1.96	2.13
Oxidation Reduction Potential	mV	49.4	104.6	28.1	94.5	88.8	20.0	-149.5	48.6	101.8
pH	S.U.	7.13	7.29	7.44	7.15	7.33	7.10	7.25	7.21	7.25
Temperature	deg C	14.0	9.4	20.7	14.6	5.1	16.0	24.1	17.2	6.0
Turbidity	NTU	0.33	0.50	3.62	0.11[b]	1.31	— [c]	1.10	5.10	1.86
Volume Purged	gal	0.8	1.2	0.7	0.4	0.7	1.0	2.0	2.3	2.0

Notes:
deg c
gal
mg/l
mS/cm
mV
NTU
AU
S.U.
[a] subsequent measurements (-126 NTU) indicated that the turbidity meter was not functioning.
[b] ubsequent measurement (-0.02 NTU) indicated that the turbidity meter was not functioning.
[c] t have an odor.