October 29, 2009

Mr. Jaspal Walia
Project Manager
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203

Re: Injection Report – MW-09 Area
Waterfront Elementary School Property
QLT Buffalo LLC
Buffalo, New York

Dear Mr. Walia,

On behalf of QLT Buffalo LLC, WSP Engineering of New York, P.C. prepared this report to document the field activities for the recently completed chemical oxidation/enhanced bioremediation injection program conducted at the MW-09 Area. This work was conducted in accordance with the Pre-Design Investigation Report and Chemical Oxidation/Enhanced Bioremediation Injection Work Plan dated July 31, 2009.

Based on the groundwater monitoring and subsequent investigation conducted in June/July 2009, WSP Engineering evaluated the conditions surrounding monitoring well MW-09 ("the MW-09 area"). As a result of these investigations, discussion with our client and the New York State Department of Environmental Conservation (NYSDEC), Klozur® CR was identified for use as an injectate for benzene concentrations detected in samples collected from the MW-09 area. This product was injected into the affected groundwater zone in the vicinity of MW-09 between August 17 and 26, 2009.

Klozur® CR is a single, formulated product consisting of base-activated persulfate. Klozur® CR provides three separate chemistries to attenuate petroleum-affected groundwater in a single application:

- Klozur® CR generates the sulfate radical, an oxidizing compound. Klozur® CR was formulated to address compounds such as petroleum constituents (including benzene, toluene, ethylbenzene, and xylenes [BTEX] and polycyclic aromatic hydrocarbons [PAH]). The sulfate radical-typically remains active for several weeks within a groundwater bearing zone.
- Klozur® CR contains an oxygen releasing compound (calcium peroxide) which can stimulate native aerobic petroleum oxidizing microbes to metabolize benzene, toluene, ethylbenzene, xylenes (BTEX) and other similar compounds. Klozur® CR can release oxygen for up to 6-months following application.
- Sulfate is a byproduct of Klozur® CR. Sulfate has been shown to stimulate native anaerobic petroleum oxidizing microbes to attenuate BTEX. Sulfate longevity in the aquifer is largely site specific, but can persist for more than one year.

Each of these mechanisms requires contact with the target compound to be successful. Given that soil heterogeneities limit the uniform delivery of the Klozur® CR throughout the affected

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area, chemical oxidation alone may not achieve remediation goals. To provide additional performance, the longer-lasting oxygen releasing compound and sulfate will diffuse beyond the initial delivery zones and continue to enhance conditions over a long-term to stimulate microbial breakdown of the benzene detected in the MW-09 samples.

Field Activities

Full-scale injection activities began on August 17, 2009, and concluded on August 26, 2009. The injections were performed by Remedial Services, Inc. of Independence, Kansas and A-Zone Environmental of Charles Town, West Virginia under full-time oversight by WSP Engineering.

Based on the results of a bench-scale treatability study and oxidant efficiency test performed in June/July 2009, the total proposed injection volume of Klozur® CR slurry was 14,500 gallons to produce a concentration of 4 g Klozur® CR/1 kg of soil. The injection footprint covered approximately 3,600 square feet over a saturated thickness of 15 feet. The Klozur® CR was delivered to the site in 45-pound pails by common carrier truck and was stored on pallets in secured mobile storage units. 24,030 pounds of Klozur® CR were injected at the site

The Klozur® CR was mixed into an injectable slurry within a mobile feed tank that had secondary containment. Potable water for the slurry was obtained from the Waterfront School. The Klozur® CR slurry was mixed at a 20 percent solid to liquid ratio by weight. The ratio was approximately 10.5 buckets, or approximately 473 pounds of Klozur® CR per 300 gallons of potable water. The ratio was approximated in the field using 300 gallon poly mixing totes. Thus, injection volumes were approximated based on field measurement and the injection log (Enclosure A) was an ongoing record of the volume throughout field activities. Discrepancies between the proposed delivery schedule and field observations are due to estimated field measurements. As such, the total quantity on the injection log does not equate to 24,030 pounds. However, all Klozur® CR delivered to the site was injected into the subsurface.

Delivery points were spaced approximately 10 feet apart (Figure 1). A total of 35 delivery points were planned for a proposed delivery of the Klozur® CR slurry over two hundred ten - 2-foot intervals. This equated to six 2-foot intervals per delivery point at intervals of 20 ft bgs, 18 ft bgs, 16 ft bgs, 14 ft bgs, 12 ft bgs, and 10 ft bgs. Approximately 70 gallons of slurry were planned for delivery at each interval. The temporary delivery points were installed by advancing 4-foot-long Geoprobe® rods with an expendable drive point to approximately 20 feet bgs, or until refusal, using a direct push rig. Injections began at an initial applied pressure of approximately 50 psi to initiate flow as determined in the potable water pilot test. The pressure was adjusted such that flow was maintained between 2 gpm and 10 gpm.

The delivery is documented in the Injection Log (Enclosure A). When the design quantity of slurry could not be injected to any depth interval, the slurry volume not delivered to that interval was added to the next delivery interval within the same boring. If delivery in the final interval was not equal to the planned volume for a given boring, then the volume not delivered to that interval was added to the same interval at an adjacent location. If a planned delivery point was eliminated, then the amendment scheduled for that boring was added to adjacent borings in close proximity to the eliminated point. If it was not possible to deliver the missing interval immediately adjacent, the slurry was delivered in the closest possible point to ensure all Klozur® CR was injected at the site. Additional material was added to delivery points that were readily accepting injection of the Klozur® CR as close as possible to missing intervals.

A well packer was installed in MW-09 throughout the injection activities. The packer was installed to minimize short-circuiting and to avoid delivering injectate into the well. MW-11 was monitored to determine if a well packer was required. However, this monitoring well was not as close to the delivery locations and was not influenced by subsurface injections. The well packer was removed from MW-09 at the conclusion of field activities.

Twenty-two of the 35 proposed locations were completed at all proposed intervals. The injection rods encountered refusal at less than 10 ft bgs while drilling at two locations. Subsequent attempts to install delivery points in the vicinity of these locations (IP-03 and IP-08) were unsuccessful. It was not possible to inject at IP-11. Preferential subsurface pathways led to substantial swelling of the soil and surfacing ("daylighting") of injectate in the area surrounding IP-11. Injection at locations IP-06, IP-09, IP-10, and IP-13, all near IP-11 could not be completed because these locations contributed to swelling and surfacing of the injectate. When influence was seen at the surface near IP-11, delivery was discontinued at these locations. In addition, delivery did not occur at two locations (IP-27 and IP-35) because the areas of highest benzene concentration were prioritized. While monitoring inventory of Klozur® CR throughout the project, it was decided to focus remaining material in the area of highest benzene concentration and areas where injection was difficult or curtailed (the school loading dock; IP-8 through IP-11). The injection log (Enclosure A) provides detailed information for each injection point.

After the slurry delivery was completed at the shallowest depth at each location, the delivery point was abandoned by filling it with grout and, if applicable, the concrete surface was patched with Type II Portland cement sand grout to match the existing surface. All materials and equipment mobilized to the site were removed at the conclusion of field activities. Empty containers of Klozur® CR were cleaned and disposed of an in appropriate roll-off container for off-site disposal.

The breathing zone in the work area was monitored throughout the project using a multigas meter equipped with a 10.7 eV photoionization detector (PID). The PID was capable of monitoring levels of volatile organic compounds (VOCs) and hydrogen sulfide gas (H_2S). Indoor air readings from the Waterfront School's crawl space were measured at least once per day. There were no measured readings of VOCs or H_2S in outdoor or indoor air at anytime during the field activities.

Slurry Cleanup

During execution of the project, an inspection of the Waterfront School's crawl space resulted in the discovery of short circuiting of slurry through expansion joints within the crawl space near the loading dock. The expansion joints were sealed using hydraulic cement and were monitored for subsequent intrusion of slurry throughout the remainder of the project. The short-circuiting to the crawl space resulted in the starting and stopping of injection points close to the school to allow for sealing of the expansion joints. Slurry that entered the crawl space came into contact with saturated soil already present within the crawl space. The saturated soil containing slurry was characterized, removed via high vacuum equipment, and shipped offsite as a non-hazardous waste. Ontario Specialty Contracting, Inc. performed the removal activities. Transportation and disposal was handled by Modern Disposal Services, Inc. The approved waste profile and laboratory characterization data is provided as Enclosure B.

Restoration

During injection activities, “daylighting” or surfacing of the injectate occurred within areas of grassy vegetation. This distressed the vegetation quickly and required restoration. To restore these areas, top soil with peat moss was imported and spread evenly to create a new seed bed for new growth. The filled areas were seeded, fertilized, and mulched. The restoration activities were conducted by T.P.O. Corporation. The Waterfront School engineer volunteered to water the newly planted areas until vegetation is completely established over the area.

Closing

In accordance with the work plan, groundwater monitoring will commence approximately three months after injection (late November 2009). Quarterly monitoring will be conducted for one year to evaluate the performance of the injection program.

We trust that this information satisfies your requirements at this time. If you have any questions or concerns, please do not hesitate to contact me or Reynolds Renshaw at (703) 946 5801.

Sincerely,

Glen Rieger
Senior Project Director

GER:eal:paw
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Enclosures

cc/encl.: Gordon Adkison, Duke Realty
Tanya Alexander, National Fuel Gas Distribution Corp.
Maura Desmond, Esq. NYSDEC
Martin Doster, New York State Department of Environmental Conservation
Morgan G. Graham, Esq., Phillips, Lytle, LLP
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Craig Slater, Harter Secrest & Emery LLP
Robert Rua, Buffalo Board of Education
Dennis Sutton, City of Buffalo
Barbara L. Schifeling, Esq., Damon & Morey LLP
Michael D. Spear, REM Ltd
John Manzi, Quanta Holdings
Reynolds Renshaw, Renshaw Consulting Group, LLC

Enclosure A

Injection Log
MW-09 Injection Program
QLT Buffalo
Buffalo, New York

	10 ft BGS		12 ft BGS		14 ft BGS		16 ft BGS		18 ft BGS		20 ft BGS	
DELIVERY POINT	CR (LB)	Slurry (GAL)	CR (LB)	Slurry (GAL)	CR (LB)	Slurry (GAL)	CR (LB)	Slurry (GAL)	CR (LB)	Slurry (GAL)	CR (LB)	Slurry (GAL)
IP-1	115	70	115	70	115	70	115	70	115	70	115	70
IP-2	115	70	115	70	115	70	115	70	115	70	115	70
IP-3	REFUSAL											
IP-4	115	70	115	70	115	70	115	70	115	70	115	70
IP-5	115	70	115	70	115	70	115	70	164	100	345	210
IP-6											32	20-25
IP-7	115	70	115	70	230	140	230	140	131	80	230	140
IP-8	REFUSAL											
IP-9	0	0	0	0	0	0	0	0	115	70	115	70
IP-10											32	20-25
IP-11	Cannot inject in this area due to swelling and daylighting											
IP-12	115	70	115	70	115	70	115	70	115	70	115	70
IP-13											82	50
IP-14	115	70	115	70	115	70	115	70	115	70	115	70
IP-15	115	70	115	70	115	70	115	70	115	70	115	70
IP-16	115	70	472	300	230	140	115	70	115	70	230	140
IP-17	115	70	115	70	115	70	115	70	115	70	345	210
IP-18	0	0	115	70	115	70	115	70	115	70	115	70
IP-19	115	70	115	70	115	70	115	70	115	70	115	70
IP-20	115	70	115	70	230	140	230	140	115	70	115	70
IP-21	115	70	115	70	460	280	0	0	0	0	0	0
IP-22	115	70	115	70	115	70	115	70	115	70	115	70
IP-23	115	70	115	70	115	70	115	70	115	70	115	70
IP-24	115	70	115	70	230	140	472	300	472	300	472	300
IP-25	472	300	472	300	472	300	230	140	230	140	460	420
IP-26	115	70	115	70	115	70	115	70	115	70	115	70
IP-27												
IP-28									164	100	0	0
IP-29							115	70	115	70	115	70
IP-30	115	70	115	70	115	70	115	70	115	70	115	70
IP-31	115	70	115	70	230	140	230	140	115	70	115	70
IP-32	115	70	115	70	115	70	115	70	115	70	115	70
IP-33	115	70	115	70	115	70	115	70	230	140	230	140
IP-34	0	0	82	50	230	140	230	140	115	70	115	70
IP-35												
	2887	1770	3441	2120	4152	2540	3692	2260	3691	2260	4528	2870
	35 points		35 points		35 points		35 points		35 points		35 points	

Completed interval
Partial interval
Refusal or daylighting
Interval accounted for by neighboring point
Injection point eliminated in field

Enclosure B

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Cover Page

Ontario Specialty

For Lab Project # 09-3150
Issued September 1, 2009
This report contains a total of 9 pages

The reported results relate only to the samples as they have been received by the laboratory.

Any noncompliant QC parameters having impact on the data are flagged or documented on the final report.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of frequently used data flags and their meaning:

"ND" = analyzed for but not detected.
"E" = Result has been estimated, calibration limit exceeded.
"D" = Duplicate results outside QC limits. May indicate a non-homogenous matrix.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

pH Analysis Report

Client: Ontario Specialty

Client Job Site:	Health Now	**Lab Project Number:**	09-3150
Client Job Number:	N/A	**Date Sampled:**	8/28/2009
		Time Sampled:	12:00 PM
		Date Received:	8/28/2009
Sample Type:	Soil	**Time Received:**	4:25 PM
Location:	Laboratory	**Date Analyzed:**	8/31/2009
		Time Analyzed:	9:27 AM

Lab Sample Number	Field Number	Field Location	Result (pH)
9809	N/A	Health Now	11.81

ELAP Number 10958

Method: EPA 9045C

Comments:

Signature:

Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Flashpoint by Pensky-Martin Analysis Report

Client: Ontario Specialty

Client Job Site: Health Now
Client Job Number: N/A
Sample Type: Soil

Lab Project Number: 09-3150
Date Sampled: 08/28/2009
Date Received: 08/28/2009
Date Analyzed: 08/28/2009

Lab Sample Number	Field Number	Field Location	Result (°C)
9809	N/A	Health Now	> 70

ELAP Number 10958 Method: SW846 1010

Comments: °C = degrees Centigrade

Signature:
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Percent Solids Analysis Report

Client: Ontario Specialty

Client Job Site: Health Now
Client Job Number: N/A
Sample Type: Soil

Lab Project Number: 09-3150
Date Sampled: 8/28/2009
Date Received: 8/28/2009
Date Analyzed: 8/28/2009

Lab Sample Number	Field Number	Field Location	Result (% Solid)
9809	N/A	Health Now	54.9

ELAP Number 10958

Method: SW17 2540B

Comments:

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 093150PS.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

Client: Ontario Specialty

Client Job Site: Health Now

Client Job No.: N/A

Field Location: Health - Now

Lab Project No.: 09-3150
Lab Sample No.: 9809

Sample Type: Soil

Date Sampled: 8/28/2009
Date Received: 8/28/2009

Laboratory Report for Reactivity

Parameter	Date Analyzed	Analytical Method	Results (mg/kg)
Cyanide Reactivity	9/1/2009	SW846, 7.3.3.2	ND<1.0
Sulfide Reactivity	9/1/2009	SW846, 7.3.4.2	ND<10

ELAP ID. No.: 10709

Comments: ND denotes Non Detect.
Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: _____
Bruce Hoogesteger

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with sample condition requirements upon receipt.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: Ontario Specialty

Client Job Site: Health Now

Client Job No.: N/A

Field Location: Health-Now

Field ID No.: N/A

Lab Project No.: 09-3150

Lab Sample No.: 9809

Sample Type: TCLP Extract

Date Sampled: 08/28/2009

Date Received: 08/28/2009

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	09/01/2009	EPA 6010	<0.100	5.0
Barium	09/01/2009	EPA 6010	0.504	100.0
Cadmium	09/01/2009	EPA 6010	<0.025	1.0
Chromium	09/01/2009	EPA 6010	<0.050	5.0
Lead	09/01/2009	EPA 6010	<0.100	5.0
Mercury	09/01/2009	EPA 7470	<0.0020	0.2
Selenium	09/01/2009	EPA 6010	<0.100	1.0
Silver	09/01/2009	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____

Bruce Hoogesteger, Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: Ontario Specialty

Client Job Site: Health Now
Client Job Number: N/A
Field Location: Heath Now
Field ID Number: N/A
Sample Type: Soil

Lab Project Number: 09-3150
Lab Sample Number: 9809
Date Sampled: 08/28/2009
Date Received: 08/28/2009
Date Analyzed: 08/31/2009

Base / Neutrals	Results in ug / Kg	Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 523	Dibenz (a,h) anthracene	ND< 523
Anthracene	ND< 523	Fluoranthene	537
Benzo (a) anthracene	ND< 523	Fluorene	ND< 523
Benzo (a) pyrene	ND< 523	Indeno (1,2,3-cd) pyrene	ND< 523
Benzo (b) fluoranthene	ND< 523	Naphthalene	ND< 523
Benzo (g,h,i) perylene	ND< 523	Phenanthrene	664
Benzo (k) fluoranthene	ND< 523	Pyrene	ND< 523
Chrysene	ND< 523	Acenaphthylene	ND< 523
Diethyl phthalate	ND< 523	1,2-Dichlorobenzene	ND< 523
Dimethyl phthalate	ND< 1,310	1,3-Dichlorobenzene	ND< 523
Butylbenzylphthalate	ND< 523	1,4-Dichlorobenzene	ND< 523
Di-n-butyl phthalate	ND< 523	1,2,4-Trichlorobenzene	ND< 523
Di-n-octylphthalate	ND< 523	Nitrobenzene	ND< 523
Bis (2-ethylhexyl) phthalate	ND< 523	2,4-Dinitrotoluene	ND< 523
2-Chloronaphthalene	ND< 523	2,6-Dinitrotoluene	ND< 523
Hexachlorobenzene	ND< 523	Bis (2-chloroethyl) ether	ND< 523
Hexachloroethane	ND< 523	Bis (2-chloroisopropyl) ether	ND< 523
Hexachlorocyclopentadiene	ND< 523	Bis (2-chloroethoxy) methan	ND< 523
Hexachlorobutadiene	ND< 523	4-Bromophenyl phenyl ether	ND< 523
N-Nitroso-di-n-propylamine	ND< 523	4-Chlorophenyl phenyl ether	ND< 523
N-Nitrosodiphenylamine	ND< 523	Benzidine	ND< 1,310
N-Nitrosodimethylamine	ND< 523	3,3'-Dichlorobenzidine	ND< 523
Isophorone	ND< 523	4-Chloroaniline	ND< 523
Benzyl alcohol	ND< 1,310	2-Nitroaniline	ND< 1,310
Dibenzofuran	ND< 523	3-Nitroaniline	ND< 1,310
2-Methylnapthalene	ND< 523	4-Nitroaniline	ND< 1,310

Acids	Results in ug / Kg	Acids	Results in ug / Kg
Phenol	ND< 523	2-Methylphenol	ND< 523
2-Chlorophenol	ND< 523	3&4-Methylphenol	ND< 523
2,4-Dichlorophenol	ND< 523	2,4-Dimethylphenol	ND< 523
2,6-Dichlorophenol	ND< 523	2-Nitrophenol	ND< 523
2,4,5-Trichlorophenol	ND< 1,310	4-Nitrophenol	ND< 1,310
2,4,6-Trichlorophenol	ND< 523	2,4-Dinitrophenol	ND< 1,310
Pentachlorophenol	ND< 1,310	4,6-Dinitro-2-methylphenol	ND< 1,310
4-Chloro-3-methylphenol	ND< 523	Benzoic acid	ND< 1,310

ELAP Number 10958 Method: EPA 8270C Data File: S46807.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram
Surrogate outliers indicate probable matrix interference

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: Ontario Sepcialty

Client Job Site: Health Now
Client Job Number: N/A
Field Location: Health Now
Field ID Number: N/A
Sample Type: Soil

Lab Project Number: 09-3150
Lab Sample Number: 9809
Date Sampled: 08/28/2009
Date Received: 08/28/2009
Date Analyzed: 09/01/2009

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 15.7
Bromomethane	ND< 15.7
Bromoform	ND< 39.3
Carbon Tetrachloride	ND< 39.3
Chloroethane	ND< 15.7
Chloromethane	ND< 15.7
2-Chloroethyl vinyl Ether	ND< 78.5
Chloroform	ND< 15.7
Dibromochloromethane	ND< 15.7
1,1-Dichloroethane	ND< 15.7
1,2-Dichloroethane	ND< 15.7
1,1-Dichloroethene	ND< 15.7
cis-1,2-Dichloroethene	ND< 15.7
trans-1,2-Dichloroethene	ND< 15.7
1,2-Dichloropropane	ND< 15.7
cis-1,3-Dichloropropene	ND< 15.7
trans-1,3-Dichloropropene	ND< 15.7
Methylene chloride	ND< 39.3
1,1,2,2-Tetrachloroethane	ND< 15.7
Tetrachloroethene	ND< 15.7
1,1,1-Trichloroethane	ND< 15.7
1,1,2-Trichloroethane	ND< 15.7
Trichloroethene	ND< 15.7
Trichlorofluoromethane	ND< 15.7
Vinyl chloride	ND< 15.7

Aromatics	Results in ug / Kg
Benzene	ND< 15.7
Chlorobenzene	ND< 15.7
Ethylbenzene	ND< 15.7
Toluene	ND< 15.7
m,p-Xylene	ND< 15.7
o-Xylene	ND< 15.7
Styrene	ND< 39.3
1,2-Dichlorobenzene	ND< 39.3
1,3-Dichlorobenzene	ND< 39.3
1,4-Dichlorobenzene	ND< 15.7

Ketones	Results in ug / Kg
Acetone	1,080
2-Butanone	188
2-Hexanone	54.4
4-Methyl-2-pentanone	ND< 39.3

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 15.7
Vinyl acetate	ND< 39.3

ELAP Number 10958 Method: EPA 8260B Data File: V68406.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 • (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
COMPANY: Ontario Specialty	COMPANY: Same	LAB PROJECT #: 09-3150 / CLIENT PROJECT #:
ADDRESS: 333 Ganson St.	ADDRESS:	
CITY: Buffalo STATE: NY ZIP: 14203	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS) 2 day TAT per lab. EAH 8/31
PHONE: (716) 856-3333 FAX: (716) 842-1630	PHONE: FAX:	STD [X] 1 [ ] 2 [ ] 3 [ ] 5 [ ] OTHER [ ]
ATTN: John Yenson	ATTN:	QUOTE #: PO # Z9898
COMMENTS: JYenson@ontariospecialty.com 716-583-4400		

PROJECT NAME/SITE NAME: Health Now

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	TCLP Metals	Vocs TCL	S-vocs ABN	pH EAH 8/31	Reactivity	% solids	Flash point				REMARKS	PARADIGM LAB SAMPLE NUMBER
1	8-28-09	12:00	X		Health - Now	soil	2	X	X	X	X	X	X	X				24 hr turn	9809
2																		DO 8260 TCL, 8270	
3																		ABN (totals) per J.	
4																		Data as per J.H. 8/31 EAH 8/31	
5																			
6																			
7																			
8																			
9																			
10																			

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y [X]	N [ ]
Comments:		
Preservation: N/A	Y [ ]	N [ ]
Comments:		
Holding Time:	Y [X]	N [ ]
Comments:		
Temperature:	Y [X]	N [ ]
Comments: 19°iced - pres. begun in field		

Sampled By	8-28-09 12:00	Date/Time
Relinquished By	8-28-09 1:00pm	Date/Time
Received By	8/28/09 1:30	Date/Time
Received @ Lab By: Elizabeth A. Honch	8/28/09 1625	Date/Time

Total Cost:

P.I.F.

MODERN DISPOSAL SERVICES, INC.

Environmental & Industrial Contracting Services, Inc.

WASTE PRODUCT RECORD

Generator Name: WSP Engineering of New York, PC **Phone:** 412 604 1040
Address: 750 Holiday Drive
City: Pittsburgh **State:** PA **Zip:** 15220
Contact: Glen Rieger **Title:** Senior Project Director
Fax: 412 920 7455 **SIC:** **EPA ID #**
On behalf of QLT Buffalo LLC

Process Generating Waste:
groundwater remediation - Klozur®CR injectate at 20 percent solution with water mixed with soil/sediment

Constituent	%	Phase	%	Restrictions	Yes	No
		Layering		Characteristic Waste	☐	☒
		Single		Listed Waste	☐	☒
		Bi-Layered		Medical/Biological Waste	☐	☒
		Multi-Layered		Etiological Waste	☐	☒
Wet Soil	45	Liquid		PCB Contaminated	☐	☒
Wet Soil	55	Solid		Hazardous Material	☐	☒
		Sludge		Radioactive	☐	☒
		Other		Sewage / Septic	☐	☒

	YES	NO
Is Waste Product Record Based on Generator's Knowledge?	☒	☐
Is Analysis Attached?	☒	☐
Was analysis completed by a NYSDOH certified laboratory?	☒	☐
Are MSDS's attached?	☐	☒

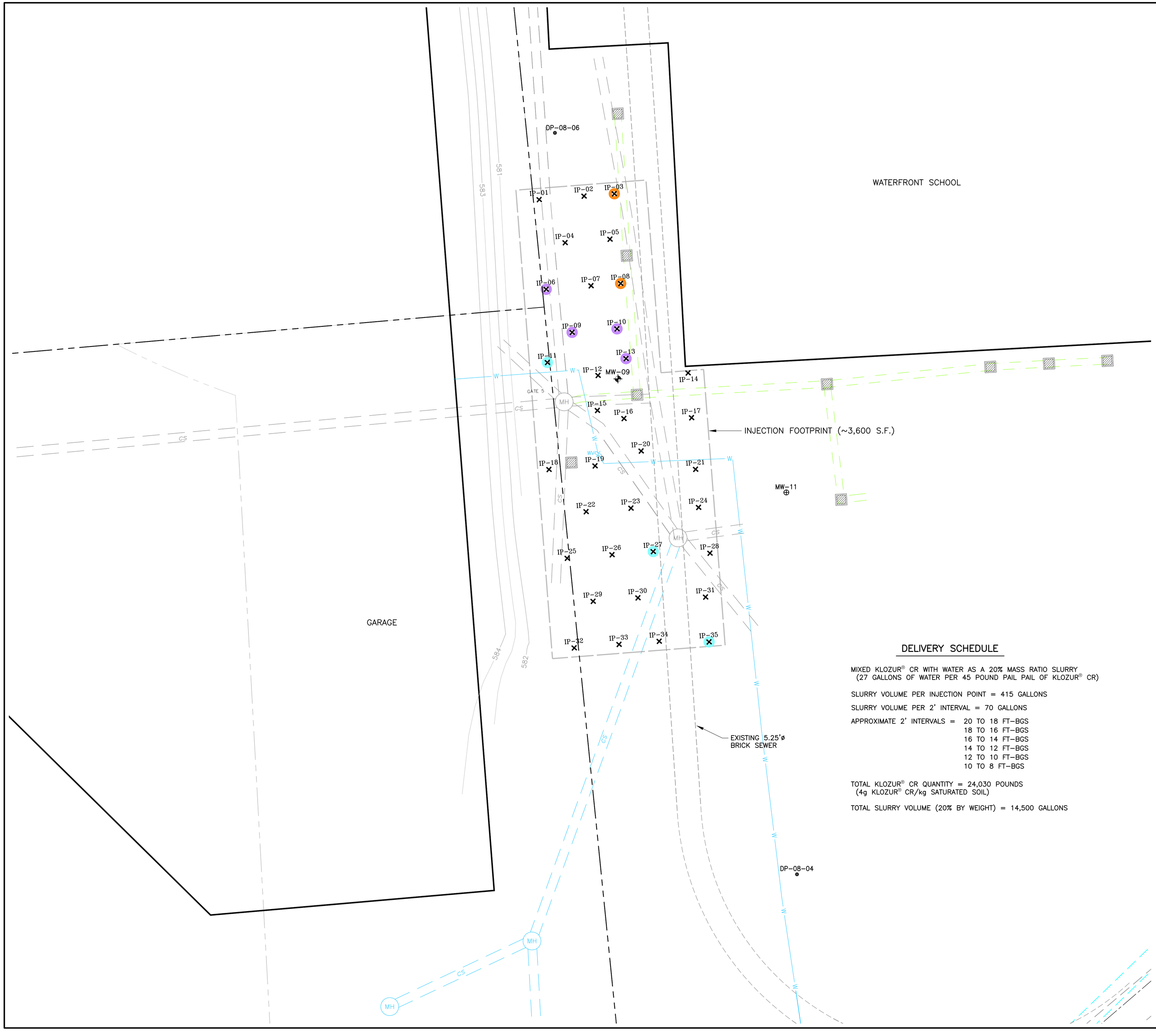
I certify that the material described above is not a hazardous waste as defined by RCRA (title 40) or 6 NYCRR parts 370-374, and that the information contained herein is true and accurate to the best of my knowledge. I understand that mismanagement of waste (hazardous or other) is punishable by law. Also, I will notify IRSI if the waste (or the process by which the waste is generated) described in this product record, changes.

Generator Representative: Glen Rieger Signature: Glen Rieger Date: 9/1/09
As representative/Agent for QLT Buffalo

MWSP090902A | OK TO PROCESS SOLIDIFY W/DUST =7 RO

Technical Manager Signature: [signature] Date: 9/2/09

Figure



LEGEND

- INJECTION PREVENTED DUE TO INJECTATE SURFACING ("DAYLIGHTING")
- DIRECT-PUSH REFUSAL AT PROPOSED INJECTION POINT
- PROPOSED INJECTION POINT NOT COMPLETED
- IP-20 INJECTION POINT
- DP-08-04 GROUNDWATER SAMPLE
- MW-11 MONITORING WELL
- MW-9 MONITORING WELL NETWORK
- PROPERTY LINE
- BUILDING/GARAGE FOOTPRINT
- NEW COMBINED SEWER LINE
- ORIGINAL COMBINED SEWER LINE
- STORM SEWER
- WATER LINE
- MANHOLE
- CATCH BASIN/DRAINAGE STRUCTURE

NOTE:

8'ø AND 5.25'ø BRICK SEWER LOCATIONS ARE APPROXIMATE, LOCATED FROM A DRAWING DATED JUNE 8, 1882. SEE REFERENCE 5.

DELIVERY SCHEDULE

MIXED KLOZUR® CR WITH WATER AS A 20% MASS RATIO SLURRY (27 GALLONS OF WATER PER 45 POUND PAIL PAIL OF KLOZUR® CR)

SLURRY VOLUME PER INJECTION POINT = 415 GALLONS

SLURRY VOLUME PER 2' INTERVAL = 70 GALLONS

APPROXIMATE 2' INTERVALS = 20 TO 18 FT-BGS
18 TO 16 FT-BGS
16 TO 14 FT-BGS
14 TO 12 FT-BGS
12 TO 10 FT-BGS
10 TO 8 FT-BGS

TOTAL KLOZUR® CR QUANTITY = 24,030 POUNDS (4g KLOZUR® CR/kg SATURATED SOIL)

TOTAL SLURRY VOLUME (20% BY WEIGHT) = 14,500 GALLONS

REFERENCES:

1. RETEC FIGURE FOR BUFFALO SERVICE CENTER, BUFFALO, NY, NFG01-15979-500 TITLED EXISTING CONDITIONS, AREAS OF CONCERN AND PROPOSED ACTIONS, FIGURE PP1-1.

2. LCS INC. DRAWING TITLED, "FIGURE 3- SITE INVESTIGATION PLAN, BURA 4th STREET SITE, BUFFALO, NEW YORK, APRIL 2005", PROJECT # 058341.22. APPROXIMATE SCALE: 1"=65'

3. NIAGARA BOUNDARY AND MAPPING SERVICES DRAWING TITLED, "MAP SHOWING EXCAVATION LIMITS OF FORMER BUFFALO SERVICE CENTER AND BURA WEST AREA, AREA OU1 REMEDIAL AREAS", DATED JANUARY 2006, JOB NO. 5822-05.

4. NIAGARA BOUNDARY AND MAPPING SERVICES DRAWING TITLED, "MAP SHOWING BACKFILLED EXCAVATION AREA OF FORMER BUFFALO SERVICE CENTER AND BURA WEST AREA, OU1 REMEDIAL AREA", DATED FEBRUARY 2006, JOB NO. 5822-05.

5. CITY OF BUFFALO, DIVISION OF ENGINEERING, BUFFALO, NEW YORK DRAWING TITLED, "PLAN & PROFILE OF THE BUFFALO TRUNK SEWER", DATED JUNE 8, 1882.

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK & WHITE REPRODUCTION MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

SCALE, FEET
10 0 10 20

REVISIONS

REV	DESCRIPTION		
–	Revised:	Chkd:	Appr.:
ⓐ	Revised:	Chkd:	Appr.:
ⓑ	Revised:	Chkd:	Appr.:
ⓒ	Revised:	Chkd:	Appr.:

SEAL

DATE

DRAWN BY RBL 09/23/09
CHECKED —
APPROVED —

AS-BUILT INJECTION PROGRAM MW-09 AREA

PREPARED FOR

QLT BUFFALO LLC
BUFFALO, NEW YORK

WSP Engineering of New York, P.C.
750 Holiday Drive, Suite 410
Pittsburgh, Pennsylvania 15220
(412) 604-1040

FIGURE 1

Drawing Name
080190-D09

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