Long Island | 170 Keyland Court | Bohemia, NY 11716 | Tel: 631.269.8800 Fax: 631.269.1599

Manhattan | 1560 Broadway, Suite1024 | New York, NY 10036 | Tel: 212.201.7905 Fax: 212.202.4079

www.impactenvironmental.com

May 25, 2011

Brian Jankauskas
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York

Re: Baseline Study and Pilot Test Report for Melody Cleaners Site
Voluntary Cleanup Program Site Code #347-1

Dear Mr. Jankauskas

This letter serves as a summary report for the baseline study and pilot test performed as part of the approved Remediation Plan, dated March 2, 2010 prepared by Impact Environmental for the abovementioned Site.

1. Baseline Study

From August to September 2010, the baseline sampling was conducted on the Site. Two additional monitoring wells, identified as MLW- 0 I (80') and MLW- 0 D (115'), were installed at Zone-1. The monitoring well installation logs are presented in the **Appendix A**. Note that during the well installation, a clay layer of unknown thickness was detected starting at approximately 115 ft BEG, and MLW-0D was set immediately above the detected clay layer.

As part of the baseline study, several monitoring wells and geoprobe temporary wells were sampled for VOCs, metals and COD analysis. A summary of the baseline sampling results can be referenced with **Table 1**. The sampling locations of the baseline study can be referenced with **Figure 1**.

Zone-1 (Former Leaching Pools of Melody Cleaners)

At Zone-1, the laboratory analysis performed on the soil sample SP-2 (35') did not detect any concentrations of PCE or its daughter products. The laboratory analysis performed on the

groundwater samples detected PCE levels at 23 ppb (9/27/2010) and 39 ppb (11/29/2010) at MLW-0D (115').

The laboratory analysis performed on the up-gradient soil sample SP-1 (35') did not detect any concentration of PCE or its daughter products. The laboratory analysis performed on the up-gradient groundwater samples (GWP-1, 35', 80' and 120') did not detect any concentrations of PCE or its daughter products exceeding the applicable guidance values.

The baseline study revealed that source removal (by excavation) and SVE-1 operations have been successful in mitigating the contamination at Zone-1. Accordingly, it is recommended that the scale of ISCO injection at Zone-1 be revised.

Zone-2 (Former Leaching Pools of Laundromat)

At Zone-2, the laboratory analysis on the soil sample SP-3 (35') failed to detect any concentrations of PCE or its daughter products. The laboratory analysis performed on the groundwater samples detected PCE levels of 3100 ppb (8/25/2010) and 4000 ppb (11/29/2010) at MLW-1 IS (80').

MW-1 IS is located directly down-gradient from one of the former leaching pool structures, which were excavated in 2004. With elevated levels of contamination continuing to be detected at MLW-1 IS, it is suspected that the leaching structures from the Laundromat parking lot have contributed to the plume. However, since the old leaching structures have already been excavated, no further source removal activities are proposed at this point. Instead, the full scale ISCO application, as described in the NYSDEC approved RAP, will be performed with focus in the vicinity of the former leaching structures.

2. Pilot Test

The pilot test was performed in two separate mobilizations. The first mobilization involved the collection of soil samples for soil oxidant demand (SOD) analysis (in preparation for the RemOX injection) and the RegenOX injection/ evaluation. The second mobilization involved the RemOX injection/evaluation. The pilot test was performed through a direct push injection rig. The locations of the pilot test can be referenced with **Figure 2**.

From January 4 to 5, 2011, during the first mobilization, prior to the RegenOX injection, multiple saturated soil samples were collected from the Site. Said soil samples were mixed on the Site to make a composite sample which was subject to laboratory analysis for SOD. The RegenOX injection was performed at PT-1 area, which is in the vicinity of SVE-2 (30'). Three (3) injection points were spaced hydraulically up-gradient in an arc approximately 15 ft from SVE-2 and 10 ft between each points in the arc. Each injection point was installed to 35 ft BEG. RegenOx solution was injected from 35 ft to 20 ft BEG, and the injection rate was 15 lbs per linear ft.

From March 3 to 4, 2011, during the second mobilization, RemOX injection was performed at PT-2 area, which is in the vicinity of MLW-1 IS (80'). The second mobilization involves the installation of three (3) injection points spaced hydraulically up-gradient in an arc approximately 15 ft from MW-1 IS and 10 ft between each points in the arc. Each injection point was installed to 85 ft BEG. RemOX solution was injected from 85 ft to 65 ft BEG, and the injection rate was 2.75 lbs per linear feet. The injection rate was determined in consultation with the manufacturer by utilizing the SOD analysis results and previous baseline study results.

3. Pilot Test Groundwater Sampling

Monitoring wells SVE-2 and MLW-1 IS were utilized as observation wells for the first and second mobilization, respectively. Prior to the injection, a data logger (YSI 600 XLM) was installed in the observation well. During the pilot test (approximate duration of one week), the installed data logger collected information including pH, oxidation-reduction potential (ORP), dissolved oxygen (DO), turbidity, temperature and electric conductivity. The data log results can be referenced with **Appendix B**.

At the completion of the pilot test, two rounds of groundwater sampling were performed to evaluate the effectiveness of the injected oxidants. Said groundwater samples were field measured for pH, temperature, DO, salinity, electric conductivity and turbidity. In addition, for RegenOX application, hydrogen peroxide concentration was measured in the field utilizing a Hach Peroxide Test Kit (0-100 ppm); and for RemOX application, permanganate concentration was measured in the field by utilizing a Hach Colorimeter II Manganese HR System (0.2-20 ppm) and by visual confirmation (should be dark purple if potassium permanganate presents). The groundwater samples were also subjected to laboratory analysis for VOCs and metals.

4. Evaluation of the Pilot Test Results

For RegenOX Application:

According to the data log (YSI 600 XLM) deployed in SVE-2, four days after the RegenOX injection, an increase in conductivity was detected; however, no significant increase in ORP was observed.

Subsequent to the RegenOX injection, concentration of hydrogen peroxide was detected in the groundwater samples collected from SVE-2 at 3 ppm on 1/12/2011, 4 ppm on 3/25/11 and 6 ppm on 5/12/2011.

The laboratory analysis on the groundwater samples collected from SVE-2 indicated that the level of PCE increased from 6.8 ppb (11/29/2010) to 12 ppb (3/25/2011) and 18 ppb (5/12/11). However, since the PCE level was extremely low at the beginning of the injection, it is inconclusive as for whether the observed increase is a direct result of RegenOX application or the result of seasonal fluctuation.

The laboratory analysis indicated that as a result of the RegenOX injection, the concentrations of several target inorganic analytes increased in the groundwater. Compared with the baseline study, the levels of arsenic and thallium changed from below to above the applicable guidance levels.

For RemOX Application:

According to the data log (YSI 600 XLM) deployed in MLW-1 IS, approximately 4 hours after the RemOX injection, an anomaly was observed in the log. The cause of the anomaly is unclear; however, it is suspected that the probe was damaged during this incident. Since then, significant increase in conductivity and significant reduction in ORP were observed.

Groundwater samples from MLW-1 IS were visually checked on 3/15/2011 and 3/25/2011, no visible evidence of potassium permanganate was observed in the well (no purple color was observed). On May 12, 2011, a Hach Colorimeter II Manganese HR System was utilized to quantitatively measure the permanganate concentration, and the permanganate was detected in the groundwater sample collected from MLW-1 IS at 2.9 ppm (in $KMnO_4$).

The laboratory analysis on the groundwater samples collected from MLW-1 IS indicated that levels of PCE decreased from 4000 ppb (11/29/2010) to 3300 ppb (3/25/11) and then increased

to 9600 ppb (5/12/11). This observed reduction-and-rebound pattern is typical for the ISCO applications. The observed reduction is the result of reaction between permanganate and PCE, while the observed rebound is the result of an increased rate of diffusion from pore space caused by consumption of organic carbon by permanganate.

The laboratory analysis also indicated that as a result of the RemOX injection, the concentrations of several target inorganic analytes increased in the groundwater. Compared with the baseline study, the level of mercury changed from below to above (3/25/11) and then back to below (5/12/11) the applicable guidance level.

The laboratory analysis results on the confirmatory groundwater samples taken prior to and subsequent to the pilot test are presented in **Table 2**.

5. Recommendations

The following are the recommendations based on the baseline study and the pilot test performed on the Site.

Areas of Full Scale Injection

At Zone-1, the detected levels of PCE were marginally above the applicable guidance value, and therefore the ISCO application in Zone-1 will unlikely to be cost-effective (note that contaminant level has to be >1 ppm for ISCO to be cost-effective). Accordingly, the ISCO application at Zone-1 will be revised. At Zone-2, the full scale ISCO application, as described in the NYSDEC approved RAP, will be performed with focus in the vicinity of the former leaching structures.

Comparison of Oxidants

Both RegenOX and RemOX were detected at observation wells 15 ft hydraulically down-gradient from the injection points. Therefore, both oxidants were considered feasible remedy for this Site. The selection of the remedy will be based upon the evaluation of the pilot test result and the cost estimation of the full scale injection.

Radius of Influence

Both RegenOX and RemOX were detected at low concentrations (<10 ppm in both cases) in the observation wells. Accordingly, it is recommended that the injection interval at source area be revised from 15 ft to 10 ft.

Rate of Oxidant Loading

The oxidation of PCE by hydrogen peroxide and/or permanganate is considered an irreversible reaction; however, when the concentrations of both PCE and oxidants are extremely low, the reaction will not continue. This is why PCE were detected concurrently with the oxidants in the groundwater. To further reduce the level of PCE, a higher concentration of oxidant will be needed. Accordingly, it is recommended that the loading rate of the selected oxidant be increased for the full scale injection.

Field Implementation

Based on the field observation, the injection of RegenOX was less time-consuming. This is mainly because the injection of RegenOX requires less volume of mixing water compared with RemOX. When the intake flow rate is low, the required injection volume becomes the key factor in determining the length of operation, and therefore the key factor in determine the cost of the whole operation.

Elevated Levels of Inorganic Analytes

Elevated levels of arsenic and thallium were observed during the RegenOX application. Elevated level of mercury was encountered during the RemOX application. Therefore, levels of metals will be monitored throughout the full scale application.

Revised ISCO Plan

Revised ISCO plan with oxidant selection will be submitted in a separated document.

Please feel free to contact us with any questions or comments regarding this revision.

Sincerely,

Impact Environmental

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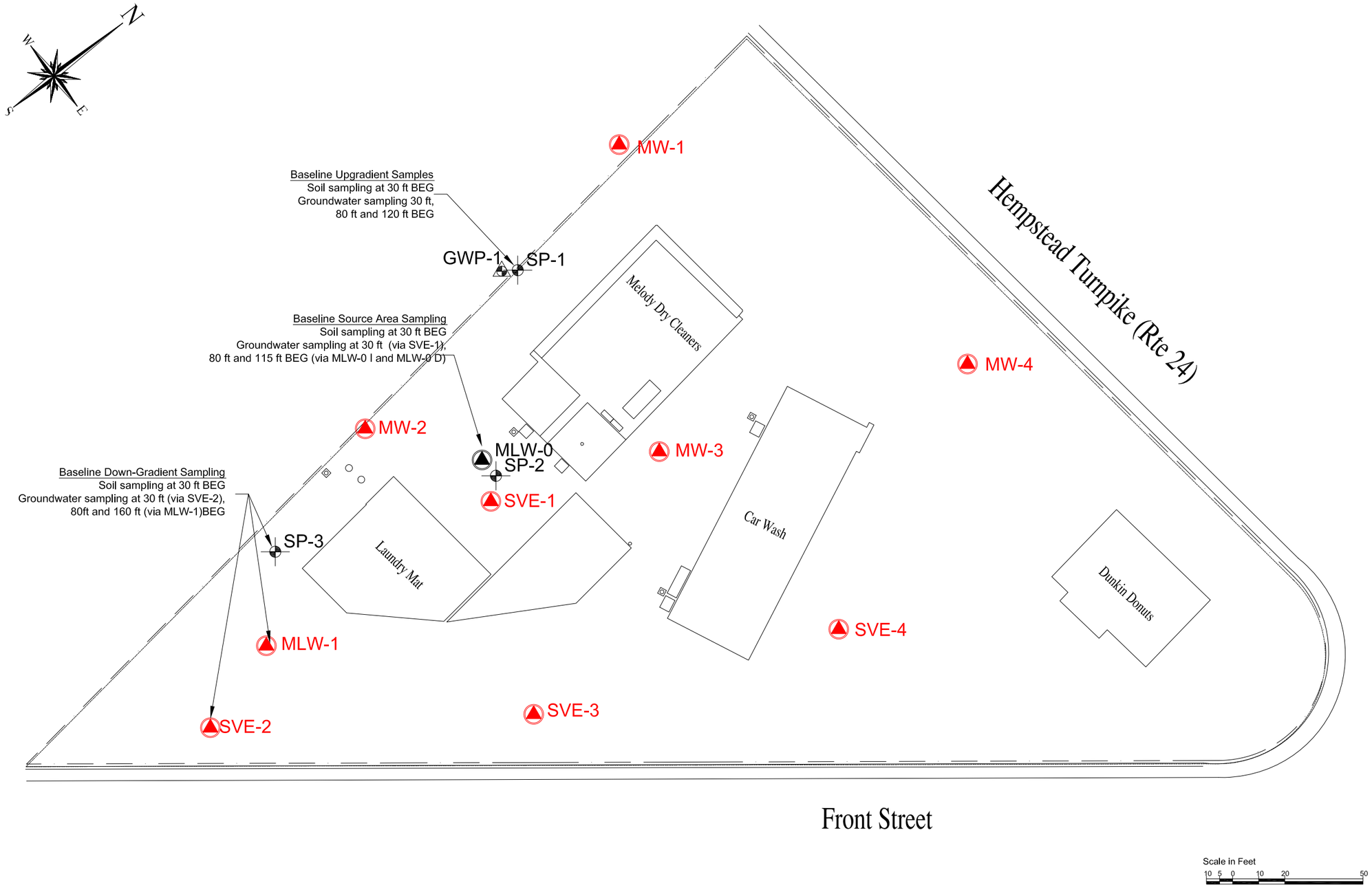
Wenqing Fang

Environmental Engineer

CC:



PROJECT # 04-455

Figure # 01

TITLE: Baseline Sampling Plan

Melody Cleaners Site
East Meadow, New York

DRAWN BY:	WF
CHECKED BY:	KK
DATE:	4-18-2011
SCALE:	1" = 40'

IMPACT ENVIRONMENTAL

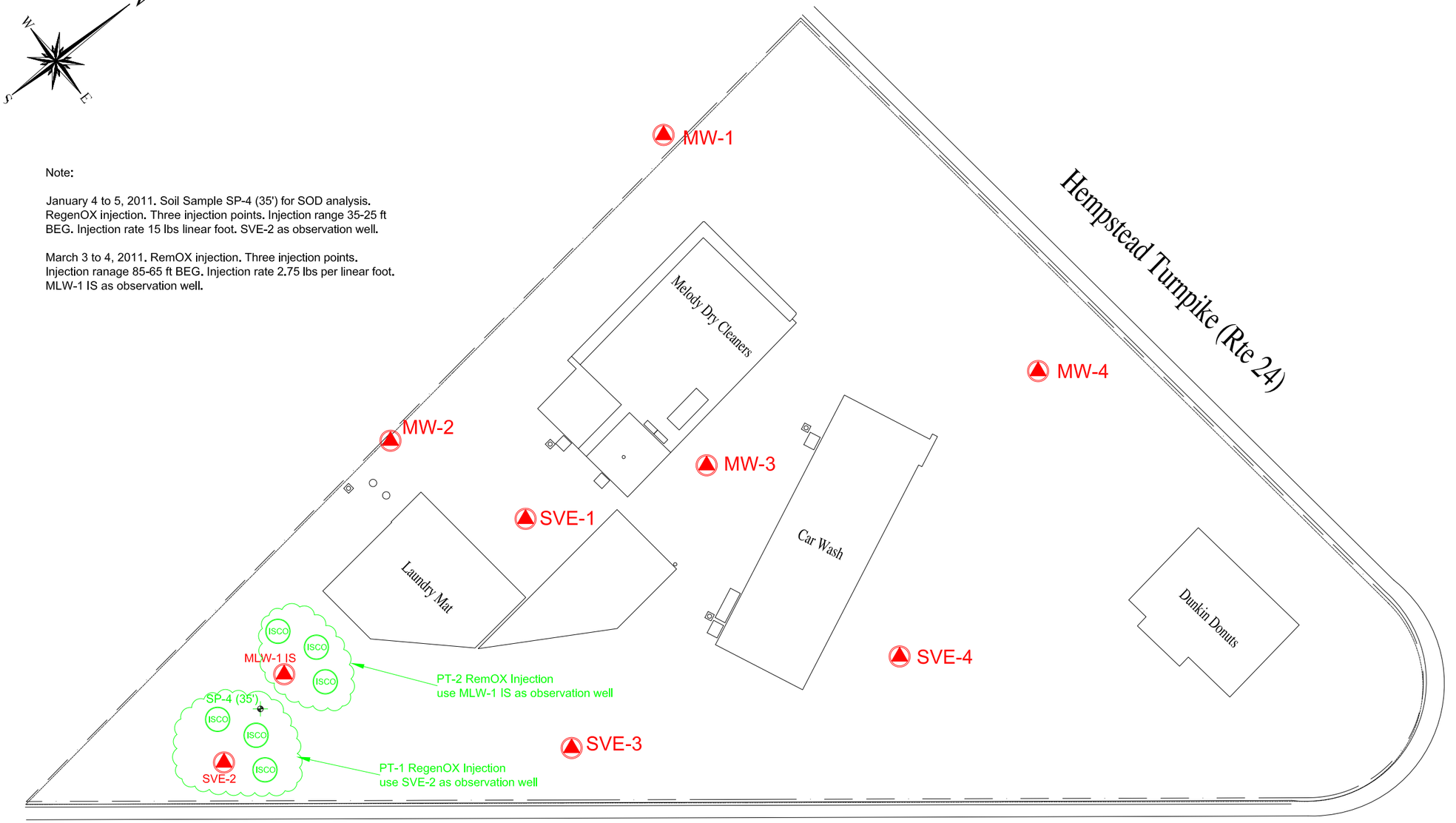
170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800 FAX (631) 269-1599

1560 BROADWAY, SUITE 1024
NEW YORK, NEW YORK 10036
TEL (212) 201-7905 FAX (212) 201-7906

Note:

January 4 to 5, 2011. Soil Sample SP-4 (35') for SOD analysis. RegenOX injection. Three injection points. Injection range 35-25 ft BEG. Injection rate 15 lbs linear foot. SVE-2 as observation well.

March 3 to 4, 2011. RemOX injection. Three injection points. Injection ranage 85-65 ft BEG. Injection rate 2.75 lbs per linear foot. MLW-1 IS as observation well.



PROJECT # 04-455

Figure # 02

Pilot Test Plan

DRAWN BY:	WF
CHECKED BY:	KK
DATE:	4-18-2011
SCALE:	1" = 40'

TITLE: *Melody Cleaners Site, East Meadow, New York*

IMPACT ENVIRONMENTAL

170 KEYLAND COURT
BOHEMIA, NEW YORK 11716
TEL (631) 269-8800 FAX (631) 269-1599

1560 BROADWAY, SUITE 1024
NEW YORK, NEW YORK 10036
TEL (212) 201-7905 FAX (212) 201-7906

Table 1: Baseline Sampling Results

	Soil Samples			Groundwater Samples								
Sample ID	**SP-1**	**SP-2**	**SP-3**	**SVE-1**	**SVE-2**	**MLW-0 I**	**MLW-0 D**	**MLW1 IS**	**MLW-1ID**	**GWP-1**	**GWP-1**	**GWP-1**
Depth	35'	35'	35'	30'	30'	80'	115'	80'	160'	35'	80'	120'
Sampling Date	8/2/2010	8/2/2010	8/2/2010	9/24/2010	8/25/2010	9/27/2010	9/27/2010	8/25/2010	9/27/2010	8/2/2010	8/2/2010	8/2/2010
	ug/kg	ug/kg	ug/kg	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	U	U	U	4.6
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichlorotrifluoroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U	U	U	1.2	U	U	13
1,1-Dichloroethene	U	U	U	U	U	U	U	U	U	U	U	4.4
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromoethane	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
2-Butanone	U	U	U	U	U	U	U	U	U	U	U	U
2-Hexanone	U	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-Pentanone	U	U	U	U	U	U	U	U	U	U	U	U
Acetone	U	U	U	U	U	U	U	U	U	U	U	U
Benzene	U	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U	U	U	U	U	U
Carbon Disulfide	U	U	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U	U	U	U	U	U
Chloroform	U	U	U	U	U	1.1	2.7	U	U	U	U	U
Chloromethane	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U	U	U
Cyclohexane	U	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	U	U	U	U	U	U	U	U	U	U	U	U
Dichlorodifluoromethane	U	U	U	U	U	U	U	U	U	U	U	U
Ethyl Benzene	U	U	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	U	U	U	U	U	U	U	U	U	U	U	U
m/p-Xylenes	U	U	U	U	U	U	U	U	U	U	U	U
Methyl Acetate	U	U	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl Ether	U	U	U	U	U	U	U	U	U	U	U	U
Methylcyclohexane	U	U	U	U	U	U	U	U	U	U	U	U
Methylene Chloride	U	2.2J	1.8J	U	U	U	U	U	U	U	U	U
o-Xylene	U	U	U	U	U	U	U	U	U	U	U	U
Styrene	U	U	U	U	U	U	U	U	U	U	U	U
t-1,3-Dichloropropene	U	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	U	U	U	U	18	1J	23	3100	30	U	U	U
Toluene	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	U	U	U	U	U	U	U	1.6	U	U	U	3.8
Trichlorofluoromethane	U	U	U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U	U	U	U	U	U	U
Total Concentration.	0	2.2	1.8	0	18	2.1	25.7	3100	31.2	0	0	25.8

Table 1: Baseline Sampling Results

	Soil Samples			Groundwater Samples								
Sample ID	**SP-1**	**SP-2**	**SP-3**	**SVE-1**	**SVE-2**	**MLW-0 I**	**MLW-0 D**	**MLW1 IS**	**MLW-1ID**	**GWP-1**	**GWP-1**	**GWP-1**
Depth	35'	35'	35'	30'	30'	80'	115'	80'	160'	35'	80'	120'
Sampling Date	8/2/2010	8/2/2010	8/2/2010	9/24/2010	8/25/2010	9/27/2010	9/27/2010	8/25/2010	9/27/2010	8/2/2010	8/2/2010	8/2/2010
	mg/kg	mg/kg	mg/kg	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Trivalent Chromium	1.58	21.6	2.33	U	U	0.003J	0.003J	U	0.0853	1.34	0.794	0.071
Hexavalent Chromium	U	0.164J	0.094J	U	U	0.03	0.07	U	U	U	U	U
Aluminum	1020	854	940	99.9	5270	198	4780	328	2010	133000	28300	17300
Antimony	U	U	U	U	U	U	U	U	U	U	U	U
Arsenic	U	U	U	U	U	U	20.8	U	6.15J	71.8	265	34.8
Barium	3.44J	4.31J	2.49J	67.2	U	34.1J	98.1	44.6J	28.2J	390	269	219
Beryllium	0.07J	0.09J	U	U	1.16J	U	U	U	U	9.35	4.27	5.69
Cadmium	U	U	U	U	1.3J	U	U	U	U	U	U	U
Calcium	61.5J	68J	46.9J	20500	30700	43300	121000	12500	6300	19600	14800	17600
Chromium	1.65	21.8	2.42	U	8.08	32.6	72.9	U	85.3	1340	794	71.4
Cobalt	U	0.85J	U	U	U	U	U	U	U	86.8	14J	U
Copper	1	2.57	1.24	2.1J	80.2	2.63J	30.7	3.08J	50.5	270	174	94.4
Iron	1640	1850	1670	51.9	16300	56.2	12800	1210	8980	255000	220000	43800
Lead	0.5J	0.7	0.69	U	3.85J	5.98J	34.2	U	11.9	105	96.4	59.2
Magnesium	90.3J	90.9J	89.7J	3140	4340	615J	3040	2310	1000	8380	4010	4890
Manganese	26.7	12.6	3.67	2.01J	95.5	3.8J	157	51.3	22.7	6270	943	150
Mercury	U	U	U	U	0.11J	0.12J	U	U	0.12J	U	U	U
Nickel	0.91J	2.03	U	U	6.7J	U	9.18J	U	63.8	339	142	24.6
Potassium	64.8J	57.4J	55.5J	2790	4670	26500	33100	2740	1360	11200	5040	3440
Selenium	U	U	U	U	U	U	4.85J	U	U	U	U	U
Silver	U	U	U	U	U	U	U	U	U	U	U	U
Sodium	106	118	125	60200	93400	U	27700	41300	3850	250000	19700	15400
Thallium	U	U	U	3.89J	U	2.66J	2.89J	U	U	U	3.87J	U
Vanadium	1.53J	2.45	1.45J	U	U	20.2	29.2	U	16.3J	186	532	142
Zinc	5.18	5.88	4.5	16.5J	161	9.35J	49.2	68.7	95	454	278	81.1
COD	291	306	308	3.51J	U	14.6	29.8	U	31.8	32.2	28.2	22.3

Table 2: Confirmatory Sampling Reuslts for Pilot Test

	RegenOX Application SVE-2			RemOX Application MLW-1 IS			NYSDEC TOGS 1.1.1. Ambient Water Quality Standards and Guidance Values
	Prior to Pilot	After Pilot	After Pilot	Prior to Pilot	After Pilot	After Pilot	
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Sampling Date	8/25/2010	3/25/2011	5/12/2011	8/25/2010	3/25/2011	5/12/2011	
Metals							
Aluminum	5270	898	5400	328	3400	153	100
Antimony	U	U	U	U	U	U	3
Arsenic	U	12.3	34.8	U	14.5	5.36 J	25
Barium	U	4.52 J	37.7 J	44.6 J	64.3	71.6	1000
Beryllium	1.16 J	U	1.76 J	U	U	0.31 J	3
Cadmium	1.3 J	U	1.62 J	U	U	0.51 J	NA
Calcium	30700	22800	43300	12500	9640	13600	NA
Chromium	8.08	U	17.6	U	4.27 J	U	50
Cobalt	U	U	U	U	U	U	NA
Copper	80.2	10.8	53.8	3.08 J	11.5	U	200
Iron	16300	3710	61200	1210	11200	486	300
Lead	3.85 J	U	11.9	U	6.21	5.4 J	25
Magnesium	4340	3970	4960	2310	1610	2510	35000
Manganese	95.5	51.2	171	51.3	40.3	136	300
Mercury	0.11 J	0.16 J	0.2	U	1.6	0.11 J	0.7
Nickel	6.7 J	U	U	U	U	4.16 J	100
Potassium	4670	3060	8420	2740	4180	6560	NA
Selenium	U	U	5.1 J	U	U	U	10
Silver	U	U	U	U	U	U	50
Sodium	93400	98200	69100	41300	24000	35100	20000
Thallium	U	U	11.0 J	U	U	11.6 J	0.5
Vanadium	U	6.46 J	35.6	U	37.6	U	NA
Zinc	161	49.7	54.3	68.7	30.1	26.7	2000

Table 2: Confirmatory Sampling Reuslts for Pilot Test

	RegenOX Application SVE-2			RemOX Application MLW-1 IS			NYSDEC TOGS 1.1.1. Ambient Water Quality Standards and Guidance Values
	Prior to Pilot	After Pilot	After Pilot	Prior to Pilot	After Pilot	After Pilot	
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Sampling Date	11/29/2010	3/25/2011	5/12/2011	11/29/2010	3/25/2011	5/12/2011	
Volatile Organic Compound							
1,1,1-Trichloroethane	U	U	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	U	U	1
1,1,2-Trichlorotrifluoroethane	U	U	U	U	U	U	5
1,1-Dichloroethane	U	U	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	U	U	5
1,2,4-Trichlorobenzene	U	U	U	U	U	U	5
1,2-Dibromo-3-Chloropropane	U	U	U	U	U	U	0.04
1,2-Dibromoethane	U	U	U	U	U	U	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	U	3
1,2-Dichloroethane	U	U	U	U	U	U	0.6
1,2-Dichloropropane	U	U	U	U	U	U	1
1,3-Dichlorobenzene	U	U	U	U	U	U	3
1,4-Dichlorobenzene	U	U	U	U	U	U	3
2-Butanone	U	U	U	U	U	U	50
2-Hexanone	U	U	U	U	U	U	50
4-Methyl-2-Pentanone	U	U	U	U	U	U	NA
Acetone	14	U	U	11	U	U	50
Benzene	U	U	U	U	U	U	1
Bromodichloromethane	U	U	U	U	U	U	50
Bromoform	U	U	U	U	U	U	50
Bromomethane	U	U	U	U	U	U	5
Carbon Disulfide	U	U	U	U	U	U	60
Carbon Tetrachloride	U	U	U	U	U	U	5
Chlorobenzene	U	U	U	U	U	U	5
Chloroethane	U	U	U	U	U	U	5
Chloroform	U	U	U	U	U	U	7
Chloromethane	U	U	U	U	U	U	5
cis-1,2-Dichloroethene	U	U	U	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.4
Cyclohexane	U	U	U	U	U	U	NA
Dibromochloromethane	U	U	U	U	U	U	50
Dichlorodifluoromethane	U	U	U	U	U	U	5
Ethyl Benzene	U	U	U	U	U	U	5
Isopropylbenzene	U	U	U	U	U	U	5
m/p-Xylenes	U	U	U	U	U	U	5
Methyl Acetate	U	U	U	U	U	U	NA
Methyl tert-butyl Ether	U	U	U	U	U	U	10
Methylcyclohexane	U	U	U	U	U	U	NA
Methylene Chloride	U	U	U	U	U	U	5
o-Xylene	U	U	U	U	U	U	5
Styrene	U	U	U	U	U	U	5
t-1,3-Dichloropropene	U	U	U	U	U	U	0.4
Tetrachloroethene	6.8	12	18	4000	3300	9600	5
Toluene	U	U	U	U	U	U	5
trans-1,2-Dichloroethene	U	U	U	U	U	U	5
Trichloroethene	U	U	U	U	U	3.7	5
Trichlorofluoromethane	U	U	U	U	U	U	5
Vinyl Chloride	U	U	U	U	U	U	2

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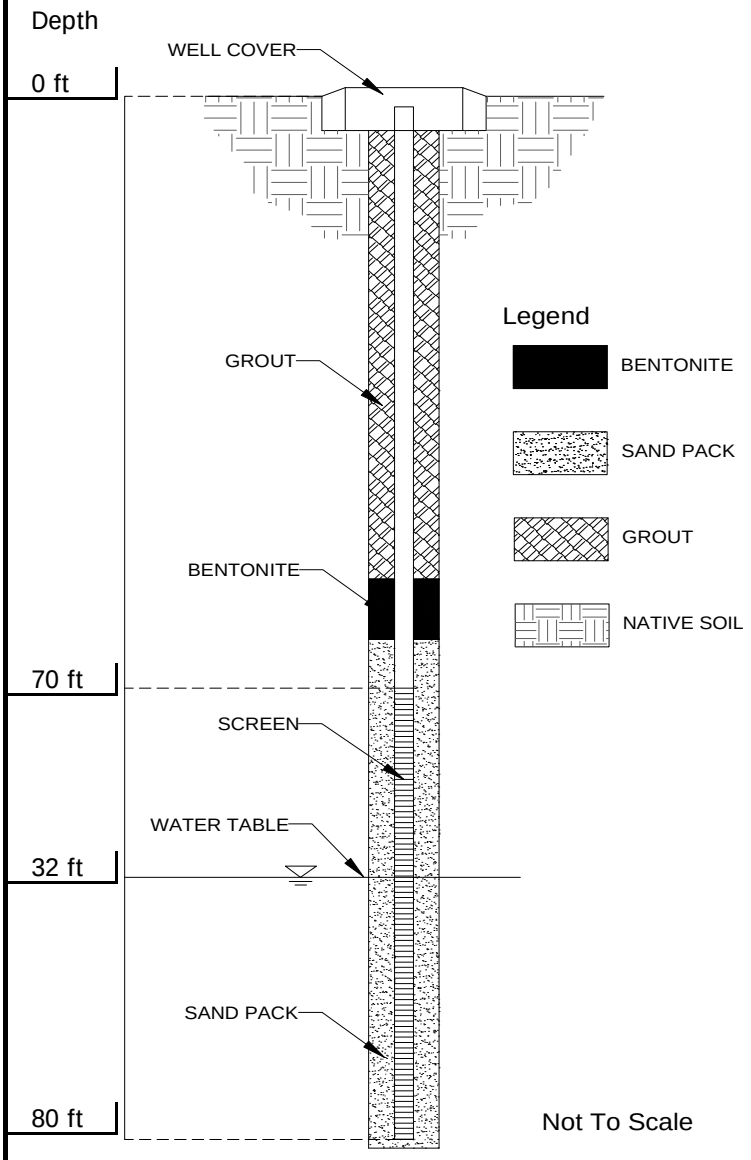
		Well Code:	**MLW-0 I**
		Installer:	Land Air and Water
		Installation Method:	Hollow stem auger
		Installation Date:	8/31/2010
Site Location:	Melody Cleaners Site	**Geologist:**	WF
Job Number:	04-455	**Coordinates**	
Client:		**(State Plane NAD 84):**	
Location:	2050 Hempstead Turnpike, East Meadow	**Elevation:**	



Surface Pad
- Type: cement

Well Cap
- Type: 2-inch

Surface Casing
- Type: 8-inch

Riser Pipe
- Type: Sch. 80 PVC
- Diameter: 2-inch
- Length: 65 ft
- Interval (BEG): 0 ft to 65 ft

Annular Seal
- Type: grout
- Length: 59 ft
- Interval (BEG): 0 ft to 59 ft

Bentonite Seal
- Type: granular
- Length: 5 ft
- Interval (BEG) 59 ft to 64 ft

Filter Pack Seal
- Type: #00 morris sand
- Length: 1 ft
- Interval (BEG) 64 ft to 65 ft

Filter Pack 2
- Type: #2 morris sand
- Length: 15 ft
- Interval (BEG) 65 ft to 80 ft

Screen
- Type: Sch. 80 PVC
- Diameter 2-inch
- Length: 10 ft
- Slot Size: 10-slot
- Interval (BEG): 70 ft to 80 ft

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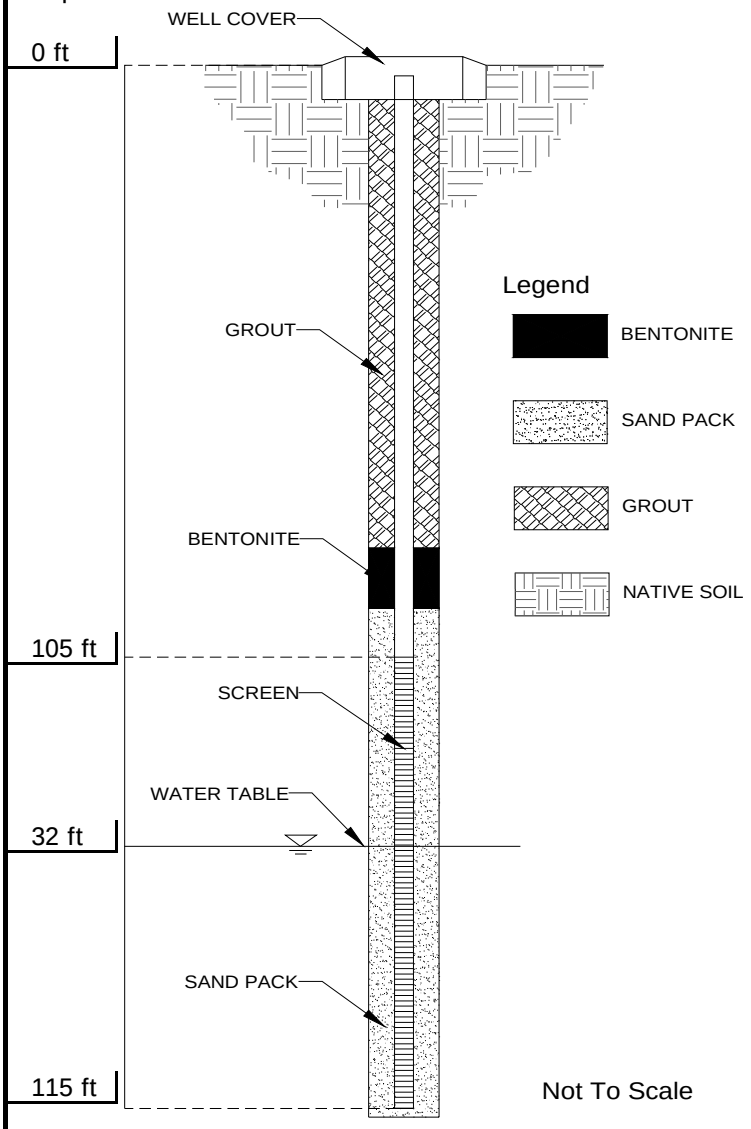
		Well Code:	**MLW-0 D**
		Installer:	Land Air and Water
		Installation Method:	Hollow stem auger
		Installation Date:	9/20/2010
Site Location:	Melody Cleaners Site	**Geologist:**	WF
Job Number:	04-455	**Coordinates**	
Client:		**(State Plane NAD 84):**	
Location:	2050 Hempstead Turnpike, East Meadow	**Elevation:**	



Surface Pad
- Type: cement

Well Cap
- Type: 2-inch

Surface Casing
- Type: 8-inch

Riser Pipe
- Type: Sch. 80 PVC
- Diameter: 2-inch
- Length: 105 ft
- Interval (BEG): 0 ft to 105 ft

Annular Seal
- Type: grout
- Length: 94 ft
- Interval (BEG): 0 ft to 94 ft

Bentonite Seal
- Type: granular
- Length: 5 ft
- Interval (BEG) 94 ft to 99 ft

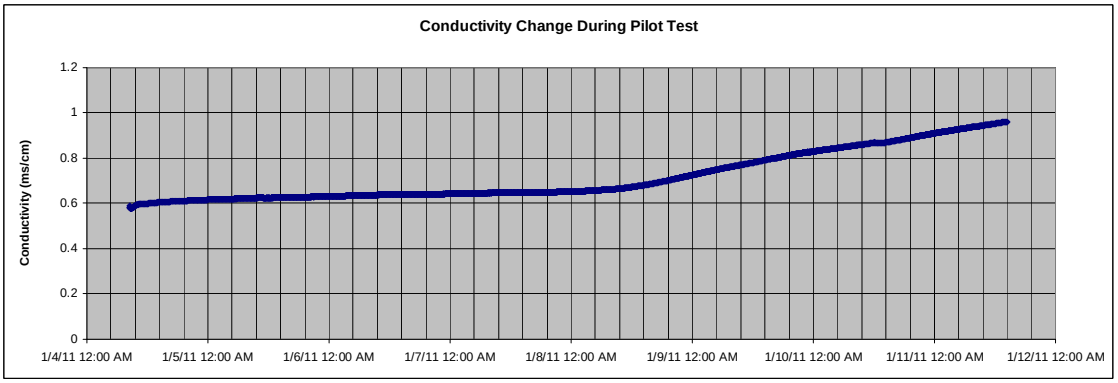
Filter Pack Seal
- Type: #00 morris sand
- Length: 1 ft
- Interval (BEG) 99 ft to 100 ft

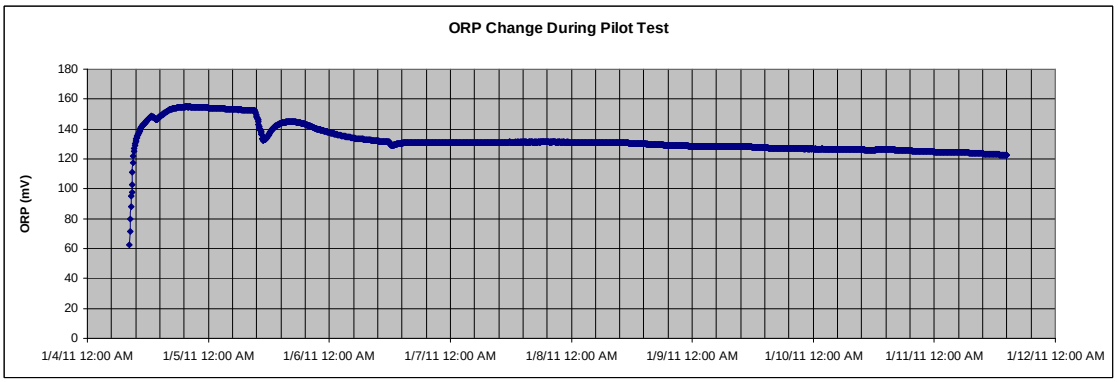
Filter Pack 2
- Type: #2 morris sand
- Length: 15 ft
- Interval (BEG) 100 ft to 115 ft

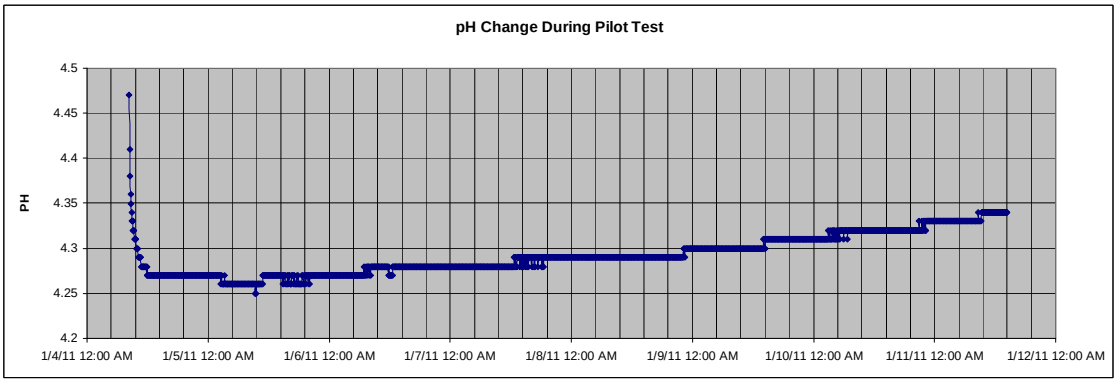
Screen
- Type: Sch. 80 PVC
- Diameter 2-inch
- Length: 10 ft
- Slot Size: 10-slot
- Interval (BEG): 105 ft to 115 ft

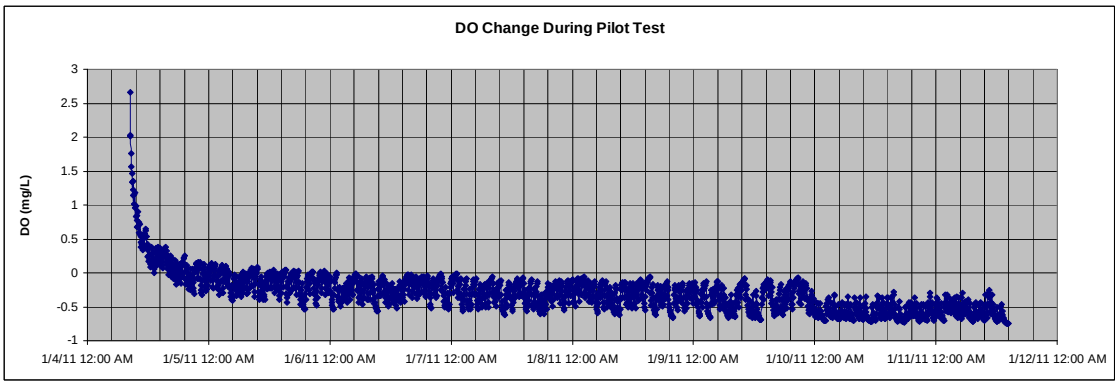
Appendix B
Data Log Results

Data Log Results for RegenOX Application

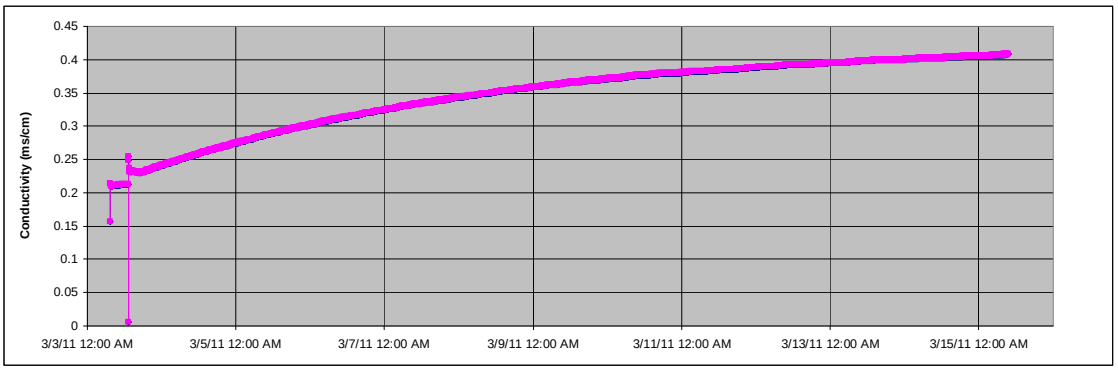


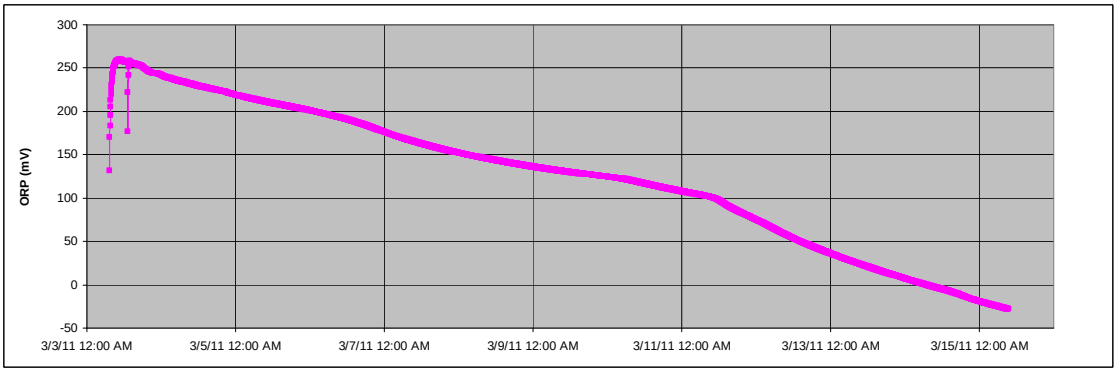


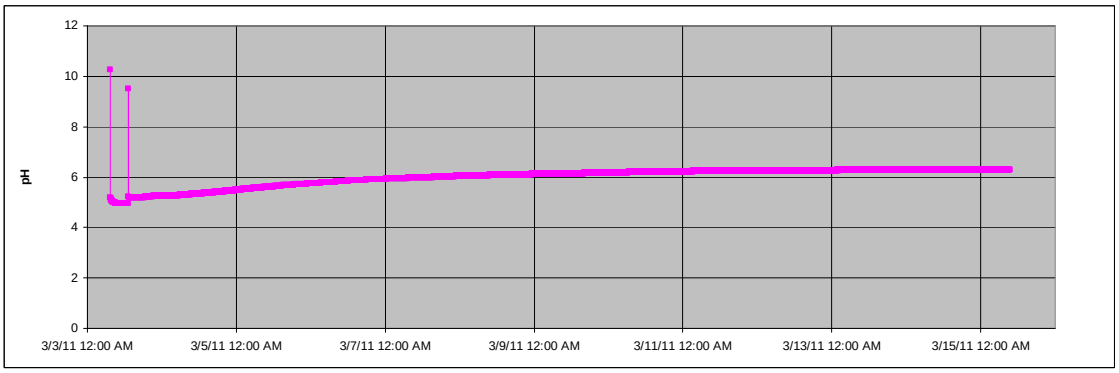


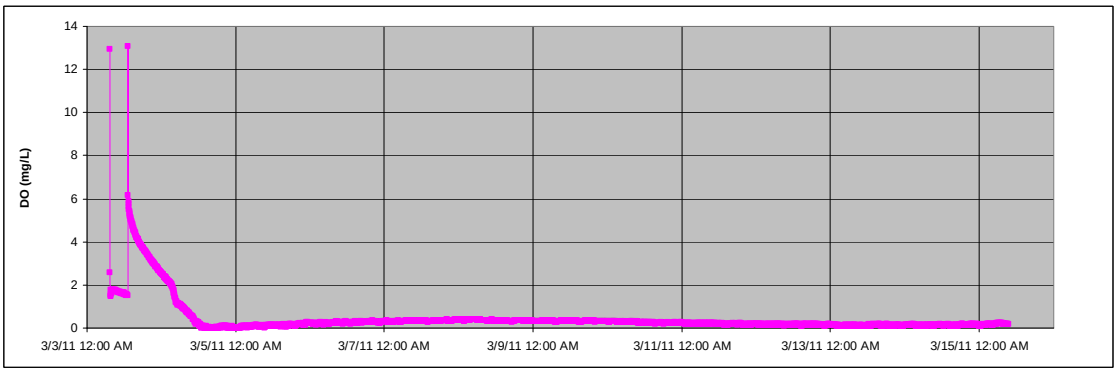


Data Log Results for RemOX Application









Groundwater Field Sampling Notes
Baseline Study and Pilot Test
Melody Cleaners Site
(August 2011- May 2011)

		pH	DO	ORP	Cond.	Turb	Temp.	Salinity	TDS
	Date		g/L	mV	mv	NTU	C	ppt	g/L
Baseline Study									
GWP-1 120'	8/2/2010	4.15	4.7	261	0	33.8	19.9	0	0
GWP-1 80'	8/2/2010	4.33	4.6	253	0	33.2	18.43	0	0
GWP-1 35'	8/2/2010	4.43	4.28	245	0	41.3	19.63	0	0
SVE-1-30'	8/25/2010	6.24	8.51	228	0.338	1.9	16.06	0.01	0.22
SVE-2-30'	8/25/2010	4.17	0	128	0.597	20.5	16.81	0.01	0.381
MLW-1 ID-160'	8/25/2010	5.39	6.35	208	0.134	7.9	15.68	0	0.087
MLW-1 IS-80'	8/25/2010	5.42	6.84	256	0.237	NA	16.63	0	0.015
MLW-0 I-80'	9/24/2010	5.97	8.58	112	0.353	23.6	17.04	0.2	0.229
MLW-0 D-120'	9/24/2010	5.51	8.15	212	0.199	27.1	15.73	0.1	0.129
Post-Pilot Test									
SVE-2-30'	3/25/2011	7.7	3.59	-69	0.847	65	15.8	0.4	0.542
MLW-1 IS 80'	3/25/2011	6.95	6.9	-5	0.241	58	15.03	0.1	0.157
MLW-1 IS 80'	5/12/2011	7.1	3.43	140	0.425	39	17.4	0.2	0.277
SVE-2-30'	5/12/2011	7.53	5.06	-100	0.833	NA	15.29	0.4	0.531