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September 15, 2011

Mr. David Gardner
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233-7013

Re: Franklin Cleaners Site (Site No. 1-30-050)
D&B Work Assignment No. D004446-01
Quarterly Report No. 25
D&B No. 2531

Dear Mr. Gardner:

The Quarterly Report (No. 25) presents a summary of the operation, maintenance, monitoring and sampling activities performed at the off-site Franklin Cleaners groundwater extraction and treatment system (see Attachment A, Figure 1), for the period beginning September 1, 2010 through November 30, 2010.

Operation, maintenance, system monitoring and sampling activities were conducted by a New York State Department of Environmental Conservation (NYSDEC) "call-out" contractor, Environmental Assessment and Remediations (EAR), under direct contract to the NYSDEC. Reporting, data management and assessment, and additional engineering/ technical evaluation services were performed by Dvirka and Bartilucci Consulting Engineers (D&B).

Presented below is a summary of system operation and maintenance completed during the quarter, as well as the analytical results and interpretation of the sample collection and analysis completed during this reporting period at the off-site Franklin Cleaners groundwater extraction and treatment system. Note that a groundwater sampling report was not completed during this reporting period due to a Chain of Custody error made by the sampling technicians. Groundwater sampling was not repeated, as it was deemed too late in the quarter at the time by the NYSDEC. In addition, a Site Management Plan (SMP) for the off-site Franklin Cleaners groundwater extraction and treatment system is currently being prepared by D&B.

Groundwater Extraction and Treatment System Operation and Maintenance

During this reporting period, extraction well EW-1 operated at an average pumping rate of 32.4 gallons per minute (gpm) and extraction well EW-2 operated at an average pumping rate of 6.6 gpm. Normalized graphs of the average flow rate for EW-1 and EW-2 since September 2006 are presented in Attachment B. Based on a review of the data, the flow rate for EW-1 has slightly increased as compared to Quarter 24, but continues to exhibit an overall slightly decreasing trend. The flow rate for EW-2 has also slightly increased as compared to Quarter 24, but continues to exhibit an overall increasing trend.

Approximately 0.77 pounds of tetrachloroethene (PCE) were removed from the extracted groundwater by the treatment system during this reporting period and approximately 41.73 pounds of PCE have been removed since start-up of the treatment system in September 2003. The average PCE removal efficiency for this reporting period was greater than 99 percent. A graph of the average PCE removal rate is provided in Attachment C. Overall, the PCE removal rate is exhibiting a decreasing trend and has declined since September 2007.

Based on measurements recorded at the treatment system discharge flow meter, approximately 5,712,650 gallons of treated groundwater has been discharged to the Nassau County Department of Public Works (NCDPW) storm sewer system. Note that this volume is inconsistent with data collected from the influent flow meters for EW-1 and EW-2, which recorded a combined total flow of approximately 3,757,102 gallons of groundwater entering the treatment system. In an effort to repair the total flow inconsistencies, EAR replaced the influent flow sensors for EW-1 and EW-2 on January 21, 2010; however, inconsistencies and intermittent no-flow readings are still noted. As detailed in the recommendations of this and the previous quarterly reports, further diagnosis of these inconsistencies or replacement of the paddle-style flow meters with mag-style flow meters is warranted.

During this reporting period, the groundwater extraction and treatment system was operative for a total of approximately 1,670 hours and inoperative for a total of approximately 515 hours due to routine and non-routine system maintenance.

Blower maintenance was performed in October 2010, as part of routine maintenance.

Non-routine maintenance performed during this reporting period included the following:

- EAR's electrician was on-site on August 31, 2010 to diagnose the recurring high-high wet well alarm condition and noted that the phase loss detection device within the wet well pump control panel appeared to be damaged. Upon closer inspection, the electrician noted that the device was cracked and removed it from the control panel. EAR ordered a replacement phase loss detection device and installed it on September 22, 2010. Note that

the treatment system was off from August 30, 2010 through September 22, 2010 as a result of the repair. Since the phase loss detection device has been replaced, the treatment system has not experienced any shutdowns due to a high-high wet well condition;

- Cleaning of the fresh air inlet screen on November 12, 2010; and
- Cleaning of the influent flow meter paddle wheels on November 29, 2010.

A copy of the Site Activities Logs, System Monitoring Logs and a System Operations and Downtime Log for this reporting period, which includes a summary of system maintenance events and alarm responses, as prepared by EAR, are provided in Attachment D. A summary of the routine maintenance events completed this reporting period and the scheduled routine maintenance events for Quarter 26 is provided in Attachment E.

Groundwater Extraction and Treatment System Sampling

Groundwater samples collected from the EW-1 and EW-2 well influent piping sample taps, as well as from the air stripper (liquid) discharge sample tap, were collected once during the month of September and twice during October and November of this reporting period. Note that only one sampling event was completed in September due to an extended amount of down-time associated with the diagnosis and repair of the phase loss detection device. Each sample was analyzed for volatile organic compounds (VOCs) utilizing United States Environmental Protection Agency (USEPA) 40 CFR Method 624. In addition, the samples collected from the air stripper discharge sample tap were also analyzed for iron and manganese utilizing USEPA SW-846 Method 6010 and for pH utilizing USEPA SW-846 Method 9040.

The analytical results of samples collected from the aqueous phase system influent are compared to the New York State Department of Environmental Conservation (NYSDEC) Class GA Groundwater Standards and Guidance Values, and the analytical results of the aqueous phase samples collected from the air stripper discharge are compared to the site-specific NYSDEC State Pollutant Discharge Elimination System (SPDES) permit equivalency effluent limitations. Analytical results are presented in Attachment F.

Based on a review and evaluation of the analytical results of groundwater sampled from extraction well EW-1, PCE was detected at concentrations ranging from 14.0 ug/l (detected on October 21, 2010), to a maximum of 25.0 ug/l (detected on September 23, 2010). Groundwater sampled from extraction well EW-2 exhibited PCE concentrations ranging from 51.0 ug/l (detected on October 21, 2010), to a maximum of 63.0 ug/l (detected on October 7, 2010). The NYSDEC Class GA Standard for PCE is 5.0 micrograms per liter (ug/l) in groundwater. Based on the maximum concentrations detected and extraction well flow rates for EW-1 (32.4 gpm) and EW-2 (7.0 gpm), extraction well

pump EW-1 is removing PCE at a rate of 4.06 x 10^{-4} pounds per hour (lb/hr) and extraction well pump EW-2 is removing PCE at a rate of 2.21 x 10^{-4} lb/hr.

The analytical results for the discharge samples collected this reporting period exhibited VOCs and metals concentrations below the effluent limitations, with the exception of the sample collected on September 23, 2010. That sample exhibited iron at a concentration of 1,130 ug/l, above its site specific effluent limit of 1,000 ug/l. It should also be noted that while effluent VOCs were detected at concentrations below the effluent limits, concentrations of PCE ranging from a minimum of 0.18 ug/l to a maximum of 0.35 ug/l were detected. The NYSDEC was immediately notified of the iron exceedance and PCE detection upon review of the data. Laboratory analyzed pH values were within the site specific effluent range of 6.5 to 8.5; however, the field reading collected from the wet well on August 26, 2010 (8.89) exhibited a pH value slightly above the site specific effluent range.
A summary of the extraction and treatment system performance results since September 2007 is provided in Attachment G.

Vapor phase samples were collected from the two carbon adsorption unit influent and effluent sample taps at a general frequency of once per week. Each sample was collected by filling a Tedlar bag directly from each of the influent and effluent sample taps located on the two carbon adsorption units. The samples were screened using a calibrated, hand-held photoionization detector (PID). During this reporting period, PID readings collected from both carbon vessels were 0.0 parts per million (ppm) for both the vapor phase influent and effluent vapor samples at each carbon adsorption unit, with exceptions as noted below:

September 30, 2010:

- 1.2 ppm at the vapor phase influent and 1.4 ppm at the effluent of Carbon Vessel No. 1; and
- 0.9 ppm at the vapor phase influent and 1.1 ppm at the effluent of Carbon Vessel No. 2.

November 4, 2010:

- 0.3 ppm at the vapor phase influent and 0.8 ppm at the effluent of Carbon Vessel No. 1; and
- 1.1 ppm at the vapor phase influent and 1.1 ppm at the effluent of Carbon Vessel No. 2.

November 12, 2010:

- 0.1 ppm at the vapor phase influent and 0.1 ppm at the effluent of Carbon Vessel No. 1; and
- 0.1 ppm at the vapor phase influent and 0.1 ppm at the effluent of Carbon Vessel No. 2.

November 19, 2010:

- 1.3 ppm at the vapor phase influent and 1.2 ppm at the effluent of Carbon Vessel No. 1; and
- 1.3 ppm at the vapor phase influent and 1.1 ppm at the effluent of Carbon Vessel No. 2.

November 24, 2010:

- 1.5 ppm at the vapor phase influent and 1.5 ppm at the effluent of Carbon Vessel No. 1; and
- 1.5 ppm at the vapor phase influent and 1.6 ppm at the effluent of Carbon Vessel No. 2.

The NYSDEC was immediately notified of the PID reading exceedances upon review of the data. In addition, and as recommended below, EAR's sample technicians should notify the NYSDEC and D&B if an effluent exceedance is noted during future monitoring events.

It should also be noted that based on the maximum influent PCE mass flow rates for EW-1 and EW-2, the carbon vessels are being loaded at a rate of 6.26×10^{-4} lb/hr and given an average blower flow rate of 630 cubic feet per minute (ft^3/min), this equates to a maximum air concentration of 0.04 ppm. The elevated PID readings noted above may indicate that the granular activated carbon (GAC) has been exhausted and, as recommended below, it may be warranted to collect an air sample for laboratory analysis from each carbon vessel sample tap to determine if the carbon vessels need to be serviced.

Data Validation

The samples collected throughout this reporting period have been analyzed by Test America Laboratories (TAL), Shelton, CT. The data packages submitted by TAL have been reviewed for completeness and compliance with the NYSDEC Analytical Services Protocol (ASP) Quality Assurance/Quality Control (QA/QC) requirements. All sample results have been deemed valid and usable for environmental assessment purposes; however, PCE was detected in the method blank and qualified as non-detect (U) in system effluent water sample AS-1 on September 23, 2010.

Data Validation Checklists are presented in Attachment H.

Findings

Based on the results of the performance monitoring conducted during this reporting period, D&B offers the following findings:

- Groundwater extraction well EW-1 exhibited PCE concentrations ranging from 14.0 ug/l to a maximum of 25.0 ug/l and groundwater extraction well EW-2 exhibited PCE concentrations ranging from 51.0 ug/l to a maximum of 63.0 ug/l, in exceedance of the NYSDEC Class GA Groundwater Standard for PCE of 5.0 ug/l. No other VOCs were detected at concentrations above their respective Class GA Groundwater Standard or Guidance Values in EW-1 or EW-2.
- The analytical results of the system aqueous phase influent samples show that groundwater extraction wells EW-1 and EW-2 continue to capture VOC-contaminated groundwater at an average combined total flow rate of 39 gpm, which is greater than the minimum required pumping rate of 20 gpm, as specified in the December 2000 Groundwater Extraction and Treatment System Design Report.
- Inconsistencies were again noted between the influent total gallons pumped for EW-1 and EW-2 and the treatment system discharge total gallons pumped. Note that the influent flow meters were replaced on January 21, 2010; however, the meters continue to malfunction. In addition, non-routine cleaning and maintenance of the flow meters does not appear to be an effective remedy.
- The PID readings collected from the carbon vessel vapor phase effluent continue to intermittently exhibit total VOCs greater than the site specific effluent limit of 1.0 ppm.
- EAR replaced the damaged phase loss detection device in the wet well pump control panel on September 22, 2010 and no wet well high-high alarms were noted after that date through the end of the quarter.
- Effluent VOCs were detected at concentrations below the effluent limit; however, concentrations of PCE ranging from a minimum of 0.18 ug/l to a maximum of 0.35 ug/l were detected.
- The field screening of the effluent water continues to intermittently exhibit a pH outside the site specific effluent range of 6.5 to 8.5.
- Based on the influent mass loading rate and the blower air flow rate, the carbon vessels are currently being loaded at a maximum rate of approximately 6.26×10^{-4} lb/hr. Given an average blower flow rate of 630 ft^3/min, this equates to a maximum influent air concentration of 0.04 ppm, well below the PID screening concentrations noted throughout this reporting period.
- A new DER-10 document, dated May 2010, has been implemented since the March 1998 ROD was issued.
- The toxicity data, cleanup levels and remedial action objectives, as defined in the March 1998 ROD, remain unchanged.

Recommendations

Based on the results of performance monitoring conducted during this reporting period, D&B offers the following recommendations:

- Continue operation of the groundwater extraction and treatment system to minimize downgradient migration of PCE, currently being captured by the system.
- It is recommended that the NYSDEC call-out contractor diagnose the inconsistencies noted between the influent and effluent flow meters and/or replace the paddle-style flow meters with mag-style flow meters.
- Due to the intermittent elevated PID readings detected at the carbon adsorption vessel effluent sample taps, it is recommended that a vapor sample be collected and laboratory analyzed via Method TO-15 at each carbon vessel effluent sample tap, in order to determine the actual VOC concentrations in the effluent vapor and to determine whether a carbon change-out is warranted at this time.

Please do not hesitate to contact me at (516) 364-9890, Ext. 3094, if you have any questions.

Very truly yours,

Stephen Tauss
Project Manager

SET/OI(t)/j,csf,lf
Attachments
cc: J. Trad (NYSDEC)
J. Multari (Molloy College)
J. Neri (H2M)
R. Walka (D&B)
F. DeVita (D&B)
P. Martorano (D&B)
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ATTACHMENT A

FIGURES

SOURCE: USGS FREEPORT AND LYNBROOK QUADRANGLES

FRANKLIN CLEANERS SITE
VILLAGE OF HEMPSTEAD, NEW YORK

SITE LOCATION MAP

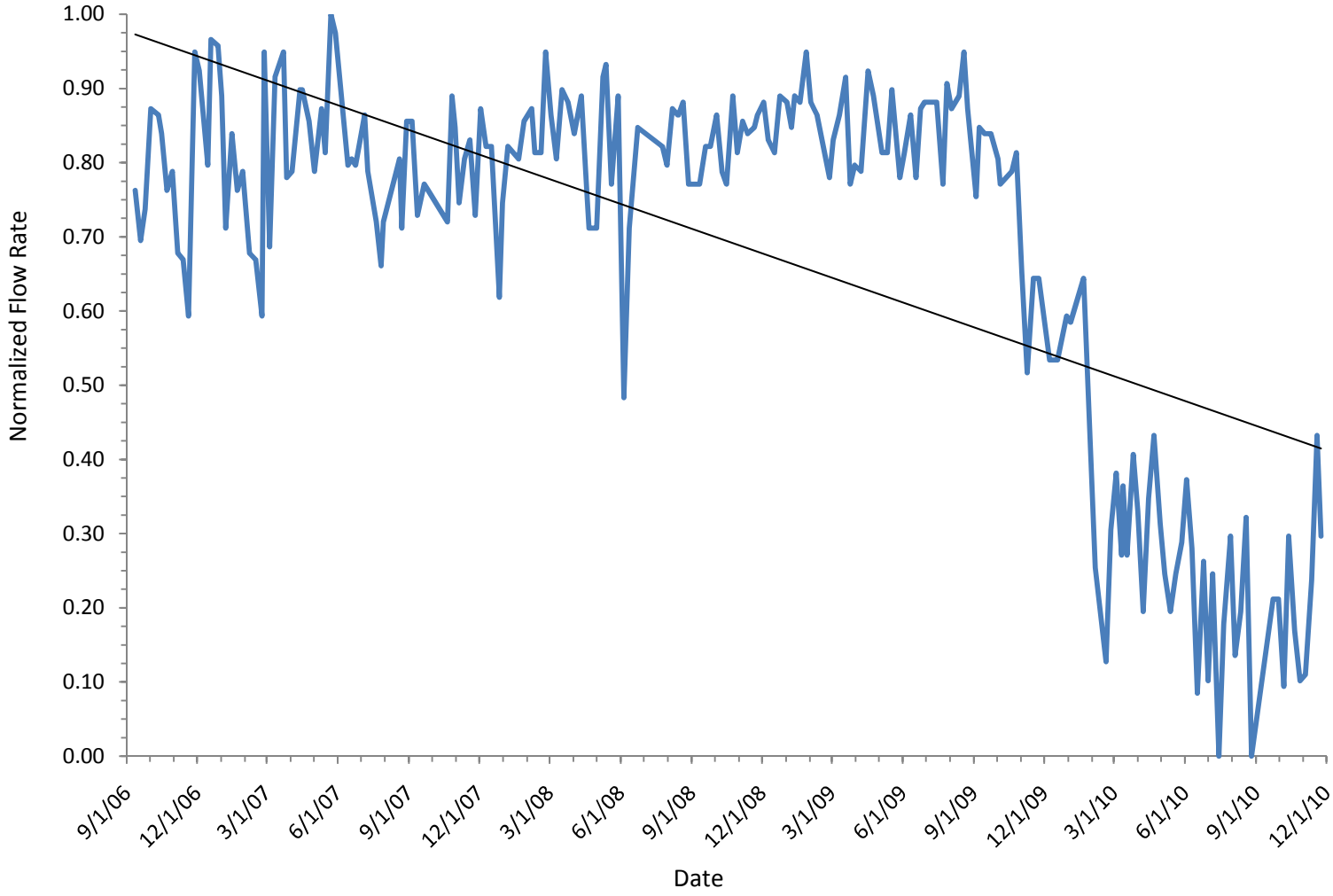
FIGURE 1

Dvirka and Bartilucci
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

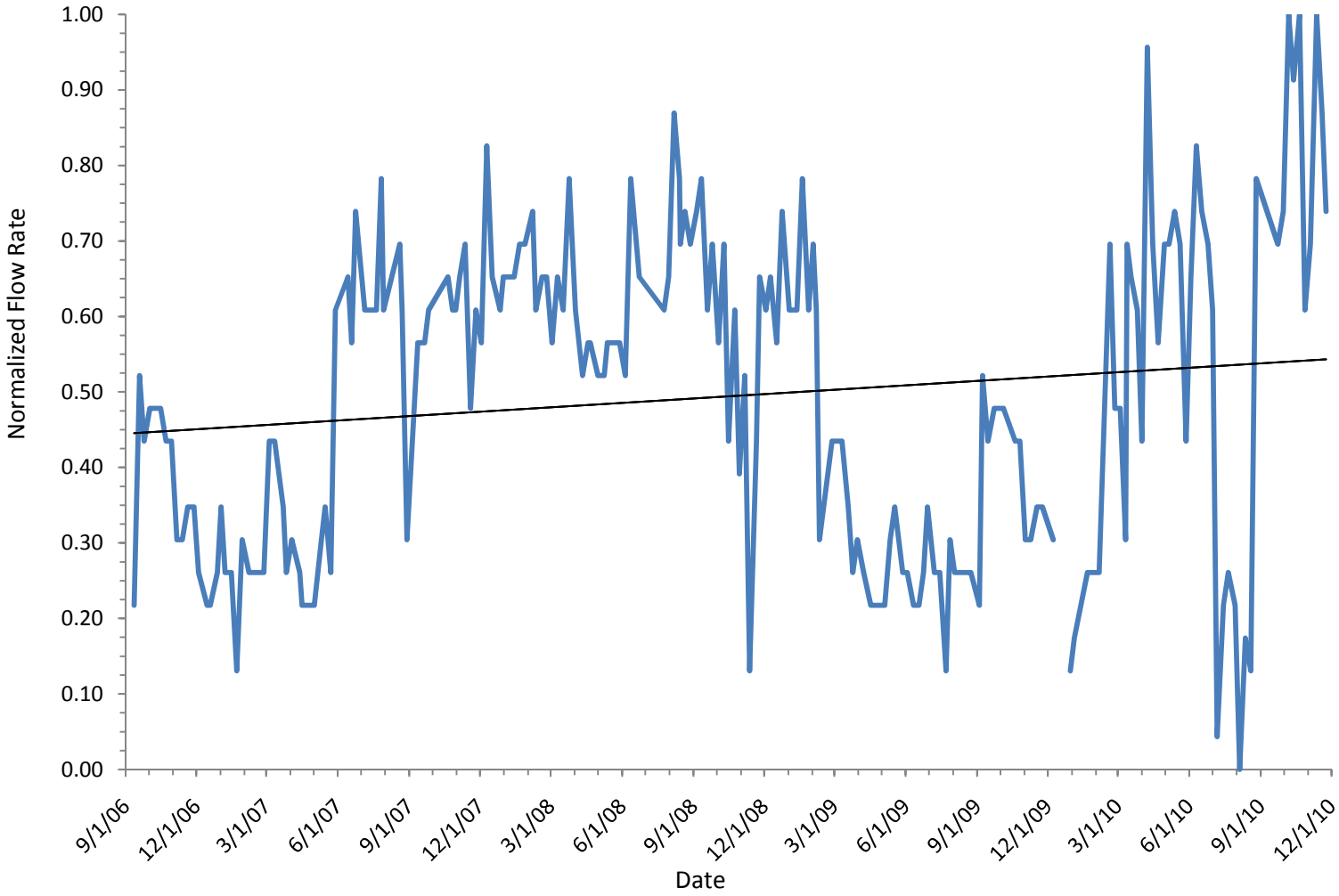
ATTACHMENT B

NORMALIZED EXTRACTION WELL FLOW RATE GRAPHS

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT NO. D004446 / SITE NO. 1-30-050
NORMALIZED GRAPH OF AVERAGE FLOW RATE FOR EW-1



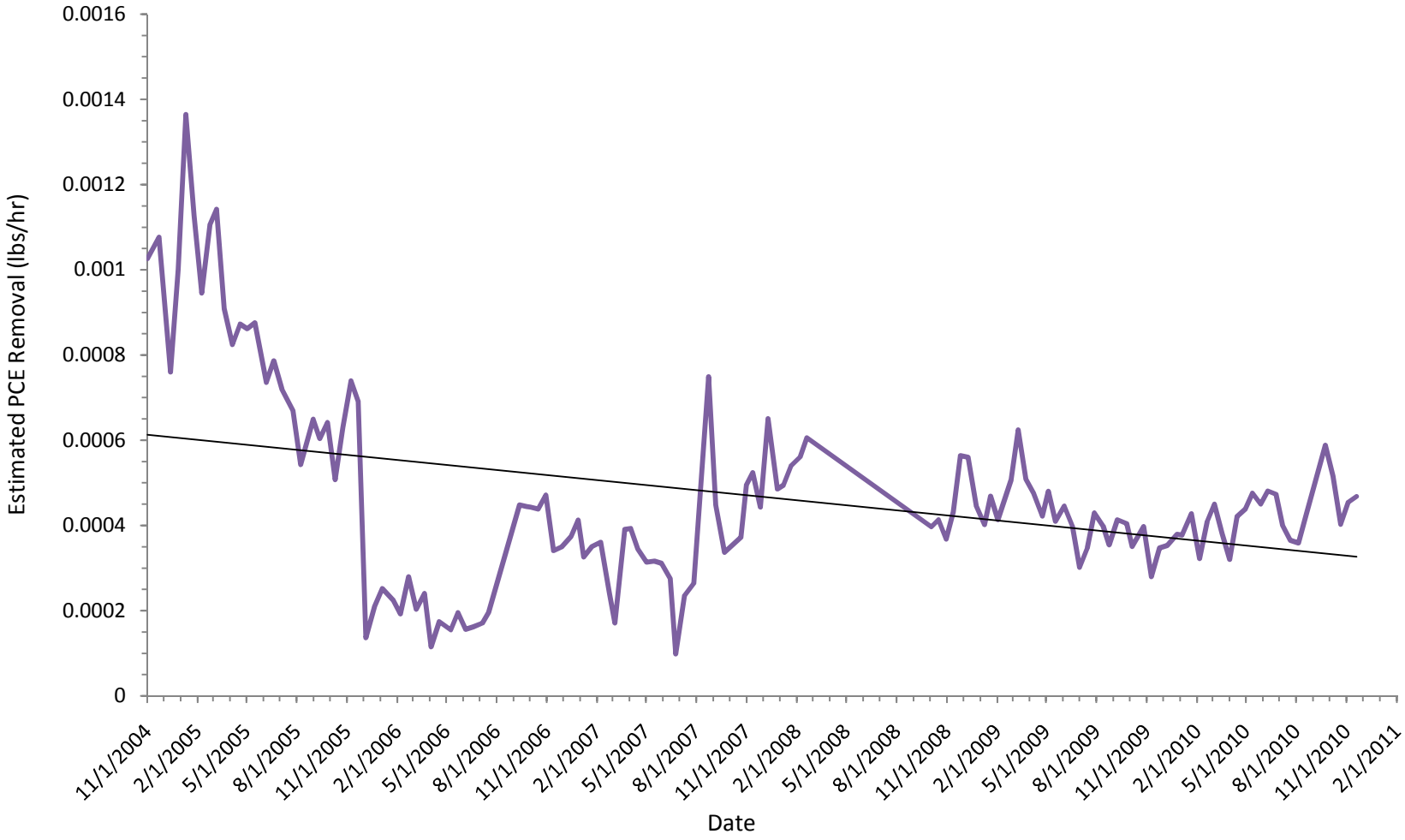
FRANKLIN CLEANERS SITE
NYSDEC CONTRACT NO. D004446 / SITE NO. 1-30-050
NORMALIZED GRAPH OF AVERAGE FLOW RATE FOR EW-2



ATTACHMENT C

AVERAGE PCE REMOVAL RATE GRAPH

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT NO. D004446 / SITE NO. 1-30-050
ESTIMATED AVERAGE PCE REMOVAL RATE



ATTACHMENT D

SITE LOGS

FRANKLIN CLEANERS SITE, NYSDEC SITE NO. 1-30-050
SITE ACTIVITIES LOG

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	REASON FOR SITE VISIT (CHECK BOX BELOW)			
KS	8/31/10 1245			Monitoring		Maintenance
				Sampling		Other (Provide Description)
			X	Alarm Response		

Description: Trouble shoot Alarm 3 MH/WW. Power ISSUE @ the WW/control Pannel. Call PM TO discuss. Eletrician to evaluate. System off on Departure.

PL	8/31/10 1430	1500		Monitoring		Maintenance
				Sampling	X	Other (Provide Description)
				Alarm Response		

Description: Trouble Shoot problem w/ww pump motor starters. Lock out system.

KII	9/9/10 1130	1230		Monitoring		Maintenance
				Sampling	X	Other (Provide Description)
				Alarm Response		

Description: Take photos of wells in Parking area.

FRANKLIN CLEANERS SITE, NYSDEC SITE NO. 1-30-050
SITE ACTIVITIES LOG

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	REASON FOR SITE VISIT (CHECK BOX BELOW)			
KH / PL	9/22/10 0900	1330		Monitoring		Maintenance
				Sampling	X	Other (Provide Description)
				Alarm Response		

Description: Install New Part in Wetwell Control Panel. Totalizer @ Restart 49,202338, Monitor System, Install new well caps @ 4 + 5, Return Log Book to Site.

KS	9/23/10 0900	1200	X	Monitoring		Maintenance
			X	Sampling		Other (Provide Description)
				Alarm Response		

Description: Weekly Site check, Bi Weekly Sampling.

KS	9/30/10 1000	1245	X	Monitoring		Maintenance
				Sampling		Other (Provide Description)
				Alarm Response		

Description: Weekly Site check.

FRANKLIN CLEANERS SITE, NYSDEC SITE NO. 1-30-050
SITE ACTIVITIES LOG

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	REASON FOR SITE VISIT (CHECK BOX BELOW)			
KS	10/7 0915	1330	X	Monitoring	X	Maintenance
			X	Sampling		Other (Provide Description)
				Alarm Response		

Description: Weekly site check, Bi-weekly sampling, min. property maintenance.

KS	10/13/10 0915	1130	X	Monitoring		Maintenance
				Sampling		Other (Provide Description)
				Alarm Response		

Description: Weekly site check.

KS	10/21/10 0900	1200	X	Monitoring	X	Maintenance
			X	Sampling		Other (Provide Description)
				Alarm Response		

Description:

FRANKLIN CLEANERS SITE, NYSDEC SITE NO. 1-30-050
SITE ACTIVITIES LOG

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	REASON FOR SITE VISIT (CHECK BOX BELOW)			
KS	10/28/10 1000	1200	X	Monitoring		Maintenance
				Sampling		Other (Provide Description)
				Alarm Response		

Description: Conduct weekly site check - Record Readings.

KS 1	11/4/10 0915	1130	X	Monitoring		Maintenance
			X	Sampling		Other (Provide Description)
				Alarm Response		

Description: Weekly site check - Bi weekly system Sampling.

KS	11/12/10 0845	1100	X	Monitoring	X	Maintenance
				Sampling		Other (Provide Description)
				Alarm Response		

Description: Weekly site check. Shut system down to clean Fresh Air Inlet Screen.

FRANKLIN CLEANERS SITE, NYSDEC SITE NO. 1-30-050
SITE ACTIVITIES LOG

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	REASON FOR SITE VISIT (CHECK BOX BELOW)			
KS	11/19/10 0845	1130	X	Monitoring		Maintenance
			X	Sampling		Other (Provide Description)
				Alarm Response		

Description: WEEKLY SITE CHECK, BI WEEKLY SAMPLES. MONITOR PH & CARBON.

KS	11/24/10 0900	1100	X	Monitoring		Maintenance
				Sampling		Other (Provide Description)
				Alarm Response		

Description: WEEKLY SITE CHECK.

KS, KH+GW	11/29/10 0815	1345	X	Monitoring		Maintenance
			X	Sampling		Other (Provide Description)
				Alarm Response		

Description: GWS EVENT.

FRANKLIN CLEANERS SITE, NYSDEC SITE NO. 1-30-050
SITE ACTIVITIES LOG

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	REASON FOR SITE VISIT (CHECK BOX BELOW)			
PL + GW	11/30/10 0815	1300	X	Monitoring		Maintenance
			X	Sampling		Other (Provide Description)
				Alarm Response		
Description: Day 2 GWS.						
				Monitoring		Maintenance
				Sampling		Other (Provide Description)
				Alarm Response		
Description:						
				Monitoring		Maintenance
				Sampling		Other (Provide Description)
				Alarm Response		
Description:						

FRANKLIN CLEANERS SITE, NYSDEC SITE No. 1-30-050
SYSTEM MONITORING LOG

DATE	8/19/10 KS	8/26/10 KS	9/23/10 KS	9/30/10 KS	10/7/10 KS
TIME	0815	0845	0930	1000	0915
EW-1					
Flow Rate (gpm)	33.7	29.9	32.4	32.4	31.01
Total Flow (gal)	0859 8474 @ 0841	0892 0693 @ 0956	0916 6219 @ 1015	0 9448 9168 @ 1035	0980 934 @ 1005
Influent pH (grab sample field reading)	5.84	7.20	5.98	6.35	16:26
VFD Operating Frequency (Hz)	80.0	80.0	80.0	80.0	80.0
Pump Runtime (hrs @ time)	4899460 @ 0839	4916387 @ 0955	4929272 @ 1010	4946180 @ 1030	4962849 @ 0957
Bicycle Pump Pressure Reading (psi)	—	—	—	—	—
Water Column Above Pump (ft H_2O)(psi x 2.31)	—	—	—	—	—
Routine Sampling Performed (YES/NO)	YES @ 0910	NO	YES 1040	NO	YES 1025
EW-2					
Flow Rate (gpm)	5.0	0.0 / 6.5 after	6.3	6.4	7.0
Total Flow (gal)	1211 1898 @ 0841	1211 2675 @ 0956	1212 1789 @ 1015	1218 4478 @ 1035	1224 7258 @ 1005
Influent pH (grab sample field reading)	6.24	7.51	5.96	5.92	5.75
VFD Operating Frequency (Hz)	60.0	60.0	60.0	60.0	60.0
Pump Runtime (hrs @ time)	3021 861 @ 0839	3038 788 @ 0955	3051 672 @ 1010	3068 630 @ 1030	3085 250 @ 0957
Bicycle Pump Pressure Reading (psi)	—	—	—	—	—
Water Column Above Pump (ft H_2O)(psi x 2.31)	—	—	—	—	—
Routine Sampling Performed (YES/NO)	YES - 0930	NO	YES 1100	NO	YES - 1035
Air Stripper					
Sump Level (inches)	6"	6"	6"	6"	6"
Effluent pH (grab sample field reading)	7.18	8.39	6.72	6.82	6.85
Fresh Air Inlet Vacuum (in H_2O)	2	2.5	1.5	1.5	1.5
Blower Suction (in H_2O)	20.5	21	20.5	20.5	21
Blower Discharge (in H_2O)	24	24	25	24	24
Blower Runtime (hrs @ time)	3786 151 @ 0839	3803 078 @ 0955	3815 971 @ 1010	3832 828 @ 1030	3849 548 @ 0957
Routine Sampling Performed (YES/NO)	YES - 0958	NO	YES - 1117	NO	YES @ 1047

FRANKLIN CLEANERS SITE, NYSDEC SITE No. 1-30-050
SYSTEM MONITORING LOG

DATE	8/19/10 KS	8/26/10 KS	9/23/10 KS	9/30/10 KS	10/7/10 KS
TIME	0815	0845	0930	1000	0915
Vapor Phase Carbon					
Lead/Lag Unit					
Lead pressure Inlet/Outlet (psi)	24 / 18.5	24 / 19	25 / 19	24 / 19	24 / 19
Lead Total VOC Conc. Inlet/Outlet (ppm)	0.8 / 0.7	0.0 / 0.0	0.0 / 0.0	1.2 / 1.4	0.0 / 0.0
Lag pressure Inlet/Outlet (psi)	9 / 6	9 / 6	9 / 6	9 / 6	9 / 6
Lag Total VOC Conc. Inlet/Outlet (ppm)	0.7 / 0.6	0.0 / 0.0	0.0 / 0.0	0.9 / 1.1	0.0 / 0.0
Exhaust Flow Rate (scfm)	620	620	640	626	620
Exhaust Temperature (°F)	89°	85°	85°	85°	80°
Wet Well					
Pump No. 1 Runtime (hrs)	175993 @ 0839	176830 @ 0955	177469 @ 1012	178297 @ 1032	179134 @ 1003
Pump No. 2 Runtime (hrs)	165521 @ 0840	166197 @ 0956	166712 @ 1012	167391 @ 1032	168054 @ 1004
Wet Well pH (grab sample field reading)	7.41	8.89	7.04	7.06	7.28
Valve Vault					
Pump No. 1 Operating Pressure (psi)	1.8	1.9	9	1.5 - 2	9.7 → 10
Pump No. 1 Flow Rate (gpm)	65	62	64	64	64
Pump No. 2 Operating Pressure (psi)	1.9	1.9	9	1.5 - 2	10
Pump No. 2 Flow Rate (gpm)	66	65	65	67	67
Flow Meter Vault					
Total Flow (gallons @ time)	48241055 @ 0851	48836623 @ 1022	49287179 @ 1025	49873426 @ 1100	50455995 @ 1017
Jet Pump					
Line Pressure (psi)	-0-	-0-	-0-	0	0

COMMENTS

FRANKLIN CLEANERS SITE, NYSDEC SITE No. 1-30-050
SYSTEM MONITORING LOG

DATE	10/13/10 KS	10/21/10 KS	10/28/10 KS	11/4/10 KS	11/12/10 KS
TIME	0915	0900	1000	0915	0845
EW-1					
Flow Rate (gpm)	33.4	31.9	31.1	31.2	32.7
Total Flow (gal)	10084507@1004	10450722@0952	10771592@1012	11090422@0937	11457468@0911
Influent pH (grab sample field reading)	6.60	—	6.85	6.36	5.82
VFD Operating Frequency (Hz)	80.0	80.0	80.0 Hz	80.0 Hz	80.0 Hz
Pump Runtime (hrs @ time)	4977256@1000	4996438@0950	5013271@1010	5036012@0935	5049268@0908
Bicycle Pump Pressure Reading (psi)	—	—	—	—	—
Water Column Above Pump (ft H_2O)(psi x 2.31)	—	—	—	—	—
Routine Sampling Performed (YES/NO)	NO	YES 1027	NO	YES 0959	NO
EW-2					
Flow Rate (gpm)	6.8	7.0	6.1	6.3	7.0
Total Flow (gal)	12303330@1004	12378336@0953	12444276@1013	12510135@0937	12585668@0911
Influent pH (grab sample field reading)	5.26	—	6.63	5.42	5.45
VFD Operating Frequency (Hz)	60.0	60.0	60.0 Hz	60.0 Hz	60.0 Hz
Pump Runtime (hrs @ time)	3099657@1000	3118839@0950	3135671@1010	3152412@0935	3171668@0908
Bicycle Pump Pressure Reading (psi)	—	—	—	—	—
Water Column Above Pump (ft H_2O)(psi x 2.31)	—	—	—	—	—
Routine Sampling Performed (YES/NO)	NO	YES@1033	NO	YES 1010	NO
Air Stripper					
Sump Level (inches)	6"	6"	6"	6"	6"
Effluent pH (grab sample field reading)	7.37	—	7.44	6.83	6.94
Fresh Air Inlet Vacuum (in H_2O)	1.5	2	4	4	5
Blower Suction (in H_2O)	21	21	21	21	21
Blower Discharge (in H_2O)	24	24	23	22.5	22
Blower Runtime (hrs @ time)	3863954@1000	3883137@0950	3899969@1010	3916711@0935	3935967@0909
Routine Sampling Performed (YES/NO)	NO	YES@1043	NO	YES 1023	NO

FRANKLIN CLEANERS SITE, NYSDEC SITE No. 1-30-050
SYSTEM MONITORING LOG

DATE	10/13/10 KS	10/21/10 KS	10/28/10 KS	11/4/10 KS	11/12/10 KS
TIME	0915	0900	1000	0915	0845
Vapor Phase Carbon					
Lead/Lag Unit					
Lead pressure Inlet/Outlet (psi)	24 / 19	24 / 19	23 / 18	22.5 / 18	22 / 17.5
Lead Total VOC Conc. Inlet/Outlet (ppm)	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.3 / 0.18	0.1 / 0.1
Lag pressure Inlet/Outlet (psi)	9 / 6	9 / 6	9 / 6	8 / 6	8.5 / 6
Lag Total VOC Conc. Inlet/Outlet (ppm)	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	1.1 / 1.1	0.1 / 0.1
Exhaust Flow Rate (scfm)	620	600	610	600	600
Exhaust Temperature (°F)	81°	79°	85°	80°	80°
Wet Well					
Pump No. 1 Runtime (hrs)	179857 @ 1002	180821 @ 0951	181665 @ 1010	182503 @ 0936	183461 @ 0909
Pump No. 2 Runtime (hrs)	168623 @ 1002	169387 @ 0951	170056 @ 1011	170726 @ 0936	171504 @ 0909
Wet Well pH (grab sample field reading)	7.47	—	7.71	7.32	7.06
Valve Vault					
Pump No. 1 Operating Pressure (psi)	9.5	10	9	1.3	9
Pump No. 1 Flow Rate (gpm)	64	63	64	62	60
Pump No. 2 Operating Pressure (psi)	10	10.1	10	1.4	10
Pump No. 2 Flow Rate (gpm)	66	62	66	63	64
Flow Meter Vault					
Total Flow (gallons @ time)	50951088 @ 1012	51622702 @ 1003	52209024 @ 1021	52792358 @ 0952	53462852 @ 0920
Jet Pump					
Line Pressure (psi)	0	0	0	0	0

COMMENTS

11/4/10 System running normal upon Arrival & departure.

11/12/10 System running upon Arival- Fresh Air Inlet pressure high @ 5. Shut system down to clean. System running normal upon departure.

FRANKLIN CLEANERS SITE, NYSDEC SITE No. 1-30-050
SYSTEM MONITORING LOG

DATE	11/19/10 KS	11/24/10 KS	12/2/10 KS	12/9/10 KS	12/16/10 KS
TIME	0845	0900	0845	0930	1630
EW-1					
Flow Rate (gpm)	35.0	33.4	32.6	31.8	31.5
Total Flow (gal)	11777802 @ 0952	12006430 @ 0947	12371621 @ 0938	12692059 @ 0957	13014819 @ 1102
Influent pH (grab sample field reading)	5.97	6.37	7.22	5.81	5.77
VFD Operating Frequency (Hz)	80.0 Hz	80.0	80.0	80.0	80.0
Pump Runtime (hrs @ time)	5066130 @ 0945	5078124 @ 0945	5097292 @ 0936	5114086 @ 0955	5130997 @ 1100
Bicycle Pump Pressure Reading (psi)	—	—	—	—	—
Water Column Above Pump (ft H_2O)(psi x 2.31)	—	—	—	—	—
Routine Sampling Performed (YES/NO)	YES @ 1013	NO	YES @ 1056	NO	YES @ 1139
EW-2					
Flow Rate (gpm)	6.7	6.4	0 / 6.9	7.1	0
Total Flow (gal)	12651698 @ 0952	12699020 @ 0947	12754795 @ 0938 / 12794870 @ 1222	12824497 @ 0957	12843535 @ 1103
Influent pH (grab sample field reading)	5.45	5.44	7.01	5.43	5.26
VFD Operating Frequency (Hz)	60.0 Hz	60.0	60.0	60.0	60.0
Pump Runtime (hrs @ time)	3188531 @ 0945	3200524 @ 0945	3219693 @ 0936	3236489 @ 0955	3253397 @ 1100
Bicycle Pump Pressure Reading (psi)	—	—	—	—	—
Water Column Above Pump (ft H_2O)(psi x 2.31)	—	—	—	—	—
Routine Sampling Performed (YES/NO)	YES @ 1029	NO	YES @ 1105	NO	YES @ 1149
Air Stripper					
Sump Level (inches)	6"	6"	6"	6"	6"
Effluent pH (grab sample field reading)	6.74	6.88	9.25	7.04	6.99
Fresh Air Inlet Vacuum (in H_2O)	1.5	1.5	1	1.5	1.5
Blower Suction (in H_2O)	20	21	20.5	20.5	20.5
Blower Discharge (in H_2O)	25	25	24	24.5	24
Blower Runtime (hrs @ time)	3952829 @ 0945	3964822 @ 0945	3983991 @ 0936	4000787 @ 0955	4017694 @ 1100
Routine Sampling Performed (YES/NO)	YES @ 1042	NO	YES @ 1125	NO	YES @ 1205

FRANKLIN CLEANERS SITE, NYSDEC SITE No. 1-30-050
SYSTEM MONITORING LOG

DATE	11/19/10 KS	11/24/10 KS	12/2/10 KS	12/9/10 KS	12/16/10 KS
TIME	0845	0900	0845	0930	1030
Vapor Phase Carbon					
Lead/Lag Unit					
Lead pressure Inlet/Outlet (psi)	12/19	25/19	24/19	24.5/19	24/19
Lead Total VOC Conc. Inlet/Outlet (ppm)	1.3/1.2	1.5/1.5	2.2/2.7	1.6/2.0	1.6/1.6
Lag pressure Inlet/Outlet (psi)	9/6.5	9/6.5	9/6	9/6.5	9/6
Lag Total VOC Conc. Inlet/Outlet (ppm)	1.3/1.1	1.5/1.6	3.3/3.5	3.2/5.1	1.6/1.6
Exhaust Flow Rate (scfm)	656	620	615	630	630
Exhaust Temperature (°F)	81°	81°	80°	79°	78°
Wet Well					
Pump No. 1 Runtime (hrs)	184299 @ 0950	184898 @ 0946	185958 @ 0937	186713 @ 0956	187579 @ 1101
Pump No. 2 Runtime (hrs)	172190 @ 0950	172676 @ 0946	173456 @ 0937	174131 @ 0956	174809 @ 1101
Wet Well pH (grab sample field reading)	6.90	7.31	8.97	7.24	7.10
Valve Vault					
Pump No. 1 Operating Pressure (psi)	9.2	10	9	9	9
Pump No. 1 Flow Rate (gpm)	60	64	64	64	63
Pump No. 2 Operating Pressure (psi)	9.8	10.1	10	10	10
Pump No. 2 Flow Rate (gpm)	63	64	65	64	61
Flow Meter Vault					
Total Flow (gallons @ time)	54648914 @ 1004	54467938 @ 1016	55135670 @ 0943	55722850 @ 1004	56313184 @ 1116
Jet Pump					
Line Pressure (psi)	0	0	0	0	0

COMMENTS

11/19/10 System operating normal on Arrival + Departure.

12/2/10 System running upon Arrival - Flow Sensor EW2 not recording. System shut down @ 1150 to maintenance Flow Senor. 55143396 Totalizer. System ON @ 1212 - monitor system for 20 min. Record EW-2 Readings after cleaning sensor. Turned Heat to ON - 50° Turned outside lighting on "Auto"

12/16/10 Flow Sensor @ EW-2 NOT working.

FRANKLIN CLEANERS SITE, NYSDEC SITE NO. 1-30-050
SYSTEM OPERATIONS AND DOWNTIME SHEET

SHUT-OFF DATE/TIME	RESTART DATE/TIME	CAUSE	ACTIONS TAKEN	TOTALIZER READING
7/19/10 1030	7/19/10	Power down w. work	Pump down / Restarted	45934965 @ 1233
7/21/10 1027		REQUEST @ PM	EW-2 Shutdown	11941158
7/23/10 1323				07507601
	7/26/10 1315		RESTART SYSTEM	07507612 EW1
	7/27/10 1410		RESTART EW-2	11941158 EW2
7/30/10 0955	7/30/10 1045	MAINTENANCE		46564937
8/26/10 1035	8/26/10 1110	MAINTENANCE	FLOW SENSOR 2 CLEANING AIR INLET-CLEAN CHECK VALVE @ EW-2 INLET FOR AVAIL WATER	48837586
8/30/10 1915	8/31/10	Alarm-3	Pump Down WW / Restart Failure	49,202,338 SYSTEM OFF
	9/22/10 1030	Replaced Part.	RE-START AFTER replacement part	49,202,338 ON
11/2/10 1028	11/2/10 1036	Personnel Shut down	Fresh air inlet screen to - be cleaned.	5346842
11/29/10 1322	11/29/10 1330	Flow sensor EW2 not working	Cleaned flow Sensor Paddle wheels	64897868
12/2/10 1150	12/2/10 1212	FLOW SENSOR EW-2 not recording	Cleaned paddle wheel of IRON & Algae/ Back in function	55143396
12/22/10 1134	12/22/10 1204	Flow Sensor Not working @ EW2	Cleaned Iron from paddle wheel. Replaced. MONITORED.	56817131
1/6/11 1010	1/6/11 1100	BLOWER MAINTENANCE	GREASE, FILTERS, BELTS.	59062265

ATTACHMENT E

ROUTINE MAINTENANCE SCHEDULE

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050
SUMMARY OF MAINTENANCE ACTIVITIES

Activity	Sep-2010 25th Qtr	Oct-2010 25th Qtr	Nov-2010 25th Qtr	Dec-2010 26th Qtr	Jan-2011 26th Qtr	Feb-2011 26th Qtr
Blower Maintenance		10/15/2010				
Air Stripper Maintenance						
GAC Removal and Replacement						
Wet Well Pumps Maintenance						

##/##/##	Activity Completed
	Activity to Complete

ATTACHMENT F

ANALYTICAL RESULTS

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050
RESULTS OF ANALYSIS OF EW-1 INFLUENT

SAMPLE ID	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	SYSTEM INFLUENT (EW-1)	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	9/23/2010	10/7/2010	10/21/2010	11/4/2010	11/19/2010	
COLLECTED BY	EAR	EAR	EAR	EAR	EAR	
UNITS	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOCs						
Dichlorodifluoromethane	U	U	U	U	U	5 ST
Chloromethane	0.72 J	U	0.43 J	0.49 J	0.23 J	--
Vinyl chloride	U	U	U	U	U	2 ST
Bromomethane	U	U	U	U	U	5 ST
Chloroethane	U	U	U	U	U	5 ST
Trichlorofluoromethane	U	U	U	U	U	5 ST
1,1-Dichloroethene	U	U	U	U	U	5 ST
Methylene chloride	U	U	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	5 ST
1,1-Dichloroethane	U	U	U	U	U	5 ST
Chloroform	0.15 J	0.13 J	0.11 J	0.15 J	0.14 J	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	5 ST
Carbon tetrachloride	U	U	U	U	U	5 ST
1,2-Dichloroethane	U	U	U	U	U	0.6 ST
Trichloroethene	U	U	U	U	U	5 ST
1,2-Dichloropropane	U	U	U	U	U	1 ST
Bromodichloromethane	U	U	U	U	U	50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	0.4 ST
trans-1,3-Dichloropropene	U	U	U	U	U	0.4 ST
1,1,2-Trichloroethane	U	U	U	U	U	1 ST
Tetrachloroethene	**25 B**	**19**	**14**	**17**	**16**	5 ST
Dibromochloromethane	U	U	U	U	U	50 GV
Chlorobenzene	U	U	U	U	U	5 ST
Bromoform	U	U	U	U	U	50 GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	3 ST
2-Chloroethyl vinyl ether	U	U	U	U	U	5 ST

NOTES:

Concentration exceeds NYSDEC Class GA Groundwater Standards or Guidance

ABBREVIATIONS:

ug/L = Micrograms per liter
--: Not established
ST: Standard Value
GV: Guidance Value

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below CRDL, value estimated
B: Compound detected in method blank

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050
RESULTS OF ANALYSIS OF EW-2 INFLUENT

SAMPLE ID	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	SYSTEM INFLUENT (EW-2)	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	9/23/2010	10/7/2010	10/21/2010	11/4/2010	11/19/2010	
COLLECTED BY	EAR	EAR	EAR	EAR	EAR	
UNITS	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
VOCs						
Dichlorodifluoromethane	U	U	U	U	U	5 ST
Chloromethane	U	0.48 J	0.48 J	U	0.73 J	--
Vinyl chloride	U	U	U	U	U	2 ST
Bromomethane	U	U	U	U	U	5 ST
Chloroethane	U	U	U	U	U	5 ST
Trichlorofluoromethane	U	U	U	U	U	5 ST
1,1-Dichloroethene	0.42 J	U	0.18 J	0.19 J	0.24 J	5 ST
Methylene chloride	U	U	U	U	U	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	5 ST
1,1-Dichloroethane	0.17 J	U	0.12 J	U	0.11 J	5 ST
Chloroform	0.16 J	U	0.15 J	0.16 U	U	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	5 ST
Carbon tetrachloride	U	U	U	U	U	5 ST
1,2-Dichloroethane	U	U	U	U	U	0.6 ST
Trichloroethene	U	U	U	U	U	5 ST
1,2-Dichloropropane	U	U	U	U	U	1 ST
Bromodichloromethane	U	U	U	U	U	50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	0.4 ST
trans-1,3-Dichloropropene	U	U	U	U	U	0.4 ST
1,1,2-Trichloroethane	U	U		U	U	1 ST
Tetrachloroethene	**58 B**	**63**	**51**	**60**	**56**	5 ST
Dibromochloromethane	U	U	U	U	U	50 GV
Chlorobenzene	U	U	U	U	U	5 ST
Bromoform	U	U	U	U	U	50 GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	3 ST
2-Chloroethyl vinyl ether	U	U	U	U	U	5 ST

NOTES:

Concentration exceeds NYSDEC Class GA Groundwater Standards or Guidance Values

ABBREVIATIONS:

ug/L = Micrograms per liter
--: Not established
ST: Standard Value
GV: Guidance Value

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below CRDL, value estimated

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050
RESULTS OF ANALYSIS OF AIR STRIPPER EFFLUENT FOR VOCs

SAMPLE ID	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	EFFLUENT LIMITATIONS	NYSDEC CLASS GA GROUNDWATER STANDARDS AND GUIDANCE VALUES
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER		
DATE OF COLLECTION	9/23/2010	10/7/2010	10/21/2010	11/4/2010	11/19/2010		
COLLECTED BY	EAR	EAR	EAR	EAR	EAR		
UNITS	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Dichlorodifluoromethane	U	U	U	U	U	--	5 ST
Chloromethane	U	U	0.46 J	0.28 J	0.15 J	--	--
Vinyl chloride	U	U	U	U	U	--	2 ST
Bromomethane	U	U	U	U	U	--	5 ST
Chloroethane	U	U	U	U	U	--	5 ST
Trichlorofluoromethane	U	U	U	U	U	--	5 ST
1,1-Dichloroethene	U	U	U	U	U	--	5 ST
Methylene chloride	U	U	U	U	U	--	5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	--	5 ST
1,1-Dichloroethane	U	U	U	U	U	10	5 ST
Chloroform	U	U	U	U	U	--	7 ST
1,1,1-Trichloroethane	U	U	U	U	U	10	5 ST
Carbon tetrachloride	U	U	U	U	U	--	5 ST
1,2-Dichloroethane	U	U	U	U	U	--	0.6 ST
Trichloroethene	U	U	U	U	U	10	5 ST
1,2-Dichloropropane	U	U	U	U	U	--	1 ST
Bromodichloromethane	U	U	U	U	U	--	50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	--	0.4 ST
trans-1,3-Dichloropropene	U	U	U	U	U	--	0.4 ST
1,1,2-Trichloroethane	U	U	U	U	U	--	1 ST
Tetrachloroethene	U*	0.35 J	0.19 J	0.20 J	0.18 J	5	5 ST
Dibromochloromethane	U	U	U	U	U	--	50 GV
Chlorobenzene	U	U	U	U	U	--	5 ST
Bromoform	U	U	U	U	U	--	50 GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	--	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	--	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	--	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	--	3 ST
2-Chloroethyl vinyl ether	U	U	U	U	U	--	5 ST

NOTES:

Concentration exceeds Site Specific Effluent Limitation

ABBREVIATIONS

ug/L = Micrograms per liter
--: Not established
ST: Standard Value
GV: Guidance Value

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below CRDL, value estimated
U*: Compound qualified as non-detect due to a detection in the method blank.

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050
RESULTS OF ANALYSIS OF AIR STRIPPER EFFLUENT IRON, MANGANESE AND pH

SAMPLE ID	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	SYSTEM EFFLUENT (AS-1)	EFFLUENT LIMITATIONS
SAMPLE TYPE	WATER	WATER	WATER	WATER	WATER	
DATE OF COLLECTION	9/23/2010	10/7/2010	10/21/2010	11/4/2010	11/19/2010	
COLLECTED BY	EAR	EAR	EAR	EAR	EAR	
UNITS	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
METALS						
Iron	**1,130**	125 J	30.6 J	73.8 J	172 J	1,000
Manganese	149	38.6	23.9	21.0	43.7	1,000
pH (S.U.)	7.50	--	7.18	7.32	7.18	6.5 to 8.5

ABBREVIATIONS:

ug/L: Micrograms per liter

QUALIFIERS:

B: Concentration is greater than the instrument detection limit (IDL) but less than the Contract Required Detection Limit (CRDL)
U: Compound analyzed for but not detected
J: Compound found at a concentration below CRDL, value estimated

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050
VAPOR PHASE SAMPLE RESULTS

SAMPLE ID	CARBON VESSEL NO. 1 INFLUENT	CARBON VESSEL NO. 1 EFFLUENT	CARBON VESSEL NO. 2 INFLUENT	CARBON VESSEL NO. 2 EFFLUENT
SAMPLE TYPE	AIR	AIR	AIR	AIR
COLLECTED BY	EAR	EAR	EAR	EAR
UNITS	(ppm)	(ppm)	(ppm)	(ppm)
DATE OF COLLECTION	***PID Reading***	***PID Reading***	***PID Reading***	***PID Reading***
9/23/2010	0.0	0.0	0.0	0.0
9/30/2010	1.2	**1.4**	0.9	**1.1**
10/7/2010	0.0	0.0	0.0	0.0
10/13/2010	0.0	0.0	0.0	0.0
10/21/2010	0.0	0.0	0.0	0.0
10/28/2010	0.0	0.0	0.0	0.0
11/4/2010	0.3	0.8	1.1	**1.1**
11/12/2010	0.1	0.1	0.1	0.1
11/19/2010	1.3	**1.2**	1.3	**1.1**
11/24/2010	1.5	**1.5**	1.5	**1.6**

NOTES:

Samples were collected by filling a Tedlar bag at each of the sampling locations. Samples were tested using a handheld photoionization detector (PID).

ATTACHMENT G

PERFORMANCE SUMMARY

FRANKLIN CLEANERS SITE
NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050
EXTRACTION AND TREATMENT SYSTEM PERFORMANCE RESULTS

DATE OF SAMPLE COLLECTION	SYSTEM INFLUENT (EW-1) AVERAGE EXTRACTION RATE (gpm)	SYSTEM INFLUENT (EW-1) PCE CONCENTRATION (ug/l)	SYSTEM INFLUENT (EW-2) AVERAGE EXTRACTION RATE (gpm)	SYSTEM INFLUENT (EW-2) PCE CONCENTRATION (ug/l)	SYSTEM EFFLUENT (AS-1) PCE CONCENTRATION (ug/l)	PCE REMOVAL EFFICIENCY (%)	ESTIMATED AVERAGE PCE REMOVAL RATE[3] (lb/hr)	ESTIMATED SYSTEM RUNTIME (hr)	ESTIMATED CUMULATIVE PCE REMOVAL (lbs)
9/5/2008	39.0	13	6.0	60	< 0.5	99.31	4.34E-04	110	34.11
9/19/2008	39.6	15	6.1	82	< 0.5	99.44	5.48E-04	327	34.29
10/3/2008	40.1	12	6.1	51	< 0.5	99.23	3.97E-04	338	34.43
10/16/2008	39.0	11	6.2	64	< 0.5	99.25	4.14E-04	311	34.55
10/30/2008	39.5	12	5.8	45	< 0.5	99.21	3.68E-04	248	34.65
11/12/2008	39.8	12	6.0	64	< 0.5	99.30	4.31E-04	312	34.78
11/25/2008	39.9	16	6.1	80	< 0.5	99.46	5.64E-04	430	35.02 [1]
12/9/2008	39.7	16	6.2	78	< 0.5	99.45	5.60E-04	207	35.14
12/24/2008	40.4	13	6.4	57	< 0.5	99.28	4.46E-04	300	35.27
1/8/2009	39.9	12	6.1	53	< 0.5	99.24	4.02E-04	361	35.42
1/19/2009	40.3	14	6.1	61	< 0.5	99.35	4.69E-04	269	35.54
2/2/2009	40.3	12	6.1	56	< 0.5	99.26	4.13E-04	323	35.68
2/26/2009	39.1	16	5.6	69	< 0.5	99.45	5.07E-04	581	35.97 [1]
3/11/2009	40.1	18	5.7	92	< 0.5	99.54	6.24E-04	253	36.13
3/25/2009	39.0	16	5.3	74	< 0.5	99.48	5.09E-04	335	36.30
4/8/2009	39.2	16	5.3	61	< 0.5	99.44	4.76E-04	334	36.46
4/24/2009	40.4	13	5.2	61	< 0.5	99.38	4.22E-04	277	36.58
5/5/2009	39.5	16	5.2	63	< 0.5	99.46	4.81E-04	186	36.67
5/18/2009	40.5	13	5.5	53	< 0.5	99.33	4.10E-04	554	36.89 [1]
6/3/2009	39.5	15	5.3	56	< 0.5	99.40	4.45E-04	65	36.92
6/18/2009	39.1	13	5.2	55	< 0.5	99.35	3.98E-04	326	37.05
7/1/2009	40.3	8	5.5	48	< 0.5	99.09	3.02E-04	308	37.14
7/15/2009	40.3	11	5.3	47	< 0.5	99.23	3.47E-04	144	37.19
7/28/2009	40.6	13	5.4	61	< 0.5	99.37	4.29E-04	458	37.39
8/13/2009	40.4	13	5.3	51	< 0.5	99.33	3.98E-04	382	37.54
8/24/2009	40.2	11	5.3	50	< 0.5	99.25	3.54E-04	449	37.70 [1]
9/8/2009	39.9	13	5.8	53	< 0.5	99.30	4.14E-04	141	37.76
9/25/2009	39.8	12	5.8	57	< 0.5	99.28	4.05E-04	412	37.93
10/5/2009	39.0	10	5.8	54	< 0.5	99.17	3.50E-04	241	38.01
10/26/2009	39.5	12	5.7	56	< 0.5	99.28	3.97E-04	495	38.21
11/9/2009	36.0	8	5.4	48	< 0.5	99.03	2.79E-04	324	38.30
11/24/2009	37.5	11	5.5	51	< 0.5	99.21	3.47E-04	502	38.47 [1]
12/8/2009	36.2	12	5.4	50	< 0.5	99.23	3.53E-04	172	38.53
12/26/2009	36.3	13	5.2	55	< 0.5	99.31	3.80E-04	307	38.65
1/4/2010	36.8	13	5.1	54	< 0.5	99.32	3.77E-04	256	38.75
1/21/2010	37.5	14	5.3	62	< 0.5	99.38	4.27E-04	408	38.92
2/5/2010	32.9	12	5.3	47	< 0.5	99.18	3.22E-04	343	39.03
2/19/2010	31.4	15	6.3	55	0.82	98.74	4.09E-04	564	39.26 [1]
3/4/2010	34.4	16	5.8	60	< 0.5	99.35	4.50E-04	251	39.38
3/18/2010	33.1	14	6.2	48	< 0.5	99.19	3.81E-04	104	39.42
4/1/2010	33.8	11	5.7	47	< 0.5	99.11	3.20E-04	328	39.52
4/15/2010	34.0	14	6.3	58	< 0.5	99.25	4.21E-04	336	39.66
4/30/2010	33.6	15	6.3	59	< 0.5	99.28	4.39E-04	342	39.81
5/13/2010	32.2	16	6.4	68	0.52	99.30	4.76E-04	299	39.95
5/28/2010	33.3	14	5.7	76	0.97	98.77	4.50E-04	440	40.15 [1]
6/10/2010	33.2	16	6.6	65	0.51	99.30	4.81E-04	226	40.26
6/25/2010	33.0	17	6.3	61	< 0.50	99.33	4.73E-04	322	40.41
7/7/2010	32.8	16	4.8	57	< 0.50	99.40	4.00E-04	148	40.47
7/21/2010	32.0	14	5.3	53	< 0.50	99.27	3.65E-04	330	40.59
8/5/2010	31.5	15	4.7	52	0.50	99.34	3.59E-04	289	40.70
8/19/2010	33.7	16	5.0	62	0.50	99.41	4.25E-04	607	40.95 [1]
9/23/2010	32.4	25	6.3	58	< 0.12	99.87	5.89E-04	24	40.97
10/7/2010	31.0	19	7.0	63	0.35	99.52	5.16E-04	336	41.14
10/21/2010	31.9	14	7.0	51	0.19	99.67	4.02E-04	336	41.28
11/4/2010	31.2	17	6.3	60	0.20	99.72	4.55E-04	336	41.43
11/19/2010	35.0	16	6.7	56	0.18	99.74	4.68E-04	639	41.73 [1]

NOTES:

1. Estimated through the end of the reporting period.
2. Performance results for the reporting period are shaded.
3. Mass removal rate(lb/hr) = flow(gpm)*concentration(ug/l)*3.79(liters/gallon)*1E-6(g/ug)*2.2E-3(lb/g)*60(min/hr)

ABBREVIATIONS:

gpm: gallons per minute
ug/L: micrograms per liter
lb/hr: pounds per hour
NS: Not sampled

QUALIFIERS:

J: Compound found at a concentration below CRDL, value estimated
B: Compound detected in method blank as well as the sample, value estimated

ATTACHMENT H

DATA VALIDATION CHECKLISTS

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners aka Hempstead
Project Number:	2531-03
Sample Date(s):	September 23, 2010
Matrix/Number of Samples:	Water/ 3 (EW-1, EW-2 and AS) Trip Blank/0
Analyzing Laboratory:	TestAmerica Laboratories, Shelton, CT
Analyses:	Volatile Organic Compounds (VOCs): 40 CFR Part 136 method 624 Metals: Iron and manganese by USEPA SW846 Method 6010B
Laboratory Report No:	220-13438 Date:10/11/2010

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Trip blanks					X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds %R - percent recovery RPD - relative percent difference

Comments:

Performance was acceptable with the following exception:

2A. Tetrachloroethene was detected in the method blank and qualified as non-detect (U) in AS.

INORGANIC ANALYSES
Metals

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Field duplicates RPD					X

%R - percent recovery RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 11/16/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners aka Hempstead
Project Number:	2531-03
Sample Date(s):	October 7, 2010
Matrix/Number of Samples:	Water/ 3 (EW-1, EW-2 and AS) Trip Blank/0
Analyzing Laboratory:	TestAmerica Laboratories, Shelton, CT
Analyses:	Volatile Organic Compounds (VOCs): 40 CFR Part 136 method 624 Metals: Iron and manganese by USEPA SW846 Method 6010B
Laboratory Report No:	220-13611 Date:10/27/2010

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds %R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable.

INORGANIC ANALYSES
Metals

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Field duplicates RPD					X

%R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 11/16/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners aka Hempstead
Project Number:	2531-08
Sample Date(s):	October 21, 2010
Matrix/Number of Samples:	Water/ 3 (EW-1, EW-2 and AS) Trip Blank/0
Analyzing Laboratory:	TestAmerica Laboratories, Shelton, CT
Analyses:	Volatile Organic Compounds (VOCs): 40 CFR Part 136 method 624 Metals: Iron and manganese by USEPA SW846 Method 6010B
Laboratory Report No:	220-13750 Date:11/08/2010

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R					X
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds %R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable.

INORGANIC ANALYSES
Metals

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R					X
4. Field duplicates RPD					X

%R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 12/8/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners aka Hempstead
Project Number:	2531-08
Sample Date(s):	November 4, 2010
Matrix/Number of Samples:	Water/ 3 (EW-1, EW-2 and AS) Trip Blank/0
Analyzing Laboratory:	TestAmerica Laboratories, Shelton, CT
Analyses:	Volatile Organic Compounds (VOCs): 40 CFR Part 136 method 624 Metals: Iron and manganese by USEPA SW846 Method 6010B
Laboratory Report No:	220-13944 Date:11/16/2010

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R					X
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds %R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable.

INORGANIC ANALYSES
Metals

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R					X
4. Field duplicates RPD					X

%R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 12/8/2010
VALIDATION PERFORMED BY SIGNATURE:	

DATA VALIDATION CHECK LIST

Project Name:	Franklin Cleaners aka Hempstead
Project Number:	2531-08
Sample Date(s):	November 19, 2010
Matrix/Number of Samples:	Water/ 3 (EW-1, EW-2 and AS) Trip Blank/0
Analyzing Laboratory:	TestAmerica Laboratories, Shelton, CT
Analyses:	Volatile Organic Compounds (VOCs): 40 CFR Part 136 method 624 Metals: Iron and manganese by USEPA SW846 Method 6010B
Laboratory Report No:	220-14096 Date:12/10/2010

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R					X
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds %R - percent recovery RPD - relative percent difference

Comments:

Performance was acceptable.

INORGANIC ANALYSES
Metals

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R					X
4. Field duplicates RPD					X

%R - percent recovery RPD - relative percent difference

Comments:

Performance was acceptable.

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 3/7/2011
VALIDATION PERFORMED BY SIGNATURE:	