

FRANKLIN CLEANERS GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

Latitude 40.688°, Longitude -73.627°

### **REPORT TITLE**

Site Management Quarterly Report No. 33

### **REPORTING PERIOD**

September 2012 through November 2012

### CLIENT

New York State Department of Environmental Conservation

David Gardner, Project Manager email: drgardne@gw.dec.state.ny.us

#### CONSULTANT

Dvirka and Bartilucci Consulting Engineers

Stephen Tauss, Project Manager email: stauss@db-eng.com



**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION** *Division of Environmental Remediation* 

# 625 Broadway, 12th Floor, Albany, New York 12233

### Site

**NYSDEC Site No. 130050**, Franklin Cleaners Site Groundwater Extraction and Treatment System Village of Rockville Centre, Town of Hempstead, Nassau County, New York



## Project Background and Site Description

The Franklin Cleaners groundwater extraction and treatment system (GWE&TS) is actively recovering and treating the "leading edge" of a chlorinated solventcontaminated groundwater plume emanating from the former Franklin Cleaners dry cleaner site, located approximately one mile upgradient of the GWE&TS, in the Village of Hempstead, Nassau County, New York. The groundwater plume is primarily composed of tetrachloroethene (PCE). The Franklin Cleaners GWE&TS has been in operation since September 2004. Refer to *Figure 1* for a site location map depicting the treatment system location.

### Groundwater Extraction and Treatment System Overview





The GWE&TS consists of two 6-inch diameter wells screened approximately 75 to 90 feet below grade. Extracted groundwater is conveyed via underground piping to a low-profile stacked-tray air stripper located in the GWE&TS building. The treated groundwater is discharged from the air stripper to a wet well equipped with two series-configured submersible pumps, which convey the treated water via underground piping to a Nassau County Department of Public Works storm sewer manhole in accordance with all applicable discharge standards. Exhaust gas from the air stripper was treated utilizing two series-configured granular activated carbon (GAC) vessels; however, it should be noted that, based on historic low contaminant concentrations detected in the air stripper exhaust gas, the air stripper exhaust piping was reconfigured

to bypass the GAC vessels and discharge exhaust gas directly to the atmosphere in June 2011, per the direction of the NYSDEC. The GWE&TS is equipped with instrumentation and controls which allow for automated startup and operation, and an autodial alarm notification system. Refer to *Figure 2* for an "as-built" treatment system layout diagram.

### **Regulatory Requirements/Cleanup Goals**

Site-specific remedial goals have been established through the remedy selection process as defined in 6 NYCRR Part 375-1.10, and are documented in the Record of Decision (ROD), dated March 1998. The site-specific remedial goals outlined in the March 1998 ROD are provided in <u>Attachment A</u>. The overall goal is to meet all appropriate Standards, Criteria, and Guidance (SCGs) and to be protective of human health and the environment. Implementation of the GWE&TS is specifically focused on the following goals:

• Reduce, control, or eliminate contaminated media to the extent practicable;



- Eliminate the potential for exposure to contaminated groundwater; and
- Provide for attainment of SCGs for groundwater, soil and indoor air within the limits of the affected area, to the extent practical.

### Treatment System Performance Summary

The GWE&TS performance during the current reporting period and since inception in September 2004 is summarized below:

System Extraction Rates and Total Flow Volumes						
	EW-1	EW-2 <sup>(1,2)</sup>	System Influent	System Effluent (2)		
Average Pumping Rate - Current Reporting Period	28.4 gpm	6.4 gpm	34.8 gpm	43.5 gpm		
Average Pumping Rate - Previous Reporting Period	29.4 gpm	6.5 gpm	35.9 gpm	43.0 gpm		
Average Pumping Rate to Date	36.2 gpm	5.1 gpm	37.4 gpm	67.8 gpm		
<b>Total Flow Volume - Current Reporting Period</b>	2,674,189 gal.	613,239 gal.	3,287,428 gal.	3,103,600 gal.		
Total Flow Volume to Date	144,745,389 gal.	19,199,945 gal.	163,945,334 gal.	205,596,620 gal.		

1. Extraction EW-2 flow meter consistently malfunctioned from approximately January 2010 to June 2011. Based on previously recorded flow data, it has been assumed that EW-2 was operating at an average flow rate of 7 gpm during this time period.

2. System influent and effluent pumping rates and volumes are monitored on a bi-weekly basis. Following replacement of the influent flow meters on June 23, 2011, total flow inconsistencies remained with respect to influent/effluent flow. As such, the effluent flow meter was replaced on May 2, 2012. Although the system influent and effluent flows are more consistent following the effluent meter change, system influent and effluent flows remain dissimilar.







**Extraction Well EW-1 Flow Rate Trend Line** 





- 1. Based on the results of capture zone design modeling, containment of the Franklin Cleaners chlorinated plume (at an approximate 450-foot width) would be achieved with the GWE&TS operating at a minimum required pumping rate of 20 gpm, in a one or two extraction well scenario. Extraction well EW-1 has been operating at an average flow rate of approximately 37 gpm since system start-up to provide for a greater factor of safety and ensure the full width of the plume is captured. Extraction well EW-2 has been operating at an average flow rate of approximately 5 gpm since system start-up due to the elevated VOC concentrations present within this well. It should be noted that the maximum yield for EW-2 has been historically limited to a range of 5-7 gpm due to a high silty/clay component in the screened interval of this extraction well.
- 2. Extraction well EW-1 was set at approximately 37 gpm following replacement of the influent flow meters. Based on recommendations presented in the RSO Report the flow at extraction well EW-1 was reduced to approximately 30 gpm in February 2012.
- 3. As detailed above, it is assumed that extraction well EW-2 was operating at an average of 7.0 gpm during this time period.



### Treatment System Performance Summary (cont.)



Total VOC Removal Assessment	
/OC Removal - Current Reporting Period	0.64 lbs.
VOC Removal - Previous Reporting Period	0.62 lbs.
Average VOC Removal to Date (per period)	0.93 lbs.
Total VOC Removal to Date	48.1 lbs.

1. The approximate PCE removal efficiency for the low-profile stacked-tray air stripper ranged from 99.50% to 99.80% during this reporting period. Additionally, it should be noted that the average differential pressure across the low-profile air stripper was well below 45 inches of water (manufacturer's recommended threshold for equipment maintenance) during this reporting period.

2. This change in the air stripper differential pressure is the result of the deletion of two air stripper trays from the modular air stripper on October 22, 2012, performed as recommended in the May 2012 RSO Report.

3. The VOC removal costs include monthly utility charges, maintenance costs and engineering costs. Capital construction costs and NYSDEC project management effort are not included in this evaluation. Due to the relatively high VOC removal costs, a RSO evaluation has been performed for the Franklin Cleaners Site in order to improve the efficiency and effectiveness of the GWE&TS, while at the same time, reducing the overall associated operating costs. A plume re-delineation program based on recommendations presented in the RSO is planned to be implemented in the near future.

4. Average calculated from system start-up (September 2004) through the previous reporting period.





### System Operation and Maintenance

Routine and non-routine system maintenance completed during this reporting period, as well as a summary of the alarm conditions and associated system runtime/downtime for this reporting period, are summarized below. Refer to <u>Attachment B</u> for operation and maintenance logs, as prepared by NYSDEC "call out" contractor for this reporting period.

Routine Equipment Maintenance Schedule Summary										
Maine Oracleur				Maintenance Summary						
Major System Component	Manufacturer	MODEI Number	Maintenance	Currei	nt Reporting	Period	Next R	Reporting P	Period	
oomponom		namoor	rrequency	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	
Extraction Well Pumps	Grundfos Pump Corp.	Redi-Flo-4 Model 25E3	As needed based on flow trends							
Air Stripper	Carbonair	STAT Model 180	As needed based on differential pressure readings							
Pressure Blower	New York Blower Company	Model 2506A	Bi-Monthly	9/6/12	10/18/12					
Vapor Carbon Vessels	Tetrasolv Filtration Inc.	Model VF-1000	As needed based on PID screening results							
Wet Well Pumps	Flygt Corporation	Model CP3085	Annual							
Sump Pump	Grundfos Pump Corp.	Model KP-350	As needed							
Flow Meter Vault Effluent Screen			Annually							
Wet Well Strainer			Annually							

: Planned activity





### Non-Routine System Maintenance:

- Groundwater monitoring well repairs were completed at ASMW-4, ASMW-5 and ASMW-6 on October 8, 2012. These
  well repairs consisted of the installation of new manholes and cement pads at groundwater monitoring wells ASMW-4,
  ASMW-5 and ASMW-6. In addition, due to changes in the parking area elevation during the reconstruction of this area,
  the well riser was extended approximately 2 to 3 feet at groundwater monitoring well ASMW-6;
- Maintenance and deletion of two low-profile air stripper trays, as well as the replacement of the associated air stripper gaskets, was completed on October 22, 2012;
- Reassembly of air stripper piping and trays on October 23, 2012;
- Installation of a VFD for the pressure blower was attempted on October 29, 2012; however, during installation, it was determined that the VFD was not properly sized for the pressure blower motor. As such, the VFD was not installed at this time;
- Installation of a new VFD for the pressure blower was also attempted on October 29, 2012; however, during installation, it was determined that the VFD was damaged. As such, the VFD was not installed at this time;
- Assessment of Site damage due to hurricane Sandy on October 31, 2012. No damage was observed on-site; however, the Site was observed to not have power;
- Assessment of power restoration due to hurricane Sandy on November 6, 2012. The Site was still observed to not have power at this time;
- Final installation of VFD for the pressure blower and system start-up, as well as modification to the air stripper trays, on November 15, 2012.

### **General Facility Maintenance:**

• Facility landscaping activities were performed on September 6, 2012.

#### Alarm Conditions:

No alarm conditions occurred during this reporting period.

System Runtime/Downtime Summary						
Runtime - Current Reporting Period (1)	1,608 hours	73.6%				
Downtime - Current Reporting Period (1)	576 hours (3)	26.4%				
Total Runtime to Date <sup>(2)</sup>	71,678 hours	90.1%				
Total Downtime to Date	7,123 hours	9.9%				

1. Total elapsed time for current reporting period, 2,184 hours (September 1, 2012 through November 30, 2012).

2. Based on a system start-up date of September 20, 2004.

3. Downtime for this reporting period is the result of a power outage following hurricane Sandy.





### System Monitoring and Sampling Results

A summary of the pertinent routine system monitoring and sampling results are provided below. Refer to <u>Attachment C</u> for tabulated analytical results.

Extraction Wells - System Influent PCE Concentration Ranges/Averages (1)						
Sample Point	Current Reporting Period	Previous Reporting Period	Average to Date	Groundwater Standard		
Extraction Well EW-1	12 ug/l - 29 ug/l	12 ug/l - 16 ug/l	18 ug/l	5.0 ug/l (Class GA)		
Extraction Well EW-2	55 ug/l - 140 ug/l	46 ug/l - 56 ug/l	92 ug/l	5.0 ug/l (Class GA)		

1. In addition to the PCE concentrations presented in this table, chloroform, 1,1-dichloroethene and trichloroethene were detected in one or more system influent samples collected from EW-2; however, these compounds were detected at concentrations well below their respective Class GA Groundwater Standards.



### **Extraction Well EW-1 PCE Concentration Trend Line**

### **Extraction Well EW-2 PCE Concentration Trend Line**



### Aqueous-Phase Air Stripper Effluent Concentration Ranges

Discharge Permit Parameters	Current Reporting Period	Previous Reporting Period	Site-Specific Effluent Limit
PCE	ND	ND	5.0 ug/l
TCE	ND	ND	10.0 ug/l
1,1-DCE	ND	ND	10.0 ug/l
Cis-1,2-DCE	ND	ND	10.0 ug/l
1,1,1-TCA	ND	ND	10.0 ug/l
Iron	ND - 2,350	ND - 192	1,000 ug/l
Manganese	11.8 - 221 ug/l	11.3 ug/l - 31.7 ug/l	1,000 ug/l
pH (Field Screening Results)	6.95 - 7.18	<mark>6.39</mark> - 6.59	6.5 - 8.5

Notes:

ND: Constituent concentration below the analytical detection limit.

Site-specific effluent limits, per the SPDES permit equivalency.

Red font denotes an exceedance of the site-specific effluent limits.



Vapor-Phase Discharge		
	System Vapor Discharge	Site-Specific Discharge Limit
Total VOC Concentrations (field screening with PID) $^{\scriptscriptstyle (1)}$	0.0 - 3.3 ppm	NA
Total VOC Concentrations (laboratory analysis)		NA
Average Pressure Blower Flow Rate	884 cfm	NA
Maximum Total VOC Emissions (2)	0.05 lbs/hr	0.5 lbs/hr $^{\scriptscriptstyle (3)}$

--: Not analyzed

NA: Not applicable

- 1. The PID screening is utilized as a means to instantaneously monitor total vapor-phase VOC discharge concentrations.
- 2. Total VOC emissions were calculated utilizing the "worst case scenario" PID data.
- 3. The site-specific effluent limit of 0.5 lbs/hr was developed in consultation with the NYSDEC as a means to monitor the vapor-phase VOCs discharged by the GWE&TS.

### Groundwater Monitoring Summary

The network of groundwater monitoring wells was sampled to determine groundwater quality at, and in the vicinity of, the Site. Groundwater samples were collected from three groundwater monitoring wells located in close proximity to the leading edge of the Franklin Cleaners plume (ASMW-1 through ASMW-3), and four groundwater monitoring wells located downgradient of the leading edge of the plume (ASMW-4 through ASMW-6). Note that groundwater monitoring wells ASMW-4 through ASMW-7 act as early warning or "sentinel" wells for a cluster of Village of Rockville Centre public supply wells located downgradient of the treatment system building. The locations of the groundwater monitoring wells are depicted on *Figure 3*.

The NYSDEC "call-out" contractor inadvertently collected two rounds of groundwater samples during this reporting period. As a result, groundwater monitoring wells ASMW-1, ASMW-2 and ASMW-4 were sampled on September 26, 2012 and groundwater monitoring wells ASMW-1 through ASMW-6 were sampled on November 19 and 20, 2012. Groundwater monitoring well ASMW-7 could not be sampled during this reporting period due to construction activities being conducted by Molloy College at and in the vicinity of the monitoring well. These construction activities included modification of ASMW-7 so that Molloy College may use this well for future irrigation purposes. Per the NYSDEC's request, Molloy College will install a valve within the ASMW-7 piping to allow for the continued routine collection of groundwater samples from this well.

All of the sampled groundwater monitoring wells were found to be accessible during the groundwater monitoring/sampling event conducted on September 26, 2012 and November 19 and 20, 2012, with the exception of groundwater monitoring well ASMW-7, as discussed above.

All groundwater monitoring wells were located as indicated on the site map.

#### Groundwater Monitoring Well Repairs:

Based on recommendations presented in the May 2012 Remedial System Optimization Report, monitoring wells were repaired on October 8, 2012, as follows:

- The well pads were restored, brought to surface grade and the well covers were replaced at groundwater monitoring wells ASMW-4 and ASMW-5; and
- The well pad was restored, brought to surface grade, the well cover was replaced and the well riser was extended approximately 2 to 3 feet at groundwater monitoring well ASMW-6.





Following completion of the well repair work completed on October 8, 2012, concrete well pads (where applicable), protective casings, surface seals, well IDs, PVC well risers, well plugs and locks were observed to be present and in good condition, with the following exceptions:

- None of the groundwater monitoring wells had visible well IDs;
- The protective casing was observed to be in poor condition at groundwater monitoring well ASMW-2;
- The locks were not functional at groundwater monitoring wells ASMW-4, ASMW-5 and ASMW-6;
- The well casing, locking well cap and lock were observed to be covered in cement at groundwater monitoring well ASMW-5; and
- A well bolt was missing from groundwater monitoring well ASMW-2.

The majority of these items have already been repaired, as will be detailed in the following Quarterly Report. Field inspection logs for all groundwater monitoring wells assessed during this period are provided in <u>Attachment D</u>.

### Groundwater Monitoring Results Summary:

A headspace reading was collected at each of the sampled groundwater monitoring wells immediately after the removal of the well caps utilizing a PID. In addition, a headspace reading was also collected during the groundwater monitoring well inspection event conducted in September. VOCs were detected at concentrations ranging from non-detect to 0.6 ppm in the headspace of the monitoring wells.

Below is a detailed summary of PCE concentrations in site groundwater. Refer to <u>Attachment C</u> for analytical data results.

Groundwater Monitoring Wells - PCE Concentrations									
	Treatment System Effectiveness Monitoring Wells			Sentinel Monitoring Wells				Class GA Groundwater	
Monitoring Well (1)	ASMW-1	ASMW-2	ASMW-3	ASMW-4	ASMW-5	ASMW-6	6 ASMW-7 Standard		
Current Reporting Period - September 26, 2012	ND (3)	1.2 ug/l		ND				5.0 ug/l	
Current Reporting Period - November 19 and 20, 2012	21 ug/l	1.6 ug/l	0.15 ug/l	0.19 ug/l	ND	ND		5.0 ug/l	
Previous Reporting Period	24 ug/l	3.9 ug/l	ND	ND	ND	ND	ND	5.0 ug/l	
2-Year PCE Trend Analysis (2)	Decreasing	Stable	Stable	Stable	Stable	Stable	Stable		

ND: Constituent concentration below the analytical detection limit.

--: Not sampled.

Red font denotes an exceedance of the Class GA Groundwater Standard.

In addition to PCE, the following containments were detected below their respective Class GA standards in one or more monitoring well during this reporting period: chloroform, trichloroethene and 1,1,1-trichloroethane.

1. Click on monitoring well IDs for graphs depicting PCE concentrations over the last 2 years in wells exhibiting exceedances of the Class GA Groundwater Standard for this and the previous reporting period.

2. Trend analysis is calculated on an increase or decrease of 5.0 ug/l over a 2-year time frame.

3. Note that this "non-detect" PCE concentration is anomalously low, based on current and historical PCE concentrations detected in this monitoring well.

Downgradient early warning "sentinel" groundwater monitoring wells ASMW-5 and ASMW-6 for the Rockville Centre Water District exhibited non-detect VOC concentrations during this reporting period.

A figure depicting the current PCE concentrations in groundwater is provided as *Figure 4*. In comparison with the previous





reporting period, PCE concentrations have remained stable in all of the groundwater monitoring wells. PCE concentrations have remained non-detect in downgradient "sentinel" wells ASMW-5 and ASMW-6. Note that, groundwater contaminant data is limited to the west and south of ASMW-1 and the treatment system building, as the current monitoring well network does not include wells in these areas.

### Data Validation:

All sample results have been reviewed by D&B and are deemed valid and usable for environmental assessment purposes. No qualification of the data was necessary based on D&B's review. Data Validation Checklists are presented in <u>Attachment E</u>.

All analytical data associated with the Franklin Cleaners GWE&TS project have been submitted to the NYSDEC in the required EQuIS format and within 30 days of receipt of the data from the NYSDEC "call-out" contractor.

### Findings and Recommendations

### Findings:

- Extraction Well Flow: The analytical results of the system influent samples demonstrate that groundwater extraction wells EW-1 and EW-2 continue to capture VOC-contaminated groundwater. Extraction well EW-1 operated at an average flow rate of 28.4 gpm throughout this reporting period and extraction well EW-2 operated at an average flow rate of 6.4 gpm throughout this reporting period;
- Treatment System Runtime: The treatment system was operational for approximately 73.6% of this reporting period (approximately 1,608 hours). Note that the vast majority of the 26.4% of downtime was due to a power outage following hurricane Sandy;
- GWE&TS Routine Maintenance: All required maintenance items were completed per the requirements of the routine maintenance schedule;
- Air Stripper: The air stripper continues to operate efficiently and within its design specifications;
- Air Stripper Discharge Parameters (Aqueous-phase): All aqueous-phase discharge analytes were detected at concentrations below their respective site-specific effluent limits, with the exception of iron at a concentration of 2,350 ug/l (detected on November 15, 2012), exceeding the site-specific effluent limit of 1,000 ug/l. Note that this exceedance is likely attributable to the extraction well shut-down and restart prior to and following the air stripper maintenance and modification, thus disturbing any sediments accumulated within the well. The field screened pH results were observed at values within site-specific effluent ranges during this reporting period;
- Air Stripper Discharge Parameters (Vapor-phase): PID readings collected at the vapor-phase discharge piping outlet exhibited total VOCs ranging from non-detect to 3.3 ppm. Total VOC concentrations were detected well below the site-specific effluent limit of 0.5 lbs/hr during this reporting period;
- Groundwater Monitoring Well Inspection: Based on the recommendations presented in the May 2012 Remedial System Optimization Report, the following monitoring well repairs were completed during this reporting period:
  - The well pads were restored, brought to surface grade and the well covers were replaced at groundwater monitoring wells ASMW-4 and ASMW-5; and
  - The well pad was restored, brought to surface grade, the well cover was replaced and the well riser was extended approximately 2 to 3 feet at groundwater monitoring well ASMW-6.
- Groundwater Monitoring Well Sampling Summary:
  - Monitoring Well PCE Exceedances: Concentrations of PCE detected in groundwater monitoring well ASMW-1 exhibited an exceedance of the Class GA Standard of 5.0 ug/l, at a concentration of 21 ug/l during the November 19, 2012 sample round;
  - Monitoring Well PCE Detections: Although PCE was detected in groundwater monitoring wells ASMW-2, ASMW-3





and ASMW-4, PCE was detected well below its Class GA Standard of 5.0 ug/l; and

Sentinel Monitoring Wells (ASMW-4, ASMW-5, ASMW-6 and ASMW-7): The downgradient early warning "sentinel" groundwater monitoring wells for the Rockville Center Water District again exhibited non-detect concentrations of PCE during this reporting period, with the exception of a concentration of 0.19 ug/l detected in groundwater monitoring well ASMW-4 on November 19, 2012, detected well below the Class GA Standard of 5.0 ug/l. Therefore, D&B concludes that the selected remedy is functioning as intended by the ROD. Note that groundwater monitoring well ASMW-7 could not be sampled during this reporting period due to Molloy College construction activities.

### **Recommendations:**

- General Treatment System: Continue operation of the GWE&TS;
- RSO Evaluation: A RSO evaluation of the GWE&TS has been completed in order to improve the efficiency, effectiveness and net environmental benefit of the GWE&TS which included several recommendations for monitoring well repairs and resurveys, as well as the plume re-delineation recommendation discussed below:
- Groundwater Plume Re-delineation: Based on the fairly consistent and elevated PCE concentrations detected in
  groundwater monitoring well ASMW-1, D&B recommends re-delineation of the groundwater plume via installing and
  sampling several temporary geoprobe wells along the leading edge, length and up/sidegradient areas of the plume
  to more accurately define its current location and extent. Based on the results of the plume re-delineation, it may be
  warranted to install additional permanent monitoring wells and/or modify the current extraction well configuration in
  order to optimize and accelerate the recovery and treatment of the entire groundwater plume. D&B will provide a plume
  re-delineation scope of work for review and approval in the near future.
- Groundwater Monitoring Well Repairs: Based on the recommendations presented in the May 2012 Remedial System Optimization Report, the following items have not yet been addressed and should be repaired:
  - The well IDs on all of the groundwater monitoring wells should be replaced;
  - Re-survey any wells where the casing elevation has changed as a result of the completed well repair activities; and
  - Ensure that Molloy College installs a valve within the ASMW-7 piping to allow for the continued routine collection of groundwater samples from this well.

In addition, based on the damage previously noted at monitoring wells ASMW-4 through ASMW-7, D&B recommends that the total depths of each monitoring well be evaluated in order to ensure debris has not entered these wells. Based on the results of this evaluation, it may be warranted to re-develop or re-condition some or all of these monitoring wells.

#### **Reclassification/Delisting Evaluation**

The Site was originally listed as a Class 2 Inactive Hazardous Waste Site by the NYSDEC on June 17, 1993. Since this time, completion of the following project phases has occurred, as summarized below:

Project Phases and Completion Dates						
Project Phase	Completion Date					
Remedial Investigation	03/1998					
Remedial Design	02/2001					
Groundwater Extraction and Treatment System Construction	07/2003 (2)					
Remedial Action (Source Area Remediation)	03/2007 (1)					

1. Source area contaminated soil and groundwater were remediated with the Air Sparge/Soil Vapor Extraction (AS/SVE) system beginning in September 2003. The on-site AS/SVE system has successfully removed the contaminants from the vadose zone and greatly diminished groundwater contaminants to below detectable limits. Although confirmation soil samples met the required remedial goals, a subslab depressurization system replaced the on-site AS/SVE system in 2006 due to the detection of elevated vapor phase VOC concentrations in the basement level and below the basement floor slab.

2. Construction of the GWE&TS was completed in July 2003. The GWE&TS was placed into routine operation in September 2004 and currently continues to meet remedial objectives as originally designed.





NYSDEC Site No. 130050, Franklin Cleaners Site Groundwater Extraction and Treatment System

Site Management Quarterly Report No. 33 - September 2012 through November 2012

Given the above, NYSDEC reclassified the Franklin Cleaners GWE&TS Site on December 11, 2012, pursuant to the requirements identified in 6 NYCRR §375-2.7, as a Class 4 Site since the NYSDEC determined that the site no longer presents a significant threat to public health and/or the environment based on remedial efforts performed to date and implementation of the July 2012 Site Management Plan (SMP). In addition, the NYSDEC has implemented a post-remedial indoor air study within the source area structures/buildings to verify current site conditions. Site delisting is not feasible at this time, as all remediation and post-remediation activities have not been satisfactorily completed.

#### **Report Certification:**

I have personally examined and am familiar with the information submitted in the referenced report. To the best of my knowledge and belief, and based upon my inquiry of those individuals immediately responsible for obtaining the information reported therein, I certify that the submitted information is true, accurate, and complete.

**Project Director:** 

114

3.11.13 Date

**Richard M. Walka** Senior Vice President

**Project Manager:** 

Stephen E. Tauss Geologist II

3/11/17 Date

