

May 26, 2016

Mr. Matthew Hubicki - Environmental Engineer I New York State Department of Environmental Conservation 625 Broadway, 11th Floor Albany, New York 12233-7014

RE: Compliance Groundwater Sampling and Remedial System Operation and Maintenance Former LaRussell's Cleaners 406 Route 52 Carmel, New York

NYSDEC Site No.: 340020 Index Number: CO 3-20160127-9

Dear Mr. Hubicki:

HydroEnvironmental Solutions, Inc. (HES) completed the design of a sub slab depressurization system (SSDS) for the above referenced site. The SSDS design is based on our January 29, 2016 meeting with the New York State Department of Environmental Conservation (NYSDEC) and our subsequent site visit that same day. The SSDS is mandated by the NYSDEC in order to comply with Consent Order CO 3-20160127-9. The following letter summarizes the proposed SSDS design and future environmental work that will be completed at the subject site so that it remains in compliance with NYSDEC requirements. The site location is shown on **Figure 1**.

Proposed Sub Slab Depressurization System

In order to prevent future migration of volatile organic compound (VOCs) vapors (tetrachloroethylene and its breakdown compounds) from entering the interior space of the commercial building that is currently under renovation at the site, HES has designed a SSDS. The SSDS will be constructed of 4-inch Schedule 40, 20 slot PVC pipe below the slab and solid riser pipe above the concrete slab. The SSDS will consist of four slotted screen legs with solid riser pipe for the exhaust to the exterior and roof line of the building. The horizontal SSDS legs will be set in ³/₆-inch washed pea stone or ³/₄-inch

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crushed stone. A minimum 6 millimeter polyethylene sheeting will be placed on top of the pea stone to act as a vapor barrier. At least four inches of concrete will be poured on top of the vapor barrier and SSDS. An inline blower, manufactured by Radonaway, Model Number RPI145, will be installed in the 4-inch exhaust line. The blower will operate continuously and will be hard wired by a licensed electrician to the available onsite power. The SSDS blower will have its own dedicated circuit in the electric panel for the building. **Figure 2** shows the proposed SSDS in plan and cross-sectional views and the specifications for the proposed blower are attached at the end of this letter. The SSDS is being installed in lieu of sub slab vapor intrusion testing beneath the building.

In addition to the design and installation of the SSDS, the following Scope of Work will also be completed at the subject site:

Proposed Scope of Work

Task 1: POET System Installation and Initial Startup

HES will design Point of Entry (POET) groundwater treatment systems and provide installation oversight services as required by the NYSDEC Order on Consent, Index No. CO 3-20160127-9. This will include evaluating the existing system at the OSCOM (Hair Salon) building and reinstituting the POET system at the former dry cleaners after renovations are completed. HES will ensure that the POET systems are NYSDEC compliant with sampling ports for influent, mid-stream and effluent, and have properly sized granular activated carbon (GAC) vessels to handle the pumping rate and water use at each facility.

Task 2: Analyze Existing Remedial Approach/Propose Alternative Remedial Approach

As required by the NYSDEC, HES will review the existing available soil and groundwater quality data as well as prior environmental reports completed for the subject site. The purpose of the review is to determine if the current pump and treat remedial approach at the former LaRussell's Cleaners is appropriate and effective to bring the site to compliance and final closure.

Task 3: Semi-Annual Compliance Groundwater Monitoring and Sampling

As required by the NYSDEC in their April 2016 Consent Order, five (5) monitor wells, MW-6, MW-3D, MW-3S, MW-8S and MW-8D will need to be sampled as part of the compliance groundwater sampling program. The wells will be sampled semiannually in accordance with NYSDEC Groundwater Sampling Procedures and will be analyzed at a New York State certified laboratory for volatile organic compounds (VOCs) using EPA Method 8260. During semi-annual sampling, the two POET systems will also be sampled at the influent, mid-stream, and effluent sampling ports as required



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by the NYSDEC. The water samples collected from the POET systems will also be sampled for VOCs using EPA Method 8260. HES plans on sampling the five monitor wells and the POET systems sampling ports, if operable, in June and December of 2016.

Task 4: Compile NYSDEC Semi-Annual Compliance Groundwater Sampling Reports

As required by the NYSDEC, HES will compile compliance groundwater sampling reports after completion of each round of sampling. The reports will summarize the results of sampling and, when acceptable groundwater concentrations for constituents of concern are reached, HES will recommend formal site closure. The first compliance report will provide an update of the remedial approach, groundwater quality and POET system status.

Please contact me at (914) 276-2560 if you have any questions or should you require any additional information pertaining to this matter.

Very truly yours, HydroEnvironmental Solutions, Inc.

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William A. Canavan, PG, LSRP President

Enclosures

cc: Krista Anders, NYSDOH Rosalie Rusinko, Esq., NYSDEC Brian Finney, A-Class Management, Inc. File



FIGURE 1

Site Location Map







RP Series



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MODEL	P/N	FAN DUCT DIAMETER	WATTS	MAX. PRESSURE"WC	TYPICAL CFM vs. STATIC PRESSURE WC				
					0"	.5"	1.0"	1.5"	2.0"
RP140*	23029-1	4"	15-21	0.8	135	70	-	-	-
RP145	23030-1	4"	41-72	2.1	166	126	82	41	3
RP260	23032-1	6"	50-75	1.6	272	176	89	13	-
RP265	23033-1	6"	91-129	2.3	334	247	176	116	52
RP380	28208	8"	95-152	2.3	497	353	220	130	38



11.75"

13.41"

8.6"

10.53"

RP265

RP380

6"

8"







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