### Berninger Environmental Inc.

groundwater consultants and geologists 90-B Knickerbocker Avenue Bohemia, New York 11716

October 5, 2012

Mrs. Kiera Thompson Project Manager New York State Department of Environmental Conservation Division of Environmental Remediation Remedial Bureau C 625 Broadway, 11<sup>th</sup> Floor Albany, New York 12233-7015

Re: Schmukler's Dry Cleaners, Brownfield Cleanup Agreement Site No. C360088 City of New Rochelle, Westchester County, NY

Dear Mrs. Thompson,

#### Introduction

The following scope of work is proposed by Berninger Environmental Incorporated (BEI) on behalf of our client HNJ Reality LLC, which includes the matters discussed in the September 14, 2012 meeting between the New York State Department of Environmental Conservation (NYSDEC), HNJ and BEI. The scope of work will include the installation of one (1) off-site monitoring well couplet, located to the southeast of the subject property, which will include one (1) overburden monitoring well and one (1) bedrock well installed fifteen (15) feet into the bedrock. The proposed couplet well will serve as a sampling location in order to delineate the previously identified PCE plume found at the subject site. Well construction specifications and the location of the couplet well is discussed below.

#### Scope of Work

A monitoring well couplet consisting of one (1) overburden well and one (1) bedrock monitoring well is proposed for installation along the west side of North Avenue to the southeast of the subject site. See Figure-1 for the location of the proposed wells. Bedrock in this area is anticipated to be approximately ten (10') feet below the grade surface (bgs) with the final depth of the bedrock well anticipated to reach a depth of twenty-five (25') feet bgs. The overburden monitoring well will be installed to the top of the bedrock surface, which as mentioned above, is anticipated to be ten (10') bgs.

#### Well Specifications

The proposed overburden well (MW-6) will be installed via the direct push method to the top of the bedrock surface using a 6610 model geoprobe. It is anticipated that the well will consist of 5' of 2" PVC riser pipe and 5' of 2" PVC 0.02" slot well screen for a total depth of approximatley 10 feet bgs. A bentonite seal will be installed above the screened piping and grout seal will finish the well to grade. The well will be completed with the installation of a flush mounted 5" manhole cover. See Figure-3 for well construction details.

The bedrock well (BW-4) will be installed with the use of a track mounted air rotary geoprobe rig. BEI will sub-contract this work to a specified company and provide oversight and safety officers during the field activities. This well will consist of 20' feet of 2" PVC riser pipe with 5' feet of 2" PVC 0.02" slot screen and a 1' DNAPL sump to finish the bottom of the well. A bentonite seal will be installed above the screened piping and grout seal will finish the well to grade. The well will be completed with the installation of a flush mounted 5" manhole cover. See Figure-2 for well spec details.

Phone # (631) 589-6521 Fax # (631) 589-6528 Each monitoring well will serve as a sampling point for delineation purposes and surveying activities in order to define the direction of groundwater flow in this area. The wells will be installed side by side in order to act as a couplet for multi level sample analyzation in the chosen area (permitting the overburden well is viable due to the depth to water). All drill cuttings generated from the bedrock well installation will be screened with a photo ionization detector (PID) meter. If any PID readings are detected the excess soils will be drummed and properly disposed. The installation of the overburden monitoring well via the direct push method will not generate any excess soil.

#### Sample and Analysis

Upon completion of the bedrock/overburden well installations each well will be sampled by BEI and submitted to a New York State certified laboratory for analyzation by EPA method 8260 (VOCs). Each well will be developed before sampling with a submersible well pump which will be used to remove a minimum of five wellbore volumes. Samples will be contained in laboratory approved glassware, preserved and shipped under strict chain of custody to the certified lab. Samples will be maintained on ice to approximately 4 degrees C for preservation. All laboratory results will be reported in a category B deliverable package and submitted for third party data validation. Any water gained during the development procedure that appears to be contaminated will be drummed and stored for disposal.

#### Permitting

The New Rochelle Department of Public Works (DPW) will be contacted in order to receive the proper sidewalk and street obstruction permits. BEI has previously applied for this type of permit as part of the three (3) prior bedrock wells (BW-1, BW-2 and BW-3) that were installed during 2008. Work will commence within five (5) days of the issuance of the permit as requested by the New Rochelle DPW.

#### Schedule

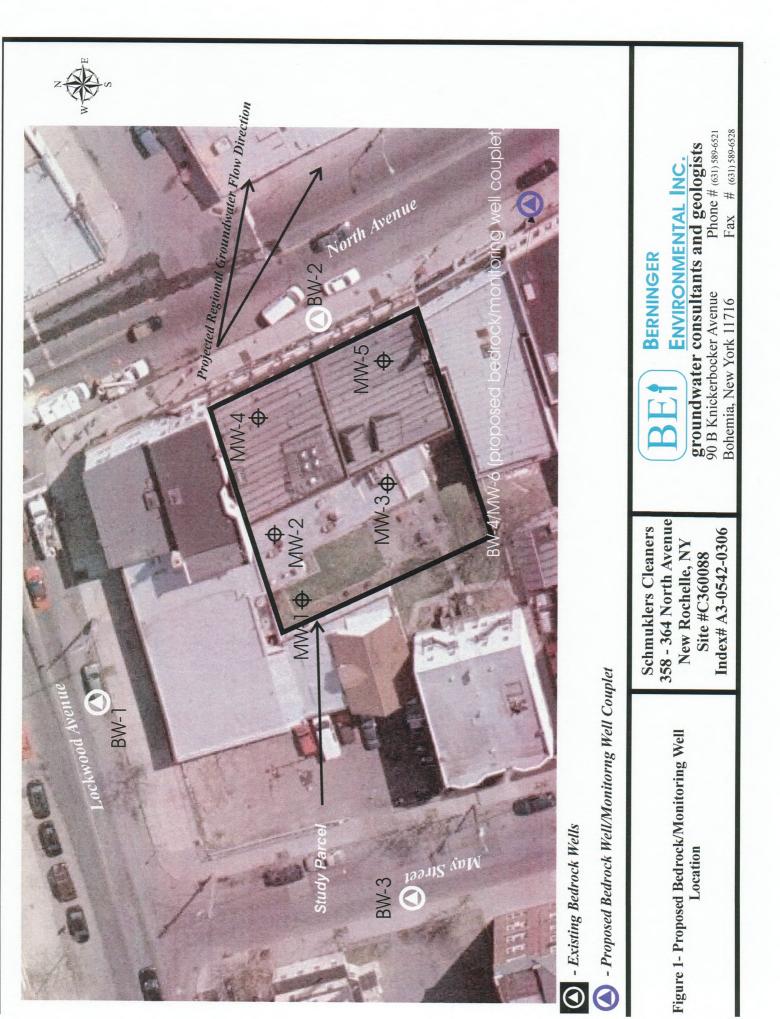
BEI will mobilize to the site within two (2) weeks of the approval of this letter. BEI will notify the surrounding property owners of the work start date in order to limit disturbances to adjoining businesses. The NYSDEC will also be notified of the work start date. The proposed work is anticipated to take two full (2) days (well installation) with one (1) additional day to develop and sample each well. Prior to well development a survey will be conducted as part of the additional days work.

#### Conclusion

After third party data validation is received BEI will include the findings within the Remedial Investigation Report (RIR) prior to submitting the report to the NYSDEC. It should be noted that third party data validation may take up to eight (8) weeks to receive.

Thank you,

Justin Halpin Project Manager Walter Berninger President/Env.Consultant



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Drawn By: JGH

### Well Log

Project: Schmuklers Dry C	Date:		
Client: HNJ Realty LLC.	Be Job No:		
Location: North Ave. New	Rochelle, NY (south of BW-2)	Driller: TBA	
Well No: BW-4	Well No: BW-4 Use: Monitoring/sampling		
Installation Method: Be	drock core rig	Bore Hole Dia: <u>4.25"</u> Sample Method: EPA 8260 (VOCs)	
Casing Type: PVC	Casing Dia: Casing Length:0.0'	Depth to Water: Approx. 10-12' bgs	
Screen Type: PVC	Screen Dia: <u>2"</u> Screen Length: <u>5</u> '	Total Depth: 26' (with DNAPL sump	
Screen Slot: 0.02 inch	Gravel Pack: #2 Fil-pro	10 cm Depini <u>-e (**** 2 cm</u> p	
Casing Seal: Cement	Finish: Cement flush	Security: 5" Manhole	

Depth Below Grade	Sample Information	Well Design	Identification/Remarks
0' grade			5" cast iron manhole cemented to grade Hydraulic Cement Seal
5	Bedrock Approx. 10' bg	s   -	Cement/Grout Seal to grade
10'			Approx. 20' Schedule 40 PVC Riser to Grade
15'			
	Gravel Pack Material—		5' - 2'' PVC 0.02'' slot screen
25'	1' DNAPL Sump		Bottom Well 26' Bgs
			Figure-2



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## Well Log

Project: Schmuklers Dry Clea	Date: TBA	
Client: HNJ Realty LLC.		Be Job No:
Location: North Ave. New Ro	Driller:_TBA	
Well No: MW-6	Use: Monitoring/sampling	Bore Hole Dia: <u>3.25"</u>
Installation Method: Direct	Sample Method: EPA 8260 (VOCs)	
Casing Type: PVC	Casing Dia: <u>2</u> Casing Length: <u>5.0</u>	Depth to Water: Approx. 10-12' bgs
Screen Type: PVC	Screen Dia: <u>2"</u> Screen Length: <u>5.0'</u>	Total Depth: 10'
Screen Slot: 0.02 inch	Gravel Pack: #2 Fil-pro	
Casing Seal: Cement	Finish: Cement flush	Security: 5" Manhole

Depth Below Grade	Sample Information	Well Design	Identification/Remarks
0' grade			5" cast iron manhole cemented to grade Hydraulic Cement Seal
Cement/Grout	Seal to grade		Approx. 5' Schedule 40 PVC Riser to Grade
		-	
5'			
Fil-Pro	Gravel Pack Material—		5' - 2'' PVC 0.02'' slot screen
10'			Bottom Well 10' bgs
	Bedrock Approx. 10' bg	şs	* well will be installed until refusal is encountered. If bedrock is encountered at a depth deeper than 10', than depth to bottom of well will vary accordingly