STERLING
Sterling Environmental Engineering, P.C

November 2, 2018

Mr. Matthew Hubicki
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7014

Subject: Groundwater Sampling and Analysis Plan
New Paltz Plaza, New Paltz, NY
Sterling File No. 2014-45

Dear Mr. Hubicki,

Sterling Environmental Engineering, P.C. (STERLING) submits this Groundwater Sampling and Analysis Plan on behalf of New Paltz Plaza Properties, L.P. in response to your September 17, 2018 letter to Mr. Peter Kempner. Groundwater sampling described herein will be conducted by STERLING, as soon as possible after approval of this work plan. The sampling will include both the annual groundwater sampling required by the Site Management Plan, and the additional analyses for polyfluoroalkyl substances (PFAS) and 1,4-dioxane required by the September 17, 2018 letter.

Groundwater levels will be measured, and groundwater samples will be collected from the five (5) site monitoring wells (MW-2, MW-9, MW-10, MW-11 and BR-2) per the SMP. Groundwater samples will be collected using low-flow purging and sampling methodology. Temperature, pH, Specific Conductivity, Oxidation Reduction Potential (ORP) and Dissolved Oxygen (DO) will be measured in the field. Groundwater samples will be collected once field parameters stabilize.

Groundwater samples will be analyzed for Volatile Organic Compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method 8260 in accordance with the SMP. The NYSDEC's September 17, 2018 letter states groundwater from representative wells should be analyzed for PFAS and 1,4-dioxane to evaluate the potential for the site to be a source of these contaminants. Historical analytical results indicate that well MW-2 is most representative of groundwater quality in the source area. On this basis, the sample from MW-2 will be analyzed for 1,4-dioxane using modified USEPA Modified Method 8270D-SIM, 21 target PFAS, using USEPA Modified Method 537, in addition to VOCs. A Field Reagent Blank (FRB) will be collected in the field for analysis, as required by the analytical method.

Groundwater samples will be collected in accordance with the NYSDEC Department of Environmental Remediation DER-10 – Technical Guidance for Site Investigation and Remediation (May 3, 2010). At least ten (10) percent of all samples will be collected in duplicate for Quality Assurance/Quality Control (QA/QC). Monitoring wells to be sampled in duplicate will be selected randomly at the time of sampling.

Precautionary measures will be taken not to introduce PFAS compounds from the sampling equipment or sampling procedures in accordance with the attached NYSDEC guidance.

Groundwater samples will be analyzed by Alpha Analytical Laboratories, Inc. (Alpha) and Category B deliverables will be produced. Alpha is a certified ELAP laboratory with the capability of achieving method reporting limits for 1,4-dioxane of 0.15 part per billion (ppb) and PFAS of 2 parts per trillion (ppt) in water. The laboratory will report the 21 compounds specified in USEPA Modified Method 537.

The results of the groundwater sample analysis will be available in approximately seven (7) to ten (10) business days after being submitted to the laboratory. STERLING will submit the laboratory report and a summary table of the groundwater sample results to the NYSDEC after the sample results are received. The results also will be included in the next Periodic Review Report.

Please let me know if you have any comments regarding this sampling plan as soon as possible and feel free to contact me if you have any questions.

Best Regards,
STERLING ENVIRONMENTAL ENGINEERING, P.C.

Thomas M. Johnson, P.G., C.P.G.
Senior Hydrogeologist
Thomas.Johnson@Sterlingenvironmental.com

TMJ/bc
Via Email
Attachment: NYSDEC PFC Groundwater Sampling Protocol

cc: P. Kempner

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ATTACHMENT 1
NYSDEC PFC Groundwater Sampling Protocol

Collection of Groundwater Samples for Per- and Polyfluoroalkyl Substances (PFAS) from Monitoring Wells Sample Protocol

Samples collected using this protocol are intended to be analyzed for perfluorooctanoic acid (PFOA) and other perfluorinated compounds by Modified (Low Level) Test Method 537.

The sampling procedure used must be consistent with the NYSDEC March 1991 Sampling Guidelines and Protocols http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf with the following materials limitations.

At this time acceptable materials for sampling include: stainless steel, high density polyethylene (HDPE) and polypropylene. Additional materials may be acceptable if proven not to contain PFAS. **NOTE: Grunfos pumps and some bladder pumps are known to contain PFAS materials (e.g. Teflon™ washers for Grunfos pumps and LDPE bladders for bladder pumps).** All sampling equipment components and sample containers should not come in contact with aluminum foil, low density polyethylene (LDPE), glass or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer. Standard two step decontamination using detergent and clean water rinse will be performed for equipment that does come in contact with PFAS materials. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFAS materials must be avoided. Many food and drink packaging materials and "plumbers thread seal tape" contain PFAS.

All clothing worn by sampling personnel must have been laundered multiple times. The sampler must wear nitrile gloves while filling and sealing the sample bottles.

Pre-cleaned sample bottles with closures, coolers, ice, sample labels and a chain of custody form will be provided by the laboratory.

1. Fill two pre-cleaned 250 mL HDPE or polypropylene bottle with the sample.
2. Cap the bottles with an acceptable cap and liner closure system.
3. Label the sample bottles.
4. Fill out the chain of custody.
5. Place in a cooler maintained at 4 ± 2º Celsius.

Collect one equipment blank for every sample batch, not to exceed 20 samples.

Collect one field duplicate for every sample batch, not to exceed 20 samples.

Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, not to exceed 20 samples.

Request appropriate data deliverable (Category A or B) and an electronic data deliverable.