PWGC
Strategic Environmental Engineering Solutions

July 1, 2013

Mr. Jonathan Greco
Project Manager
Division of Environmental Remediation
Remedial Bureau B, 12th Floor
625 Broadway
Albany, NY 12233-7016

Subject: Addendum to the Remedial Investigation Work Plan (RIWP) – Former Arkansas Chemical Site (ID No. C224172)

Dear Mr. Greco:

This letter serves as an addendum to the Final RIWP submitted to the NYSDEC, on June 25, 2013 to stipulate additional content, requirements and procedures that will be followed during implementation of the Work Plan. The contents of this addendum are added to the Work Plan and will supersede the content in the Work Plan where there is a conflict in purpose or intent. The changes included in this addendum are based on the NYSDEC RIWP approval letter dated June 27, 2013.

ADDENDUM LIST

1. Include four sub-slab sampling points in the work plan. The locations of the sampling points are provided on the attached figure. Soil vapor sampling point installation and sample collection will be performed in accordance with New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006), and United States Environmental Protection Agency (USEPA) Standard Operating Procedure (SOP) 2042, *Soil Gas Sampling*.

   Sampling points will be installed using a Geoprobe® direct-push drill rig or manually driven rods to a depth just below existing asphalt of concrete surface. Sampling points will be constructed of a dedicated stainless steel screen fitted with inert tubing (e.g. polyethylene or Teflon®) to grade. Porous, inert backfill material (e.g., glass beads, washed #1 crushed stone, etc...) will be added to create a sampling zone approximately 0.5 feet in length. The sampling point will be sealed using bentonite (or equivalent material) to prevent outdoor air infiltration.

   Prior to sampling approximately two to three probe volumes will be purged at a flow rate less than 0.2 liters per minute. VOC concentrations will be recorded during purging utilizing a PID. As part of the vapor intrusion evaluation, a tracer gas will be used in accordance with NYSDOH protocols to serve as a quality assurance/quality control (QA/QC) device to verify the integrity of the soil vapor probe seal. Helium will be used as the tracer gas and a box will serve to keep it in contact with the probe during testing. A portable monitoring device will be used to analyze a sample of soil vapor for the tracer prior to sampling. If the tracer sample results show a significant presence of the tracer, the probe seals will be adjusted to prevent infiltration. At the conclusion of the sampling round, tracer monitoring will be performed a second time to confirm the integrity of the probe seals.

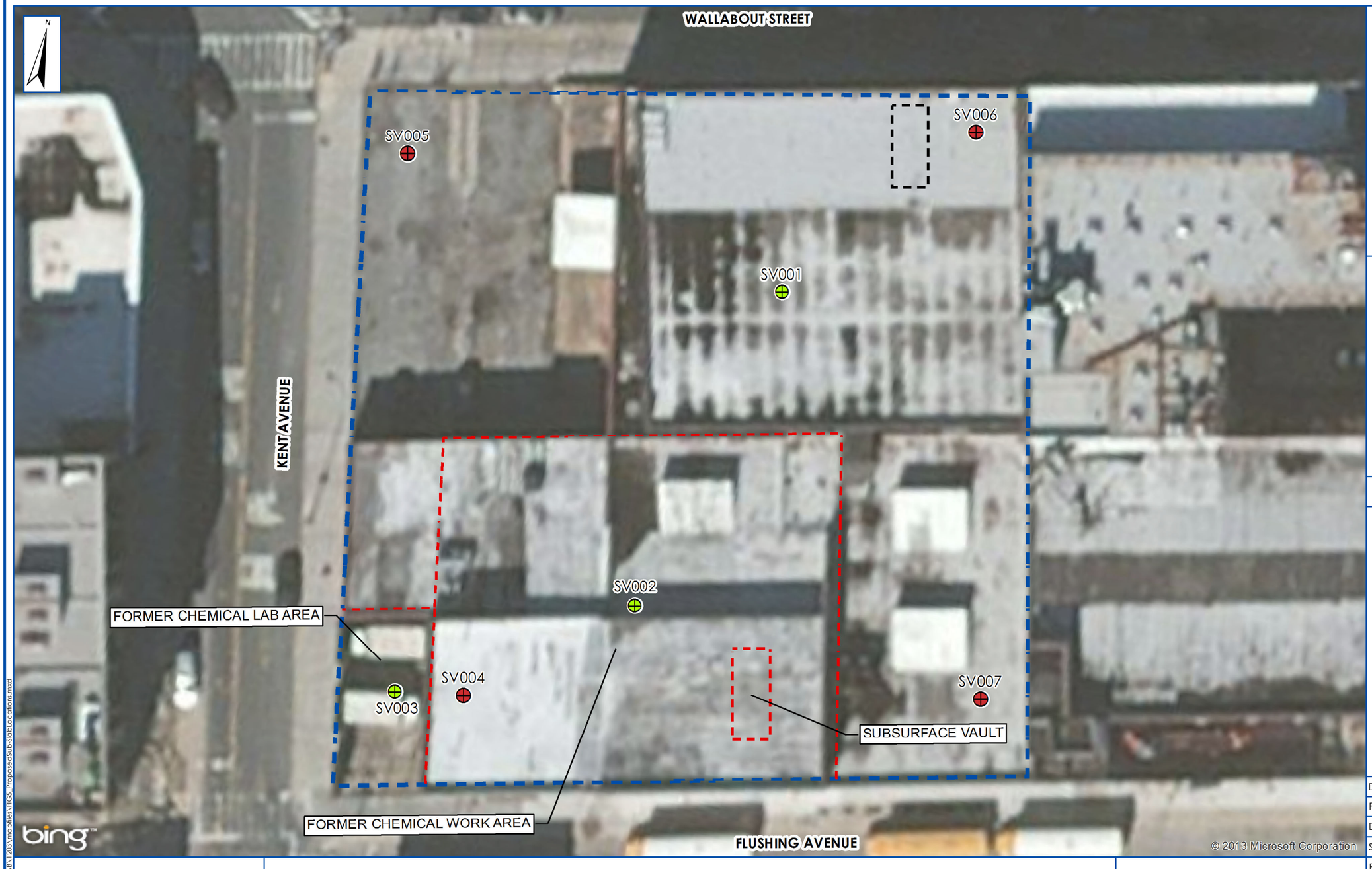
   Soil vapor samples will be collected using one liter SUMMA® canisters fitted with a pre-set flow regulator (approximately 8.3 mL/min). The laboratory will provide certified-clean

canisters with an initial vacuum of approximately 26 inches of mercury (in. of Hg) for sample collection and flow regulators pre-set to provide uniform sample collection over an approximate 2-hour sampling period. Sample collection will be ceased (i.e., the valve on the canister closed) when approximately 2 in. of Hg vacuum remains in the canister, leaving a vacuum in the canister as a means for the laboratory to verify the canister did not leak while in transit. Samples will be analyzed for VOCs by EPA Method TO-15.

Should you have any questions, or require further information, please do not hesitate to contact us.

Sincerely,
P.W. Grosser Consulting, Inc.

Andrew Lockwood
Senior Project Manager



PWGC
Strategic Environmental and Engineering Solutions
P.W. GROSSER CONSULTING, INC.
630 Johnson Avenue. • Suite 7
Bohemia • NY • 11716-2618
Phone: (631) 589-6353 • Fax: (631) 589-8705
E-mail: INFO@PWGROSSER.COM

- 2012 Soil Vapor Location
- Proposed Soil Vapor Location
- Approximate UST Location
- Former Chemical Work/Lab Area
- Lot 1 Proposed Development Site

DRAWING INFORMATION:

Project:	RAB1203	Designed by:	CC
Date:	7/1/2013	Drawn by:	BB
Scale:	AS SHOWN	Approved by:	AL

FIGURE NO: 5

SHEET:

PROPOSED SUB-SLAB SAMPLING LOCATIONS

74 WALLABOUT STREET
BROOKLYN, NEW YORK

0 50 100 150 200 Feet

Document Path: D:\GIS\Projects\MRA\RAB\1203\mapfiles\HG5_ProposedSubSlabLocations.mxd