

February 17, 2010
File: 147-111388

Mr. Robert Filkins
Senior Engineering Geologist, Remedial Bureau B
Division of Environmental Remediation, NYSDEC
625 Broadway, 12th Floor
Albany NY 12233-7016

Re: Former Mimi Cleaners: 58 Christie Place, Scarsdale, NY
VP Site No. V00306-3
Scope to Resample Sub-Slab Vapor and Indoor Air Sampling
28 Popham Road Building

Dear Mr. Filkins:

HDR provides this scope of work to resample sub-slab vapor and indoor air within the 28 Popham Road Building as part of the off-site delineation of potential contaminated soil gas associated with the Former Mimi Cleaners (Site). Figure 1 shows an aerial photograph with the former Mimi Cleaners and the 28 Popham Road Building highlighted. This work plan is based on the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006*.

Background

Figure 2 illustrates the locations sampled initially at the 28 Popham Road Building in August 2009. Results revealed elevated concentrations of PCE in the sub-slab vapor at two locations are above NYSDOH criteria and could impact indoor air quality. The results of the study were discussed with the NYSDOH and the New York State Department of Environmental Conservation (NYSDEC). A decision was made to re-sample at select sample locations during the heating season to verify results received.

Sub-Slab Vapor and Indoor Air Sampling

The locations proposed for re-sampling are shown on Figure 2. Access will need to be provided by the property owner(s) to conduct the proposed sampling. A total of two (2) sub-slab vapor samples and one (1) indoor air sample will be collected from within the basement of the building as follows:

- one sub-slab vapor sample and one indoor air sample will be collected from a location in the eastern section of the building (28-PR-2-SS & 28-PR-2-AMB, respectively), and
- one sub-slab vapor sample will be collected in the northern center area of the building (28-PR-3-SS).

These sample locations have been selected as initial results revealed the highest concentrations of PCE and TCE at these locations. The two sub-slab vapor samples, 28-PR-2-SS & 28-PR-3-SS contained 4,680 & 3,530 $\mu\text{g}/\text{m}^3$ of PCE, and 35.5 & 110 $\mu\text{g}/\text{m}^3$ of TCE, respectively. The indoor air sample, PR-2-AMB, contained 1.96 and 0.381 $\mu\text{g}/\text{m}^3$ of PCE and TCE, respectively.

For the sub-slab vapor sample locations, permanent sample ports were installed in August 2009. Details of the construction of each sample port are outlined in our initial July 09, 2009 revised scope of work. On the day of sampling, at each sub-slab location the threaded plug will be removed from the sub-slab vapor probes and a temporary NPT thread to compression fitting coupler will be used to connect the probe to a section of Teflon® tubing outfitted with compression fittings. The tubing and point will be purged and attached to a Summa canister. For the purging process, the tubing will be connected to a personal air sampling pump which will be run at a flow rate of <0.2 L/min to purge a minimum of three volumes of air from the core hole through the floor or the soil vapor implant area. After purging, the tubing will be connected to a laboratory-supplied Summa Canister (6-L capacity). Vacuum on the canister will be recorded, and the valve on the canister will be opened to collect the sub-slab vapor. The flow control valve on the Summa canister will be set by the laboratory to collect the sample over an approximate 4 hour period (~ 20 ml/min) as was done during the initial sample collection in August 2009.

The indoor air samples will be collected using laboratory-supplied Summa Canisters (6-L capacity) following the procedures listed in the NYSDOH October 2006 Guidance. The vacuum on each canister will be recorded, and the valve on the canister will be opened to collect the indoor air. The flow control valve on the Summa canister will be set by the laboratory to collect the sample over an approximate 4 hour period (~ 20 ml/min).

During the sampling, the vacuum on each canister will be periodically recorded. At the end of the targeted sampling period, but before the vacuum on the canister is completely exhausted, the canister valve will be closed. The final vacuum reading will be recorded, the tubing will be disconnected, and the canister will be prepared for shipment.

The field notes and documentation for the sampling will include the following, where applicable:

- sample identification,
- date and time of sample collection,
- sampling depth,
- identity of samplers,
- sampling methods and devices,
- volume of soil vapor extracted,
- canisters vacuum before and after samples collected,
- apparent moisture content (dry, moist, saturated, etc.) of the sampling zone, and
- chain of custody protocols and records used to track samples from sampling point to analysis.

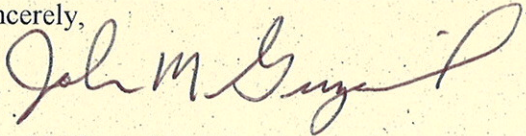
Photographs of each sample location will be taken during sampling. Samples will be shipped via overnight courier under proper chain-of-custody to a NYSDOH-certified laboratory for VOC analyses (chlorinated solvents only) by EPA T0-15. Based on a 4-hour sample collection interval the practical quantitation limit is less than $1 \mu\text{g}/\text{m}^3$. Analytical results of the sub-slab vapor and indoor air sampling investigations will be summarized and submitted to NYSDEC and NYSDOH in a data summary report.

Schedule

HDR is prepared to commence with sample collection once approval of this scope has been received and access to the building has been granted.

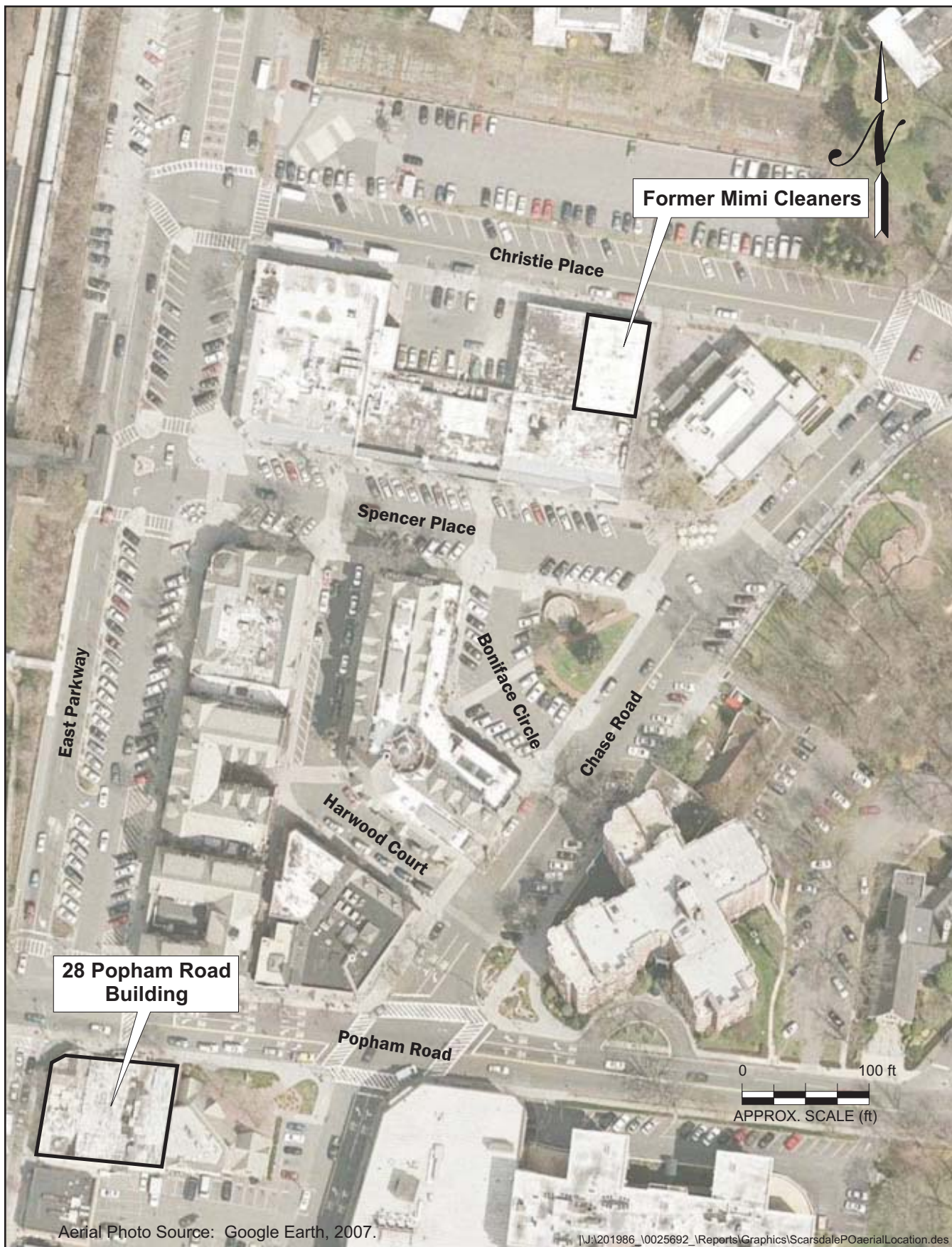
If you have any questions, please feel free to contact me at (845) 735-8300.

Sincerely,

A handwritten signature in dark ink, appearing to read "John M. Guzewich". The signature is fluid and cursive, with a large, stylized "J" and "G".

John M. Guzewich
Project Manager

Cc: N. Walz, NYSDOH
S. Russo, Esq. Sive, Paget & Riesel, P.C.
K. Healy, Esq. Bryan Cave LLP



Henningson, Durham & Richardson
Architecture and Engineering, P.C.
One Blue Hill Plaza
Pearl River, NY 10965

**Location of 28 Popham Road Building and
Former Mimi Cleaners**
Former Mimi Dry Cleaners
Scarsdale, NY

**Figure
1**

