ENVIRONMENTAL CONSULTING & MANAGEMENT
ROUX ASSOCIATES INC

209 SHAFTER STREET
Islandia, New York 11749-5074 TEL 631-232-2600 FAX 631-232-9898

February 11, 2008

Mr. Robert DeCandia, P.E.
Project Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7015

Re: Busy Bee Cleaners, #V00376-1
1818 Merrick Road, Merrick, New York
Soil Vapor Investigation Work Plan

Dear Mr. DeCandia:

Busy Bee Cleaners ("Busy Bee") and its environmental consultant, Roux Associates, Inc. ("Roux Associates"), have prepared the following scope of work to address soil vapor investigation requests included in a letter dated July 28, 2006 from the New York State Department of Environmental Conservation ("NYSDEC") that presents comments on the February 13, 2006 Remedial Investigation Report and June 2, 2006 Soil Vapor Sampling Results, and a February 7, 2008 telephone call between Roux Associates, the NYSDEC, and the New York State Department of Health ("NYSDOH").

The NYSDEC presented two comments in the July 28, 2006 letter that relate to additional soil vapor investigation. These comments are presented verbatim below in italics.

Comment 1. *Based on the levels of tetrachloroethene ("PCE") and trichloroethene ("TCE") in indoor air, additional soil vapor intrusion sampling should be conducted. Sampling should be conducted in the winter/heating season to determine the potential for soil vapor intrusion during a worst case scenario, as recommended in the NYSDOH Draft Soil Vapor Intrusion Guidance. Sampling of sub-slab vapor, indoor air on each floor of the building and outdoor air should be conducted simultaneously.*

Comment 2. *The extent of soil vapor contamination has not been fully delineated. Additional soil vapor sampling should be conducted in areas east of SG-2 and south of Alice Street.*

In accordance with the Final NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, Roux Associates proposes to collect seven samples at the locations summarized below and shown in the attached figure (Figure 1).

- Two indoor air samples (A-3 and A-4) one from the first floor and one from the second floor of 1814 Merrick Road. A third indoor air sample will also be collected from the third floor of the building if it is occupied.

- One sub-slab soil vapor sample (SG-5) collected from the existing soil vapor sampling point located on the first floor of 1814 Merrick Road.

- One air sample (A-5) from the crawlspace of the home located east of 22 Alice Street.

- One soil vapor sample (SG-9) located on the far east side of the Site (in the location of soil vapor screening sample SV-3).

- One soil vapor sample (SG-10) located on the far east side of the rear parking lot at 1812 Merrick Road.

- One outdoor ambient air sample (A-2).

Prior to sample collection, Roux Associates will obtain subsurface utility information from the local building department. Based on this information, the NYSDEC and NYSDOH may request an additional soil vapor sampling location between 1812 Merrick Road and 1814 Merrick Road.

At the exterior soil vapor sampling locations, a Geoprobe® rod equipped with a Geoprobe soil vapor sampling connector and a disposable drive point will be advanced into the ground to approximately three feet. Once at the desired depth, the Geoprobe rod will be retracted approximately one foot, creating a void space. One end of a polyethylene sampling tube will then be connected to an adapter inserted into the Geoprobe rods. The adapter will be threaded onto the post run tubing connector at the bottom of the rods, sealing off the ambient air with a silicon o-ring. The other end of the sampling tube will be run to the surface.

Sampling tubing at the surface will be passed through an enclosure that covers the top of the sample point and connects to a disposable three-way stop-cock. New sample tubing and stop-cocks will be used at each sample location. The enclosure will be flooded with helium as an inert tracer gas. Tubing from one of the stop-cock ports will lead to a vacuum pump and tubing from the other stop-cock port will lead to a pre-evacuated six-liter Summa canister supplied by the laboratory. The stop-cock valve will isolate the pump and the Summa canister. Initially, the valve leading to the Summa canister will be closed and the valve leading to the vacuum pump will be open. The soil gas sampling location will be purged of one to three volumes of the sampling apparatus using the vacuum pump set at a rate equal to or less than 0.2 liters per minute. During purging, the purge gas will be analyzed for the helium tracer gas using a helium detector. If helium is detected, the surface seal will be adjusted and the purging continued until no helium is being detected.

The interior sub-slab soil vapor sampling point will be purged in a similar manner of one to three volumes of the sampling apparatus using the vacuum pump set at a rate equal to or less than 0.2 liters per minute. The integrity of the interior soil vapor sampling point has already been tested and helium tracer gas will not be used at this location.

In all cases, care will be taken to avoid excessive purging prior to sample collection. Following purging, the valve leading to the pump will be closed, the pump will be turned off, and the valve leading to the Summa canister will be opened. The exterior soil vapor samples will be collected over a one-hour period while the interior sub-slab soil vapor sample will be collected over an eight-hour period. All sample exposure durations will be controlled using a laboratory calibrated regulator. Once each Summa canister has been filled, the valve on the canister will be closed and the canister disconnected from the sampling tubing.

Interior air samples and the exterior ambient air sample will be collected concurrently with the sub-slab soil vapor sample in pre-evacuated six-liter Summa canisters with a flow-controlling regulator over an eight-hour period. An effort will be made to conduct the sampling within 1814 Merrick Road during a period when the exhaust fan at Busy Bee Cleaners is not venting to the exterior.

Soil vapor and air samples will be analyzed for VOCs using USEPA method TO-15 and analytical results will be reported in micrograms per cubic meter.

Proposed Schedule
Roux Associates proposes to collect soil vapor and indoor air samples as soon as possible. This schedule will be dictated primarily by obtaining access to the properties. All efforts will be made to conduct this work prior to April 1, 2008. Analytical results will be forwarded to the NYSDEC and NYSDOH within five days of receipt.

If you have any questions concerning the proposed scope of work, please do not hesitate to contact me at 631-232-2600.

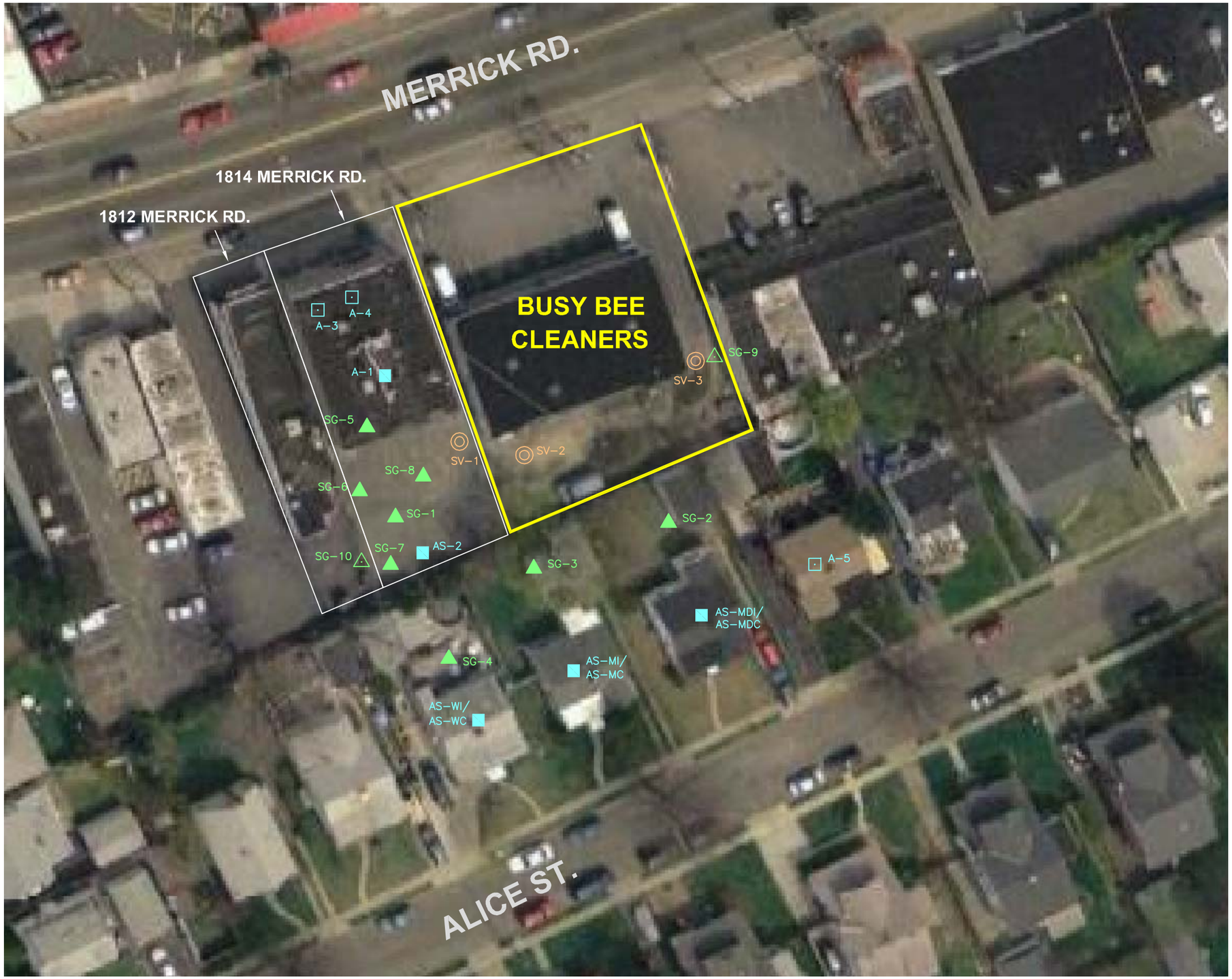
Sincerely,

ROUX ASSOCIATES, INC.

Michael Roux
Principal Hydrogeologist

Attachment

cc: Sharon McLelland, New York State Department of Health
Joseph DeFranco, Nassau County Department of Health
Busy Bee Cleaners
Frederick Eisenbud, Esq., Lamb & Barnosky, LLP



LEGEND

- PREVIOUS SOIL VAPOR SAMPLE
- PROPOSED SOIL VAPOR SAMPLE
- PREVIOUS AIR SAMPLE
- PROPOSED AIR SAMPLE
- PREVIOUS SOIL VAPOR SCREENING LOCATION

N

120' 0 120'

Title:

PROPOSED SAMPLING LOCATIONS

NYSDEC VCP # V00376-1

Prepared For:

BUSY BEE CLEANERS

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: M.R.	Date: 06MAR08	FIGURE
Prepared by: B.H.C.	Scale: AS SHOWN	1
Project Mgr: M.R.	Office: NY	
File No: BUS0114501	Project: 102301Y	

\BUS1032Y\BUS01Y\145\BUS0114501.DWG