

June 27, 2008

Mr. William Murray, P.E.  
Project Manager  
New York State Department of Environmental Conservation  
270 Michigan Ave.  
Buffalo, New York 14203

Re: Sub-Slab Vapor Sampling Work Plan  
100 Amherst Villa Road  
Cheektowaga, New York

Dear Mr. Murray:

On behalf of our client, Mercy Flight, Benchmark Environmental Engineering & Science, PLLC (Benchmark) has prepared this Sub-Slab Vapor Sampling Work Plan (Work Plan) for the above-referenced site. This Work Plan was prepared based on discussions with you in June 2008.

### **Background**

This document presents the proposed scope of work and implementation procedures for completion of sub-slab vapor sampling at Mercy Flight's newly constructed heliport hanger and associated offices at 100 Amherst Villa Road, Cheektowaga, NY.

During construction of the new facility, several extraction points and vertical risers necessary for an active sub-slab depressurization (ASD) system were installed. While certain system components have been proactively installed prior to the determined necessity of an ASD system, the purpose of this Work Plan is determine whether this system is to be required and subsequently activated following construction. This Work Plan outlines the additional scope of work that was discussed with you and that will be completed prior to occupancy, to determine the necessity of activating an ASD system.

### **Project Objective**

The primary objective of this sub-slab vapor sampling is to:

- Collect sub-slab vapor samples from the newly constructed building to evaluate whether VOCs are a concern for the building.

### **Sub-slab Vapor Testing**

To evaluate the potential vapor intrusion into the Site building, two sub-slab vapor samples will be collected in the location shown on Figure 1. The sampling will

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generally follow New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) guidance and policies.

At the sub-slab sample locations, Benchmark personnel will drill an approximate  $\frac{3}{4}$  - inch diameter hole through the concrete floor (est. 4-6 inches thick) using a hand-held drill. Approximately 6 inches of soil will then be drilled from beneath the hole. An appropriately sized silicone stopper fitted with a  $\frac{1}{4}$ -inch hollow Teflon tube will then be inserted into the core hole and sealed using modeling clay. A real time helium tracer gas will be used to confirm the integrity of the probe seal prior to formal sample collection. Once the seal is determined to be adequate, a Summa canister fitted with an 8-hour regulator will be attached to the opposite end of the Teflon tubing. Three volumes will be purged from the sampling line before initiating Summa canister sampling. Purging will be performed with a vacuum pump or syringe.

All Summa canister valves will remain closed until the boring is completed, purged, and all of the canisters are in their respective positions. The valves will then be opened for the 8-hour collection period. Following sample collection, the Summa canisters will be shipped to an NYSDOH-approved laboratory for analysis of Target Compound List (TCL) volatile organic compounds (VOCs) in accordance with USEPA Method TO-15.

Upon receipt of the sub-slab vapor testing results, a letter report summarizing the results of the testing will be prepared and submitted to the NYSDEC and NYSDOH.

### **Project Schedule**

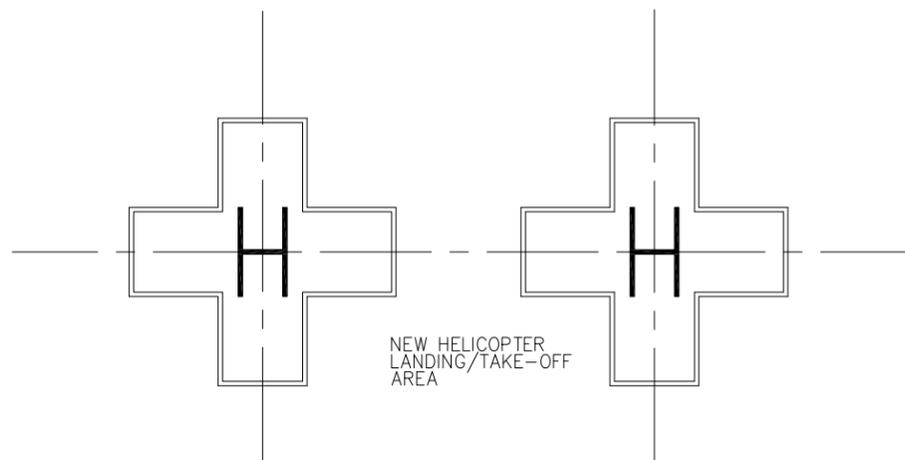
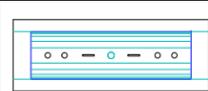
Benchmark is prepared to mobilize to the Site immediately upon completion of all construction activities and upon NYSDEC and NYSDOH approval of this Work Plan.

Sincerely,  
Benchmark Environmental Engineering & Science, PLLC

Michael Lesakowski  
Project Manager

c: Matt Forcucci, NYSDOH  
Margie Ferrentino, MercyFlight

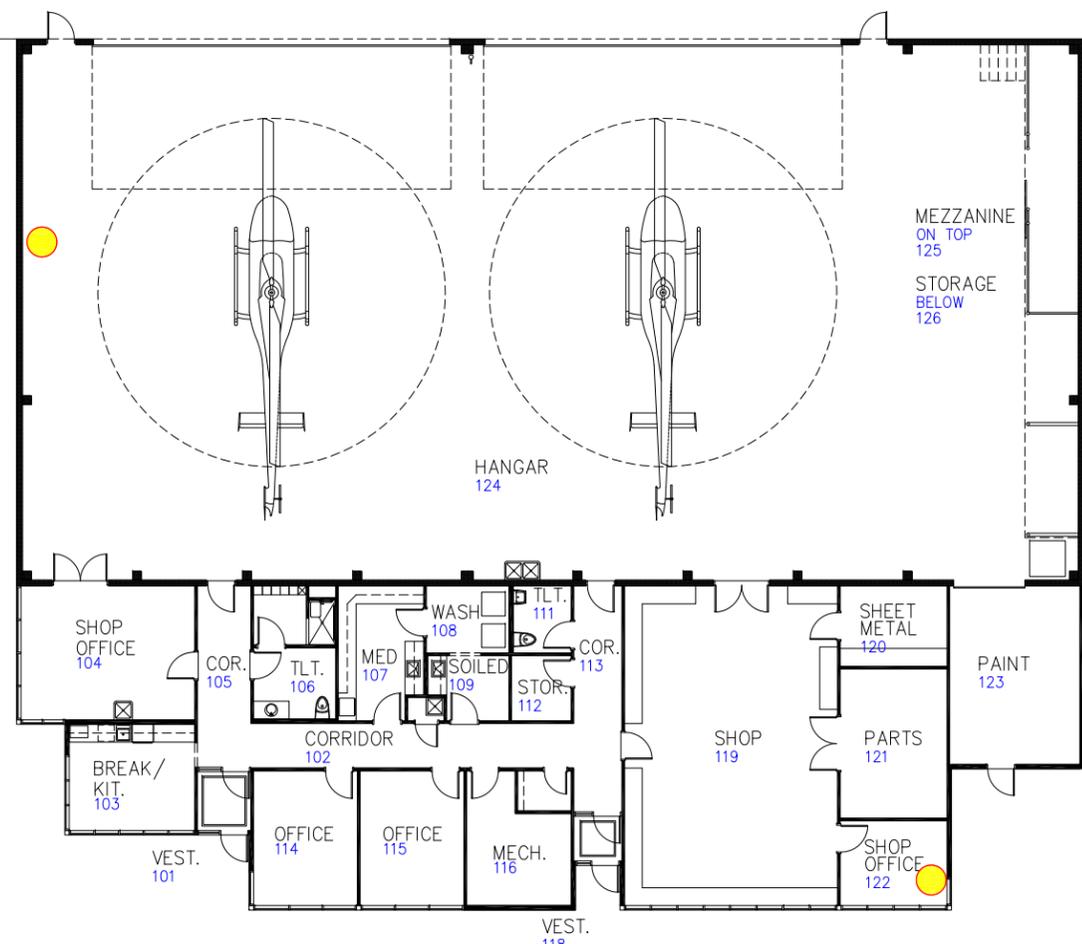
# **FIGURES**



**LEGEND:**



PROPOSED SUBSLAB SOIL VAPOR  
SAMPLE LOCATION



**MERCY FLIGHT EXPANSION**  
PROPOSED SUB-SLAB SOIL VAPOR SAMPLING LOCATIONS  
100 AMHERST VILLA ROAD  
CHEEKTOWAGA, NEW YORK

PREPARED FOR  
MERCY FLIGHT, INC.

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**FIGURE 1**