Ms. Barbara Jakub Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

## **RECEIVED**

10:29 am, Nov 14, 2011

Alameda County Environmental Health

Subject: Work Plan - Addendum I

Dear Ms. Jakub:

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,

JIMMY KOO

Enclosure: Work Plan - Addendum I



Ms. Barbara Jakub Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Subject: Work Plan - Addendum I

Sunny Piedmont Cleaners

Oakland, California

### Dear Barbara:

On behalf of Mr. Jimmy Koo of Sunny Piedmont Cleaners, ICES submits the following responses to a letter from Alameda County Environmental Health dated October 6, 2011 for the Site.

### 1. Comment:

In addition to your proposed sample depths of one-foot below the sanitary sewer and at 10 feet, please submit samples for analysis from locations that exhibit elevated PID readings.

## Response:

Soil samples will be collected at locations that exhibit elevated PID readings from the boring and analyzed for VOCs using EPA Method 8260.

### 2. Comment:

The work plan does not specify soil vapor sampling procedures nor does it reference the guidance that was used. Please submit an addendum to the work plan for soil vapor confirmation sampling that at a minimum provides information on the method used to install the sub-slab vapor probes, depth of probes, details the use of an appropriate tracer gas and a shroud, included appropriate sample quantity, sample frequency and atmospheric gas analysis, and proposes appropriate purging and leak testing.

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3300 Powell Street Suite #109 Emeryville, CA



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# Response:

Two sub-slab soil vapor samples will be collected from two onsite boring locations (SV-1 and SV-2) located at the eastern and western portion of the Site (Figure 1) following the soil removal activities. Two rounds of soil vapor sampling will be conducted: one round will be conducted within a week following the soil removal activities and the second round will be conducted four weeks later.

An electric Roto Hammer equipped with a 1.5-inch bit will be used to drill 1 inch into the cement slab. The cuttings will be removed and a 5/8 inch bit will be used to drill through the remainder of the slab and 3 to 4 inches into the sub base material. The hole will be cleared of any cuttings and debris. The sample train, constructed of 1/8 or 1/4 inch Nylaflow or Telfon tubing with a plastic or stainless steel air diffuser will be attached, and inserted through the slab into the sub base. #30 kiln dried sand will be poured into the hole up to the base of the slab. 1 inch of dry granular bentonite will be poured into the hole, surrounding the tubing. Hydrated bentonite will be placed in the hole and up to the surface of the slab. The sub-slab sampling point will be allowed to equilibrate for a minimum of 30 minutes before sampling.

After equilibration, three volumes of air will be purged from the tubing prior to the collection of the soil vapor samples.

Additionally, a tracer compound, difluoroethane or iso-propanol, will be used to test for leaks around the sampling tubing at the ground surface. The tracer will be placed under the shroud during the leak testing. If the tracer is detected per California EPA advisory specifications, another sampling point will be constructed and the process of purging and leak testing will be performed.

Soil vapor samples will be collected in 1-liter SUMMA canisters. Each SUMMA canister will be fitted with a flow controller, which will be calibrated to maintain a flow rate of no more than 200 milliliters per minute. The sampling end of the tubing will be fitted to the SUMMA canister sampling port and the port valve will be opened, allowing air to enter the sample container due to the pressure differential. The port valve will be closed upon



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> the collection of a sufficient sample. The SUMMA canister will be labeled for identification and stored away from direct sunlight prior to analysis. After the soil vapor samples are obtained, the tubing and bentonite will be removed and the sub-slab sampling points will be backfilled with neat cement.

The soil vapor samples will be sent to a state-certified laboratory and analyzed for VOCs using TO-15, oxygen, carbon dioxide, and methane.

Please feel free to contact Derek Wong or myself, if you need any additional information regarding this Site.

Sincerely,

cc:

Pèng Leong, P.E. Principal Engineer

Mr. Jimmy Koo, Sunny Piedmont Cleaners

