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By Alameda County Environmental Health 1:26 pm, Apr 07, 2017

April 7, 2017

Ms. Kit Soo
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

**Subject: Submittal Acknowledgement Statement
Vapor Intrusion Mitigation Plan Addendum**
10700 MacArthur Blvd.
Oakland, California
AEI Project # 365948
Toxics Case No. RO0002580

Dear Ms. Soo:

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the State Water Resources Control Board's Geotracker website.

If you have any questions or need additional information, please do not hesitate to call the undersigned at (310) 270-8339, or Mr. Peter McIntyre at AEI Consultants, (925) 746-6004.

Sincerely,


WAC Enterprises FHS, LLC
8245 W. 4th Street,
Los Angeles, CA 90048

cc: Mr. Peter McIntyre, AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597



April 7, 2017

Ms. Kit Soo
Alameda County Department of Environmental Health
1131 Harbor Parkway
Alameda, California 94502

Re: Addendum, Vapor Intrusion Mitigation Plan

Former Young's Cleaners
10700 MacArthur Boulevard, Oakland, California
AEI Project No. 365948
Toxics Case No RO0002580

Dear Kit Soo:

On behalf of WAC Enterprise FHS, AEI Consultants (AEI) appreciates the opportunity to present this addendum to the previously submitted March 6, 2017 *Vapor Intrusion Mitigation Plan* (VIMP) addressing the environmental concerns at 10700 MacArthur Boulevard in Oakland, California ("the Site"). This Addendum has been prepared in response to the request presented in the letter dated April 4, 2017 from the Alameda County Department of Environmental Health (DEH) on April 3, 2017 as documented in the DEH.

HVAC System Evaluation

As proposed in the DEH-approved VIMP, heating, ventilation, and air conditioning (HVAC) evaluations are necessary to assess that existing HVAC configuration is effective at maintaining positive pressure within the building to reduce the potential for vapor intrusion. An evaluation was performed on HVAC equipment serving the proposed Shoe Palace tenant suite as documented in AEI's March 21, 2017 *Interim Vapor Intrusion Mitigation Plan Implementation* (VIMPI).

The evaluation has not been completed for the storeroom and Rainbow Apparel tenant space both of which operate under independent HVAC units from the Shoe Palace. AEI plans to complete the same evaluation performed at Shoe Palace, using similar protocol as outlined in the Interim VIMPI, within the two noted suites, concurrently. The concurrent testing will allow for an assessment if a positive pressure is maintained within the suites during concurrent operation, as was documented in the Shoe Palace suite.

AEI is currently scheduling the HVAC evaluation and optimization which will be performed by a licensed commercial HVAC specialist and is anticipated to be completed the week of April 10, 2017. The HVAC evaluation and optimization is scheduled to be performed for the following locations:

- Storeroom
- Rainbow Apparel
- Proposed Shoe Palace

Results will be submitted to the DEH as requested upon completion.

HVAC System Operation and Maintenance (O&M) Plan

The initial HVAC evaluation for the Shoe Palace space indicated that the existing configuration was appropriate for maintaining a positive pressure within the building. Provided the evaluation of the HVAC systems in the storage space and Rainbow Apparel are similar, AEI would recommend operation of the HVAC systems during tenant occupancy as described in the below O&M Plan at the following locations:

- Storeroom
- Rainbow Apparel
- Proposed Shoe Palace

The Rainbow Apparel tenants business hours are between the hours of 10:00 AM and 8:00 PM. Therefore, AEI recommends the HVAC system be programmed to operate between the hours of 9:00 AM to 9:00 PM, seven days a week, which should cover tenant occupancy with overlap for opening and closing of the store. Once the Shoe Palace hours are established, a similar schedule will be conducted for the Shoe Palace tenant suite. The HVAC system for the storeroom will be operational to overlap both tenant suites operational hours.

It will be the onsite Property Manager's responsibility to communicate with tenants regarding the HVAC operation schedule. Thermostats within each tenant space will be programmed to run in accordance with the above schedule. Thermostats will be inspected on a monthly basis by the onsite Property Manager to verify that the schedule remains in place and has not been tampered with. If it is observed that the schedule is regularly being altered, additional measures will be implemented which may include limiting the tenant access to adjusting the thermostat. Inspection logs will be kept by the Property Manager and provided to AEI to be included in the semi-annual groundwater monitoring and system update reports.

If an HVAC system will be down for repairs for longer than four-hours, additional ventilation will be provided to the affected tenant space until the repairs are completed.



Interim Mitigation Measures Work Plan– Storeroom

During the March 2017, indoor air sampling event, PCE and TCE concentrations increased significantly in the indoor air sample collected from within the unoccupied storeroom. Specifically, the observed TCE concentrations increased to 6.13 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) which is near, but still below, the EPA accelerated response level of $7 \mu\text{g}/\text{m}^3$, and well below the urgent response level $21 \mu\text{g}/\text{m}^3$ as adapted by the California Regional Water Quality Control Board, San Francisco Bay Region in their October 16, 2014 draft *Interim Framework for Assessment of Vapor Intrusion at TCE-Contaminated Sites in the San Francisco Bay Region*. The framework outlines the following response:

- If TCE is equal to or less than accelerated response, "...routine periodic confirmation sampling or monitoring..." is appropriate.
- If the TCE concentration is greater than the accelerated response, "...early or interim response measures be evaluated and implemented quickly, within a few of weeks."

Therefore, AEI recommends implementing the following tiered response, which is more conservative than outlined in the framework, but consistent with the discussions with the DEH. Furthermore, it should be noted that risk assessment evaluations for commercial properties, as derived from the US EPA guidelines, are based on an eight or more hour exposure duration, whereas the unoccupied storeroom is designed for temporary exposure while acquiring equipment or supplies, typically less than two-hours a day.

AEI provides the following work plan to assess possible causes and mitigation options.

Tier 1:

During the week of April 10, 2017, AEI will perform a Site inspection within the storeroom concurrent with the above-described HVAC evaluation. The inspection will include:

- Although the sub-slab depressurization (SSD) and soil vapor extraction and treatment (SVET) system equipment room is separate from the storeroom, AEI will assess the equipment room as a possible source for elevated PCE/TCE in the storeroom. Initially, the vent fan inside the equipment room will be turned off, reducing the outflow of air from the building and reducing the potential negative pressure generated. The vent fan was installed to move air within the equipment room to keep the room cool, and the blowers from overheating. AEI will monitor room temperature to verify if an active cooling system is necessary.
- AEI will inspect the SSD and SVET system piping within the equipment room for leaks which may be present, which could be a source of VOCs to building air.
- AEI will inspect the integrity of the floor within the equipment and store room for obvious cracks and/or penetrations.



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10700 MacArthur Boulevard, Oakland, California
Toxics Case No RO0002580

- HVAC system, following the evaluation and optimization, in the storeroom will be turned on, evaluated and operated as describe above, in fan only mode (no heating or cooling). Operation of the HVAC system within the storeroom is anticipated to reduce the threat of vapor intrusion by creating a positive pressure within the storeroom.

Upon completion of these items and HVAC system evaluation, AEI will collect a confirmation indoor air sample within the storage room as well as the equipment room. The results of these samples will be used to quantify whether these modifications reduced VOC concentrations in indoor air. If concentrations do not decrease, or remain the same, AEI will implement Tier 2.

Tier 2:

Under this scenario, additional indoor air sample results will have indicated that additional mitigation actions are warranted. AEI will oversee the installation of a Retro-Coat™ vapor barrier as completed within the Shoe Palace. The Retro-Coat™ vapor barrier will be installed following the protocol described in the Interim VIMP. Upon completion of the Retro-Coat™ vapor barrier, a confirmation indoor air sample will be collected to verify the effectiveness of the retro-coat installation.

Schedule

AEI plans to continue implementing outstanding items described in this report upon approval from the DEH. The current tentative schedule for implementation of the described activities is as follows:

Week of April 10th:

- Complete the HVAC evaluation within the Rainbow Apparel tenant space, the storeroom, and Shoe Palace.
- Work with the Property Manager to implement the HVAC O&M schedule.
- Perform the Tier 1 evaluation of the storage room/system room.

By April 14th:

AEI will submit the results of the HVAC evaluation to the DEH.

Week of April 17th

AEI will collect a confirmation indoor air sample within the storage room and system room.



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By April 21st

AEI will submit the results of the Tier 1 findings of the storage room and confirmation indoor air sample results. The findings will include a recommendation regarding if Tier 2 activities should be implemented.

End of May 2017:

AEI will submit a final technical report with the results of the VIMP related activities. The report will contain a description of items outlined in this Addendum as well as items outlined in the *VIMP* and *Interim VIMP* reports. The report will recommend an appropriate schedule for periodic indoor air sampling to confirm performance of the VIMP activities.

Closing


AEI appreciates working with the DEH to actively address the environmental concerns at the Site. Please contact the undersigned at (925) 746-6000 if you have any questions regarding the contents of this Addendum.

Sincerely,

AEI Consultants



Jeremy Smith
Senior Project Manager



Trent A. Weise, P.E.
Vice President

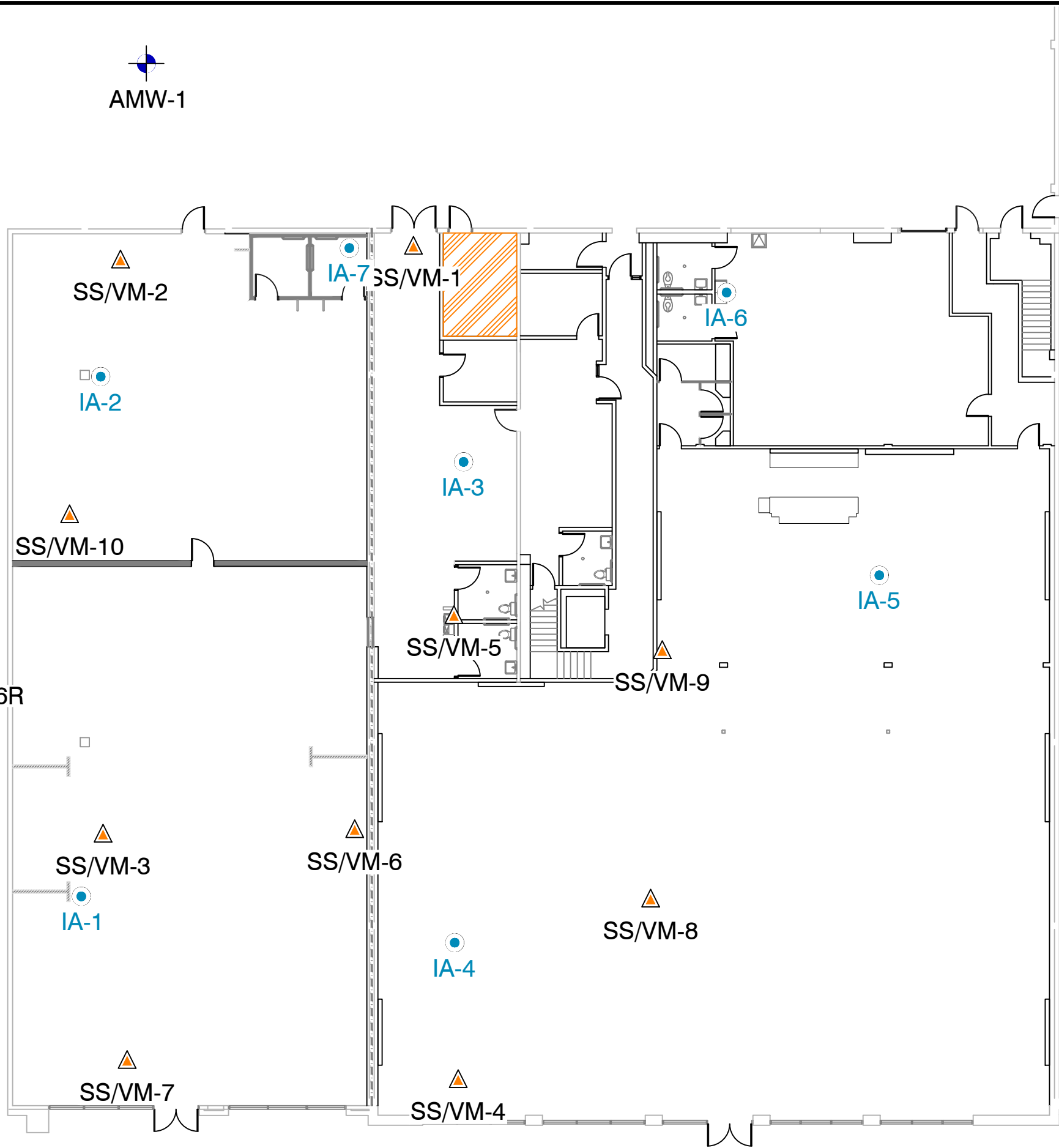
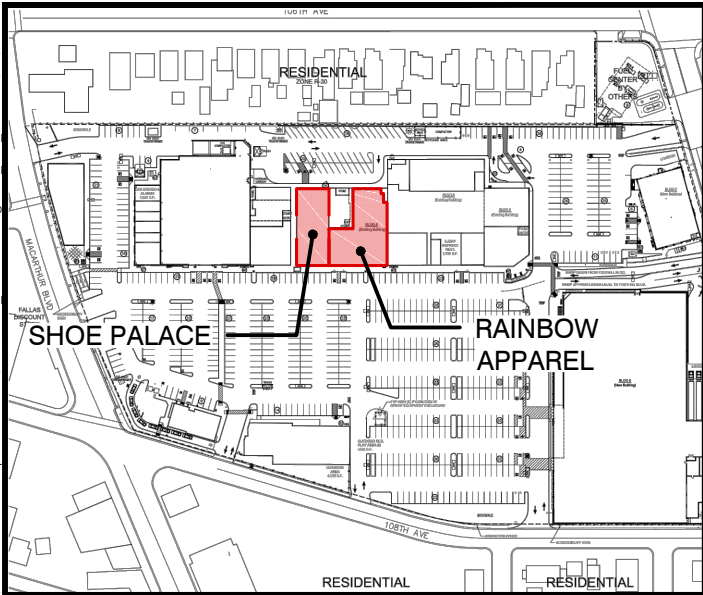


Encl:

Figure 1 – Site Plan

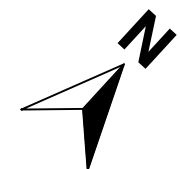


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LEGEND

-  Interior Fixture
-  SVET & SDS Equipment Location
-  Groundwater Monitoring Well
-  Soil Vapor/Sub-slab Vapor Monitoring Point
-  Indoor Air Sample Location



AEI Consultants
San Jose, California

SITE PLAN

10700 MacArthur Blvd
Oakland, California

FIGURE 1
Project No. 261829