## Wickham, Jerry, Env. Health

From: Wickham, Jerry, Env. Health

Sent: Monday, February 10, 2014 9:25 AM

To: Goloubow, Ron Subject: Re: RO400 Work Plan

Ron,

This appears to be consistent with guidance so sampling without a waiting period after a rain event is acceptable.

Jerry Wickham Alameda County Environmental Health

Sent from my iPad

On Feb 7, 2014, at 4:58 PM, "Goloubow, Ron" <Ron.Goloubow@arcadis-us.com> wrote:

Hi Jerry the proposed soil vapor sample locations for the Volkswagen Dealership in Oakland, CA area all within the foot print of the building at the Site and are not subject to "direct" infiltration from rain fall. The area around the proposed locations are also paved with asphalt and/or concrete thus limiting any affects from the infiltration of the rainfall to the subsurface near the proposed locations. For these reasons ARCADIS believes that the soil vapor sampling can take place less than five days after a rain event.

Please let us know if the ACEH agrees.

Ron.

Ron Goloubow, P.G. | Principal Geologist | <a href="mailto:ron.goloubow@arcadis-us.com">ron.goloubow@arcadis-us.com</a>
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From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]

Sent: Thursday, February 06, 2014 6:52 PM

**To:** Goloubow, Ron **Cc:** Shah, Arpen

Subject: RE: RO400 Work Plan

If you can confirm that infiltration is not occurring in the areas where the soil vapor samples will be collected such as beneath a building, soil gas sampling can proceed less than 5 days after a rain event. That is actually in the DTSC guidance.

Regards,
Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
phone: 510-567-6791
jerry.wickham@acgov.org

From: Goloubow, Ron [mailto:Ron.Goloubow@arcadis-us.com]

Sent: Thursday, February 06, 2014 2:22 PM

To: Wickham, Jerry, Env. Health

Cc: Shah, Arpen

Subject: RE: RO400 Work Plan

Jerry can you confirm that the since the locations of the proposed soil vapor samples for the subject site are within the foot print of a building, the county would not object to the collection and analysis of the soil vapor samples less than five days after a rain event?

Thanks.

Ron Goloubow, P.G. | Principal Geologist | ron.goloubow@arcadis-us.com ARCADIS U.S., Inc. | 100 Montgomery Street, Suite 300 | San Francisco, CA 94104 T: 415 432 6942 | M: 510 501 1789 Connect with us! www.arcadis-us.com | LinkedIn | Twitter | Facebook

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From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]

Sent: Tuesday, February 04, 2014 6:08 PM

To: Goloubow, Ron

Cc: Bell, Caitlin; Shipley, Jay; Jouhet, Sandra @ Auburn Hills

Subject: RE: RO400 Work Plan

Hello Ron,

No objections to the additional locations.

Given that the sampling locations are within a building surrounded by paved areas, conditions are not likely to be sensitive to rainfall. Therefore, there could be some flexibility with regard to the guidance.

Regards,
Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
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jerry.wickham@acgov.org

From: Goloubow, Ron [mailto:Ron.Goloubow@arcadis-us.com]

Sent: Tuesday, February 04, 2014 4:46 PM

To: Wickham, Jerry, Env. Health

Cc: Bell, Caitlin; Shipley, Jay; Jouhet, Sandra @ Auburn Hills

Subject: RE: RO400 Work Plan

Hi Jerry – I wanted to let you know that the scope of the soil vapor investigation has been expanded as requested by the tenant at the Volkswagen Car Dealership in Oakland. The revised scope of work will include the collection of 5 sub slab soil vapor samples (three more than originally included in the scope of work) and 3 vapor samples from vadose zone soil vapor monitoring wells (two more than originally included in the scope of work).

The 5 sub slab samples will be collected at the following locations: 1 in the garage; 2 in the room immediately west of the garage; and 2 in an office immediately west of the room (see the attached figure).

The 3 soil vapor monitoring wells will be located as follows: 2 in the garage; 1 in an office immediately west of the room (see the attached figure).

We are tentatively set to conduct the field work during the week of February 10; the sampling is subject to be postponed based on the weather (from the DTSC guidance document)t:

"Rainfall decreases the air-filled porosity of the shallow soil, thereby limiting diffusional transport of volatile contaminants. Also, soil gas contaminants may partition into the clean infiltrating rainwater, both of which may potentially bias soil gas sampling results. Hence, soil gas sampling should not occur during a significant rain event and should only occur after five days without a significant rain event. A significant rain event is defined as 1/2 inch or greater of rainfall during a 24-hour period."

The as the report of this investigation is due to the Alameda County Department of Environmental Health on March 19, 2014.

Please let me know if you have any questions or need any more information.

Thanks Ron.

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From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]

Sent: Wednesday, November 06, 2013 8:42 AM

To: Goloubow, Ron Cc: Bell. Caitlin

Subject: RE: RO400 Work Plan

This should be enough for me to write a conditional approval. Should get the letter out within next few days.

Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
phone: 510-567-6791
jerry.wickham@acgov.org

From: Goloubow, Ron [mailto:Ron.Goloubow@arcadis-us.com]

Sent: Tuesday, November 05, 2013 1:38 PM

To: Wickham, Jerry, Env. Health

Cc: Bell, Caitlin

Subject: FW: RO400 Work Plan

Hi Jerry how about this?

## Setup and Leak Testing

After the sampling apparatus is placed onto the tubing that comprises the soil-vapor probe, a leak test will be conducted to assess the sample apparatus fittings. With the valves at the sample canister and soil-vapor sampling point both in the closed position, a manual purging

device (i.e., gas-tight syringe with purge valve) will be activated to apply a vacuum to the sampling apparatus of at least 10 inches of mercury (Hg). The valve between the tee and the manual purging device will be closed to observe whether the vacuum is maintained in the sampling apparatus between the soil-vapor sampling point and the sample canister. If the vacuum is maintained (no more than 10% loss in 10 minutes) then the sampling procedure will continue. The vacuum will be maintained at each location to indicate that the fittings and connections in the sampling apparatus are maintained. Helium will be used as a tracer compound for the leak check compounds. Helium will be placed at the ground surface under a shroud placed where the Nylaflo® tubing enters the ground surface where ambient air could enter the sampling system.

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From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]

Sent: Tuesday, November 05, 2013 8:24 AM

To: Bell, Caitlin; Goloubow, Ron Subject: RO400 Work Plan

Ron and Caitlin,

I was able to review your Work Plan for RO400, Volkswagen, Oakland. I had one question/comment regarding leak checks. If you can answer this question in an email, I should be able to provide a conditional approval for the Work Plan.

Please provide further information on how leak checks will be performed. No leak check compounds appeared to be identified in the analyte list.

Regards,

Jerry Wickham Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502-6577 phone: 510-567-6791

jerry.wickham@acgov.org

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