From: Ashley Gjovik ashleygjovik@apple.com

Subject: Fwd: SD01 EHS Request - 4/2 Notes

Date: May 18, 2021 at 4:08 PM
To: @apple.com



FYI - these were the list of questions they said they weren't going to answer, — in addition to any future vapor intrusion questions (that they won't answer either).

Ashley M. Gjøvik **€** Engineering Program Manager (408) 204-9976

Begin forwarded message:

From: Ashley Gjovik <ashleygjovik@apple.com>
Subject: Fwd: SD01 EHS Request - 4/2 Notes
Date: April 21, 2021 at 10:52:53 AM PDT

To: @apple.com>

Ashley M. Gjøvik **€** Engineering Program Manager (408) 204-9976

Begin forwarded message:

From: Ashley Gjovik <ashleygjovik@apple.com>
Subject: Re: SD01 EHS Request - 4/2 Notes
Date: April 21, 2021 at 10:52:41 AM PDT
To: Michael Steiger msteiger@apple.com
Cc: Jenna Waibel jwaibel@apple.com

Hi Michael,

I hope you're well.

A couple additional questions.

- 14) Im trying to understand the 2015 VI testing. Is it correct that both the June & Dec testing was only a <u>10hr</u> sample? (Pg7) (All previous testing looked like it was 24hr-48hrs in comparison). Based on the previous history of testing results that were above industrial limits, what was the rationale for accepting such a shorter duration of testing?
- 15) It also looks like when they did the 2015 testing, the indoor air was 50-60 degree Fahrenheit, and outside was 40-50 degrees. (Pg6) Was that true for both June and Dec? Doesn't heat usually encourage VI? Was there any testing with the building at a temperature that it would be with employees working in it and the results came back in limits? I would think the June testing was warmer, but I don't think is see any of the detailed June testing details included in the report. Can you share those too please?
- 16) pg 11 talks about how TCE, PCE, & Chloroform amounts "noticeably increased" in Dec after June, and said "perhaps related to transit fluctuations in barometric pressure." Will you be doing SSV testing this year as well? Or only indoor air? Seems like the enormous groundwater plumes under the building could be moving chemicals around?





Applying Information Technology for Stewardship of Groundwater Contamination Plumes

630 views • Mar 17, 2014

Find the words.

Ashley M. Gjøvik

€ Engineering Program Manager(408) 204-9976

Begin forwarded message:

From: Ashley Gjovik <ashleygjovik@apple.com>
Subject: Re: SD01 EHS Request - 4/2 Notes
Date: April 11, 2021 at 11:28:18 AM PDT
To: Michael Steiger msteiger@apple.com
Cc: Jenna Waibel jwaibel@apple.com

A few initial follow up questions.

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- 1) First, the 2015 report says the seal for SubSlat vent 7 was "compromised" so SubSlat vent 2 was used instead (pg 5). Both of those vents are very close to my desk. What does compromised mean? Could vapors be leaking out of it?
- Two sub-slab monitoring points were replaced with alternate locations. Sample collection from Sub-Slab Monitoring Point SS-7 was attempted three times; however, the seal was found to be compromised as evidenced by detection of the tracer gas helium during pre-sampling leak testing. Therefore, a sample was collected from Sub-Slab Monitoring Point SS-2 instead. This monitoring point is located within the same building area (Section 2, as shown on Figure 3) as Sub-Slab Monitoring Point SS-7, so it fulfills the stated rationale for Sub-Slab Monitoring Point SS-2 of assessing subsurface soil gas conditions in Section 2 of the building. Sub-Slab Monitoring Point SS-11 could not be located. Therefore, Sub-Slab Monitoring Point SS-10, located in the vicinity of Sub-Slab Monitoring Point SS-11, was used instead.

2) The same paragraph says SS-11 could not be located. What kind of monitoring is usually done to ensure those Sub Slab vents actually stay sealed? If you can't find it, how do you know its ok?

3) I saw that in 2015 they found Ethylebenze in exceedance of EPA industrial limits in the indoor air near my desk, but that Ethylebenzne is not a COC. Was there any talk of making it a COC? Will it be one of the chemicals you test for this year — and if not, can it be? Did anyone confirm those levels actually went down after the Dec testing? The last data point we have shows Ethylebenzene present on site above EPA industrial limits in our workspace.

PAL, with the exception of ethylbenzene (detected at a maximum concentration of 12 microgram per cubic meter [µg/m³] compared to its PAL of 4.0 µg/m³). The detections of toluene, ethylbenzene, and xylenes were not unexpected given that they are commonly encountered in

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4) I also see what looks like exceeding levels of Tolunene in the lab reports next to my desk but didn't see it mentioned in the reports — can you provide insight? Also same questions as Ethylebenzne above.

Client Sample ID: J6038-IA2-122915

Lab Sample ID: 320-16653-

Date Collected: 12/29/15 17:28 Date Received: 12/31/15 10:00 Matrix: A

Sample Container: Summa Canister 6L

Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil F
1,2-Dichloroethane	0.023		0.020	0.020	ppb v/v			01/06/16 23:42	
Methylene Chloride	0.22		0.20	0.20	ppb v/v			01/06/16 23:42	
Chlorobenzene	ND		0.020	0.020	ppb v/v			01/06/16 23:42	
1,1,2-Trichloroethane	ND		0.050	0.050	ppb v/v			01/06/16 23:42	
Chloroform	0.052		0.020	0.020	ppb v/v			01/06/16 23:42	
1,2-Dichlorobenzene	ND		0.050	0.050	ppb v/v			01/06/16 23:42	
1,4-Dichlorobenzene	ND		0.10	0.10	ppb v/v			01/06/16 23:42	
Freon 12	0.53		0.020	0.020	ppb v/v			01/06/16 23:42	
1,1-Dichloroethane	ND		0.020	0.020	ppb v/v			01/06/16 23:42	
1,1-Dichloroethene	ND		0.020	0.020	ppb v/v			01/06/16 23:42	
cis-1,2-Dichloroethene	ND		0.020	0.020	ppb v/v			01/06/16 23:42	
trans-1,2-Dichloroethene	ND		0.020	0.020	ppb v/v			01/06/16 23:42	
Ethylbenzene	2.9		0.020	0.020	ppb v/v			01/06/16 23:42	
Tetrachloroethene	0.043		0.020	0.020	ppb v/v			01/06/16 23:42	
Toluene	280	E	0.020	0.020	ppb v/v			01/06/16 23:42	
1,1,2-Trichloro-1,2,2-trifluoroetha	0.074		0.030	0.030	ppb v/v			01/06/16 23:42	
ne									
1,1,1-Trichloroethane	ND		0.020	0.020	ppb v/v			01/06/16 23:42	
Trichloroethene	0.20		0.020	0.020	ppb v/v			01/06/16 23:42	
Freon 11	0.27		0.045	0.045	ppb v/v			01/06/16 23:42	
Vinyl chloride	ND		0.020	0.020	ppb v/v			01/06/16 23:42	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil F
1,2-Dichloroethane	0.092		0.081	0.081	ug/m3			01/06/16 23:42	
Methylene Chloride	0.75		0.69	0.69	ug/m3			01/06/16 23:42	
Chlorobenzene	ND		0.092	0.092	ug/m3			01/06/16 23:42	
1,1,2-Trichloroethane	ND		0.27	0.27	ug/m3			01/06/16 23:42	
Chloroform	0.25		0.098	0.098	ug/m3			01/06/16 23:42	
1,2-Dichlorobenzene	ND		0.30	0.30	ug/m3			01/06/16 23:42	
1,4-Dichlorobenzene	ND		0.60	0.60	ug/m3			01/06/16 23:42	
Freon 12	2.6		0.099	0.099	ug/m3			01/06/16 23:42	
1,1-Dichloroethane	ND		0.081	0.081	ug/m3			01/06/16 23:42	
1,1-Dichloroethene	ND		0.079	0.079	ug/m3			01/06/16 23:42	
cis-1,2-Dichloroethene	ND		0.079	0.079	ug/m3			01/06/16 23:42	
trans-1,2-Dichloroethene	ND		0.079	0.079	ug/m3			01/06/16 23:42	
Ethylbenzene	12		0.087	0.087	ug/m3			01/06/16 23:42	
Tetrachloroethene	0.29		0.14	0.14	ug/m3			01/06/16 23:42	
Toluene	1100	E	0.075	0.075	ug/m3			01/06/16 23:42	
1,1,2-Trichloro-1,2,2-trifluoroetha	0.57		0.23	0.23	ug/m3			01/06/16 23:42	
ne 1,1,1-Trichloroethane	ND		0.11	0.11	ug/m3			01/06/16 23:42	
Trichloroethene	1.1		0.11	0.11	ug/m3			01/06/16 23:42	
Freon 11	1.5		0.25	0.25	ug/m3			01/06/16 23:42	
Vinyl chloride	ND		0.051		ug/m3			01/06/16 23:42	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil l
4-Bromofluorobenzene (Surr)	127		70 _ 130					01/06/16 23:42	
1,2-Dichloroethane-d4 (Surr)	103		70 - 130					01/06/16 23:42	
Toluene-d8 (Surr)	103		70 - 130					01/06/16 23:42	

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Client Sample ID: J6038-IA7-122915

Date Collected: 12/29/15 17:09 Date Received: 12/31/15 10:00

Sample Container: Summa Canister 6L

Lab Sample ID: 320-16653-12

Matrix: Air

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.020		0.020	0.020	ppb v/v			01/07/16 04:32	1
Methylene Chloride	ND		0.20	0.20	ppb v/v			01/07/16 04:32	1
Chlorobenzene	ND		0.020	0.020	ppb v/v			01/07/16 04:32	1
1,1,2-Trichloroethane	ND		0.050	0.050	ppb v/v			01/07/16 04:32	1
Chloroform	0.043		0.020	0.020	ppb v/v			01/07/16 04:32	1
1,2-Dichlorobenzene	ND		0.050	0.050	ppb v/v			01/07/16 04:32	1
1,4-Dichlorobenzene	ND		0.10	0.10	ppb v/v			01/07/16 04:32	1
Freon 12	0.53		0.020	0.020	ppb v/v			01/07/16 04:32	1
1,1-Dichloroethane	ND		0.020	0.020	ppb v/v			01/07/16 04:32	1
1,1-Dichloroethene	ND		0.020	0.020	ppb v/v			01/07/16 04:32	1
cis-1,2-Dichloroethene	ND		0.020	0.020	ppb v/v			01/07/16 04:32	1
trans-1,2-Dichloroethene	ND		0.020	0.020	ppb v/v			01/07/16 04:32	1
Ethylbenzene	1.3		0.020	0.020	ppb v/v			01/07/16 04:32	1
Tetrachloroethene	0.035		0.020	0.020	ppb v/v			01/07/16 04:32	1
Toluene	130	E	0.020	0.020	ppb v/v			01/07/16 04:32	1
1,1,2-Trichloro-1,2,2-trifluoroetha	0.073		0.030	0.030	ppb v/v			01/07/16 04:32	1
ne									
1,1,1-Trichloroethane	ND		0.020	0.020	ppb v/v			01/07/16 04:32	1
Trichloroethene	0.20		0.020	0.020	ppb v/v			01/07/16 04:32	1
Freon 11	0.27		0.045	0.045	ppb v/v			01/07/16 04:32	1
Vinyl chloride	ND		0.020	0.020	ppb v/v			01/07/16 04:32	1
m,p-Xylene	7.4		0.040	0.040	ppb v/v			01/07/16 04:32	1
o-Xylene	4.4		0.020	0.020	ppb v/v			01/07/16 04:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.080		0.081	0.081	ug/m3			01/07/16 04:32	1
Methylene Chloride	ND		0.69	0.69	ug/m3			01/07/16 04:32	1
Chlorobenzene	ND		0.092	0.092	ug/m3			01/07/16 04:32	1
1,1,2-Trichloroethane	ND		0.27	0.27	ug/m3			01/07/16 04:32	1
Chloroform	0.21		0.098	0.098	ug/m3			01/07/16 04:32	1
1,2-Dichlorobenzene	ND		0.30	0.30	ug/m3			01/07/16 04:32	1
1,4-Dichlorobenzene	ND		0.60	0.60	ug/m3			01/07/16 04:32	1
Freon 12	2.6		0.099	0.099	ug/m3			01/07/16 04:32	1
1,1-Dichloroethane	ND		0.081	0.081	ug/m3			01/07/16 04:32	1
1,1-Dichloroethene	ND		0.079	0.079	ug/m3			01/07/16 04:32	1
cis-1,2-Dichloroethene	ND		0.079		ug/m3			01/07/16 04:32	1
trans-1,2-Dichloroethene	ND		0.079		ug/m3			01/07/16 04:32	1
Ethylbenzene	5.8		0.087		ug/m3			01/07/16 04:32	1
Tetrachloroethene	0.24		0.14		ug/m3			01/07/16 04:32	1

TestAmerica Sacramento

01/07/16 04:32

01/07/16 04:32

Client Sample ID: J6038-IA7-122915

Date Collected: 12/29/15 17:09 Date Received: 12/31/15 10:00

4-Bromofluorobenzene (Surr)

1.2-Dichloroethane-d4 (Surr)

Sample Container: Summa Canister 6L

Lab Sample ID: 320-16653-12

Matrix: Aiı

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fa
Toluene	510	E	0.075	0.075	ug/m3			01/07/16 04:32	
1,1,2-Trichloro-1,2,2-trifluoroetha	0.56		0.23	0.23	ug/m3			01/07/16 04:32	
ne 1,1,1-Trichloroethane	ND		0.11	0.11	ug/m3			01/07/16 04:32	
Trichloroethene	1.0		0.11	0.11	ug/m3			01/07/16 04:32	
Freon 11	1.5		0.25	0.25	ug/m3			01/07/16 04:32	
Vinyl chloride	ND		0.051	0.051	ug/m3			01/07/16 04:32	
m,p-Xylene	32		0.17	0.17	ug/m3			01/07/16 04:32	
o-Xylene	19		0.087	0.087	ug/m3			01/07/16 04:32	

70 _ 130

70 - 130

127

103

Client Sample ID: J6038-IA8-122915

Date Collected: 12/29/15 17:11 Date Received: 12/31/15 10:00 Lab Sample ID: 320-16653-13 Matrix: Aiı

5) any idea why the 2019 FYR didn't mentioned the above industrial limits of Tolulene or Ethylebenzne in the indoor air?

TRW

A Vapor Intrusion Evaluation Report was completed for the TRW Site in June 2015. This report summarized the vapor intrusion mitigation procedures conducted and the results of the confirmatory indoor air sampling. Mitigation activities included:

- additional former source area excavations to remove residual contaminated mass;
- installation of a passive sub-slab vapor collection system and repairs verified by a Californiaregistered engineer;
- closure of potential conduits for the vapor intrusion pathway, including the interior groundwater monitoring wells;
- sealing of other potential vapor intrusion conduits, including slab piping penetrations, gaps between interior walls where soil is exposed, and expansion joints in the concrete slab;
- clean-out and visual inspection of the elevator shaft to verify its integrity; and
- confirmatory sub-slab and indoor air (10-hour TO-15 canister) sampling under ventilation-off conditions.

The most recent round of indoor air sampling at the TRW Site confirmed protective levels of TCE – levels of up to 0.58 μg/m3 – below EPA's long-term commercial Regional Screening Level (RSL) of 2

Fifth Five-Year Review - AMD 901/902 and TRW Superfund Sites and the Offsite OU

18

 μ g/m3 and EPA Region 9's Interim Accelerated Response Action Level of 7 μ g/m3 (10-hour workday). These indoor air concentrations meet EPA's requirements for being protective of public health under a commercial-use scenario and demonstrate that the building is acceptable for occupancy.

6) Apparently the HVAC couldn't be turned off in Section 3 during the Dec 2015 testing so indoor/outdoor air was circulating. Was there any testing done after that with the HVAC always off? Or was the May 2015 testing the last indoor air testing done in that section under ideal VI testing conditions?

2.4 Sampling Field Activities

Sampling was performed on December 29, 2015 with the HVAC system off. Prior to the start of sampling, the HVAC system was turned off 36 hours prior to sampling. The HVAC system designed to automatically close the outdoor intakes when the system is turned off, and it was confirmed that all vents were in the closed position after system shutdown occurred. Howeve the HVAC unit for HVAC Zone 3 (outlined in purple on Figure 4) could not be turned off at the tim of sampling. Additionally, not all locations were accessible for collection of field measurements a discussed in Section 2.1.

7) Per your 2015 report and the 2019 report it sounds like PCE, TCE, and Chloroform levels are either remaining stable or even increasing under the buildings. Considering that, would it be possible to request annual VI testing in the TRW Microwave site?

Sample SS-5. PCE and cis-1,2-dichloroethene (DCE) were only detected above the DTSC SVSL in Sub-Slab Sample SS-5. Sub-Slab Monitoring Point SS-5 was sampled in both May and December 2015. TCE, PCE, and chloroform concentrations at this location were relatively modest in both May and December 2015 but did show a noticeable increase in December, perhaps related to transient fluctuations in barometric pressure.

8) Page 12 of this report says that 2015 tenant improvements didn't actually have much impact on the VI control system in the building. You mentioned that after the improvements in 2014-2015, now things are under control. Did something happen after this report was published to get them under control?

In general, the concentrations of PCE, TCE and other VI-related compounds of interest were similar in December as in May and/or were low compared to levels considered significant. Therefore, the tenant improvements do not appear to have a measurable effect on the performance of the VI control system.

8) The report says these results are "worst case" with HVAC off — but with the frequent wild fires the last few years, we've had periods of weeks, even months with HVAC off. Did we consider that? (Pg11)

Building conditions at the time of sampling suggest this sampling event represents a worst-case scenario for VI due to the absence of mechanical ventilation (e.g., HVAC off), which would not be representative of normal working conditions in most occupied buildings.

9) I've recently begun learning a lot more about how these types of chemicals tend to have a far worse impact on women then men (due to our increased body fat, lower weight, and also how sensitive our hormones are). Do you happen to know if the OSHA and EPA industrial max levels have started to consider female subjects? Or are these numbers mostly expected male bodies?

10) for the 2015 testing, they based their calculations on the weather at Moffett Air Field in Mt View. Any reason they wouldn't use Sunnyvale weather & pressure?

11) per the FYR plan it looks like cDCE (as well as TCE) as found in the soil under the building above remediation criteria. Was there further clean up on it?

Soil Excavation

(Figure B-12). Confirmation samples collected confirmed the remediation to a depth ranging 25 to 30 feet below ground surface. Twelve of the 39 locations identified in contained concentrations of TCE and/or cis-1,2-DCE above the cleanup levels. Some areas exceeding the cleanup level were not excavated removed due to 1) depth exceeding 25 feet, 2) below groundwater and not feasible to excavate, or 3) in close proximity to the building/building footings. These locations with soil remaining in place that continue to exceed the cleanup level are circled on Figure B-12.

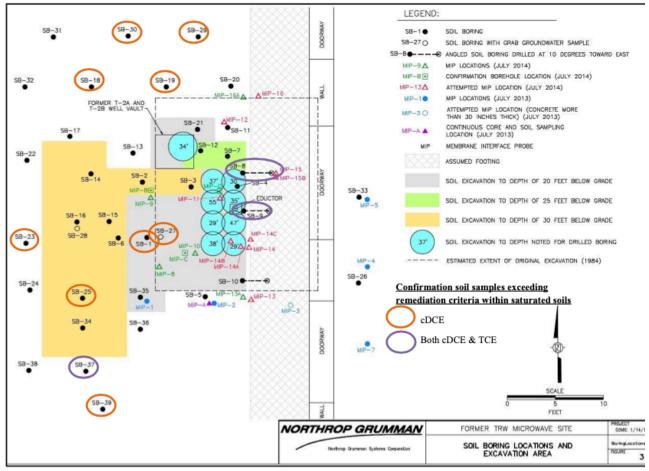


Figure B-12. TRW 2014 Soil Excavation and Boring Locations

Fifth Five-Year Review - AMD 901/902 and TRW Superfund Sites and the Offsite OU

12) page 16 of the 2019 FYR says the remedy for our building is no longer in operation — can you explain what this means please?

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				has not yet been issued.	
TRW	The remedy selected for the Site is no longer being operated.	Select a revised cleanup plan and prepare a revised EPA decision document.	Ongoing	A draft Focused Feasibility Study was completed in 2011 that presents cleanup alternatives for the site; the document has been reviewed by EPA but is currently undergoing further revision by the RP. A revised EPA decision document has not yet been issued.	NA

13)

I made a map of where I had the really bad fainting spell in September of 2019. I brought this up again with our Sr Director, who remembered me telling him about it when it happened. This screwed up my diagnosis of what happened last year because the only time I had ever had severe fainting spells like I did in my hazardous waste apartment (with suspected VI) — was that time in September at SD01. It first started in office (marked) and then continued for a couple hours at my desk (marked).

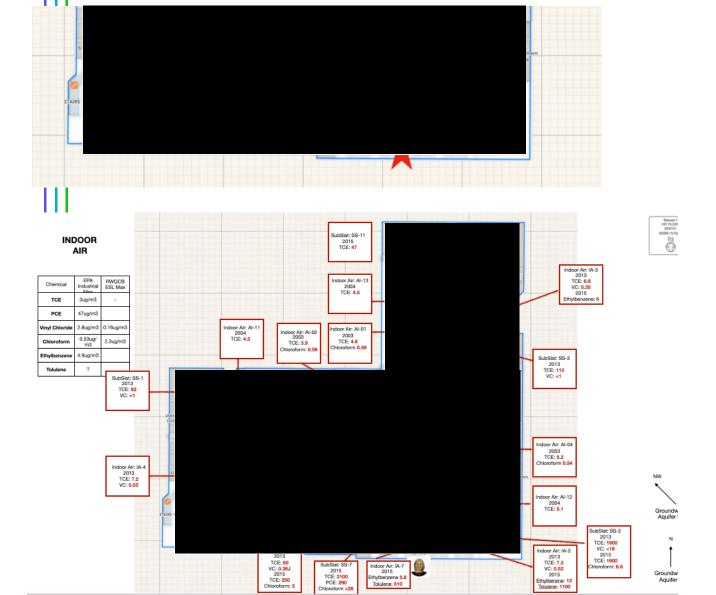
You can see these are almost the exact locations of SS-7, SS-2, IA-7, AI-12, and IA-2

These slub slats have up to 2100 ug/m3 of TCE, 290ug/m3 of PCE, & 6.6-26 of Chloroform.

The indoor air there has had up to 7.3 ug/me TCE, 12ug/m3 of ethylbezene, 1100 of toluene, and 0.53 of vinyl chloride.

Not sure if anyone else has ever had incidents like that but probably worth noting our organization is only 10% women — so if women are the canaries in the coal mine due to our hormones & fat....

For the 2021 testing would you be willing to please test IA-7, IA2, &/or AI-12 again please? (Essentially my does and office) And SS-2 & SS-7 if you're doing sub slats again too.



Ashley M. Gjøvik **€** Engineering Program Manager (408) 204-9976

On Apr 9, 2021, at 7:52 PM, Ashley Gjovik ashleygjovik@apple.com> wrote:

Thank you, Michael! I sincerely appreciate your transparency with all this. Looking forward to reading through these.

Ashley M. Gjøvik **€** Engineering Program Manager (408) 204-9976

On Apr 9, 2021, at 1:57 PM, Michael Steiger <msteiger@apple.com> wrote:

Hi Ashley — follow up on action items:

· Michael to get copy of 2019 Five Year Review and share, figure out why it wasn't posted publicly.

https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm? fuseaction=second.scs&id=0900265&doc=Y&colid=38417®ion=09&type=SC

· Michael to share 2015 testing reports

https://apple.box.com/s/zwgzinh541g647ft24m26xn3v7q7vujq

Michael to look into details why EPA website currently says human exposure is not under control
 Link here: https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?

fuseaction=second.Healthenv&id=0901181#Risk

It appears EPA doesn't have the current information listed.

• Michael to follow up on 8-10hr workday assumption in previous reports

8 hours is the standard, agency-approved exposure factor to use for exposure time (ET) for commercial / industrial scenario risk assessments.

· Michael to share results of current 2021 testing

Next step is a floor penetration survey. No testing has been done yet, but results will be provided when completed.

· Michael to share info on new passive sample testing technology planned for 2021

https://beacon-usa.com/services/passive-samplers-indoor-ambient-air/

Thanks,

Michael

Michael T. Steiger, P.E. I **€** Environment, Health and Safety iPhone +1.650.544.3659 I msteiger@apple.com

On Apr 2, 2021, at 4:42 PM, Ashley Gjovik ashleygjovik@apple.com> wrote:

Hello! Thanks for meeting today. My notes from our conversation are below. Let me know if I missed anything.

Action Items:

- Michael to get copy of 2019 Five Year Review and share, figure out why it wasn't posted publicly.
- Michael to share 2015 testing reports
- · Michael to look into details why EPA website currently says human exposure is not under control

- Link here: https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm? fuseaction=second.Healthenv&id=0901181#Risk
- · Michael to follow up on 8-10hr workday assumption in previous reports
- Michael to share results of current 2021 testing
- Michael to share info on new passive sample testing technology planned for 2021
- · Ashley to share her personal article as FYI:
 - Link here: https://sfbayview.com/2021/03/i-thought-i-was-dying-my-apartment-was-built-on-toxic-waste/

Thank you again for your time and for trying to answer all my questions. I really appreciate it.

Ashley M. Gjøvik **€** Engineering Program Manager (408) 204-9976

On Apr 2, 2021, at 3:48 PM, Ashley Gjovik ashleygjovik@apple.com> wrote:

Hello.

Michael's Presentation Notes:

- Michael manages voluntary/required vapor intrusion program & due diligence program for new sites; mitigation systems & programs
- Late 2014 / Early 2015 vapor intrusion mitigation system installed (passive system) + sealed the floor.
 Sampling done by Northrup and found no unacceptable VI. (Summa, timing tbd 8-10 of them maybe)
- When Apple looked at the site, considering leasing, made tenant improvements. Had to cut into floor —
 ensured piping and barrier not disrupted so responsible party inspected Apple's work.
- Late Dec 2015 testing done and results were acceptable (Summa, timing tbd 8-10 of them maybe)
- EPA and Apple confirmed no VI in 2015, so no historical issues to disclosed to anyone in the building because assumed to not be an issue anymore.
- No indoor VI testing since 2015. 2021 will be first round. In 2021, doing more state of art testing. Passive samplers. Absorbent passive samplers over a week.
- Never heard EPA or landlord were doing more testing.
- · Portfolio review not trigged by event/incident.
- Biz conduct says employees can speak freely about working conditions. Can raise concerns to authorities. No
 retaliation. Though preferred to raise concerns internally first because Apple can respond quicker than gov.
- If you notice weird chemical odors do report to EHS ASAP.

A summary of my planned questions for today are below:

1. I see vapor intrusion issues were found inside SD01 in 2013. Was there any further remediation other than the installation of the passive barrier & ventilation system? Was the ventilation system ever made active, or is it still passive? Is there active monitoring too — or just ad hoc?

Answered above

2. I see additional vapor intrusion testing was conducted in 2015 and it was determined the VI issues were mitigated. What type of testing was done (summa?)? What duration (24, 48 etc)? How many locations in the building? What were the results?

Will follow up with report

3. How often is VI testing done in the building? Has it been done since 2015? If so, where are the results?

Answered above

4. Where can I find the 2019 Five Year Report? I see it was completed Sept 2019 — but it does not appear to be posted on the EPA website. Can I request it from the EPA project manager?

Will send

5. Am I allowed to contact the EPA project manager?

Yes

 I see there's a covenant with the government for the property — prohibiting residential use — does that mean employees should never pull all-nighters? It's been known to happen.

Occasional all-nighters are not a problem

7 - Lana damanu (Langanura viale dalah latiana mara dana danaidavina a (Lafah marledan). Hama thada bada ya dan

7. I see cancer α exposure risk calculations were done considering a o- roni workday. πave these been re-done for a Hardware Engineering workday (often much longer)?

He'll follow up on assumption

Levels on site well below CA PAL screening levels — indoor air numbers.

8. Pg 32 of the 2014 FYR mentions there's excess cancer risk for occupants due to vapor intrusion, and also plumbing/steam pathways (like the lockeroom showers). Shouldn't employees be notified about this? Prop 65 at least?

No Prop 65 requirements per internal review.

9. Shouldn't employees be notified this is a remediation site? Ideally informed consent for working there. At the very least Right to Know should require some sort to disclosure?

Apple decided no legal requirement. Larger question for Apple on ethical/moral obligation.

10. Pg 28 of the 2014 FYR mentions the current land use covenant is not in compliance with modern California legislation and needs to be revised. Was it revised? I don't see a new one still. Does CA Civil Code § 1471 add any new requirements on the property not current reflected?

Question for legal

11. The land use covenant requires notice to be given to EPA if any damages to remediation systems — or any subsurface disturbance. How are employees supposed to follow this if there's no notice it's a remediation site?

Not employee's responsibility - would be EHS & Construction Mgmt. Austin is on-site and keeps an eye on it.

12. The EPA Superfund pages says the site does not current have "Human Exposure Under Control." Why is that? Are you worried about the employees?

He'll look into it. Link is here: https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Healthenv&id=0901181#Risk

13. The EPA site says the site is not ready for re-use or re-development. Does that mean it's not ready to become residential — or even commercial and other industrial use is prohibited?

Probably just residential

14. Isn't it problematic to have an elevator shaft almost directly over the Eductor pit? Shafts are VI freeways. There are two bathrooms right over it as well — and plumbing is also often a freeway for VI.

Was sealed & did testing to confirm seal effective.

15. Did the two 2019 legal settlements relate to the TRW site/plume as well? Or only Signetics?

Not related to Stewart 1

16. Will you share the results of the current testing you have planned for SD01? And the future testing plans/strategy?

Yes, absolutely

17. Would you be willing to at least email or present at a staff meeting — to disclose the MSQ SCV management team (My boss: David Powers' org) on the history & current conditions of the property & building?

One other person expressed concern as well

Larger message may be possible, but need to talk to legal.

-Ashley

Ashley M. Gjøvik
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On Mar 31, 2021, at 2:46 PM, Ashley Gjovik ashleygjovik@apple.com> wrote: Sounds great! Thanks, MIchael! Engineering Program Manager On Mar 31, 2021, at 8:44 AM, Michael Steiger <msteiger@apple.com> wrote: HI Ashley, I'm on vacation through Thursday this week. I'll look into this more on Friday when I get back. I can then send you the links / reports and we go over the information together on our call. Michael Michael T. Steiger, P.E. I & Environment, Health and Safety iPhone +1.650.544.3659 | msteiger@apple.com On Mar 29, 2021, at 12:47 PM, Ashley Gjovik <ashleygjovik@apple.com> wrote: Hi Michael, I've been mapping out the data from the government reports. Between the EPA & Water Boards reports I only see vapor intrusion testing results from 2003, 2004, & 2013. The reports mentioned that testing was also done in 2015, but I don't see any results published for that. I know one of the managers in my team who has SubSlat vent SS-3 in his office said he's had someone come by to measure things at least once over the last few years. Are those results posted anywhere that I can review before we meet please? (2015 results, + anything else collected after that). Thanks! <PastedGraphic-5.png> **SD01 EHS Request** Scheduled: Apr 2, 2021 at 4:00 PM to 4:30 PM, PDT Location: Virtual Conference One-Time Room Invitees: Jenna Waibel, Ashley Gjovik, Michael Steiger