

Wickham, Jerry, Env. Health

From: PDKing0000@aol.com
Sent: Tuesday, August 05, 2014 7:59 AM
To: Wickham, Jerry, Env. Health
Subject: RO 3135 - 475 Lesser Street - Additional Vapor Pin Samples
Attachments: 0675.R3 Figure 3 Site Plan showing Benzene in SG.pdf; 0675.R3 Figure 3 Site Plan showing TPH-G in SG.pdf; 0675.R3 Table 1A.pdf; 0675.R3 Table 1B.pdf

Hi Jerry,

Attached are the recently received vapor pin sample results for the subject site (see attached pdf copies of Table 1A showing the sample results and Table 1B showing the shroud tracer gas concentrations for each sample). Based on the sample results, additional vapor pins will be installed and sampled at locations SS7, SS8 and SS9 shown on the two attached pdf figures (documents 0675.R3 Figure 3 Site Plan showing Benzene in SG.pdf, and 0675.R3 Figure 3 Site Plan showing TPH-G in SG.pdf). All proposed vapor pin installation, sample collection, and sample analysis will be performed in accordance with procedures set forth in P&D's July 7, 2014 Soil Gas Vapor Assessment Work Plan. In addition, at the time that the new vapor pins are sampled, vapor pin SS6 will also be sampled to verify that elevated sub-slab vapor concentrations are not present near the property boundary.

Collection of soil gas samples from the proposed new vapor pins is tentatively scheduled to occur Thursday 8/7/14.

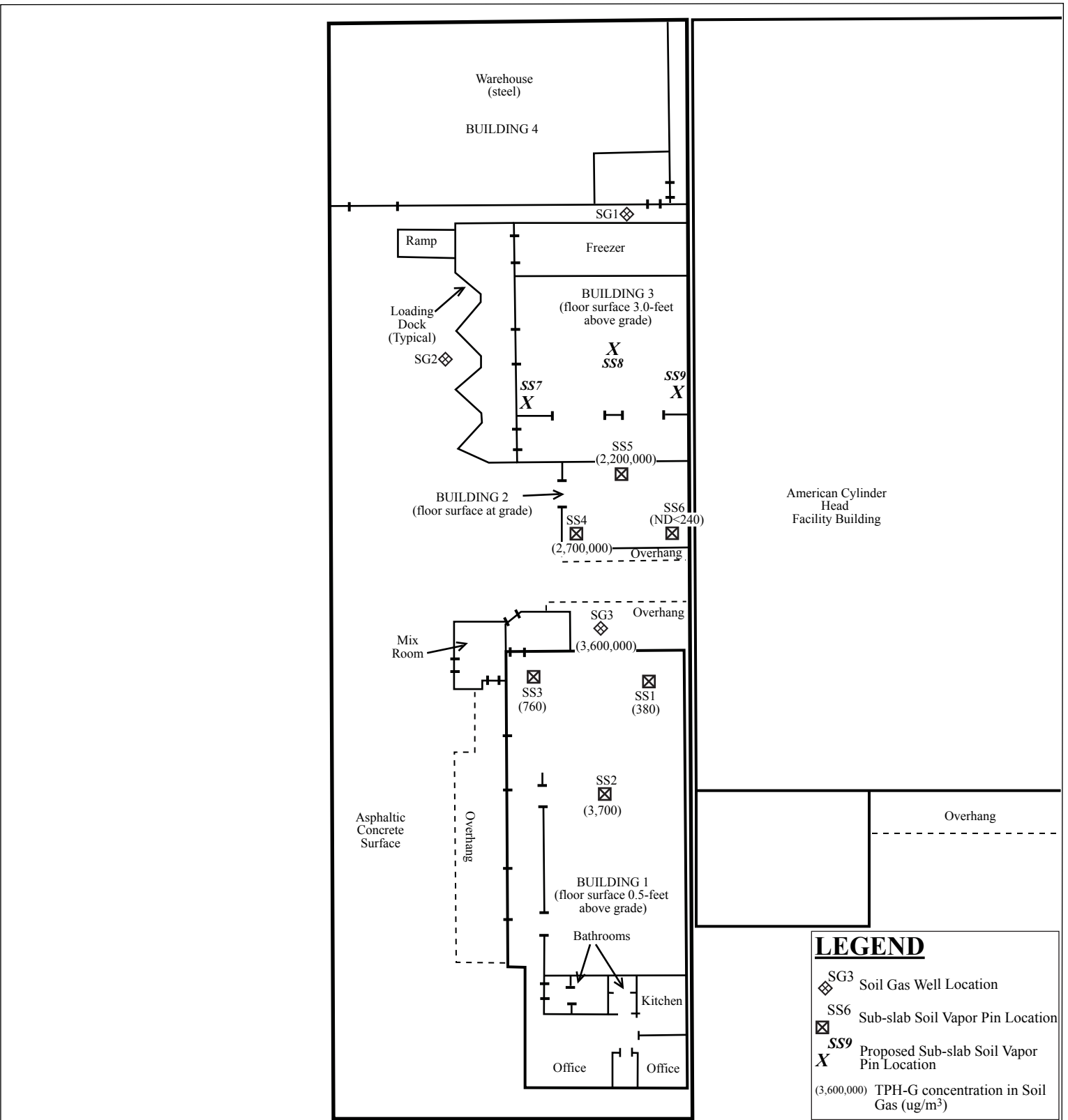
Please let me know if you have any questions or need any additional information. Thank you!

Paul

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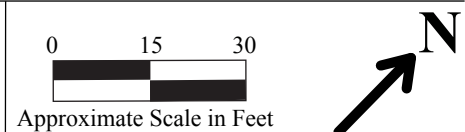
Sidewalk

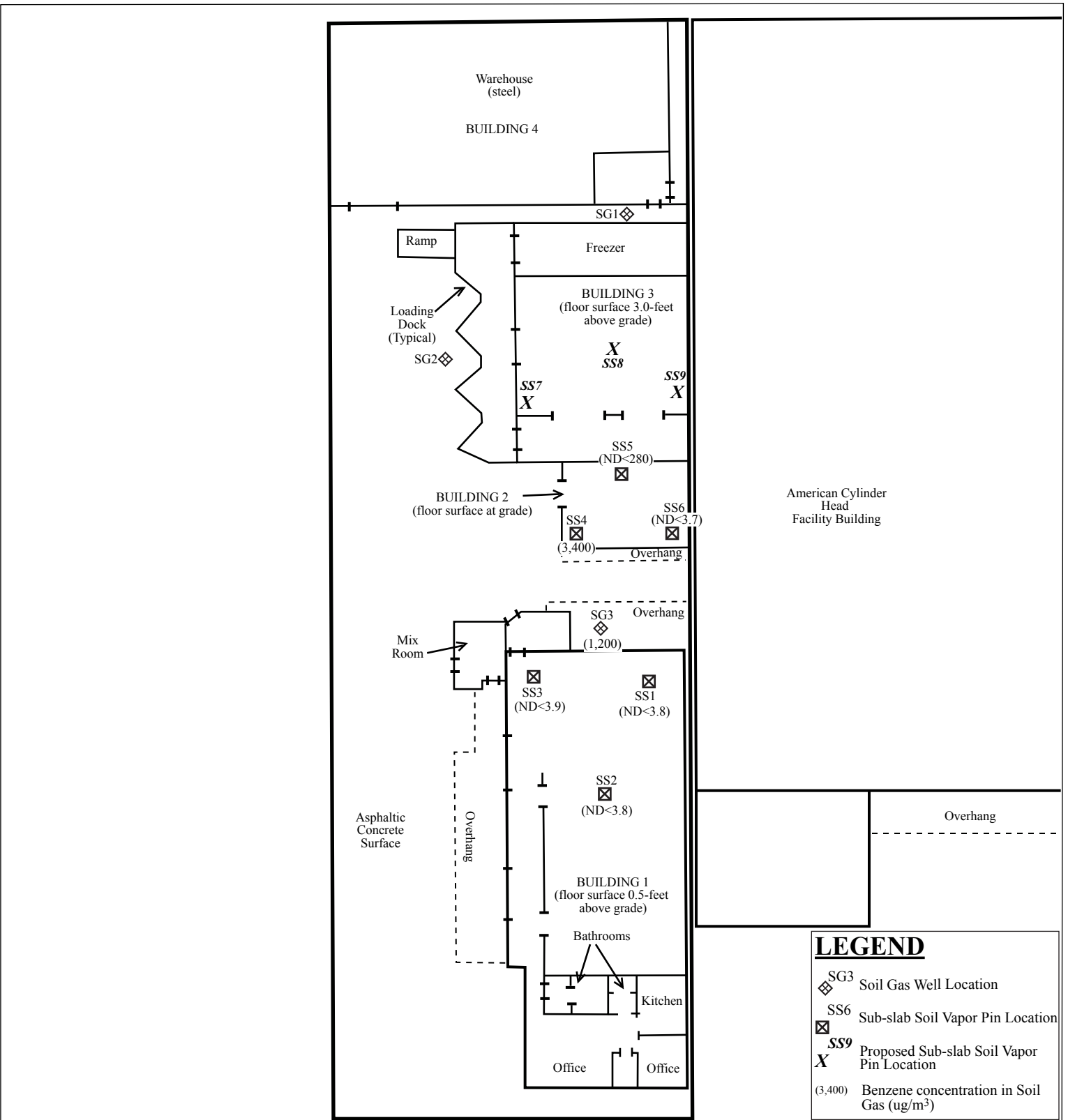
Lesser Street

Figure 3
 Site Plan Showing Sub-Slab Soil Gas Vapor Pin Locations and TPH-G Concentrations in Soil Gas
 475 Lesser Street
 Oakland, California

Base Map From:
 Basics Environmental, Inc., dated April 3, 2014, and
 Google Earth, 8/28/2012

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 Oakland, CA 94610





Sidewalk

Lesser Street

Figure 3
 Site Plan Showing Sub-Slab Soil Gas Vapor Pin Locations and Benzene Concentrations in Soil Gas
 475 Lesser Street
 Oakland, California

Base Map From:
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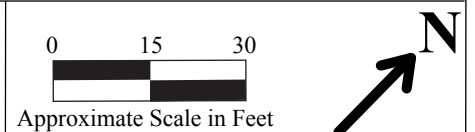


Table 3A
Summary of Soil Gas Sample Analytical Results - TPH-G and VOCs

Sample ID	Sample Date	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylenes	Naphthalene	1,1-DFA	Percent Shroud	2-Propanol	Percent Shroud
SS1	7/10/2014	380	ND<4.3	ND<3.8	12	ND<5.2	12	6.0	ND<2.5	20,000, a	0.1	ND<240	0
SS1-DUP	7/10/2014	300	ND<4.3	ND<3.8	5.2	ND<5.2	13	5.9	NA	45,000, a	NA	NA	NA
SS1-REP	7/10/2014	NA	NA	NA	NA	NA	NA	NA	ND<2.5	NA	NA	ND<240	0
SS2	7/10/2014	3,700	ND<4.3	ND<3.8	84	8.7	28	6.0	ND<2.5	2,700, a	0	ND<240	0
SS3	7/10/2014	760	ND<4.4	ND<3.9	6.3	30	120	58	ND<2.5	16	0	ND<240	0
SS4	7/10/2014	<u>2,700,000</u>	240	<u>3,400</u>	480	ND<250	ND<250	ND<250	ND<2.5	5,200	0	ND<240	0
SS5	7/10/2014	2,200,000	ND<320	ND<280	440	ND<390	ND<390	ND<390	ND<2.5	ND<960	0	ND<240	0
SS6	7/10/2014	ND<240	ND<4.2	ND<3.7	ND<4.4	ND<5.1	5.6	ND<5.1	ND<2.5	5,900, a	0	ND<240	0
LTCP													
with No Bioattenuation Zone (residential)				85		1,100			93				
(commercial)				280		3,600			310				
ESL ¹		300,000	4,700	42	160,000	490	Combined = 52,000		36	No Value	No Value	No Value	No Value
ESL ²		2,500,000	47,000	420	1,300,000	4,900	Combined = 440,000		360	No Value	No Value	No Value	No Value
<u>Notes:</u>													
TPH-G = Total Petroleum Hydrocarbons as Gasoline.													
MTBE = Methyl-tert-Butyl Ether.													
1,1-DFA = 1,1-Difluoroethane.													
ND = Not Detected.													
NA = Not Analyzed.													
a = Laboratory Note: exceeds instrument calibration range.													
LTCP = Low Threat Closure Policy, developed by State Water Resources Control Board , effective August 17, 2012, from Appendix 4 Direct Measurement of Soil Gas Concentrations. Soil Gas Criteria with no bioattenuation zone.													
ESL ¹ = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board , updated December 2013 from Table E2 – Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion for Residential Land Use.													
ESL ² = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board , updated December 2013 from Table E2 – Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion for Commercial/Industrial Land Use.													
<i>Italicized values exceed their respective LTCP values.</i>													
Values in bold exceed their respective ESL¹ values.													
<u>Underlined values exceed their respective ESL² values.</u>													
Results in micrograms per cubic meter (µg/m ³), unless otherwise indicated.													

Summary of Soil Gas Shroud Sample Analytical Results - 1,1-Difluoroethane and 2-Propanol

Sample ID	Sample Date	1,1-DFA, #	2-Propanol, ##
SS1 DFA	7/10/2014	16,000,000	NA
SS1 2-PROPANOL	7/10/2014	NA	2,700,000
SS2 DFA	7/10/2014	17,000,000	NA
SS2 2-PROPANOL	7/10/2014	NA	210,000
SS3 DFA	7/10/2014	28,000,000	NA
SS3 2-PROPANOL	7/10/2014	NA	1,500,000
SS4 DFA	7/10/2014	13,000,000	NA
SS4 2-PROPANOL	7/10/2014	NA	3,500,000
SS5 DFA	7/10/2014	15,000,000	NA
SS5 2-PROPANOL	7/10/2014	NA	650,000
SS6 DFA	7/10/2014	6,000,000	NA
SS6 2-PROPANOL	7/10/2014	NA	38,000
<u>Notes:</u>			
ND = Not Detected.			
NA = Not Analyzed.			
# = 1,1-DFA used as leak detection compound for TO-15 analysis.			
## = 2-Propanol used as leak detection compound for TO-17 analysis.			
Results in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), unless otherwise indicated.			