

Nowell, Keith, Env. Health

From: Michael Harrison <mharrison@enviroassets.com>
Sent: Friday, June 23, 2017 3:15 PM
To: Nowell, Keith, Env. Health
Cc: Roe, Dilan, Env. Health; John R. Till Esq. (jtill@PaladinLaw.com); Peter Ton (pton@ww-envlaw.com); Jonathan W. Redding
Subject: Comments on LRM, Supplemental Remedial Investigation Workplan, June 19, 2017 (RED HANGER KLEANERS - T10000000416)
Attachments: EA22556-17 Comments LRM 2017.pdf

Dear Mr. Nowell:

Attached please find comments on the Supplemental Remedial Investigation Workplan (LRM, June 19, 2017) on behalf of our clients; Visilios D. Bouzos and Eleni V. Bouzos, individually and as trustee of the Bouzos Family Living Trust; and Dan Bouzos.

Mr. Till is currently working on incorporating concepts from the attached comments in the access agreement, and anticipates having that completed on Monday of next week.

Sincerely,

Michael Harrison, P.E., QSD/QSP, LEED AP

Principal

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June 23, 2017

Keith Nowell
Alameda County Health Services Agency (County)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RE: LRM, *Supplemental Remedial Investigation Workplan*, June 19, 2017 (“Workplan”)

Dear Mr. Nowell:

EnviroAssets has reviewed the LRM *Supplemental Remedial Investigation Workplan* (“Workplan”) for the former Red Hanger Kleaners at 6239 College Avenue in Oakland, California on behalf of our clients; Visilios D. Bouzos and Eleni V. Bouzos, individually and as trustee of the Bouzos Family Living Trust; and Dan Bouzos. The Workplan presents a variety of actions intended to address “correspondences dated April 18, 2017 and April 20, 2017” from the Alameda County Environmental Health. Please note that we were unable to locate these correspondence on GeoTracker and therefore have not reviewed them at the time of writing, and present our comments in the order that Workplan issues were identified, with affinity grouping of issues that are encountered both in the body of the Workplan narrative and within its attachments.

“Remedial Investigation” Workplan Requirements are Not Satisfied

The Workplan states that it is a Remedial Investigation (“RI”) workplan, which is a defined term under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, also known as Superfund. However, the Workplan makes no reference to RI guidance documents¹ and fails to include required elements of an RI workplan, including the sampling and analysis plan (“SAP”) (which consists of the quality assurance project plan (“QAPP”) and the field sampling plan (“FSP”)), the health and safety plan, and the community relations plan. In addition, any Workplan should include a Conceptual Site Model for providing the basic site understanding and rationale for the selection of investigative approach.

Damaged Sanitary Sewer Lateral Repair

The Workplan proposes that “the potential need for repairing the damaged clay pipe section of the existing sanitary sewer lateral (Item 2 above) will be further evaluated once the modified remediation system has been put into operation”. The Workplan also states that results of a storm and sanitary sewer system utility survey and “utility condition assessment” is ongoing and will be reported “in the next few weeks”. However, the Attachment 1 to the Workplan (Figure 2 from the *Site Investigation and Soil Vapor Extraction Report* by P&D Environmental Inc., July 11, 2016, “P&D 2016”) depicts five “pipe joint separation” locations and LRM has previously

¹ US EPA, *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, October 1988

described the lateral as “high damaged”². As it appears likely that this sewer lateral may be releasing sanitary sewer waste and likely receives discharge of knock-out water from the Site soil vapor extraction and potentially dual-phase extraction system discharge, it is unclear why further evaluation is required before repairing the damaged lateral.

Property Depictions and Property Line Survey

The Figure 1 provided in the Workplan depicts a sanitary sewer line running from the south side of 309 63rd Street north beneath 6251 College Avenue and out to College Avenue. However, we note that this lateral was not encountered during construction at 6251 College which included excavation and replacement of its sewer lateral. Consequently, this lateral should be surveyed and verified. The Workplan also states that the January 2017 survey that is presented as attachment 1, was “undertaken in January 2017 to confirm property lines, the location of the clay portion of the sanitary lateral extending from 6239 College Avenue to 63rd Street, and building locations in the site area”. However, attachment 1 does not address the accuracy of depicted property boundaries, which is convention for a survey performed for that purpose, and we note a portion of the border of the attached survey drawing has been removed. Therefore, we have significant doubts that the survey was commissioned to confirm property lines and should be relied upon for such.

Lack of References

The Workplan is critical of the work of prior consultants P&D Environmental, Inc., which “do not appear to recount all site activities completed to date in a manner which facilitates adequate assessment of the data”. However, no references section is provided to inform the reader of the reports that LRM has reviewed so critically.

Other Sources/Releases of Dry Cleaning Chemicals

The Workplan states that “the data reported on to date does appear to suggest is that other sources/releases of dry cleaning chemicals have occurred beyond the limits of the 6235-6239 College Avenue property” but provides no discussion or rationale for this conclusion and attaches only the groundwater contour from P&D 2016. Contrary to this assertion, the groundwater and soil vapor data presented on figures 2, 7, and 8 of P&D 2016 (attached) point to the “parking and storage” area behind the former dry cleaning operations at 6235-6239 College Avenue and the damaged sewer lateral as the source of the contamination as the highest measured soil vapor concentrations are located in that area with decreasing concentrations observed in groundwater and soil vapor up-gradient of the source areas and the highest groundwater concentration observed downgradient of the source area at B10.

² LRM, *Interim Remedial Action Progress Report*, December 12, 2016 (LRM 2016)



Emissions to Ambient Air

The Workplan states that there have been “no PCE emissions to ambient air”. However, this assertion is contrary to standard practice that recognizes the detection limits inherent in environmental analytical techniques. Furthermore, LRM 2016 is critical of P&D’s system operation and maintenance practices including raising questions regarding system blower operating frequency. Therefore this statement is not justified.

Groundwater Flow Direction

Workplan Figure 1 depicts an “apparent groundwater flow direction” that reflects prior representations by P&D Environmental that were “identified from groundwater monitoring well water level data at nearby sites”³ and relies on this assumed flow direction for the “rationale behind the proposed well locations”. However, the narrative then states that this groundwater flow direction “is judged not representative” while providing no rationale for this seemingly contradictory conclusion.

Borehole Logging and Sampling

The Workplan proposes to collect soil samples “at 5-foot intervals down to the water table, estimated at 5, 10, and 15 feet bgs”. This sampling frequency is reasonable, however we recommend that samples be biased to hydrogeologic contacts; in particular transitions from coarser to finer soils where chlorinated solvents may concentrate. The Workplan also proposes to collect additional soil samples where PID field screening observations are “upwards of 50 ppm[v]” in the narrative body and within *SOP-1 Groundwater Monitoring Well Installation*. However, we note that a PID reading of 50 ppmv with a standard 10.6 eV UV-discharge lamp calibrated with isobutylene corresponds to an approximate tetrachloroethylene (“PCE”) concentrations of 194,000 $\mu\text{g}/\text{m}^3$; substantially above the 2,100 $\mu\text{g}/\text{m}^3$ Water Board Environmental Screening Level (“ESL”) for commercial soil vapor. Therefore, we recommend that LRM reconsider its screening concentration and adopt a procedure which includes collecting additional soil samples where PID screening demonstrate any significant increase in headspace of 5 ppmv above that recorded for samples collected as scheduled (i.e. five foot intervals preferring lithologic contacts).

Within *SOP-1 Groundwater Monitoring Well Installation*, the Workplan proposes to collect soil samples for lithologic logging “continuously over a 10-foot interval toward the bottom of the borehole to confirm the presence of a groundwater-bearing zone and every five (5) feet for the remainder of each boring, unless otherwise directed through photoionization detector readings above 50 ppm as referenced further below”. For this shallow investigation where the consultant believes that there are multiple sources including potential unknown sources and where the

³ P&D 2016

consultant has expressed concerns with prior environmental work, we recommend that boreholes are continuously cored and logged.

Vapor Well Depth

The Workplan proposes to install additional soil vapor monitoring wells to 7-foot and 17-foot bgs in order to “match the existing wells at the site”. However, as noted previously, a 17-foot depth interval is likely to place new vapor wells within the groundwater free surface or capillary fringe. We suggest that deep vapor wells are placed after a stabilized groundwater surface is identified following monitoring well installation and monitoring to prevent similar problems with deep vapor well water intrusion that LRM has noted with existing environmental infrastructure.

VOC Sample Collection

Within *SOP-1 Groundwater Monitoring Well Installation*, LRM proposes to collect unsaturated soil samples “in an 8-oz glass jar for laboratory analysis of VOCs using EPA Method 8260 (8010 list for chlorinated solvents”. However, this procedure does not comply with the sample collection procedures provided in SW-846 - EPA Method 5035 (used for soil samples intended for analysis by 8260B) which require either EnCore samplers or field preservation in laboratory prepared and preserved vials in order to minimize “the losses of VOCs during sample transport, handling, and analysis”. LRM’s proposed sampling procedures should comply with SW-846 and current state of the practice sampling procedures for VOCs.

Well Construction

Within *SOP-1 Groundwater Monitoring Well Installation*, LRM states it has chosen well filter pack material “[b]ased on the available well construction information (twenty of twenty-two wells) installed during the RI, the filter pack will be 20/40 Colorado Silica Sand”. While this relatively fine sand pack appears appropriate for the silty and clayey soils described by P&D, we note this text is inaccurate as no wells currently exist at the site.

Investigation Derived Waste

Within *SOP-1 Groundwater Monitoring Well Installation*, LRM states that “water from the high pressure steam cleaning will be allowed to fall on the ground” during high-pressure steam cleaning of the drill rig, drilling equipment, and tools”. Such a process creates a potential new release at the location of the steam cleaning. Therefore, we disagree with this approach, recommend that all investigation derived waste are stored, characterized, and disposed of at an appropriate disposal facility, and we have been informed our clients will not allow such handling of investigation derived waste on their property.

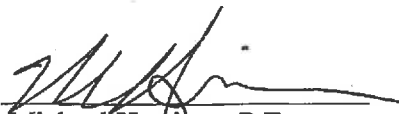
Groundwater Monitoring Well Sampling

The discussion of well purging presented by LRM within the *SOP-3 Groundwater Monitoring Well Sampling* is confusing and inconsistent as it allows for wells to be dewatered when “the recharge rate of the well is lower than extraction rate capabilities of currently manufactured pumps” while also providing procedures such that wells “will not be dewatered or purged dry, which can cause aeration as ground water cascades back into the well”. The result of such aeration would be to render samples collected as not representative. Therefore, we recommend that well sampling procedures follow practices provided in *Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality Investigations* (ASTM Designation: D 6771 – 02).

Soil Vapor Well Installation and Monitoring

The Workplan’s *SOP-4: Soil Vapor Monitoring Well/Sub-Slab Vapor Pin Installation and Sampling Procedures* cites “Department of Toxic Substances Control advisory (DTSC, 2012)” by which we assume it means the *Advisory Active Soil Gas Investigations* guidance document. However, the 2012 version of this document has been superseded by its July 2015 update. We note that various elements of SOP-4 are in conflict with the 2015 *Advisory Active Soil Gas Investigations* guidance document including but not limited to: vapor well seal construction, use of 6L summa canisters for sub-slab sample collection, and purge volume testing. Current DTSC guidance should be followed for this investigation.

Sincerely,


Michael Harrison, P.E.
Principal Engineer



CC: John R. Till, Esq.

Attach.

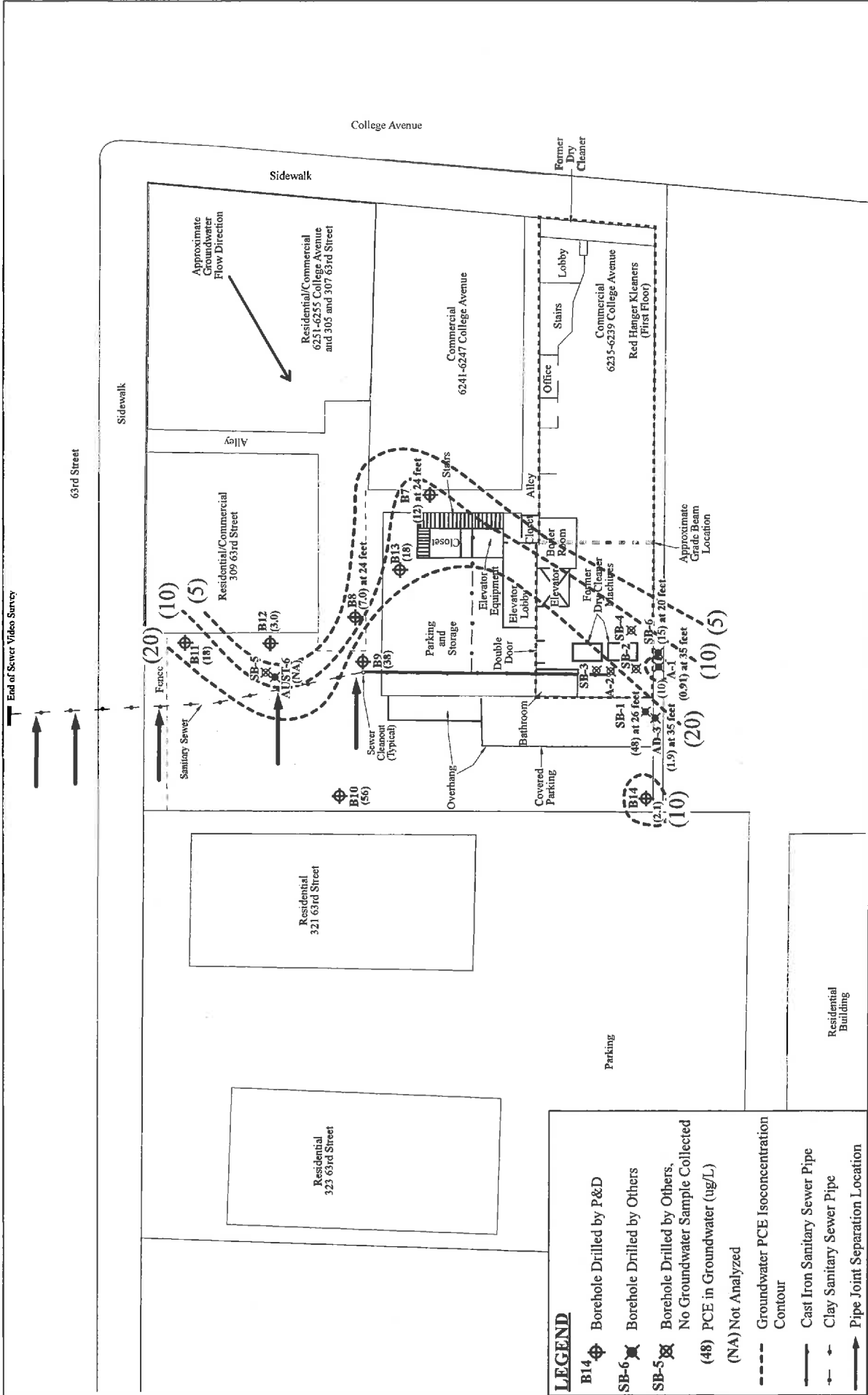


Figure 2
 Site Plan Showing PCE Concentrations in Groundwater
 Red Hanger Cleaners
 6239 College Avenue
 Oakland, California

Base Map from:
 Gordon Building, July 30, 2007, Alameda
 County Assessor's Map, Revised June 15, 1989,
 and Google Earth, 2015

P&D Environmental, Inc.
 55 Santa Clara Ave., Suite 240
 Oakland, CA 94610



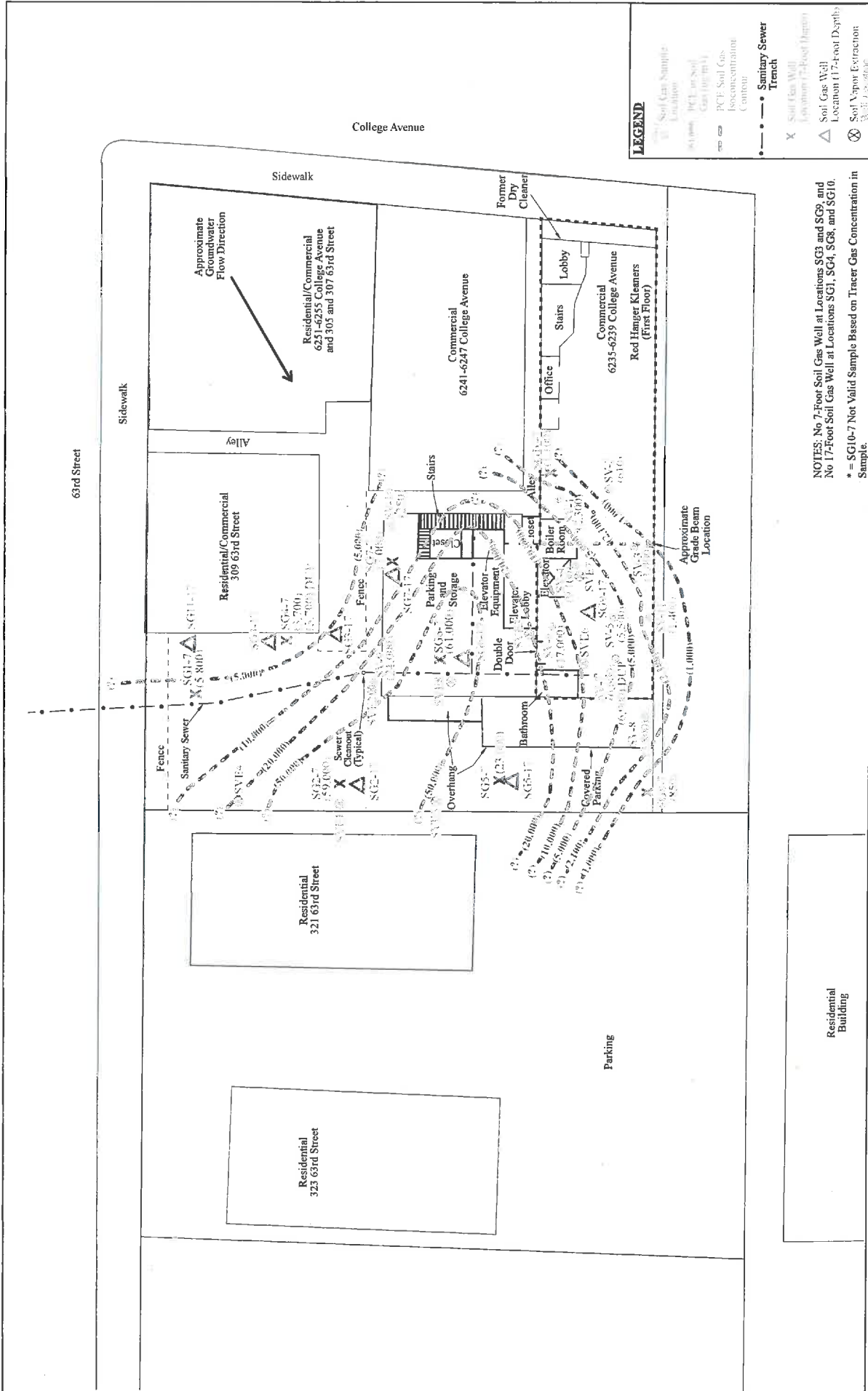
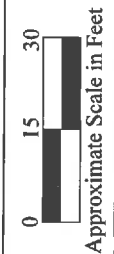
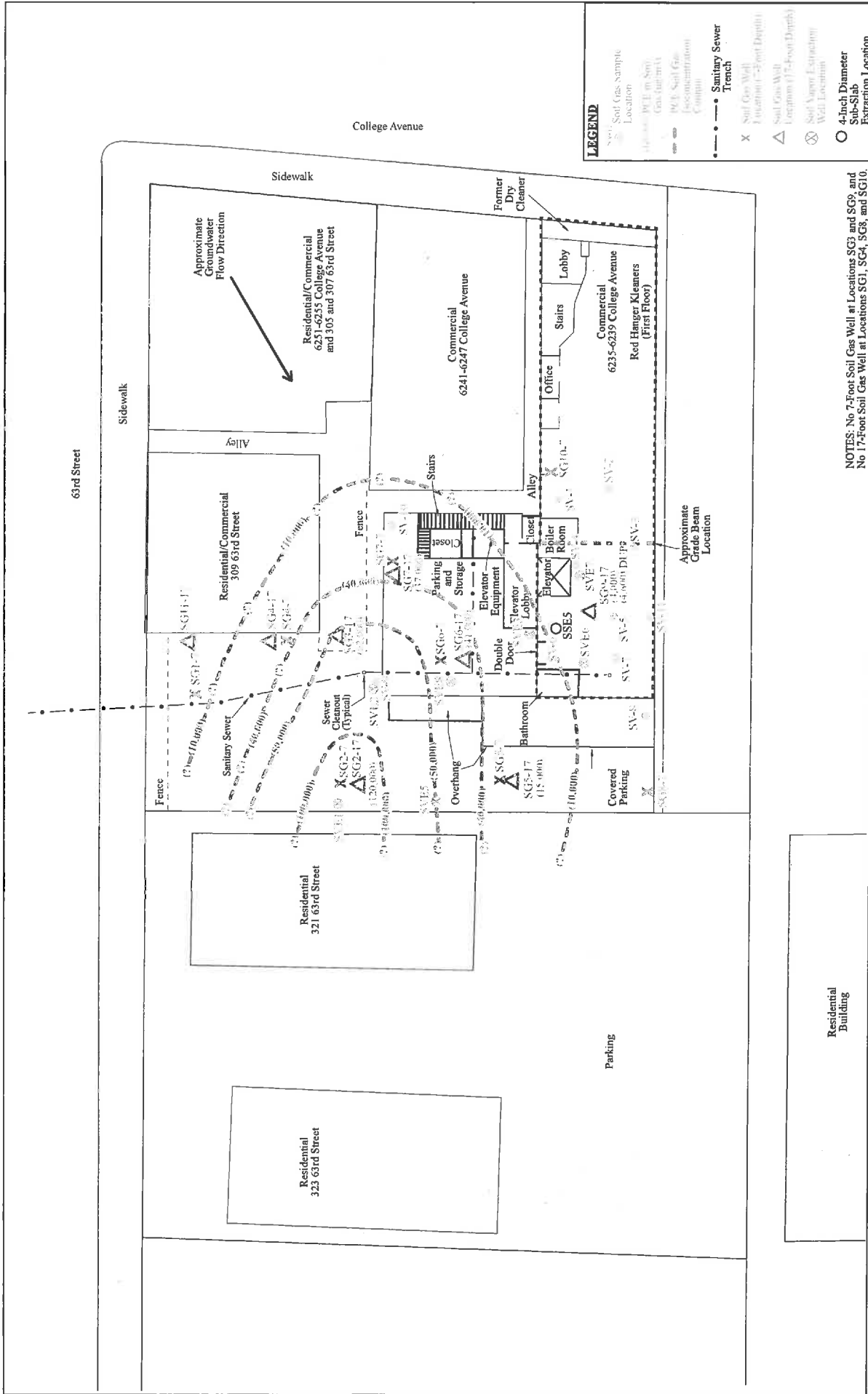


Figure 7
 Site Plan Showing PCE Concentrations in Shallow Soil Gas
 Red Hanger Kleeners
 6239 College Avenue
 Oakland, California

Base Map from:
 Gordon Building, July 30, 2007, Alameda
 County Assessor's Map, Revised June 15, 1989,
 and Google Earth, 2015

P&D Environmental, Inc.
 55 Santa Clara Ave., Suite 240
 Oakland, CA 94610





Base Map from:
 Gordon Building, July 30, 2007, Alameda
 County Assessor's Map, Revised June 15, 1989,
 and Google Earth, 2015

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Residential Building