

7/23/97

con't more than tedlar bags, but he thinks it gives more accurate concs.

7/24/97

Reviewed the DRAFT 7/15/97 "Results of the Soil Vapor Invest," by PEG. You know, they did this field work on 5/30, which was my last day before vacation. But I dont remember being notified. No; they DID notify me on 5/27. Oh well. They hit gw in the Sbs at 9.5 to 10' bgs. Strong product odor at that depth. Highest soil hits were at 8.5 and 9' bgs. Highest soil vapor hits were at 6 and 9' bgs. Highest soil vapor hits were in former UST area, in SV1. Read up to pg 5; then cut to Conclusions on pg 7: Gee, there is no indoor air inh risk to adults OR children, or to construction workers. **But once the housing layout is obtained, we should review further remediation, ie whether to excavate the UST pit.**

Mess fm Phil B: He has been playing phone tag w/Phil Briggs. But Jim still wants a copy, so Phil will send it to him.

7-25 revu 5-20 "2<sup>nd</sup>  $\phi$ " rpt.  
gw sampled on 4-24-97 flowed W  
at 0.003 ft/ft. Concs.  $\uparrow$  in MW/  
one order of mag. MW6 is back  
to ND.

7-29 gave <sup>entire</sup> file to ML.

As file with ~~copy~~  
800 Center Street,  
Oakland.

5/5/97 spoke w/Phil B: He suggested soil samplg at 3', 6', and 9'bgs, which is where we will take vapor samples. Will use a self-contained canister (SUMA cylinder). He has another site where vapors were migrating horizontally, not vertically. PEG will revise site map to include some soil sample locations. He proposed doing SV-1 where P3 was, and then another boring about 10' North. **I will write letter requesting revision.**

**WROTE CONDITIONAL WP APPROVAL LETTER**

5/6/97 con't writing letter.

Lm for Madhulla: is there any protocol for determining which soil and gw data to use? Ie, if the older data has higher concs, can they exclude it? (As PEG did) Or should they use ALL the data ever collected?

5/7/97 spoke w/ML: she said that if the Mws are low concs, and the grab gw samples were high concs, then you should include the grab gw. Sounds like no defined protocol per se, just common sense. She said the vapor barrier is risk mgmt, not remediation.

Finished letter.

5/19/97 Cheryl Gordon phoned: It is not legitimate to reimburse Mr. Rodgers if the \$\$ is going to reimburse Chevron. Bec Chevron is priority D, and they are getting their reimbursement a lot sooner by going thru Mr. Rodgers. She will talk to her supervisor about what to do.

7/23/97 mess fm Jim Scott: 415-399-1277 (8715 is fax) wants 1) update on County's wp approval, and 2) did not receive a copy of latest suggestions to work that is being done. Huh? Lm for JS: we just got PEG's Draft 7/15 report (Results of the Soil Vapor Invest) on 7/18. Have not reviewed it. Hang tight. Will get to it asap. Then ML will review it. Reorganization occurring in this office.

Mess fm Michelle Gracia from PEG: did I get rpt? Did I review it yet? Mess to MG: got it, but not yet reviewed.

Spoke w/Phil B: This is Draft bec he assumes that revisions will be made. He's concerned that there wd be confusion bet the draft and the final copy. The calcs may change. He will talk to Jim Scott; is willing to send him the draft report. Phil never received any bldg plans. They used summa canisters to collect the vapor samples, similar to what they've done in past. Costs

5/1/97 They say the models are overly conservative. And that RWQCB members have suggested "alternatives" to resolve this issue. **Does not mention just what "alternatives" RWQCB proposes.** Must the the vapor flux samples. PEG proposes to do soil vapor samples.

5/2/97 lm for Ross Tinline: 1) wd their RA pass it they used 10-5? 2) need to discuss the vapor flux sampling.

Spoke w/Ross: he thinks it wd pass w/the 10-5, but just barely. Told him I probably wd argue w/the data they used. See pg 4. For the RBCA model for vapor, you assume certain characteristics. How do they take vapor measurements to replicate indoor air conditions? 3 different ways. Flux chamber sampling (leave it on ground for 8 hrs) is getting popular, but he didnt propose that. He proposes using Geoprobe and going down to 3,6,9'bgs and in cap fringe, take vapor samples, hopefully see it attenuating towards surface. He would plug in the vapor concs into indoor/outdoor air pathways. Would he avg the concs? Which ones wd he use? Not sure. Maybe even excavate hot spots. **What about overex?** Wp only mentions ex of landscaped areas. PB thought the cost figures were high. But hes not opposed to ex, ie when laying the liner. Pg 5 proposed ex to 3' in landscaped areas only (if vapor concs show good RA). **And if vapor concs (and soil concs) are high, maybe we will do overex anyway. Do we know where the bldg will be located?** He only has an artists rendering. *If we dont know where the bldg will go, we must assume the whole site will be indoor air pathway. I suggested using Geoprobe (while its out there) to take more soil samples, esp near UST, to characterize extent of that contam (P3)? Maybe I can get bldg plans fm Jim Scott.* Has he done this soil vapor method before? No, but is doing it at other sites for purposes of RA. *I will ask ML about doing the vapor sampling at the different depths, and how to use (avg?) The data afterwards for the RA. Madhulla said ok to use the soil gas samples at different depths via Geoprobe.*

Reviewed file and copied data sheets from reports back to 1989, in order to have ALL the data on hand and look at their proposal.

phoned Phil Briggs: lm suggested we get some more soil samples from the areas of the proposed SV points. Will have Geoprobe out there after all. We dont have any vadose zone soil samples, except maybe Borings 2 and 4 at 7'bgs (but they are from 1989).

4/18/97  
con't

wk. Told him I'd like to document this in a ltr today. The wp will include RA, which is based on gw and soil samples. Duh. He will ask Ross if ex to 10'bgs will affect his RA approach.

**WROTE LETTER**

He said the RA failed.

4/21/97 mess fm J. Scott: I can delete C. Johnson and S. Nichols fm cc list. They were indemnified by all parties. Understands wp is due by 4/30.

4/24/97 mess fm JS: who is supposed to pay to do the RA?

Mess to him: Chevron already knows the RA has to be done. I believe the wp will include a RA. I think they are taking responsibility for it. Don't worry. But site has to be cleaned up to levels protective of human health before res units are built.

4/30/97 Received and reviewed 4/25/97 ltr fm State Cleanup Fund to Hollis Rodgers. State is requesting further documentation or else may consider his app as ineligible, if info not recv'd by 5/25/97. Phoned PB: lm, and faxed over the ltr. Also asked re status of wp? (Due today) phoned Jim Scott: told him re the ltr. Faxed it to him. He said he needs to get Jon Robbins involved again.

WP was faxed here after 4 pm.

5/1/97 Reviewed 4/30/97 "Work Plan" by PEG. They did RBCA Tier 1 and Tier 2.

**ISSUES:**

1) pg 4, 1st para: they only used 2/97 gw data. Shouldnt they use 95 data also?

2) pg 4, 2nd para: shouldnt they also use soil data prior to 3/96?

**Maybe it doesnt matter, bec they did not pass Tier 1 or Tier 2.**

\*\*\*3) They used 10-6. Would their #s pass if it were 10-5? Madhulla has been using 10-5, or I should say between 10-5 and 10-6.

4) ML said its ok to do direct soil vapor "flux" measurement, altho she doesnt nec agree w/it. RWQCB is pushing it. But they should take readings on 2 different days, and they should pick days w/high avg temp. Also, take foc, etc fm sample depth w/hottest hits.

4/17/97  
con't

Developer needs not only corner lot, but City's 2 lots in order to do developmt. If I hear anything fm Chevron, please contact him. Told him the other thing that should be done is an evaluation of the risk to human health for residential scenario. AKA risk assessment. Cc: Roger Rapport, City of Oakland, 1333 Bway, 4th Floor, 94612

Phoned PB: lm: I want to discuss the wp, and what about doing a RA for residential scenario.

Phoned PEG and spoke w/Russ Tinline: he has given recommendations to PB (weeks ago), and has not heard back from PB. They did initial screening via RBCA Tier 2, using 1st Q data (thinks he only used 1st Q gw data and did NOT use Geoprobe gw data; did he use 95 gw data? NO--just used 1st Q 97 gw data 90% UCL, and included soil data from Geoprobe, but probably not 1989 data), for residential, and it did not look favorable. #s in Tier 1 looked better, bec the default values are less conservative than site values. DTW is more shallow than what Tier 1 allows, so they cannot use Tier 1. Tier 2 #s were bad for both soil and gw; used vapor inhalation to indoor air; used 10-6, but doesn't think it wd have passed using 10-5. He thinks we should have a mtg. Told him he could also use a flux chamber for direct measurement (indoor air pathway). There are ways to cap site and mitigate vapors. He will be in all next week.

Mess fm PB: he discussed what PEG proposed w/his boss. Leaning towards excavation and maybe vapor barrier. He has 2-3 options for remediation. Based on the silty sand and high gw table, probably more practical to excavate. Working on cost figures; info should be together first of next wk, and get back to me end of next wk. Is a priority project.

4/18/97 lm for PB:

Spoke w/him: PEG did RA. He spoke w/the general contractor today, who will work up some cost figures for doing 1) excavation entire site (75' x 90') to 10'bgs (using shoring); 2) to 5'bgs and use vapor barrier; 3) spot excavation (UST and pumps) to 10'bgs, with rest of site maybe down to 3'bgs (which wd prevent dermal contact for planting gardens, kids digging, construction workers). Then Chevron will decide what to do. Silty sand not conducive to insitu remediation. His boss John Randall agreed that excavation is best means. He can get me wp by 4/30. He will talk to Ross Tinline next

3/24/97 spoke w/PB: Last sampling 10/95. They did QS this Q. Has results. Concs reduced significantly in onsite wells, and increased in offsite wells. He will fax results. MW1 near former USTs had 2 orders of mag reduction in benzene. He spoke w/Jim Scott. Waiting for bldg plans. He has PEG working on different approaches. Hopes to have something by mid April. He gave his idea: excavate the major impacted soil from former UST area, then vapor barrier under the bldgs. Russ thought additional Geoprobe cd ID more. What were the results from test boring 1 and 2 in the UST area? **See 10/13/89 SCI rpt.** They had up to **500 ppm benzene in soil** in #2. GW was bet 11-13'bgs then (1989). VES wd not work bec of silty sand and gw at 7'bgs. Wd smear the cap fringe during drawdown. Sounds like they are not sure whether to go for more characterization or for remediation. Maybe I should write ltr w/deadline for one or the other. **He will talk to PEG and get bk to me this week, BEFORE I write a ltr.**

Received fax w/tabulated data and lab rpts for 2/20 gw samples.

4/8/97 Reviewed 3/31/97 ltr fm PB: no explanation for the dramatic drops in concs in MW1 and MW3. They will continue w/QM. **He has asked PEG to analyze different approaches; wants to confer w/me BEFORE writing wp.**

Reviewed 3/28/97 "1st Q 97 Mon" rpt by BTS. **GW sampled on 2/20/97 flowed S-SW.**

Phoned PB: any ideas? Left message. (Maybe we dont need to remediate, esp w/those low concs. But they should be compared to res RBSLs.)

4/17/97 Roger Rapport w/City Housing Developmt at 1333 Bway phoned: 238-3502 He understands fm PB that the 2 City parcels adjacent to this site are clean, and I am negotiating w/Chevron to cleanup their site. I had to review the data: 1/24/97 PEG rpt: borings on adjacent prop include MW8/B8 and MW7. MW8/B8 and MW7 were ND for soil at 5,10, 15'bgs (TPHg and BTEX). MW7 was ND TPHg and BTEX on 1/3/97 and on 2/20/97 (including MTBE). Gw Gradient was S on 2/20/97, SW at 0.002 on 10/27/95. City is working w/nonprofit developer (James Scott). Mrs Sadler works w/City and Co of SF Comptrollers Office. They anticipate within next 3 mos entering into agreement w/Sadlers and Mr. Scott to develop low income housing: parcels 15, 16, 17. Chevron told him that their type of remed will be dependent on how soon they want to develop site. **Told him I am waiting for a remed wp from them.** There has been 3 rounds of sampling gw.

2/7/97 phoned Phil Briggs: what type remediation are they thinking of? Are you sampling in 1st Q 97? That's the most important Q.

2/20/97 spoke w/Phil Briggs: Maybe do excavation at main point source (former USTs). Trying to get a plot plan from architect where new bldgs will be. This will be housing (residential). GW is 7'bgs. Maybe put in vapor barrier. What about the contaminated gw? He's finding that vapors often migrate horizontally more than vertically. Thinks Weiss recently did study on Castro Valley site. No gw contam in Mws across street. When do they plan to build? He doesn't know. Don't they want a County signoff before they build? He asked, doesn't the bldg dept need County's approval before doing construction? His consultant is PEG; Ross Tinline. Told him that excavation wd be great. They will sample the Mws this Q.

Spoke w/Tom: can they just build w/out county signoff? He suggested I contact Mark Gomez (238-6688) at the City.

Phoned Jim Scott: Not certain which non-profit will be their partner; hopes to decide w/in next 3 wks. Thinks the bldg will start in late spring. **They may want to build parking garage below ground.** He has to check out this possibility w/the City. He doesn't have a plot plan showing the location of bldg yet. He has a feasibility study for both 5 and for 10 units. **He needs to find out what the City and architect wants to do about the parking. He will follow up on this, and call me back.**

3/24/97 Lm Jim Scott: status? They still have not decided on the non-profit. But the funding will come from California Housing Finance Agency. **There will not be underground parking.** Phil asked him if it was acceptable to put in a vapor barrier at 4'bgs. The 4' foot depth will be likely acceptable for putting in a vapor barrier. But they need more soil analysis for geotechnical purposes. **But site will be residential, so we have to remediate to residential standards anyway.**

Groundwater is contaminated significantly. Maybe Chevron wants to develop SSTLCs for residential, then remediate to those levels? See map in 4/18/96 rpt. Max onsite gw benzene conc is 8,400 ppb, and max offsite gw benzene conc is 13,000 ppb. Look at Tier 1 indoor air: res 10-6 RBSL is 7 ppb. We have a problem. GW first encountered at 6'bgs. So Tier 1 does not apply anyway.

12/10/96 Charles Ruse from PEG phoned: Will drill Mws in 4 days. Saturday?

12/11/96 mess fm Phil Briggs: Drilling on Wed 12/18. 5 day TAT on samples.

12/30/96 mess fm Terrell Sadler. 263-4239

Since Phil is out until 1/7 or so, I Phoned PEG: no answer.

Phoned Terrell Sadler: Chevron never gave them a work schedule for when cleanup will be completed. He is concerned he may have to pay \$\$ for cleanup. City requests them to seismic retrofit the bldg. I asked him why don't you just demolish the bldg? Told him about 460 Grand Ave. Similar situation, private po and bldg was demolished. I don't know who paid for the demolition. He spoke w/PEG, and said they were doing sampling on adjacent City property. They did oil changing for trucks. City dug up vents that oil was drained into, and covered it up the next day. Mrs. Booker's house blew down during 1989 earthquake. So city came in to help, and removed cement and did something to the well (place where they used to drain oil). It's on Center St. He thinks it happened in the 1960s. He wants to get a variance from City so he doesn't have to do retrofit. But he needs some documentation stating that cleanup may take a long time. So I will write him a letter.

**WROTE LETTER TO MR. SADLER,** saying it may take 4-5 years to complete the site cleanup; and also saying that site is contaminated, and status of cleanup.

1/3/97 Eric Holm of Delta Environmental phoned: 916-638-2085 He is doing Fund app for Hollis Rogers. Wants to know case ID#.

1/6/97 Reviewed 1/3 fax from PEG. Site map shows locations of the newly installed four Mws: MW5 thru MW8. Lab report follows. They did foc in MW5. They analyzed samples at 5, 10, and 15'bgs in each well and got ND TPHg and benzene in all of them. **GW results?**

2/7/97 Reviewed 1/24/97 "Soil and GW Invest" rpt by PEG. They drilled 4 Sbs and converted 3 into Mws (MW5-7). **They defined the vertical and lateral extent of Hcs in soil and gw.** So, what now? The cover letter says Chevron will "develop a remediation plan that will not be in conflict . . . w/the timeline of the proposed housing developmt that is to start construction this year."