RD 435

11/22/95 Mess fm Denton: he talked to someone working on their Vegas project: Bunker C in several wells, put in recovery trench in spring, but they have not seen any Bunker C in the trench. But it does take a long time for Bunker C to show up. He's not sure what they can do about the Bunker C in Oakland. Old aerial photos show that the site was used for fueling of oceangoing vessels. Land is owned by Port. UPRR purchased site in late 70s or early 80s. Not much history. How should we approach this? 303-938-5539.

Spoke w/Dale He thinks we should trench and scrape it out in the cold weather.

Date? Spoke w/K. Graves: he doesn't think Bunker C is a problem, since it doesn't migrate, and if it is not coming into contact with people.

2/27/96 Reviewed Fourth Q 95 Mon Report by Laidlaw. **GW sampled on 11/29/95 flowed E (towards APL site) at a gradient between 0.0078 to 0.013 ft/ft. Bunker C detected in wells OKUS-W5, W6, and RW.**

Wrote letter to RP, agreeing to decrease frequency to annual for arsenic, and delete lead analysis, etc.

10/15/96 Reviewed 4/23/96 "First Quarter 1996" report by Laidlaw. **GW sampled on 2/27/96 flowed East at between 0.010 and 0.012 ft/ft.** *Well OKUS-W4 was not sampled or gauged due to damage (churned asphalt surrounding the well, and bent well casing that may be fractured; also standing water over the well.)* Also, **OKUS-W5 and W6 have FP again; these wells have not been sampled (or gauged?) since 3rd Q 94.** Do they plan to repair OKUS-W4?

Reviewed 7/29/96 "Second Quarter 96" rpt by laidlaw. **GW sampled on 5/29/96 flowed East at 0.007 ft/ft.** OKUS-W4 was again not sampled. Pg 5 says "Burns and McDonnell will be repairing this well in the near future."

2/4/97 Reviewed 10/30/96 "third Q 96" rpt by Laidlaw. **GW measured on 8/27/96 flowed east at 0.01 ft/ft.** Bunker C is still present in OKUS-W5 and W6, and maybe the RW (?). The wells on APL site are ok: W1 is not accessible, but W2 had only 1.1 ppb benzene and 320 ppb TPHd (ND TPHg). **The accumulation rate of product in RW has decreased; they only removed 2 gal product this Q.** FOR SOME REASON, THEY ANALYZED ARSENIC THIS Q. IT IS SUPPOSED TO BE DONE 1ST Q, AS PER MY 2/27/96 LTR. They want to abandon the damaged well, OKUS-W4.

3/20/95 mess fm D. Mauldin: 1) RW is not on Table 1 bec they have FP, so no analytical. **I'd still like to see it on Table 1; just write the amount of FP.** 2) RW is not on Table 2 bec they didn't have field info by the time report was written 3) it was his error to exclude RW from Fig 2; the 3rd Q 93 QR shows it 4) I should document my concerns re offsite migration to Harry Patterson.

6/28/95 Reviewed 4/26/95 QR by USPCI/Laidlaw. **GW sampled on 2/22/95 flowed East, towards APL site.** Dissolved phase: up to 2400 ppb TPHd, up to 7400 ppb TPHg, and up to 250 ppb benzene (OKUS-W3). FP phase: up to .16' FP in OKUS-W5. . . they could not determine thickness of FP in OKUS-W6, due to viscosity of Bunker C oil. **How about trying to recover the thick Bunker C from OKUS-W6?**

7/10/95 left mess Denton; back 7/13

7/14/95 spoke w/Denton: they did a fuel fingerprint on the oil in W6 sometime around 3/94. Found it was a weathered crude oil or Bunker C (somewhere around C17 to C40). No peaks on chromatogram indicating BTEX. It could have been used for fueling of ships or locomotives. It replaced coal in 30s. It's a solid at rm temp, and meltg pt is 75 degrees F. It mixes w/diesel to make it more pourable. Trying to recover it in Las Vegas. But it's a R&D project. Even if you pump it out, it may take a long time to recover in MW. Looking at old aerial photos, the shoreline used to be where the APL prop line is. APL had docks at this shoreline. Maybe it was used for ship fueling then. UPRR bought site from Western Pacific in 70s. Don't know a lot about site history or therefore source of contam. US troops were transported out of this area in WWII.

9/12/94 Reviewed the 8/16/94 Revised Second Quarter 1994 Monitoring Report by USPCI. GW sampled 5/3/94 flowed ESE, and had **FP in OKUS-W6 and in RW.** Dissolved compounds: up to 3000 ppb TPHD, 17,000 ppb TPHG, 310 ppb benzene, and 380 **ppb** As. They recommend discontinuing analysis for arsenic and lead in gw. Let's go annual on these. . . .
Wrote letter to RP, allowing for annual sampling of **As** and Pb.

1/19/95 Reviewed 10/27/94 QR by USPCI. **GW** sampled on 8/24/94 flowed **S-SW** (consistent w/last Q) (away fm APL site). Does APL know of the plume on their site? Should we inform them? Port owns both properties; I recall a conversation w/Jon Amdur, where he knew of the problem (maybe I told him), and he may even be receiving copies of USPCI's reports. Yes he is; see the cc list on USPCI's 10/27/94 cover letter. OK. **GW had .021 FP in OKUS-W6 (noted in field as Bunker C); .06'FP in RW, and a "small amt FP noted on bailer in WS."** Up to 8200 TPHD, 1100 TPHG (W2), and up to 350 benzene (W3) in dissolved phase. Dissolved As exceeded MCL (.05 mg/L) in 2 of 10 MWs. Bunker C is not related to the UPMF site, as per page 12. **How about a table for FP recovery? (see p. a; no table, just-discussion; good** enough)

3/14/95 **Wasted approx 1 hr scanning this 8-pg document, then correcting all the damn errors from the scanner. All due to the computer not being able to retrieve the document, and MK having no time to help. Can't charge this wasted time.**

Reviewed 1/27/95 QR by USPCI. GW sampled 11/15/94 flowed East, towards the APL site. See Fig 4. GWEs decreased. There was up to 10,000 ppb TPHg (OKUS-W2), up to 5,500 ppb TPHd (OKUS-W2), and up to 320 ppb benzene (OKUS-W4). **There was also FP in OKUS-W5 and W6 (up to .22 feet). OKUS-W6 has Bunker C; the thickness is unknown, and cannot be determined. Note the RW is not included in Table 1, just Table 2. RW is also NOT included on any of the Figures. Where is it? How much FP in RW on 11/16? See Table 2. I'm concerned that the plume is going BEYOND the APL wells (W1 and W2), and that we actually have NOT defined the plume.**

Phoned Denton Mauldin of USPCI: re these questions.

4/6/94 Benson Lee of LSA Assoc. phoned (236-6810) in Pt. Richmond re site status. He's doing an EIR for Oakland Naval Supply Center.

4/27/94 spoke w/D. Mauldin. Owes me a report for bailing in 3/94. He'll send 3 94 data w/4/94 data in first week May. Oil fm the RW,is non haz bec. it's non toxic. See App. 10 (22 CCR). What about flammable? New diesel is not even ignitable. Ch. 11 Sect.66261.3 (a)(2)(c). He'll write his reponse. If <55 gal, 90days clock starts when drum is full.

4/28/94 mess. fm D. Mauldin. Wants extension for submittal of the 1st QR 94, until 5/13/94. left mess. for him OK.

5/9/94 reviewed 5/4 letter fm USPCI. Skimmer was installed in RW on 4/29.

6/2/94 Reviewed 4/29/94 QR by USPCI. OKUS-W6 had FP on 2/7/94. It's Bunker C or weathered crude oil (p.8). Dissolved concs. de- and in-creasing. Offsite wells on APL site mostly increased concs., but slightly. Oil in RW was analyzed. They got VOCs (8260) and metals, ND benz, ND PCBS, ND pesticides. GW flowed toward estuary (SE) see fig.4 Questions:

1) how much FP in W6?
2) why didn't they analyze TOG in RW? The liquid is very oily.
3)W6 never had FP before. It's on the far N end of site. Maybe plume has travelled?

6/3/94 spoke w/Denton. RE Q1: tough to measure bec. can't send probe thru it-. more viscous than molasses. Specific gravity close to water. RE Q2: Maybe they already did fuel fingerprint. He'll check. RE Q3: They had motor oil mixed w/diesel in OKUS-W5 and W4. What we have in W6 is Bunker C or crude oil. Possible source is fueling for ships in that area in the past. That area was edge of bay. He has aerial photos and will copy and send. I asked why haven't we detected oil in W6i previously? He said it takes a long time to move. I asked what kind of FP does 1717 MHRD have? He said diesel. It's ok to include FP recovery info (RW) in QRs.

6/7/94 Reviewed Revised Fourth Q 93 Report by USPCI. The revisions have to do w/Table 1 (concs. of TPH and benzene in WP1 and WP2), and Figure 4.

.doesn't think his USTs were the source. . .also questions whether his lube oil UST caused the oil we're finding in the RW. . .he told USPCI to do a fingerprint of the oil in the RW. . .they told him it came out like Bunker C . . .I have not received this info (let's look at chromatograms). Bailing began 1/31. But for now, they're just gonna hand bail FP and store in drums. Asked him thickness of FP in RW now. Ask Denton.

RE: 1717 MHRd. . .there's diesel FP, 3 EWs. . .the FP goes into AST and gets recycled. . .approx. 300-400 gal/month diesel is recovered . . .told him I was at the waste oil UST removal. . .asked to get reports. . .he said ok. Asked him if the RWQCB is overseeing this actively, or just shelving the reports. . .he thinks just shelving. . .

he'll have Denton call me re date of next RW bailing, FP thickness, monthly reporting, missing info in last QR, oil fingerprint, etc.

spoke w/Denton. started bailing 1/31/94. Reidel does bailing. I requested they inform me at least 1 day ahead of time for next week's bailing. Thinks they do it on Mondays. He'll send results of oil sampling (may be in next QR). Thinks FP is 2-4" thick in the RW. He'll send monthly FP recovery report by first week March.

Port is prop. owner. Jon Amdur is receiving QRs from UPRR.

2/17/94 Site visit. Met Mike Sulka of Reidel. Opened some MWs (OKUS-W5, W4, and the RW). Bailed oil from RW.

3/8/94 Reviewed 3/3 letter fm C. Byerman w/attached sheets to add to GW Assessment Data section. Left mess. re Table 2 in Jan 93 QR.

3/10 Reviewed 3/3 letter fm D. Mauldin. They want to reduce frequency for bailing oil in W4 and W5 from weekly to monthly. This is ok. They also propose using a solar-powered skimmer in the RW. Sounds ok.

3/15 spoke w/D. Mauldin. W5 did not have measurable FP on 11/11/93; that's why they said NP (no product) in Table 2 of 1/94 QR. Wrote letter to RP accepting reduced frequency for monitoring W4 and W5, and accepting use of skimmer in RW.

4-6 (Benson Lee of ~~LRE~~ LSA Assoc) ~~phoned~~ (~~236~~-6810) Pt. Richmond re site status. He's doing an EIR for Oak Naval Supply Ctr.

removed?

5) where does water from separator go? If storm drain system, then need NPDES permit. But BC doesn't think that NPDES allows this type of discharge anymore.
6) what are the diesel and gasoline ASTs used for? Fueling vehicles?

1/4/94 Spoke w/Chris Byerman and Rich Pollard again. Brought up issues 4, 5, and 6. #6-yes, for fueling cranes and trucks. #5-how about the other separator (near refueling area in N section site)? will check w/Denton. #4-not yet a part of USPCI's operations; therefore doesn't know answer. probably goes to an oil recycler. **Wrote letter to RP.**

2/7/94 Received mess. fm C. Byerman: they're onsite today to sample oil in RW and do QS, and think about the oil/water separator connection. I left mess. re my 4 items in my 1/4 letter, which have not been responded to. . . then I found the 2/2 letter fm UPRR, which <u>did</u> respond to my 1/4 letter.

2/14/94 Reviewed the "Fourth Quarter 1993 Monitoring Report," by USPCI. GW sampled 11/11/93 flowed SE, toward the American President Lines site. **TPHg and BTEX conc's in the DG MWs and in the offsite (APL) MWs have <u>increased.</u>** W2 has the highest conc's. W2 is directly DG of truck repair shop. **No FP this quarter.** Unknown source of chlorobenzene and arsenic in gw.
<u>Questions re this QR:</u>
1) missing data on many MWs in App. B
2) conclusion section--don't understand one sentence

Discussed w/SH. . .<u>Questions for RP</u>:
1) does RW still have FP?
2) D. Mauldin phone #?
3) how will their FP recovery system work? hooked into the treatment system at 1717 Middle Harbor Rd.? or into the separator, then pumped into the AST?
4) will they <u>continuously</u> pump FP from MWs/RW?
5) get a letter from EBMUD saying it's ok w/them to include this extra burden on their system

2/15/94 <u>spoke w/Harry Patterson: I requested</u> FP recovery **reports monthly, not quarterly.** Yes, they may want to use the gw extraction and treatment system at 1717 MHRd. **in the future**, when and if they do gw extraction and treatment at this site (1750 Ferro). But he's uncomfortable with the As and Cl HC's we're finding. . .doesn't think his USTs were the source. . .also questions whether his lube oil UST caused the oil we're

The lateral extent of soil contamination (metals and HCs like TPH-mo) has not yet been totally defined. (see Fig.4 and p.33). "The distribution of contaminants in soils indicates that the UST system is not likely the sole source." p.33

They recommend continue the QM thru 1993; **begin extracting FP from RW and OKUS-W5 into existing oil/water separator**; do aquifer test. (p.36)

12/28/93 Discussed case w/SH. Concerns re using the separator to remediate FP from wells: is it big enough to store oil? How will the system work? How often monitor and clean/remove oil? Separators not usually used to store hazardous materials. It should be regulated by NPDES or EBMUD. **The plume is spreading because FP isn't being remediated!!!**

12/30/93 JE spoke w/Chris Byerman and Rich Pollard of USPCI. No FP in W5 in November. RW had about 4" FP when it was last monitored (July). They haven't yet hooked up RW to the separator. They have a tank to store oil thus reclaimed. It's the same kind of remediation system being used near the diesel refueling area. This site is aka 1717 Middle Harbor Rd. Denton Mauldin of USPCI is project mgr. 1750 Ferro St. site will be turned over to DM because he's familiar with the adjacent project. It could be (but won't be) considered the same site because UPRR is the RP for both; Harry Patterson is UPRR contact for both. At 1717 Mid Harbor Rd., the FP wells are pumped out with total fluids pumps, into the separator. This can help control the plume from spreading, as opposed to just skimming FP, because it changes the hydrology (flow of gw). See the Phase I report, which documents installation of RW in 1988 (p. 4 and App C). At 1750 Ferro, there are drains located outside in front of the truck repair shop. These drains collect diesel drippings from the shop, as well as trucks parked in front of shop, as well as some storm water runoff. These drains are already hooked into the separator system.

Questions for USPCI:
1) who is the agency/contact for 1717 Middle Harbor Rd? (I don't think AlCo is receiving reports or is even overseeing it).
2) details for separator setup?
3) check depth of FP in RW. Call Ara in S. Cal office; he will let me know when he goes onsite.
4) how often do they empty "reclaimed oil" AST? Documentation? What happens to this oil when it's

Table 1. They recommend continued QM, and to complete the Phase II assessment in July.

8/26/93 Spoke w/C. Byerman of USPCI. He's writing the draft report for the Phase II. Benzene plume goes up to APL. Did not see FP in W4 in July, but there was about .2" FP in W5. August sampling should be tomorrow. Re the July 93 QR: Table two should read .1" and .2" FP, not .01" and .02" FP. **There's currently 1.5" FP in the RW in the former engine oil tank pit.** It could be easily hooked up to the oil/water separator which empties into the existing waste oil UST, located near the existing gas and diesel USTs. The 4 drains, located near the former waste oil USTs, are piped into a 1,000-gal AST before going into the oil/water separator. The fuel island is gone.

8/27/93 Met USPCI reps onsite; toured the MW locations and oil/water separator system.

11/2/93 Spoke w/C. Byerman. The Phase II and QR are on its way. UPRR agreed to hook up RW with FP into oil/water separator. Plume is migrating offsite. Maybe didn't draw enough formation water into MWs, and that may be why they got low levels or ND.

12/27/93 Reviewed "Phase II Site Assessment and Third Quarter Monitoring Report," by USPCI, dated Oct 93. Thirteen SBs were drilled; 5 of these converted to MWs. GW flows SE.

Soil concentrations: up to **23,000 ppm TPH-mo**; 2,870 ppm TPHd; 72 ppm TPHg; 0.096 ppm benzene; 58 ppm As; 3,890 ppm Pb; 17 ppm Cd; and 90 ppm Cr.
Groundwater concentrations: (in all MWs sampled) up to **.02 feet free product (oil) in OKU8-W5; FP also in the RW;** 5,800 ppb (dissolved) TPH-mo; 6,500 ppb TPHd; 22,000 ppb TPHg; 420 ppb benzene; 560 ppb As; and 5 ppb Pb. Also HVOCs, most notably chlorobenzene.

The As and HVOCs in gw "are not believed to be related to the contents of the former USTs" (engine oil, waste oil, diesel and gasoline) (see 10/29/93 USPCI letter). The source of metals and HVOCs in soil and gw is unknown; a non-point source is hypothesized (p.33). Further off-site characterization may be required. . .(page 29). **The two DG, offsite wells have gw hits.** The gw plume is concentrated around the truck repair shop area. **The lateral extent of gw contamination (HCs and As and maybe more) has not yet been totally defined.** The southern extent seems to reach the Oakland Estuary (p.33-35).

report does not indicate whether the tanks/pipes were found to be leakers. My guess is they're leakers. There's also no site map, which would've shown tanks.

4/28/93 JE spoke w/Chris Byerman and Eric Taylor of USPCI. They think the As may be due to fill. No As in the refueling area. Budgetary problems. Hope to do QM and write wp for Phase II in May. They want to define N boundary; to go S or SE would mean going offsite; it may be difficult to get permission.

Refueling area: they think they were 10,000 gallon ASTs. They'll have Denton Mauldin call me. How many mws?

4/29/93 Spoke w/Denton Mauldin of USPCI re refueling area, aka 1717 Middle harbor Rd. No USTs, just ASTs, which are no longer in use due to a) spill on 1990 and b) lawsuit vs the RR. They have 3 RWs and 10 MWs. They skimmed FP from the RWs by pumps until 5/92, when they put the pumps in the bottom of the RWs to drawdown total fluids. Total fluids pumped into oil/water separator. Oil is stored in tank(s). Water goes thru carbon, then into sewer under EBMUD permit. The ASTs did not leak; perhaps the lines of the drip pans did. There is no County contact; just RWQCB contact: Ray Balcom.

4/29/93 Wrote letter to RP acknowledging receipt of PSA, and requesting a workplan for Phase II assessment.

6/16/93 Reviewed June 1993 "Phase II Workplan" by USPCI. Includes 10 soil borings, 5 of which would be converted to MWs. Spoke w/Chris Byerman; he said they'd start close to existing MWs, and work their way out until they thought they'd hit the zero line. That's where they'd take their samples. That's why the proposed SBs are not shown on Figure 5. Since gw is between 8 and 11' bgs, they won't dig deeper than 15'bgs for soil samples (assuming contam. is found at gw level). 3 soil samples to be collected and analyzed per SB.

Wrote letter to RP accepting the Phase II Workplan.

8/23/93 Reviewed the July 1993 QR by USPCI. GW sampled on 5/12/93 flowed E-SE. There was floating (oil) product in W4 and W5 **(up to .2 or .02 inches?)**, which is new this quarter. Up to 4,200 ppb TPHd (W3) and up to 8,800 ppb TPHg (W2), and up to 320 ppb benzene (W4) in gw. Also As and chlorobenzene in gw. (As above the MCL.) TPHg has decreased; O&G and chlorobenzene increased; TPHd and benzene went up and down; looks like As increased. Extent of plume not defined. Some typos in

A0435

Site Summary STID 2044
Union Pacific Railroad
1750 Ferro St.
Oakland CA 94607

4/27/93 Began review of the April 1993 "Final Report: PSA" by USPCI. 12 SBs, 5 of which converted into MWs. GW flows SE. Depth of gw is 8 to 11 feet bgs.

Soil results:
up to 47,000 ppm TPH-d (OKUS-B4)
up to 19,000 ppm TPH-mo (OKUS-W5)
up to 154 ppm TPH-g (OKUS-B4)
up to 0.059 ppm benzene (OKUS-W3)
up to 1,300 ppm total Pb (OKUS-B7)
up to 17.20 ppm Cd (OKUS-B7)
some 8270 compounds (OKUS-W1, W2)
some 8010 compounds (OKUS-W2)

Groundwater results:
up to 14,000 ppb TPH-g (W2)
up to 4,500 ppb TPH-mo (W3)
up to 5,400 ppb TPH-d (W2)
up to 480 ppb Benzene (W2)
up to 470 ppb arsenic (W5)
up to 290 ppb chloroform (W2)
some 8270 compounds (W1 through W5)
some 8010 compounds (W2, W3, W4, W5)
TDS concentrations up to 2,510 ppm (W2)

They think the USTs are the source of gw contamination, but not necessarily the source of soil contamination. The lateral extent of soil and gw contam. is not adequately defined. They do not think that the USTs were the source of As and chloroform contaminants in gw. They recommend QM to gather info for a remediation plan, and a Phase II assessment to define the lateral extent of soil and gw contam. There is a RW in the former engine oil UST pit (not drilled; just placed in backfill). UPRR plans to begin oil recovery from the RW in the near future (see p.4).

There is a UPRR refueling area approx. 700 ft NW of the current site area under investigation (truck repair shop). GW remediation is ongoing here; diesel product is being recovered via a french drain, which discharges to an oil/water separator. The source of diesel is the refueling rack and fuel storage tanks. **Are they USTs or ASTs? If USTs, why wasn't this made LOP earlier? I don't recall reading about this situation prior to this PSA. See Appendix C of PSA: the "HC Investigation and Remedial Design . . ." dated 6/5/91 by USPCI. The**

3-23-99 Hoa Voscott of Camp Dresser + McKee Inc @ 925-296-8071 identified himself as the new contact person for 1717 Middle Harbor Rd and 1750 Ferro St, Oak. His company is contracted by the Port of Oakland to perform the environmental work. The Port has taken the property over from Union Pacific.

I asked Hoa to put in his report a summary and recommendation for future work based on the data collected. He said he would.

IMPORTANT MESSAGE

FOR: EBERLE

DATE: 1/10 TIME: 9^30 A.M. / P.M.

M: Eric Taylor

OF: 350

PHONE: 213 - ~~574~~ 7266

AREA CODE / NUMBER / EXTENSION

TELEPHONED	X	PLEASE CALL	
CAME TO SEE YOU		WILL CALL AGAIN	✓
WANTS TO SEE YOU		RUSH	
RETURNED YOUR CALL		SPECIAL ATTENTION	

MESSAGE: Talked to M. Heffes she wants my approval letter + USPCA's addendums Mr Clark - her boss ? J + WH 510 272 1348 Eric lost his copy of my approval letter.

SIGNED: LEV

LITHO IN U.S.A.

TOPS FORM 3002S

1-15-99 John Prall of the Port of Oakland informed this office that the Port ~~is responsible for~~ purchased the lease and property at 1750 Ferro St., Oak. The sale was completed on 12-24-98. The Port is responsible for the remediation, and submitting the quarterly report. Prall will send me a map identifying the portion of the parcel at 1750 Ferro St. that was purchased by the Port.

IMPORTANT MESSAGE

FOR DP

DATE 2/27 TIME 12:25 A.M. P.M.

M JOE NICHOLSON

OF USPCI

PHONE 916/921-2202
AREA CODE NUMBER EXTENSION

TELEPHONED		PLEASE CALL	X
CAME TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		RUSH	
RETURNED YOUR CALL		SPECIAL ATTENTION	

MESSAGE
1 8020 Ref Lim 1002 ppm BDC
2 — — —
3 T .005 X .025 TPHg - 0.32
4 B .008 E .007 T .005 X .012 TPH 2.13
5 B .063 T .063 X .016 TPH - BDL

SIGNED Rick Pitmans

LITHO IN U.S.A.

TOPS FORM 3002S

6-1-98 Spoke to Lisa Hennessy of Caldlaw Environmental. In regards to her company's letter dated 1-28-98, she will correct the fluid level data history of recovery well (RW) and send me the reasons why they are requesting discontinuing the operation of RW, and changing the fluid-level measurement frequency in RW from monthly to quarterly.