

## Roe, Dilan, Env. Health

---

**From:** Gary Richardson <[grichardson@ebresources.com](mailto:grichardson@ebresources.com)>  
**Sent:** Wednesday, May 25, 2016 12:33 PM  
**To:** 'Phillip Marshall'; [jmonroe@rabooherconsulting.com](mailto:jmonroe@rabooherconsulting.com)  
**Cc:** Roe, Dilan, Env. Health; Jennifer Brady; Bob Booher; Shams Hasan; Browder, Ronald, Env. Health  
**Subject:** RE: RO0003181, GIG Facility Soil Cleanup, 8477 Patterson Pass Road, Livermore

Phillip: I spoke to Jeff Monroe and asked him to check on the availability of a water truck to assist in the interim watering the trees as needed. We would, of course, only do this at your approval and direction. Also, you may have access to a water truck - if so please advise and E&B will reimburse you for the associated expenses.

Thanks, Gary

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**Subject:** Re: E&B's GIG Excavation Analytical Report  
**Attachments:** GIG Table 1\_Samples\_4-25-16.xls

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Attached table with ESLs based on third revision. Couple of changes in the metals from previous table, please observe footnotes.

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Good Afternoon Jeff:

The SFRWQCB has issued a third revision to the 2016 ESL (attached). Please verify that the ESLs listed in the table reflect the most recent revisions to facilitate review and approval of the backfill material.

Changes in Revision 3 include:

1. Correction to the non-cancer hazard formula for the "any land use, construction worker soil exposure scenario" (Table S-1). Revision 2 corrected the ingestion and dermal formulas while Revision 3 is now correcting the inhalation formula. This current revision makes several of the noncarcinogenic metals (e.g., barium, beryllium, nickel, and vanadium) the risk driver for the Tier 1 soil ESLs, as was the case originally.
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3. Adoption of the oral reference dose (RfD) toxicity value for vanadium given in the RSL user's guide, which is based on taking the IRIS RfD for vanadium pentoxide and factoring out the molecular weight of the oxide ion. This lowers the non-cancer risk based ESLs for direct exposure to groundwater and soil.

**Table 1**  
**4/20/16 Excavation and Clean Fill (CF) Sample Analytical Summary/ESLs**

Sample ID Depth	Date Sampled	TPHq	TPHd	TPHmo	VOC's B260	Semi-VOC's B270	CAM 17 Metals (TTLc)																
							Sb	As <sup>AA</sup>	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
XB8-13.0	4/20/2016	ND<1	150	830	ND<.005	ND<.1	ND<.2	2.5	290	0.29	ND<.04	15	5.4	7.2	3.9	ND<.05	ND<.05	14	ND<.3	0.16	ND<.5	28	23
SW49-d7.5	4/20/2016	ND<1	6.1	53	ND<.005	ND<.1	ND<.2	2.5	290	0.43	ND<.04	25	6.8	9.7	5.1	ND<.05	ND<.05	22	ND<.3	0.16	ND<.5	36	31
SW50-d11.5	4/20/2016	ND<1	16	130	ND<.005	ND<.1	ND<.2	3	360	0.39	ND<.04	23	8.7	11	5.2	ND<.05	ND<.05	24	ND<.3	0.12	ND<.5	33	30
SW51-d8.0	4/20/2016	ND<1	4.4	25	ND<.005	ND<.1	ND<.2	1.9	200	0.43	ND<.04	25	6.9	9.5	4.9	ND<.05	ND<.05	24	ND<.3	0.2	ND<.5	32	31
SW52-d11.0	4/20/2016	ND<1	ND<20	ND<20	ND<.005	ND<.1	ND<.2	3	470	0.53	ND<.04	30	8.9	13	6.3	ND<.05	ND<.05	30	ND<.3	0.17	ND<.5	41	41
SW53-d7.5	4/20/2016	ND<1	ND<10	17	ND<.005	ND<.1	ND<.2	2.7	310	0.51	ND<.04	30	10	14	6.6	ND<.05	ND<.05	27	ND<.3	0.19	ND<.5	37	40
SW54-d12.0	4/20/2016	ND<1	230	1100	ND<.005	ND<.1	<.2	1.8	120	0.15	ND<.04	8	3.1	4.3	2.4	ND<.05	0.071	7.7	ND<.3	ND<.05	ND<.5	16	14
SW55-d6.5	4/20/2016	19	1300	1100	*1	**1	ND<.2	2.6	320	0.35	ND<.04	20	8.3	10	5.2	ND<.05	ND<.05	22	ND<.3	0.062	ND<.5	29	28
SW56-d12.0	4/20/2016	ND<1	ND<10	ND<20	ND<.005	ND<.1	ND<.2	3.5	360	0.37	ND<.04	18	6.8	10	4.9	ND<.05	ND<.05	17	ND<.3	0.18	ND<.5	33	27
SW57-d8.0	4/20/2016	ND<1	5.1	35	ND<.005	ND<.1	ND<.2	2.2	190	3.5	ND<.04	16	6	8.6	4.4	ND<.05	ND<.05	18	ND<.3	0.096	ND<.5	25	24
SW58-d6.5	4/20/2016	2.4	240	250	**2	**2	ND<.2	2.4	220	0.41	ND<.04	24	6.8	8.8	5.1	ND<.05	ND<.05	23	ND<.3	0.19	ND<.5	33	30
SW59-d10.0	4/20/2016	86	1700	1700	**3	**3	ND<.2	3.5	300	0.37	ND<.04	19	6.5	9.7	4.6	ND<.05	ND<.05	18	ND<.3	0.19	ND<.5	33	27
SW60-d13.0	4/20/2016	ND<1	91	450	ND<.005	ND<.1	ND<.2	4.2	200	0.23	ND<.04	11	4.7	6.2	4.6	ND<.05	0.15	11	ND<.3	0.066	ND<.5	22	19
SW61-d12.0	4/20/2016	ND<1	ND<10	ND<20	ND<.005	ND<.1	ND<.2	2.8	350	0.35	ND<.04	18	6.3	8.9	4.6	ND<.05	ND<.05	18	ND<.3	0.16	ND<.5	31	27
SW62-d8.0	4/20/2016	ND<1	ND<10	ND<20	ND<.005	ND<.1	ND<.2	2.1	210	0.27	ND<.04	13	4.1	7.3	3.3	ND<.05	<.05	15	ND<.3	0.17	ND<.5	24	21
SW63-d6.0	4/20/2016	ND<1	ND<10	ND<20	ND<.005	ND<.1	ND<.2	2.8	260	0.4	ND<.04	23	7.8	9.3	5	ND<.05	<.05	22	ND<.3	0.23	ND<.5	35	29
SW64-d14.0	4/20/2016	ND<1	ND<10	ND<20	ND<.005	ND<.1	ND<.2	2.3	270	0.33	ND<.04	17	5.6	7.9	4.3	ND<.05	ND<.05	16	ND<.3	0.2	ND<.5	29	26
CF6	4/20/2016	ND<1	ND<10	ND<20	ND<.005	ND<.1	ND<.2	2.5	100	0.33	0.11	46	11	31	6.6	0.072	ND<.05	42	ND<.3	0.22	1.5	49	45
CF7	4/20/2016	ND<1	ND<10	19	ND<.005	ND<.1	ND<.2	2.6	30	0.25	0.29	42	4.3	7.2	4.2	ND<.05	0.3	31	ND<.3	0.13	ND<.5	27	30
SFB-RWQCB ESL's		100	230	5100	Various <sup>A</sup>	Various <sup>A</sup>	31	0.067	3000	42	39	120000#	23	3100	80	13	390	86	390	390	0.78	390	2300

**NOTES:**

Analytical Results in mg/kg. TPH = Total Petroleum Hydrocarbons; VOC = Volatile Organic Compounds  
 ND = Not Detected at or above Laboratory Detection Limits  
 ESL = Environmental Screening Limits based on Tier 1 SFB-RWQCB Feb 2016 (3rd Revision)  
 Concentration in red if exceeded ESL

<sup>A</sup> There were no detections of VOC or SVOC compounds that exceeded the published SFB-RWQCB ESL for these compounds.

<sup>\*\*1</sup>: n-Butylbenzene 0.079, sec-Butylbenzene 0.32, tert-Butylbenzene 0.036 (Lowest ESL for Benzene 440mg/kg)

<sup>\*\*2</sup>: Fluorene 1.8, 2-Methylnaphthalene 0.97, Phenanthrene 2.8 (Lowest ESL for Phenanthrene 11mg/kg)

<sup>\*\*3</sup>: bis(2-Ethylhexyl)phthalate 0.077, Phenanthrene 0.58

<sup>\*\*4</sup>: n-Butylbenzene 0.13, sec-Butylbenzene 0.32, tert-Butylbenzene 0.037, Isopropylbenzene 0.53, Naphthalene 0.18, n-Propylbenzene 0.63

<sup>\*\*5</sup>: Fluorene 1.8, 2-Methylnaphthalene 1.1, Phenanthrene 3.2

# Total Chromium has no limit, ESL shown is for Chromium III, Chromium VI ESL is 0.3

Fish-Bioassay run for CF6 and CF7, results passed

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**Dilan Roe, P.E.**

*Program Manager – Land Use Program, Local Oversight Program, & Voluntary Remedial Action Program*

Alameda County Department of Environmental Health

1131 Harbor Bay Parkway

Alameda, CA

510.567.6767; Ext. 36767

QIC: 30440

[dilan.roe@acgov.org](mailto:dilan.roe@acgov.org)

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**Sent:** Monday, May 23, 2016 7:35 AM

**To:** Roe, Dilan, Env. Health <Dilan.Roe@acgov.org>

**Subject:** Re: E&B's GIG Excavation Analytical Report

Dilan,

Attached analytical summary table with current (February 2016) ESLs from Tier 1, SFBRWQCB risk assessments in shallow soils. A fish-bioassay was also run for clean fill samples CF6 and CF7 and both passed. The only samples that exceeded ESLs for chemicals analyzed were samples collected in the vicinity of the power pole, the sidewall samples SW55-d6.5, SW58-6.5 and SW59-d10.0, each of these exceeded ESLs for diesel only.

Thanks,

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**Sent:** Friday, May 20, 2016 2:44 PM

**Subject:** RE: E&B's GIG Excavation Analytical Report

Hi Jeff:

My time is really limited so as previously requested, in order to facilitate review of the proposed backfill material, please submit a summary table for the applicable samples along with screening levels.

Thanks,

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*Program Manager – Land Use Program, Local Oversight Program, & Voluntary Remedial Action Program*

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All -

I am just checking in to see where we stand on the backfill of the excavation/continued remediation activities. My understanding was that this was to be completed prior to submission of the report to ACDEH this Friday.

Also would like to know where we all stand on fully remediating the site. I read Gary's response to my email, and consider this contamination of my property to be a circumstance that warrants remediation at this point.

All things being considered, I am becoming very anxious on the completion of this project. The irrigation on my berm adjacent to the facility is off due to the multiple breaks in the line that were caused by this excavation. I may start to lose my trees (some are 100+ yr old trees) in this area if we don't get this project wrapped up in a timely manner.

Please provide me with a status update at the earliest possible moment so I have a better understanding as to when this work will be complete.

Best,

Phillip