

Scott Schoeman
PaulsCorp, LLC
100 St. Paul Street, Suite 300
Denver, CO 80206

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By Alameda County Environmental Health 1:40 pm, Jul 17, 2017

Ms. Dilan Roe
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: 1233 Bockman Road – Acknowledgement Statement
San Lorenzo, California
ACEH Case No. 3239

Dear Ms. Roe:

PaulsCorp, LLC, has retained the environmental consultant referenced on the attached report for the project referenced above. The attached report is being submitted on PaulsCorp's, LLC, behalf.

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the State Water Resources Control Board's GeoTracker website.

Sincerely,



Scott Schoeman
Development Associate



July 14, 2017

Ms. Dilan Roe
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Remediation Implementation Letter**
1233 Bockman Road (East Sector)
San Lorenzo, California
ACDEH Case No. RO00003239

Dear Ms. Roe:

On behalf of PaulsCorp, LLC, PANGEA Environmental Services, Inc. (PANGEA) has prepared this *Remediation Implementation Letter* to inform your agency that the remediation scope from the *Remedial Design and Implementation Plan* (RDIP) has been fully completed at 1233 Bockman Road (East Sector) in San Lorenzo, California (Site). During our July 13, 2017 meeting, you requested this letter before your agency would endorse issuance of grading and foundation permits for the final construction area of Buildings 6, 7, 9 and 10 within the East Sector of the site.

PaulsCorp has requested agency endorsement for site grading and foundation work to proceed at PaulsCorps' risk. PaulsCorp understands that your agency may have additional remediation/mitigation requirements before full vertical building permit issuance after agency review of the future technical report documenting full implementation of the RDIP. A brief summary of RDIP implementation is presented below.

Remedial Excavation

Between June 19 and July 3, 2017, PANGEA oversaw remedial excavations to address the primary residual PCE and ethylbenzene impact at the Site. The excavation and soil reuse area are shown on Figure 1. Excavation activities were conducted by DCI Construction Inc. of Walnut Creek, California and Diablo General Engineering (DGE) of Concord, California. To address residual PCE impact, an area of soil approximately 15 feet (ft) wide by 160 ft long and 6.5 ft deep was excavated within the axis of the PCE soil gas plume resulting in the removal of approximately 580 bank cubic yards (BCY) of soil (approximately 870 tons of soil assuming 1.5 tons/bcy). To address the residual ethylbenzene impact, an area of soil 20 ft x 25 ft by 6.5 ft deep was excavated resulting in the removal of approximately 120 BCY of soil or approximately 180 tons of soil.

Stockpiling, Field Screening, and Soil Reuse/Disposal

During excavation, soil was removed and stockpiled in lifts corresponding to different soil types and proximity to the former dry cleaner and the capillary fringe. This approach yielded eight total stockpiles. The long narrow PCE excavation was subdivided into three 50 to 60 ft long sections and identified as Batch 1, Batch 2 and Batch 3 to facilitate soil screening for reuse. Soil from the ethylbenzene excavation was identified as Batch 4.

PANGEA Environmental Services, Inc.

1710 Franklin Street, Suite 200, Oakland, CA 94612 Telephone 510.836.3700 Facsimile 510.836.3709 www.pangeaenv.com

All generated soil stockpiles were covered with plastic and the resulting headspace screened for volatile organic compounds (VOCs) using a photo-ionization detector (PID). PID field screening detected VOCs up to 1.2 parts per million per volume (ppmv) in soil from Batch 1 soil located within the footprint of the former dry cleaners. As result, all soil excavated from Batch 1 beneath the former dry cleaner location (approximately 150 BCY, 225 tons) was deemed unacceptable for onsite reuse and was transported offsite for disposal at Alameda's Chuck Corica Golf Complex.

No VOCs were detected using a PID in final field screening of surface gravelly material from approximately 0 to 1 ft depth or from soil from Batches 2, 3 and 4. These batches were more distant from the former dry cleaner area. Seven confirmation soil samples were subsequently collected from surface gravel and Batches 2, 3 and 4 by EPA Method 5035 (e.g., TerraCore™) and submitted for analysis of VOCs by EPA Method 8260B at a California-certified laboratory. No VOCs were detected in any of confirmation soil samples (with the exception of very low levels of acetone), and therefore the soil was deemed acceptable for reuse and used as backfill for the excavation consistent with the RDIP. All shallow gravel and soil from Batches 2, 3 and 4 was reused within the excavation cavity for the RDIP implementation (No soil remained stockpiled and no soil was used for backfill or grading elsewhere at the Site). While PANGEA observed backfilling of reused soil, all compaction and testing was conducted and managed by DGE and Langan Engineering and Environmental Services, Inc. of San Francisco, California. No imported fill was used for backfilling.

Air and Dust Monitoring

During soil excavation, backfilling, and off hauling, air monitoring was conducted consistent with the procedures outlined in the RDIP and the *Site and Perimeter Air Monitoring, and Dust Mitigation Plan* dated November 16, 2017. To monitor for VOCs, a portable PID was used to measure VOC levels in air near soil work activities as necessary for worker health and safety during onsite excavation activities. No VOC levels were measured above 50 ppmv action level so no mitigation measures were required or implemented.

Dust monitoring was conducted continuously next to the excavation activities using a portable dust meter and also at a downwind perimeter location on the east property boundary using a fixed tripod-mounted dust meter station. Particulate matter (PM₁₀) concentrations along with wind speed and direction were measured and documented on preformatted data field sheets and continuously recorded on daily dust monitoring logs generated from the perimeter dust meter station.

Dust from the Site was consistently maintained below the PM₁₀ target level of 50 µg/m³ (above background) at the perimeter downwind dust monitoring station, with the rare spike lasting less than 1 minute in accordance with PANGEA's *Dust Mitigation Plan*. To reduce dust, the excavation area and nearby graded surfaces were wetted with water and traffic through the work area was prevented or limited to a speed of 15 miles per hour.

During excavation activities, a dust complaint was received on June 20, 2017 from a resident located east of the Site approximately 40 ft from the downwind perimeter station. PANGEA's *Air and Dust Monitoring Log* and the *Perimeter Station Data Log* from the day of the complaint showed very low dust levels throughout the day (average of 8 ug/m³) and well below the PM₁₀ dust target level of 50 ug/m³. Dust monitoring data from June 20, 2017 is included in Appendix A.

Future Grading

With all remedial excavation completed, dust monitoring and control during future grading activities will be consistent with the *Soil Management Plan (SMP)* dated May 16, 2016 and revised June 27, 2016. These monitoring and control procedures are consistent with requirements of the Bay Area Air Quality Management District.

Closing

A *Remedial Completion Report* documenting all field activities will prepared under a separate cover. If you have any questions or comments, please call me at (510) 435-8664 or email briddell@pangeaenv.com.

Sincerely,
PANGEA Environmental Services, Inc.



Bob Clark-Riddell, P.E.
Principal Engineer



Attachments

- Figure 1 - Remedial Soil Excavation
- Appendix A - Air Monitoring Field Data for June 20, 2017

APPENDIX A

Dust Monitoring Data – June 20, 2017

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530133701
Firmware Version	3.4
Calibration Date	11/30/2016
Test Name	TEST 1_002
Test Start Time	8:03:35 AM
Test Start Date	6/20/2017
Test Length [D:H:M]	0:06:12
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.008
Mass Minimum [mg/m3]	0.004
Mass Maximum [mg/m3]	0.069
Mass TWA [mg/m3]	0.006
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	372

	Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
8:03:35 AM	60	0.008		
8:04:35 AM	120	0.008		
8:05:35 AM	180	0.007		
8:06:35 AM	240	0.007		
8:07:35 AM	300	0.012		
8:08:35 AM	360	0.008		
8:09:35 AM	420	0.015		
8:10:35 AM	480	0.008		
8:11:35 AM	540	0.006		
8:12:35 AM	600	0.006		
8:13:35 AM	660	0.006		
8:14:35 AM	720	0.006		
8:15:35 AM	780	0.008		
8:16:35 AM	840	0.007		
8:17:35 AM	900	0.006		
8:18:35 AM	960	0.015		
8:19:35 AM	1020	0.008		
8:20:35 AM	1080	0.005		
8:21:35 AM	1140	0.005		
8:22:35 AM	1200	0.005		
8:23:35 AM	1260	0.008		
8:24:35 AM	1320	0.01		
8:25:35 AM	1380	0.008		
8:26:35 AM	1440	0.01		
8:27:35 AM	1500	0.006		
8:28:35 AM	1560	0.006		
8:29:35 AM	1620	0.005		

8:30:35 AM	1680	0.008
8:31:35 AM	1740	0.006
8:32:35 AM	1800	0.007
8:33:35 AM	1860	0.007
8:34:35 AM	1920	0.007
8:35:35 AM	1980	0.006
8:36:35 AM	2040	0.007
8:37:35 AM	2100	0.008
8:38:35 AM	2160	0.007
8:39:35 AM	2220	0.006
8:40:35 AM	2280	0.006
8:41:35 AM	2340	0.006
8:42:35 AM	2400	0.008
8:43:35 AM	2460	0.006
8:44:35 AM	2520	0.009
8:45:35 AM	2580	0.007
8:46:35 AM	2640	0.013
8:47:35 AM	2700	0.01
8:48:35 AM	2760	0.009
8:49:35 AM	2820	0.007
8:50:35 AM	2880	0.006
8:51:35 AM	2940	0.006
8:52:35 AM	3000	0.006
8:53:35 AM	3060	0.007
8:54:35 AM	3120	0.006
8:55:35 AM	3180	0.006
8:56:35 AM	3240	0.006
8:57:35 AM	3300	0.006
8:58:35 AM	3360	0.006
8:59:35 AM	3420	0.007
9:00:35 AM	3480	0.007
9:01:35 AM	3540	0.005
9:02:35 AM	3600	0.006
9:03:35 AM	3660	0.009
9:04:35 AM	3720	0.018
9:05:35 AM	3780	0.007
9:06:35 AM	3840	0.008
9:07:35 AM	3900	0.006
9:08:35 AM	3960	0.006
9:09:35 AM	4020	0.007
9:10:35 AM	4080	0.007
9:11:35 AM	4140	0.005
9:12:35 AM	4200	0.009
9:13:35 AM	4260	0.008
9:14:35 AM	4320	0.009
9:15:35 AM	4380	0.006
9:16:35 AM	4440	0.006

9:17:35 AM	4500	0.011
9:18:35 AM	4560	0.005
9:19:35 AM	4620	0.008
9:20:35 AM	4680	0.008
9:21:35 AM	4740	0.005
9:22:35 AM	4800	0.006
9:23:35 AM	4860	0.007
9:24:35 AM	4920	0.007
9:25:35 AM	4980	0.011
9:26:35 AM	5040	0.009
9:27:35 AM	5100	0.006
9:28:35 AM	5160	0.006
9:29:35 AM	5220	0.007
9:30:35 AM	5280	0.013
9:31:35 AM	5340	0.007
9:32:35 AM	5400	0.011
9:33:35 AM	5460	0.008
9:34:35 AM	5520	0.008
9:35:35 AM	5580	0.007
9:36:35 AM	5640	0.011
9:37:35 AM	5700	0.02
9:38:35 AM	5760	0.008
9:39:35 AM	5820	0.006
9:40:35 AM	5880	0.007
9:41:35 AM	5940	0.007
9:42:35 AM	6000	0.009
9:43:35 AM	6060	0.013
9:44:35 AM	6120	0.01
9:45:35 AM	6180	0.01
9:46:35 AM	6240	0.021
9:47:35 AM	6300	0.018
9:48:35 AM	6360	0.015
9:49:35 AM	6420	0.005
9:50:35 AM	6480	0.018
9:51:35 AM	6540	0.016
9:52:35 AM	6600	0.006
9:53:35 AM	6660	0.005
9:54:35 AM	6720	0.008
9:55:35 AM	6780	0.009
9:56:35 AM	6840	0.009
9:57:35 AM	6900	0.008
9:58:35 AM	6960	0.007
9:59:35 AM	7020	0.008
10:00:35 AM	7080	0.008
10:01:35 AM	7140	0.011
10:02:35 AM	7200	0.02
10:03:35 AM	7260	0.009

10:04:35 AM	7320	0.006
10:05:35 AM	7380	0.007
10:06:35 AM	7440	0.006
10:07:35 AM	7500	0.005
10:08:35 AM	7560	0.006
10:09:35 AM	7620	0.011
10:10:35 AM	7680	0.007
10:11:35 AM	7740	0.005
10:12:35 AM	7800	0.005
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10:14:35 AM	7920	0.005
10:15:35 AM	7980	0.005
10:16:35 AM	8040	0.005
10:17:35 AM	8100	0.006
10:18:35 AM	8160	0.006
10:19:35 AM	8220	0.005
10:20:35 AM	8280	0.005
10:21:35 AM	8340	0.007
10:22:35 AM	8400	0.006
10:23:35 AM	8460	0.007
10:24:35 AM	8520	0.005
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10:26:35 AM	8640	0.008
10:27:35 AM	8700	0.006
10:28:35 AM	8760	0.005
10:29:35 AM	8820	0.005
10:30:35 AM	8880	0.015
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10:32:35 AM	9000	0.005
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10:37:35 AM	9300	0.008
10:38:35 AM	9360	0.007
10:39:35 AM	9420	0.012
10:40:35 AM	9480	0.007
10:41:35 AM	9540	0.005
10:42:35 AM	9600	0.005
10:43:35 AM	9660	0.005
10:44:35 AM	9720	0.006
10:45:35 AM	9780	0.007
10:46:35 AM	9840	0.007
10:47:35 AM	9900	0.006
10:48:35 AM	9960	0.008
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10:54:35 AM	10320	0.007
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10:56:35 AM	10440	0.01
10:57:35 AM	10500	0.006
10:58:35 AM	10560	0.008
10:59:35 AM	10620	0.007
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11:01:35 AM	10740	0.008
11:02:35 AM	10800	0.011
11:03:35 AM	10860	0.013
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11:06:35 AM	11040	0.01
11:07:35 AM	11100	0.011
11:08:35 AM	11160	0.006
11:09:35 AM	11220	0.004
11:10:35 AM	11280	0.006
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11:38:35 AM	12960	0.005
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11:55:35 AM	13980	0.005
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11:59:35 AM	14220	0.005
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12:01:35 PM	14340	0.005
12:02:35 PM	14400	0.005
12:03:35 PM	14460	0.005
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12:05:35 PM	14580	0.005
12:06:35 PM	14640	0.007
12:07:35 PM	14700	0.005
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12:13:35 PM	15060	0.01
12:14:35 PM	15120	0.006
12:15:35 PM	15180	0.006
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12:17:35 PM	15300	0.006
12:18:35 PM	15360	0.008
12:19:35 PM	15420	0.01
12:20:35 PM	15480	0.008
12:21:35 PM	15540	0.006
12:22:35 PM	15600	0.009
12:23:35 PM	15660	0.015
12:24:35 PM	15720	0.01

12:25:35 PM	15780	0.007
12:26:35 PM	15840	0.008
12:27:35 PM	15900	0.011
12:28:35 PM	15960	0.007
12:29:35 PM	16020	0.009
12:30:35 PM	16080	0.008
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12:34:35 PM	16320	0.009
12:35:35 PM	16380	0.008
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12:38:35 PM	16560	0.008
12:39:35 PM	16620	0.008
12:40:35 PM	16680	0.025
12:41:35 PM	16740	0.055
12:42:35 PM	16800	0.01
12:43:35 PM	16860	0.007
12:44:35 PM	16920	0.005
12:45:35 PM	16980	0.007
12:46:35 PM	17040	0.005
12:47:35 PM	17100	0.004
12:48:35 PM	17160	0.006
12:49:35 PM	17220	0.005
12:50:35 PM	17280	0.008
12:51:35 PM	17340	0.015
12:52:35 PM	17400	0.011
12:53:35 PM	17460	0.006
12:54:35 PM	17520	0.01
12:55:35 PM	17580	0.008
12:56:35 PM	17640	0.007
12:57:35 PM	17700	0.005
12:58:35 PM	17760	0.007
12:59:35 PM	17820	0.014
1:00:35 PM	17880	0.009
1:01:35 PM	17940	0.011
1:02:35 PM	18000	0.008
1:03:35 PM	18060	0.006
1:04:35 PM	18120	0.008
1:05:35 PM	18180	0.005
1:06:35 PM	18240	0.008
1:07:35 PM	18300	0.008
1:08:35 PM	18360	0.008
1:09:35 PM	18420	0.007
1:10:35 PM	18480	0.008
1:11:35 PM	18540	0.01

1:12:35 PM	18600	0.008
1:13:35 PM	18660	0.009
1:14:35 PM	18720	0.005
1:15:35 PM	18780	0.005
1:16:35 PM	18840	0.005
1:17:35 PM	18900	0.006
1:18:35 PM	18960	0.005
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1:20:35 PM	19080	0.005
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1:25:35 PM	19380	0.005
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1:27:35 PM	19500	0.009
1:28:35 PM	19560	0.005
1:29:35 PM	19620	0.005
1:30:35 PM	19680	0.005
1:31:35 PM	19740	0.007
1:32:35 PM	19800	0.008
1:33:35 PM	19860	0.009
1:34:35 PM	19920	0.01
1:35:35 PM	19980	0.013
1:36:35 PM	20040	0.015
1:37:35 PM	20100	0.016
1:38:35 PM	20160	0.005
1:39:35 PM	20220	0.008
1:40:35 PM	20280	0.009
1:41:35 PM	20340	0.006
1:42:35 PM	20400	0.008
1:43:35 PM	20460	0.007
1:44:35 PM	20520	0.014
1:45:35 PM	20580	0.013
1:46:35 PM	20640	0.012
1:47:35 PM	20700	0.012
1:48:35 PM	20760	0.008
1:49:35 PM	20820	0.006
1:50:35 PM	20880	0.007
1:51:35 PM	20940	0.007
1:52:35 PM	21000	0.014
1:53:35 PM	21060	0.008
1:54:35 PM	21120	0.009
1:55:35 PM	21180	0.006
1:56:35 PM	21240	0.019
1:57:35 PM	21300	0.025
1:58:35 PM	21360	0.007

1:59:35 PM	21420	0.008
2:00:35 PM	21480	0.006
2:01:35 PM	21540	0.005
2:02:35 PM	21600	0.005
2:03:35 PM	21660	0.006
2:04:35 PM	21720	0.006
2:05:35 PM	21780	0.005
2:06:35 PM	21840	0.006
2:07:35 PM	21900	0.006
2:08:35 PM	21960	0.008
2:09:35 PM	22020	0.008
2:10:35 PM	22080	0.005
2:11:35 PM	22140	0.007
2:12:35 PM	22200	0.069
2:13:35 PM	22260	0.049
2:14:35 PM	22320	0.015