



# South Coast Air Quality Management District

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September 08, 2017

Mr. Steve Rossi  
Lubeco Inc.  
6859 Downey Avenue  
Long Beach, CA 90805-1919

*Via Email, Certified Mail and return receipt*

**Subject:** Notice that Lubeco, Inc. (Facility ID 41229) May Be Designated a Potentially High Risk Level Facility

Pursuant to SCAQMD Rule 1402(g), the SCAQMD is notifying you that Lubeco may be designated as a Potentially High Risk Level Facility.<sup>1</sup> As discussed later, the SCAQMD has monitored extremely high levels of hexavalent chromium, a highly toxic chemical, in the vicinity of your facility. Additionally, source tests conducted for hexavalent chromium immediate emissions from a heated sodium dichromate seal tank at Lubeco were modeled and the resulting cancer risk to the nearest resident exceeded 100 per one million. Based on further information gathered independently and from your facility, the SCAQMD may later designate your facility as a Potentially High Risk Level Facility. If your facility is designated as a Potentially High Risk Level Facility, you will be required to expeditiously reduce risks and provide reports on your toxic emissions and potential health risks to the surrounding community. Details regarding the evidence regarding this designation and possible next steps are described below.

## **Summary of Available Information Regarding Air Quality Impacts From Lubeco**

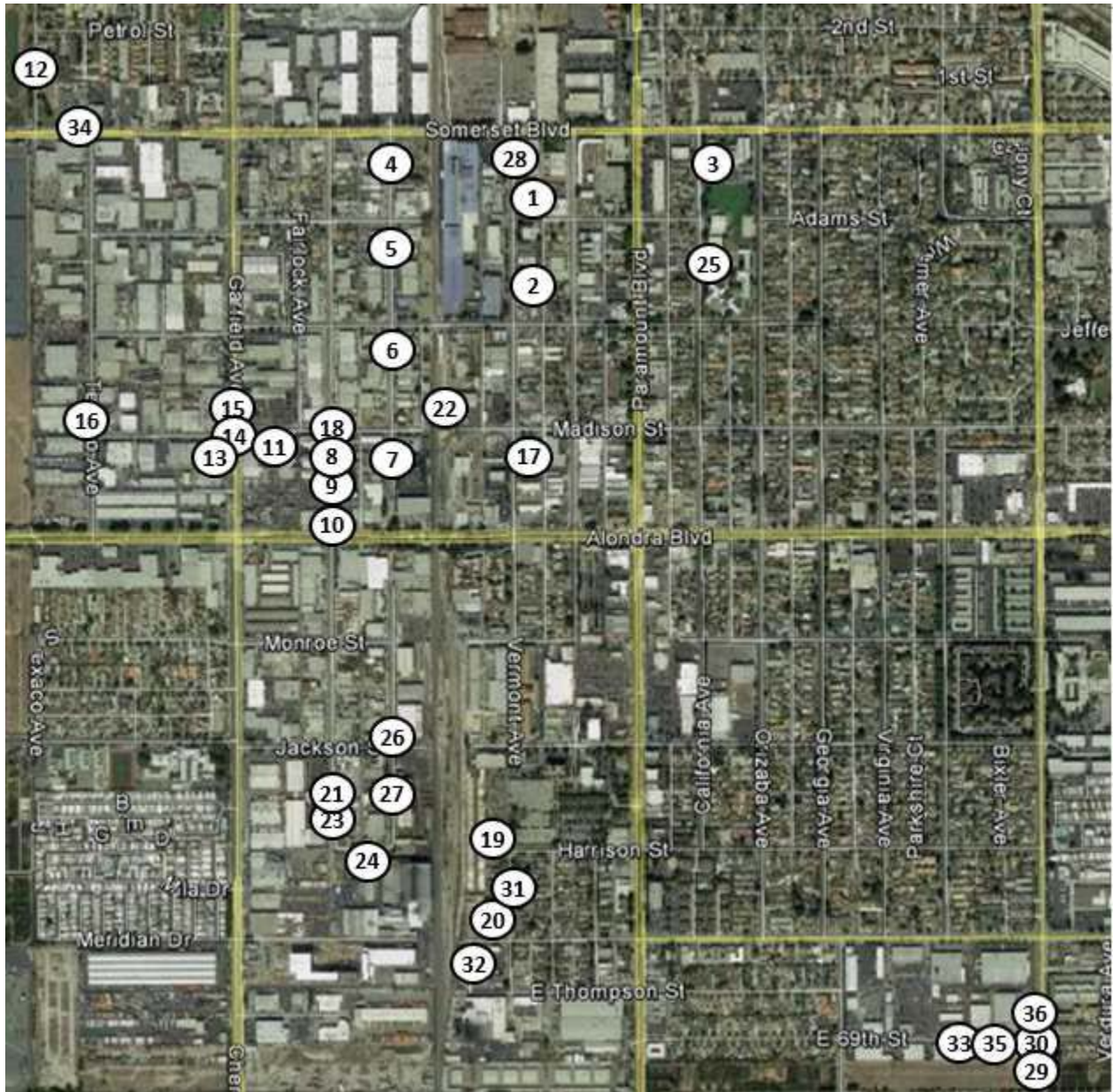
### Ambient Air Quality Monitoring Data

SCAQMD staff began monitoring in a Paramount neighborhood in late 2013 and due to increasing levels of hexavalent chromium [Cr (VI)] at these monitors in the past year, expanded its monitoring efforts in upwind industrial areas beginning October 15, 2016. Figure 1 below shows the location of the various air monitors. SCAQMD has been collecting air samples at Sites #2 and #3 since 2013, Sites #28 through #34 since early May, and added Sites #31 through #36 between mid-June to early August, 2017. As seen in Table 1, the levels that were recently recorded nearest your facility (e.g., Sites #29, #30, and #33) are substantially higher than typical background levels.<sup>2</sup> In general, higher concentrations are most typically found closest to the source of emissions.

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<sup>1</sup> Pursuant to Rule 1402(c)(14), a Potentially High Risk Level Facility is a facility for which the Executive Officer has determined that emissions data, ambient data, or data from a previously approved Health Risk Assessment indicate that the facility has a likely potential to either exceed or has exceeded a Significant Risk Level. A Significant Risk Level for purposes of this letter is a cancer risk to surrounding areas of greater than 100 chances in a million. <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1402.pdf>

Figure 1 – Map of Air Monitoring Sites in Paramount



The average level of hexavalent chromium monitored at the site with the highest concentration next to Lubeco (Site #29) is 1.43 ng/m<sup>3</sup>. Over many years, this level would present a cancer risk to offsite workers substantially higher than the Rule 1402 (c)(19) significance risk threshold of 100 chances per million.

**Table 1 – Hexavalent Chromium Air Monitoring Results (ng/m<sup>3</sup>)**

Sample Date	Site #2	Site #3	Site #28	Site #29**	Site #30	Site #31	Site #32	Site #33	Site #34	Site #35	Site #36
Sat, May 13, 2017	0.03	0.56	0.18	0.20	0.22	N/A	N/A	N/A	N/A	N/A	N/A
Tue, May 16, 2017	0.18	---	Invalid	Invalid	Invalid	N/A	N/A	N/A	N/A	N/A	N/A
Fri, May 19, 2017	0.32	0.17	0.62	0.93	0.30	N/A	N/A	N/A	N/A	N/A	N/A
Mon, May 22, 2017	0.32	---	0.76	1.95	1.16	N/A	N/A	N/A	N/A	N/A	N/A
Thu, May 25, 2017	0.05	NS	0.69	0.41	0.27	N/A	N/A	N/A	N/A	N/A	N/A
Sun, May 28, 2017	0.02	---	0.45	0.45	0.07	N/A	N/A	N/A	N/A	N/A	N/A
Wed, May 31, 2017	0.18	NS	0.85	1.19	0.56	N/A	N/A	N/A	N/A	N/A	N/A
Sat, Jun 3, 2017	0.03	---	0.40	0.09	0.11	N/A	N/A	N/A	N/A	N/A	N/A
Tue, Jun 6, 2017	0.04	0.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wed, Jun 7, 2017	N/A	N/A	1.63	1.58	0.60	N/A	N/A	N/A	N/A	N/A	N/A
Fri, Jun 9, 2017	0.58	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mon, Jun 12, 2017	0.23	0.18	1.27	0.46	0.25^	N/A	N/A	N/A	N/A	N/A	N/A
Thu, Jun 15, 2017	0.19	---	0.87	2.64	2.44	N/A	N/A	N/A	N/A	N/A	N/A
Sun, Jun 18, 2017	0.20	0.92	0.15	0.10^	0.14	0.67	N/A	N/A	N/A	N/A	N/A
Wed, Jun 21, 2017	0.14	---	0.46^	2.39	0.99	0.33	0.25	N/A	N/A	N/A	N/A
Sat, Jun 24, 2017	0.30	0.09	0.40	2.55	0.18^	0.31	0.12	N/A	N/A	N/A	N/A
Tue, Jun 27, 2017	0.29	---	1.06	1.19	0.89	Invalid	0.60	N/A	N/A	N/A	N/A
Fri, Jun 30, 2017	0.24	0.59	0.94	0.13	1.12	0.33	2.31	N/A	N/A	N/A	N/A
Mon, Jul 3, 2017	0.29	---	1.40	1.16	0.75	2.07	0.21^	N/A	N/A	N/A	N/A
Thu, Jul 6, 2017	0.31	0.37	0.80	0.26	0.34	0.41	0.88	0.77	N/A	N/A	N/A
Sun, Jul 9, 2017	0.04	---	0.29	1.44	0.12	3.44	3.21	0.09	N/A	N/A	N/A
Wed, Jul 12, 2017	0.70	0.12	0.72	0.28	0.22	1.41^	2.99	4.79	N/A	N/A	N/A
Sat, Jul 15, 2017	0.17	---	2.08^	0.34	0.09	Invalid	0.81	0.10	N/A	N/A	N/A
Tue, Jul 18, 2017	0.72	0.41	7.40	5.96	4.46^	3.71	5.82	4.02	N/A	N/A	N/A
Fri, Jul 21, 2017	0.36	---	0.60^	0.15	0.84	0.76	Invalid^	Invalid	2.65	N/A	N/A
Mon, Jul 24, 2017	0.61	0.44	0.48	2.15	1.59	0.81	0.45^	2.26	0.14	N/A	N/A
Thu, Jul 27, 2017	0.71	---	2.75	15.44	2.62	1.62^	0.83	1.42	1.75	N/A	N/A
Sun, Jul 30, 2017	0.44	0.26	0.10	3.00	0.17	0.34	0.70	0.09	1.44	N/A	N/A
Wed, Aug 2, 2017	0.31	---	0.41	0.48	0.18	0.39	1.04	0.20	1.71	N/A	N/A
Sat, Aug 5, 2017	0.07	0.07	Invalid	0.20	0.19	0.33	0.34	0.19	0.21	N/A	N/A
Tue, Aug 8, 2017	0.29	---	0.33	0.29	0.24	0.39	0.63	0.15	0.15	N/A	N/A
Fri, Aug 11, 2017	0.66	0.16	0.53	0.26	N/A	0.39	0.78	N/A	0.26	0.28	0.24^
Mon, Aug 14, 2017	0.04	---	0.16	1.20	N/A	0.42	0.50	N/A	0.22	1.57	0.42^
Thu, Aug 17, 2017	0.07	0.09	0.33	0.30	N/A	0.57^	0.67	N/A	0.19	0.40	0.25^
Sun, Aug 20, 2017	0.37	---	0.61^	0.24	N/A	0.36	0.83	N/A	0.14	0.25	0.17
Wed, Aug 23, 2017	0.37	---	0.61^	0.24	N/A	0.36	0.83	N/A	0.14	0.25	0.17
Sat, Aug 26, 2017	0.26	0.37	0.66	0.28	N/A	0.65	0.65	N/A	0.22	0.26	0.32
Tue, Aug 29, 2017	0.03	---	0.32^	0.15	N/A	0.41	0.48	N/A	0.12	0.15	0.14
Fri, Sep 1, 2017	0.07	0.53	0.69	0.19^	N/A	0.46	0.34	N/A	0.12	0.15	0.17
Mon, Sep 4, 2017	0.28	---	0.45	0.19	N/A	0.42	0.35	N/A	0.12	0.22	0.07
<b>Average</b>	<b>---</b>	<b>---</b>	<b>0.89</b>	<b>1.43</b>	<b>0.65</b>	<b>0.80</b>	<b>1.10</b>	<b>1.28</b>	<b>0.60</b>	<b>0.37</b>	<b>0.16</b>

## Notes:

- N/A Means no monitor at this location to collect sample and --- means no monitoring scheduled to be collected on this date.
- Invalid means sample collected was invalid due to a variety of reasons such as loss of power, equipment malfunction, etc.
- ^ Sampler owned by the City of Paramount.
- Additional monitoring data available for Sites #2 and #3 at: <http://www.aqmd.gov/home/regulations/compliance/air-monitoring-activities>.
- Sites #29 and 30 are located in northern Long Beach.

Source Test Results at Lubeco

On April 27, 2017, SCAQMD staff conducted triplicated source tests for hexavalent chromium emissions from a heated sodium dichromate seal tank at Lubeco with the main objective of determining an emission factor that can be used for calculating emissions from heated sodium dichromate seal tanks used in plating operations. Lubeco was selected as the host facility for the testing due to elevated ambient monitoring readings in the nearby south Paramount area. All tests were conducted on a single tank measuring 10 feet long x 3 feet wide x 4 feet high. The tank was heated to between 200-203<sup>0</sup>F, and had a mechanical mixer to keep a uniform temperature throughout the entire sealing process tank. There were no parts in the seal tank during testing.

The second objective of this testing was to identify potential sources of emissions as measured by SCAQMD ambient air monitoring in the nearby south Paramount area. Additionally, a screening test (sampling for hexavalent chromium concentration only) was also conducted to determine if any of three chromate spray booths using chromate based paints could be contributing to the elevated hexavalent chromium ambient levels in the surrounding area. The results from the source tests are listed in Table 2, below.

**Table 2 – Source Test Results**

Parameter	Cr(VI) (ng/dscm)	Cr(VI) (lb/hr)	Cr(VI) (lb/hr-ft <sup>2</sup> tank)	Cr(VI) (lb/hr-ft <sup>2</sup> tank-% dichromate)
Run #1 - Sodium Dichromate Seal Tank	232,000	1.58 x 10 <sup>-4</sup>	5.27 x 10 <sup>-6</sup>	9.94 x 10 <sup>-7</sup>
Run #2 - Sodium Dichromate Seal Tank	292,000	2.03 x 10 <sup>-4</sup>	6.77 x 10 <sup>-6</sup>	1.28 x 10 <sup>-6</sup>
Run #3 - Sodium Dichromate Seal Tank	208,000	1.51 x 10 <sup>-4</sup>	5.03 x 10 <sup>-6</sup>	9.49 x 10 <sup>-7</sup>
Sodium Dichromate Seal Tank Average	244,000	1.71 x 10 <sup>-4</sup>	5.69 x 10 <sup>-6</sup>	1.07 x 10 <sup>-6</sup>
Facility Upwind of Dichromate Seal Tank	17	N/A	N/A	N/A
Chromate Spray Booth Exhaust	33	N/A	N/A	N/A

**Designation as a Potentially High Risk Level Facility**

Based on the evidence presented above, your facility may be designated as a Potentially High Risk Level Facility pursuant to Rule 1402(g). Prior to making this designation, you are required to meet with us so that you can present any additional relevant information to us as we consider this designation. Please contact me at (909) 396-3176 no later than 5 business days from the date of this letter to schedule a meeting.

Rule 1402 Requirements for Potentially High Risk Level Facilities

If designated as a Potentially High Risk Level Facility, Lubeco will be required to submit an Early Action Reduction Plan, an Air Toxics Emission Inventory Report, a Health Risk Assessment, and a Risk Reduction Plan. The timelines for each submittal is outlined below. Each of the due dates below would be measured from the date that SCAQMD notifies you that your facility has received

a final designation as a Potentially High Risk Level Facility.

**Table 3 – Rule 1402 Requirements**

<b>Deliverable</b>	<b>Due Date</b>	<b>Rule Reference</b>
Initial Information for ATIR	30 days	1402(d)(1)
Early Action Risk Reduction Plan	90 days	1402(g)(2)
Air Toxics Inventory Report	150 days	1402(d)(2)
Health Risk Assessment	180 days	1402(g)(3)
Risk Reduction Plan	180 days	1402(g)(4)

### **Guidelines for Preparing Rule 1402 Deliverables**

Guidance for preparing each of the previously mentioned documents can be found online in the SCAQMD AB 2588 Supplemental Guidelines available here:

<http://www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588>

The California Air Resources Board (CARB) has developed the “Hot Spots” Analysis and Reporting Program (HARP) which includes the emissions inventory and risk assessment requirements of the “Hot Spots” Program into a set of program modules. ATIRs must be prepared with the Emission Inventory Module (EIM) module of HARP2, and HRAs must be prepared using the Air Dispersion and Risk Management Tool (ADMRT) module of HARP2. A free copy of the HARP software is available here:

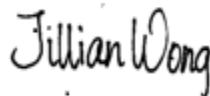
<http://www.arb.ca.gov/toxics/harp/harp.htm>.

Additional guidance for preparing ATIRs is available in CARB’s Emission Inventory Criteria and Guidelines here: <https://www.arb.ca.gov/ab2588/2588guid.htm>. Guidance for preparing HRAs is available from the Office of Environmental Health Hazard Assessment (OEHHA) here:

<http://oehha.ca.gov/air/crn/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>

We look forward to meeting with you prior to finalizing your designation as a Potentially High Risk Level Facility. If you have questions, please contact me at (909) 396-3176.

Sincerely,



Jillian Wong, Ph. D.  
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