

1 OFFICE OF THE GENERAL COUNSEL
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
2 TERESA R. BARRERA, State Bar No. 130700
SENIOR DEPUTY DISTRICT COUNSEL
3 STACEY M. PRUITT, State Bar No. 229723
SENIOR DEPUTY DISTRICT COUNSEL
4 21865 Copley Drive
Diamond Bar, California 91765
5 Tel: (909) 396-3400 • Fax: (909) 396-2961
E-mail: tbarrera@aqmd.gov
6 spruitt@aqmd.gov

7 Attorneys for Petitioner
South Coast Air Quality Management District
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9 **BEFORE THE HEARING BOARD OF THE**
10 **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**
11

12 **In the Matter of**

13 SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT,

14 Petitioner,

15 v.

16 LUBECO INC.,
17 [Facility ID# 41229]

18 Respondent.
19

Case No. 6089-1

**DISTRICT DECLARATIONS IN
SUPPORT OF STIPULATED ORDER
FOR ABATEMENT**

Hearing Date: August 17, 2017
Time: 9:00 a.m.
Place: 21865 Copley Drive
Diamond Bar, CA 91765

DISTRICT DECLARATIONS

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1. Declaration of Beverly Caldwell;
2. Declaration of Hamed Mandilawi;
3. Declaration of Jason Aspell;
4. Declaration of Jillian Wong
5. Declaration of Jo Kay Ghosh;
6. Declaration of Andrea Polidori;
7. Declaration of Teresa R. Barrera.

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DECLARATION OF BEVERLY CALDWELL

1. I, Beverly Caldwell declare:

2. I am employed as an Air Quality Inspector II in the Compliance Division of the South Coast Air Quality Management District (SCAQMD). Unless otherwise stated expressly below, I make this declaration based on personal knowledge and, if called as a witness in this action, could and would testify competently to the matters discussed herein.

3. I have held my current position on the Toxics & Waste Management team since April 2002. In my current position, my responsibilities include air quality inspections, complaint investigations, determination of compliance of District Rules and Regulations, issuance of Notices to Comply, Notices of Violation and report writing.

4. I have served the SCAQMD as an Air Quality Inspector on other compliance teams including the Industrial Compliance and Rule 46I Compliance teams inspecting facilities, determining compliance, issuing notices to comply, Notices of Violation and conducting complaint investigations. In all, I have conducted air quality inspections for over 25 years.

5. My education, training, and various certifications are as follows:
- B.S. Degree in Business Management; Cal State University, Los Angeles
 - A.A. Degree in Liberal Arts; Citrus College
 - Over 34 semester science units at Coast Community College
 - Fundamentals of Enforcement Certificate, California Air Resources Board
 - HAZWOPER/First Responder Certified; AHERA & NESHAP Certified

6. I am the inspector for Lubeco, Inc. [Facility ID No. 41229] located at 6859 Downey Avenue, Long Beach, CA 90805 (“Lubeco”). I have conducted air quality inspections at Lubeco, Inc. for the last four years and prior to this year I consistently found them in compliance during routine inspections. There is no prior history of a Notice of Violation at Lubeco. Until May 2017, there were no SCAQMD air monitors at or near Lubeco that would have measured Hexavalent Chromium emissions.

7. District Exhibit 1 is a map depicting an aerial view of Lubeco’s location.

1 8. Lubeco has one building, approximately 20,000 square feet (including
2 administrative offices), that houses its operations. Lubeco has approximately 55 employees. The
3 facility has advised me that its operating hours are generally Monday-Friday, 7:30 AM – 12:00 AM
4 (two shifts), Saturdays, 7:30 AM – 12:00 noon and occasionally on Sundays. Lubeco has four
5 swamp coolers and a fan in the ceiling to circulate air in the work area. There are three roll-up
6 doors in the work area of the building. The roll-up doors are open during operation.

7 9. District Exhibit 2 is an aerial photograph of Lubeco with a true and accurate
8 depiction of the location of the roll-up doors.

9 10. District Exhibit 3 is a photograph of the roll-up door located on the Downey
10 Avenue/east side of the building. I took this photograph from the sidewalk on Downey Avenue in
11 front of Lubeco.

12 11. District Exhibit 4 is a photograph of the roll-up door on the 69th Street/north side of
13 the building. I took this photograph from across 69th Street.

14 12. District Exhibits 5 and 6 are photographs of the roll-up door located on the Downey
15 Avenue/east side of the building. I took these photographs from inside of Lubeco. The chemical
16 process tanks used by Lubeco are captured in the foreground of the photographs.

17 13. District Exhibit 7 is a photograph of the roll-up door located on the back/west side
18 of the building. I took this photograph from inside of Lubeco. The same chemical process tanks
19 shown in Exhibit 5 are captured in this photograph, albeit from the opposite side of the building.

20 14. Lubeco uses Hexavalent Chromium in their day-to-day operations. Three of their six
21 paint spray booths are used to coat parts with chromium containing paints/primers. Lubeco also has
22 two process lines; an Anodizing process line and a Passivation process line. These lines are a series
23 of tanks containing chemical solutions that treat metal parts. The tanks which include hexavalent
24 chromium on the Anodize line are tank #'s 14, 16, 23, 25 & 20 and on the Passivation line are tank
25 #'s 35, 37, 39 & 41. These tanks are located within Lubeco's building between the roll-up doors
26 located on the west/back side of the building and the Downey Street/east side of the building. See
27 District Exhibits 3-7. Other equipment and processes at Lubeco include drying ovens, sandblasting
28

1 equipment, the waste water treatment process and demasking of treated parts. Wastes are disposed
2 of as hazardous.

3 15. Lubeco is located directly across the street (Downey Avenue) from seven duplexes.
4 The nearest residence is approximately 75 feet east of Lubeco, in the downwind direction. To
5 obtain measurements regarding the distance of those residences from Lubeco, I used a Westward
6 Distance Wheel 1EJX8 to measure from the grassy area at edge of sidewalk in front of Lubeco to
7 the property line in front of the residential structures.

8 16. District Exhibit 8 is a photograph of the duplex residences located directly across
9 Downey Avenue from Lubeco. Lubeco's front parking lot is depicted on the right side of the
10 photograph. I took the photograph while standing on 69th Street.

11 17. An apartment building is located northeast of Lubeco within 86 feet of Lubeco
12 (Stonewood Apartments). I used a Westward Distance Wheel 1EJX8 to measure from the corner
13 of Lubeco to the curb of the nearest Stonewood apartment building, located at 16862 ½ Downey
14 Avenue. Also, Mokler Elementary School is located within 1000 feet northeast of Lubeco.

15 18. District Exhibit 9 is a photograph of the Stonewood Apartments. I took this
16 photograph from the sidewalk on Downey Avenue in front of Lubeco.

17 19. On June 30, 2017, I conducted an inspection of Lubeco. The District's monitoring
18 staff had installed an ambient air monitor (Monitor No. 29) on a telephone pole (pole #2324067E)
19 directly in front of and generally downwind from Lubeco. This monitor can be seen in District
20 Exhibit 8. I am informed and believe that Monitor No. 29 had been installed in or about May 2017
21 as part of the District's Air Toxics Initiative to investigate potential sources of toxic air
22 contaminants including hexavalent chromium. I had received monitoring results stating that
23 Monitor No. 29 had recorded exceedances in the months of May and June. In addition, and I
24 received the results of a source test conducted April 27, 2017 on Lubeco's Sodium Dichromate seal
25 tank (#14) by District Engineers. That source test showed extremely high hexavalent chromium
26 readings.

27 20. District Exhibit 10 is a photograph of Lubeco's Tank No. 14, the heated sodium
28 dichromate seal tank that was the subject of the source test.

1 21. During my inspection on June 30, 2017, I observed:

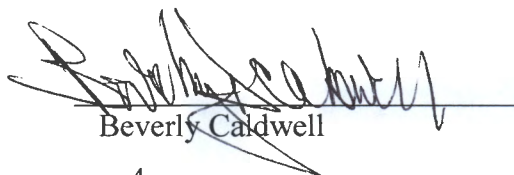
- 2 • All three roll-up doors were open. See District Exhibits 3-7.
- 3 • The sodium dichromate seal tank (#14), Chemfilm (#25) and Potassium Dichromate
4 (#24) tanks had been covered with plastic tarp. See District Exhibits 10 and 11.
5 During my previous inspections of the facility, these tanks were not covered.
6 Lubeco typically operated these tanks heated and open to the atmosphere.
- 7 • All of the other tanks containing hexavalent chromium (Tank Nos. 16, 23, 33, 35,
8 37, 39, 41) were uncovered.
- 9 • The chromic acid anodizing tank Tank # 16 and the ticermet A tank #37 are vented
10 to air pollution control equipment and these tanks were not operating at the time of
11 my inspection.
- 12 • The ceiling fan was shut down. Mr. Steven Rossi, President/Owner of Lubeco, Inc.
13 told me due to possible excess emissions, he shut down the ceiling fan. The swamp
14 coolers were not on during my inspection.
- 15 • One paint spray booth was in operation (booth #1 used to spray hexavalent chrome
16 coatings/primers).

17 22. Based on the prior high monitoring results, high source test results, the clear
18 existence and use of hexavalent chromium in Lubeco's operations, the proximity to nearby,
19 downwind residential receptors, the District determined that Lubeco was in violation of SCAQMD
20 Nuisance Rule 402 and California Health and Safety Code 41700(a).

21 23. On June 30, 2017, I issued Notice of Violation #P66001 to Mr. Steven Rossi, Owner
22 of Lubeco, Inc. and explained to him the reason for the violation. District exhibit 11 is a true and
23 accurate copy of Notice of Violation #P66001.

24 I declare under penalty of perjury under the laws of the state of California that the foregoing
25 is true and correct.

26 Executed this 16th day of August, 2017, at Diamond Bar, California.

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28 
Beverly Caldwell

1 DECLARATION OF HAMED MANDILAWI

2 I, Hamed Mandilawi, declare:

3 1. I am employed as a Senior Engineer in the Engineering and Permitting Division,
4 South Coast Air Quality Management District (SCAQMD). Unless otherwise stated expressly
5 below, I make this declaration based on personal knowledge and, if called as a witness in this
6 action, could and would testify competently to the matters discussed herein.

7 2. I have held my current position since 1990. In my current position, I supervise a
8 group of engineers that process permit applications for coating, printing, plating, aerospace,
9 military, and entertainment operations.

10 3. Prior to my current position, I worked as Air Quality Engineer since August 1987. My
11 responsibilities included the processing of permit applications for various type of equipment. Prior to
12 joining the District my relevant work experience included engineering positions in the plastic and
13 precious metal refining industries.

14 4. I graduated in May 1983 with a Bachelor of Science degree in Mechanical
15 Engineering from Gannon University, Erie, Pennsylvania.

16 5. I am personally familiar with the metal finishing operation at Lubeco based on my
17 review of the application files for Permits to Operate various pieces of equipment at the facility,
18 meeting with facility consultant Bruce Armbruster on August 1, 2017, and personal observation of
19 the various equipment at the facility during a field visit conducted on August 3, 2017.

20 6. Lubeco is a metal finishing company that processes parts used in the commercial,
21 aerospace, and defense industries. Metal finishing operations at the facility include, spray coating
22 operation, curing/drying operation, anodizing, passivation, wastewater treatment, abrasive blasting,
23 and masking and de-masking operation.

24 7. Some of the tanks used in the anodizing and passivation lines use material
25 containing chromium compounds that will result in hexavalent chromium emissions into the
26 atmosphere during the operation of the tanks primarily due to agitation, heating, and/or electrolysis.
27 In addition, hexavalent chromium emissions are being emitted into the atmosphere from the
28 anodizing and passivation lines due to the location of the tanks in the building between two roll-up

1 doors located at the south east corner and south west corner of the building, which creates high
2 cross-drafts across the tanks.

3 8. The operation of the following tanks in the anodizing line (Permit No. G29366)
4 result in hexavalent chromium emissions: Tank No. 14 (dichromate seal), Tank No. 16 (chromic
5 acid anodizing), Tank No. 23 (deoxidizer), Tank No. 24 (potassium dichromate), and Tank No. 25
6 (chem film). These tanks are not vented to air pollution control equipment. Such venting is not
7 currently required, but they have been included for possible curtailment because they are sources of
8 hexavalent chromium emissions.

9 9. The operation of the following tanks in the passivation line (Permit No. G29360)
10 result in hexavalent chromium emissions: Tank No. 33 (chromic rinse), Tank No. 35 (Dow 7),
11 Tank No. 37 (Ticermet A), Tank No. 39 (passivation Ty II), and Tank No. 41 (dichromate rinse).
12 These tanks are not vented to air pollution control equipment. Such venting is not currently
13 required, but they have been included for possible curtailment because they are sources of
14 hexavalent chromium emissions.

15 10. Tank No. 16 of the anodizing line and Tank No. 37 of the passivation line are
16 currently vented to an air pollution control system consisting of a three-stage composite mesh pad
17 and HEPA filters. The other tanks are not vented to air pollution control equipment. The District's
18 more recent research into the operation of chrome facilities, including source testing, has resulted
19 in information which demonstrates that heated tanks containing chromium can be a significant
20 source of hexavalent chromium emissions.

21 11. Three of the six permitted spray booths at the facility are allowed to spray chromium
22 containing material. Spray Booth No. 1 (Permit No. G6512), Spray Booth No. 2 (Permit No.
23 G6513), and Spray Booth No. 3 (Permit No. G6514) are equipped with three stage filtration system
24 to control particulate matter emissions and the operation of the spray booths result in hexavalent
25 chromium emission into the atmosphere.

26 12. The handling of racks used in the spray coating operation in spray booths No's 1
27 through 3 may also result in fugitive hexavalent chromium emissions into the atmosphere.

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1 13. The de-masking of painted parts is currently conducted in the open on tables within
2 the building. Parts being de-masked that have been coated with primers that contain chromium will
3 result in fugitive hexavalent chromium emissions into the atmosphere.

4 14. The handling of waste material from spray booth No's 1 through 3, exhaust filters,
5 and waste generated from the de-masking operation is also a potential source of fugitive hexavalent
6 chromium emissions into the atmosphere.

7 15. Based on the existence of these other uncontrolled sources of hexavalent chromium
8 emissions, as well as the fact that nearby air monitors have reflected elevated readings of
9 hexavalent chromium in the ambient air, the District is asking Lubeco to curtail its operations of
10 sources emitting hexavalent chromium under circumstances set forth in Conditions 2-8. In
11 addition, in an effort to reduce emissions of hexavalent chromium in the short term, the District is
12 asking Lubeco to implement Conditions 9-16 of the Proposed Findings and Decision. Finally, for
13 purposes of implementing longer term solutions, the District is asking Lubeco to prepare and
14 submit a risk reduction plan consistent with the requirement of District Rule 1402(f)(2). See
15 Condition No. 17. There are air pollution control devices that can be used on the above equipment
16 to reduce emissions by a very great amount, including High Efficiency Particulate Air filters
17 (HEPA) and Ultra-low Particulate Air filters (ULPA).

18 I declare under penalty of perjury under the laws of the state of California that the foregoing
19 is true and correct.

20 Executed this 16th day of August, 2017, at Diamond Bar, California.

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HAMED MANDILAWI

DECLARATION OF JASON ASPELL

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I, Jason Aspell, declare:

1. I am employed as a Senior Air Quality Engineer in the Source Test Engineering Branch of the Monitoring and Analysis Division, of the South Coast Air Quality Management District (SCAQMD). Unless otherwise stated expressly below, I make this declaration based on personal knowledge and, if called as a witness in this action, could and would testify competently to the matters discussed herein. This Division is part of the Office of Science and Technology Advancement, under the direction of Deputy Executive Officer Dr. Matt Miyasato and Assistant Deputy Executive Officer Dr. Jason Low. I have held this current position since March 27, 2017, and have over eight years of previous Source Test Engineering experience.

2. In my current position, my responsibilities are the supervision of a field source testing group that conducts source tests, and also reviews source emissions test protocols and reports conducted by facilities, conducts source tests, and develops source test protocols, methods, and guidelines.

3. Prior to my current position, I worked as Senior Air Quality Engineer in the Best Available Control Technology (BACT) group for two years developing the District's BACT Guidelines and administering Clean Air Technology demonstration projects. Prior to that, I was an Air Quality Engineer II for eight years in the Source Test Engineering branch reviewing source emissions test protocols and reports conducted by facilities, conducting source tests, and developing source test protocols, methods, and guidelines. Prior to that, I was an Air Quality Engineer for eight years in the Coatings Unit of the District's Permitting branch evaluating permit applications for compliance with District Rules for sources such as spray booths, metal finishing tanks, and associated air pollution control equipment. Prior to that, I was an Air Quality Inspector for 18 months in the Rule 461 and Industrial Compliance groups performing field inspections and complaint investigations to enforce District Rules.

4. My education is as follows: a Bachelor of Science degree in Chemical Engineering from the University of California at Los Angeles (June 1997), and I am currently enrolled in a

1 Master of Science program for Industrial Hygiene at the University of Montana (degree expected
2 Spring 2018).

3 5. On April 27, 2017, I participated in emissions source tests for hexavalent chromium
4 (Cr^{+6}) emissions from Tank 14, a Sodium Dichromate Seal tank (Seal tank) and a Spray Booth at
5 Lubeco, Inc., 6859 Downey Avenue, Long Beach, CA. The tests were performed according to
6 standard methodologies approved by the California Air Resources Board, CARB Method 425. For
7 the Spray Booth, a modified CARB Method 425 was developed during the District's previous
8 investigation of hexavalent chromium emissions at a chrome anodizing facility in Newport Beach,
9 Hixson Metal Finishing.

10 6. The purpose of the source tests was to develop a mass emission factor for
11 hexavalent chromium emissions from the Seal tank and perform a screening test on a spray booth,
12 as part of a determination to evaluate if the equipment were potential sources of elevated ambient
13 readings of hexavalent chromium at monitors in the surrounding area.

14 7. The official Source Test Report for these source tests is attached as Exhibit 13. The
15 report was prepared by Wayne Stredwick, Air Quality Engineer II, who participated in the source
16 testing. I was personally present and observed all the source tests and can verify that this report
17 accurately describes the source testing. Both the testing described herein and the creation of the
18 Source Test Report documenting that testing were part of Mr. Stredwick's and my regular job
19 responsibilities as SCAQMD staff.

20 8. Mr. Wayne Stredwick, arranged for the source tests through Mr. Steve Rossi,
21 President of Lubeco, Inc. Mr. Rossi was present for and observed the testing described herein,
22 accompanied by Bruce Armbruster of JE Compliance Services, consultant for Lubeco, Inc.

23 9. The Seal tank solution was analyzed to contain 5.3% chromic acid and the tank was
24 operated at a typical operating temperature of approximately 200 degrees Fahrenheit during testing.
25 The normal operation of this Seal tank results in a visible plume of steam to be emitted from the
26 tank into the room air. The room air is subsequently vented from the building through a roof vent
27 and three open roll-up doors. One of the roll-up doors is located on the west side of Lubeco's
28 building. Another is located directly across on the east side of the building. Tank 14, as well as

1 other tanks operated by Lubeco are directly in the path between these two doors. The prevailing
2 winds at this location generally blow from west to east.

3 10. Past source testing efforts for similar seal tanks at Hixson Metal Finishing and
4 Anaplex have shown that the steam carries hexavalent chromium as it leaves the tank.

5 11. The Seal tank at Lubeco is not equipped with a ventilation system to collect
6 emissions. To obtain a representative sample of all emissions from the Seal tank, our team
7 constructed a temporary enclosure over the tank and vented the enclosure through a duct with an
8 exhaust blower. This procedure has been successfully utilized to achieve 100% collection
9 efficiency for open process tanks and is documented in the Technical Guidance Document,
10 "Measurement of Hexavalent Chromium Emissions from Chromium Plating and Chromic Acid
11 Anodizing Operations for Certification of Wetting Agent Chemical Mist Suppressants Subject to
12 SCAQMD Rule 1469," which I authored. The procedure was modified to account for the
13 difference in operation of this Seal tank and a SCAQMD Rule 1469 plating or anodizing tank.
14 Isokinetic sampling was performed in triplicate in accordance with the approved methodology at
15 the temporary exhaust stack. Parts were not processed in the heated tank during testing because
16 the hexavalent chromium emission mechanism has been found to occur without part production.

17 12. The Spray Booth is used as an enclosure for spraying of chromate-containing
18 primers on aerospace parts. The Spray Booth is equipped with a filtration system as required by
19 SCAQMD Rule 1469.1 and the permit to operate. A single-run source test was performed at the
20 top of the exhaust stack of the Spray Booth for screening purposes for hexavalent chromium
21 emissions, while the facility sprayed chromate-containing primer in the Spray Booth.


22 13. The source tests revealed that the heated Seal tank resulted in hexavalent chromium
23 mass emissions of 1.71×10^{-4} lb Cr⁺⁶/hr, and an emission concentration of 244,000 ng Cr⁺⁶/dscm.
24 The hexavalent chromium emission concentration from the Spray Booth was measured to be 33
25 ng/dscm. For purposes of interpreting the test results, the background level of hexavalent
26 chromium during the most recent SCAQMD Multiple Air Toxics Exposure Study (MATES) IV
27 study was about 0.06 ng/dscm. The hexavalent chromium concentration emissions from the Seal
28 tank are over 4,000 times the MATES IV ambient concentrations.

1 14. It is my understanding that the emissions reflected in the source test for the Seal
2 tank were included in the model of Lubeco's emissions prepared by Planning and Rules Manager
3 Jillian Wong.

4 I declare under penalty of perjury under the laws of the state of California that the foregoing
5 is true and correct.

6 Executed this 11th day of August, 2017, at Diamond Bar, California.

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DECLARATION OF JILLIAN WONG

I, Jillian Wong, hereby declare:

1. I am employed by the South Coast Air Quality Management District (“District”) as a Planning and Rules Manager. If called as a witness, I would testify to the following based on my personal knowledge, as well as my studies in the fields of air dispersion modeling and health risk calculations of air pollution.

2. I received my Ph.D. in Environmental Sciences with a focus in atmospheric chemistry from the University of California, Riverside, where I conducted my research at the Air Pollution Research Center. I received my Master of Science and Bachelor of Science degrees in Chemistry from the University of California, Riverside.

3. I have held my current position with the District since July 2016. I currently manage the California Environmental Quality Act (CEQA) Intergovernmental Review (IGR), Point Source Modeling, and AB 2588 Air Toxics Hot Spots programs for the District. I began my employment with the District in 2008 and prior to holding my current position, I was employed by the District as a Program Supervisor and Air Quality Specialist within the CEQA, CEQA IGR, Point Source Modeling, and AB2588 programs. I have reviewed hundreds of Health Risk Assessments as part of my duties in these positions.

4. Prior to my employment at the District, I was a Project Manager and Senior Scientist for environmental consulting companies such as URS Corporation and Albert A Webb Associates, preparing and reviewing more than 50 Health Risk Assessments for various development projects within California in five years.

5. As part of my duties as a Planning and Rules Manager for the District, I have performed and supervised the calculation of cancer risk estimates based on Lubeco’s emissions of toxic air contaminants (TACs). These estimates were based on emissions reported by Lubeco in their 2015 Annual Emissions Reporting (“AER”) submittal and recent source test data gathered in April 2017 for hexavalent chromium emissions from the sodium dichromate seal tank (Tank 14) at Lubeco. I believe my estimates to be conservative because the emissions were only modeled for the operational hours from Lubeco’s 2015 AER and it is my understanding that hexavalent chromium is

1 emitted from the heated tank regardless of the operational status. Additionally, it is my understanding
2 that there are additional sources of hexavalent chromium at Lubeco that are not reflected in the 2015
3 AER submittal or the source test report generated for Tank 14. These other sources of hexavalent
4 chromium include, but may not be limited to other tanks which contain hexavalent chromium. In
5 addition, with respect to Tank 14, I estimated the risk based on 2920 hours of annual use even though
6 there is no permit or rule which would limit use of the tank to this number of hours. Theoretically,
7 Tank 14 could operate 24/7/365. If that occurred, the risk would be substantially higher.

8 6. Using the U.S. EPA's recommended dispersion model, AERMOD, I have modeled
9 Lubeco's emissions to estimate the TAC concentrations at the nearest residential, worker, and school
10 receptors.

11 7. I have calculated the estimated cancer risks for a given TAC concentration based on
12 the health risk assessment guidelines published by the California Office of Environmental Health
13 Hazards Assessment (OEHHA) in 2015, which were approved through a public process and are based
14 on a wide range of toxicological and exposure studies. The risk guidelines recommend using default
15 timeframes of 30 years for residents and 25 years for offsite workers when calculating cancer risks.

16 8. Using those sources, I calculated that, for residents exposed over a 30-year period, a
17 level of about 0.05 ng/m³ of atmospheric hexavalent chromium corresponds to a cancer risk of 25
18 per million. For workers exposed over a 25-year career, a level of about 0.84 ng/m³ of atmospheric
19 hexavalent chromium corresponds to a cancer risk of 25 per million. The cancer risk from
20 hexavalent chromium increases linearly based on its concentration in the air, such that a cancer risk
21 of 100 per million corresponds to concentrations of about 0.2 ng/m³ for residents and about 3.4
22 ng/m³ for workers.

23 9. Based on maps of the area, the closest homes to Lubeco appear to be located
24 approximately 80 feet (25 meters) to the east, directly across Downey Avenue, in a generally
25 downwind direction. The closest offsite workers are located immediately adjacent to Lubeco, on
26 their western fenceline, and across the street to the north. District Exhibit 12 is a map I created to
27 show the nearest residential areas to Lubeco.

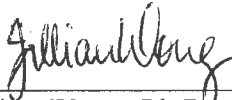
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1 10. Using air dispersion modeling and the methods specified in the 2015 OEHHA
2 guidelines, the cancer risk associated with the TAC emissions from Lubeco is approximately 442 per
3 million at this location if a resident were exposed at this level for 30 years and a cancer risk of
4 approximately 57 per million, assuming the same 30 year exposure duration, which is consistent with
5 SCAQMD's HRA methodology. This cancer risk exceeds the Significant Risk Level in District Rule
6 1402.

7 I declare under penalty of perjury under the laws of the state of California that the foregoing
8 is true and correct.

9 Executed at Diamond Bar, California, on August 16, 2017.

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Jillian Wong, Ph.D.

DECLARATION OF JO KAY GHOSH

I, Jo Kay Ghosh, hereby declare:

1. I know the following from my own personal knowledge and studies as an expert in the field of health effects of air pollution, and if called as a witness, could and would competently testify thereto.

2. I am the Health Effects Officer for the South Coast Air Quality Management District (SCAQMD) and have held this position since January 2016.

3. I received my Doctor of Philosophy degree in Epidemiology from the University of California, Los Angeles, School of Public Health. I received my Master of Public Health degree in Epidemiology and Biostatistics from the University of California, Berkeley, School of Public Health. I received my Bachelor of Science degree with a major in Bioengineering from the University of California, Berkeley, School of Engineering.

4. Prior to my employment at SCAQMD, I conducted research in the area of air pollution and health effects for 7 years. I conducted this research while working at the University of California, Los Angeles, School of Public Health, and also as a post-doctoral researcher at the University of Southern California, Department of Preventive Medicine.

5. As part of my duties as Health Effects Officer for the SCAQMD, I have reviewed scientific information regarding health effects of hexavalent chromium.

6. Hexavalent chromium has been identified by EPA and other scientific agencies as a known human carcinogen. District Exhibit 14 is a report by the EPA summarizing the cancer risks associated with hexavalent chromium. Exhibit 14 is also available on the internet at the address below, and is the type of report that is widely used by scientists and experts to study the health impact of air pollutants.

(https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0144_summary.pdf). As set out in this report and elsewhere, chronic inhalation of hexavalent chromium has been linked to increased lung cancer risks in epidemiological studies as well as in toxicological studies.

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1 7. As discussed in Declaration of Jillian Wong, District staff used dispersion modeling
2 techniques to estimate the levels of hexavalent chromium in the community located immediately
3 downwind of the Lubeco facility located at 6859 Downey Ave, Long Beach, CA. The staff used the
4 2015 guidelines established by the California Office of Environmental Health Hazard Protection
5 (OEHHA) to calculate cancer risks for residents assuming that residents are exposed to these levels
6 continuously for 30 years.

7 8. Cancer risk thresholds established by the SCAQMD specify an “acceptable cancer
8 risk” as 25-in-a-million, and “significant cancer risk” as 100-in-a-million, as set forth in SCAQMD
9 Rule 1402. The 25-in-a-million cancer risk level, termed the action level, is considered acceptable
10 because it is the cancer risk level to which facilities must reduce their risk, as established in
11 SCAQMD Rule 1402. Using the above mentioned OEHHA guidelines to calculate residential risk,
12 the 25-in-a-million risk level corresponds to a concentration of about 0.05 ng/m³ of hexavalent
13 chromium for residential cancer risk, and the 100-in-a-million risk level corresponds to a
14 concentration of about 0.2 ng/m³, assuming that residents are continuously exposed to these levels
15 for 30 years. Concentrations of hexavalent chromium higher than these “acceptable” levels increase
16 the risk to exposed residents in direct proportion to the level of hexavalent chromium in the
17 atmosphere. Based on the levels of hexavalent chromium predicted by the dispersion modeling, if
18 residents continue to be exposed to the facility’s hexavalent chromium emissions for 30 years, the
19 maximum estimated risk from this facility’s emissions to the nearest residents located downwind of
20 the facility is above both the “acceptable” cancer risk level of 25-in-a-million and the “significant”
21 cancer risk level of 100-in-a-million.

22 9. There is no known recommended medical treatment for negating the effect of
23 exposure to hexavalent chromium by inhalation at these levels. The U.S. Agency for Toxic
24 Disease Registry does not recommend any specific treatment to patients chronically exposed to
25 similar levels of hexavalent chromium, but highlights the importance of removing the patient from
26 further exposure.

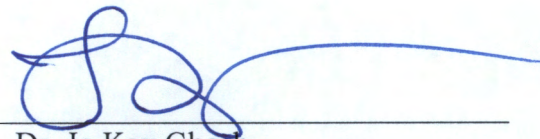
27 10. For hexavalent chromium, OEHHA has a chronic Reference Exposure Level (REL),
28 which is a health-based benchmark that is set at a level at or below which adverse non-cancer

1 health effects are unlikely to occur in the general human population when exposed continuously
2 over a lifetime. Non-cancer health effects associated with chronic exposure to hexavalent
3 chromium include nose, throat, and other respiratory irritation or allergies. The chronic REL
4 developed by OEHHA for hexavalent chromium is 200 ng/m³. Based on results from ambient
5 monitors located on Downey Avenue near the intersection of 69th Street in Long Beach (Sites #29
6 and 30 in District Exhibit 1), outdoor levels of hexavalent chromium are far below the chronic REL
7 of 200 ng/m³, meaning that it is unlikely that these levels of hexavalent chromium detected in the
8 community would cause non-cancer health effects. Ambient monitors capture hexavalent
9 chromium in the outdoor air from all sources, not just emissions from a single facility.

10 14. Based on the evidence and data available to me, my scientific training, and my
11 experience studying the health effects of atmospheric pollutants, I have concluded that if the levels
12 of hexavalent chromium from the Lubeco facility as estimated by dispersion modeling techniques
13 were to continue long-term, these emissions may increase the cancer risk in the nearby community
14 and therefore be harmful to public health. The harm to nearby residents will continue unless and
15 until the source of hexavalent chromium emissions is required to cease emitting hexavalent
16 chromium into the atmosphere or reduce emissions to an acceptable level.

17 I declare under penalty of perjury under the laws of the state of California that the foregoing
18 is true and correct.

19 Executed at Diamond Bar, California, on August 16, 2017.

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Dr. Jo Kay Ghosh

Declaration of Andrea Polidori

I, Andrea Polidori, declare:

1. I am the Atmospheric Measurements Manager in the Science & Technology Advancement division of the South Coast Air Quality Management District (the "District"). Unless otherwise stated expressly below, I make this declaration based on personal knowledge and, if called as a witness in this action I could and would testify competently to the matters discussed herein.

2. I hold a Ph.D. in Environmental Sciences with a focus on atmospheric sciences from Rutgers University, New Brunswick (NJ). In addition, I hold a Bachelor's degree in Environmental Sciences from Urbino University (Italy). Prior to joining the District, I was a Research Assistant Professor at the University of Southern California in the Department of Civil and Environmental Engineering, where I conducted extensive research on air pollution and developed methods for measuring air pollutants.

3. I have held my current position since November 2016. My primary responsibilities include the overall management of the District ambient air monitoring network operations, special monitoring programs (e.g., monitoring for air toxics in communities and near potential sources of air toxics emissions), and related projects.

4. Prior to becoming Atmospheric Measurements Manager, I was employed as Quality Assurance (QA) Manager for the District from 2013. In that capacity, I had overall responsibility for the QA functions for the District environmental measurement programs.

5. In the spring of 2017, the District launched its Community Air Toxics Initiative, which was designed to investigate, identify and remediate any additional sources across our four-county region that may emit high levels of toxic air contaminants, including hexavalent chromium. Hexavalent chromium is a human carcinogen that is emitted in certain industrial processes including chrome plating and chrome anodizing.

6. As part of this initiative, District staff identified Lubeco, Inc. located at 6859 Downey Avenue, Long Beach, CA 90805 [Facility ID No. 41229] as a potential source of hexavalent chromium emissions. District engineering and compliance staff have informed me that

1 hexavalent chromium is produced by one or more of Lubeco's metal finishing operations. In
2 addition, District source testing staff (Jason Aspell) has informed me that on April 27, 2017, the
3 District conducted source tests for hexavalent chromium emissions from a sodium dichromate seal
4 tank and a spray booth at Lubeco. That source test revealed extremely high emissions of
5 hexavalent chromium.

6 7. Based on the District's identification of Lubeco as a source of hexavalent chromium
7 emissions, my staff installed three air monitors around Lubeco. Monitor Nos. 29 and 30 were
8 installed approximately 150 feet East (and predominantly downwind) of the facility on Downey
9 Avenue. Monitor No. 29 is located directly in front of Lubeco. Monitor No. 33 was installed on
10 East 69th St., approximately 200 feet West (and predominantly upwind) of the facility. District
11 Exhibit No. 1, with references to 29, 30 and 33 reflect the current location of those air monitors.

12 8. The District's monitors were located based, in part, on meteorological ("met") data
13 obtained from one of the District's nearby met stations. This met data indicates the direction and
14 strength of prevailing winds. With respect to Lubeco, the met data revealed that winds generally
15 blow from west to east. Thus, District Monitor Nos. 29 and 30 are located in the generally
16 prevailing downwind direction of Lubeco. District Monitor No. 33 is located in a general upwind
17 direction.

18 9. The air monitors are placed by District staff at elevated locations, typically on a
19 light pole, and sample the air continuously for a 24-hour period. District Exhibit No. 8 is a
20 photograph which captures Monitor No. 29 on the light pole in front of Lubeco. After a 24-hour
21 sampling period, District staff collects the filter from the monitor and returns it to the District's lab
22 for analysis. At the lab, District scientists test the filters using a process called ion chromatography
23 to determine the concentration of hexavalent chromium in the atmosphere. I am familiar with the
24 methods published by the United States Environmental Protection Agency (EPA) as well as the
25 District's standard practices for testing for atmospheric pollutants. The District's lab analysis
26 comports with these methods and practices.

27 10. District Exhibit No. 15 reflects the most recent summary measurements of
28 hexavalent chromium taken from Monitor Nos. 29, 30, and 33.

1 11. I have also been informed by the District's modeling staff that they have modeled
2 the emissions of Lubeco based on its 2015 Annual Emissions Report and the April 2017 source test
3 of the heated sodium dichromate seal tank. Staff advised me that the modeling predicted elevated
4 concentrations of hexavalent chromium being emitted from Lubeco.

5 12. Based on all the evidence, including air monitoring and source testing, I have
6 concluded that Lubeco is more likely than not a significant contributor to the very high levels of
7 hexavalent chromium measured at Monitor No. 29, the monitor located in the predominantly
8 downwind direction of Lubeco based on the current configuration of monitors.

9 13. In the proposed Findings and Decision, the parties have stipulated to curtailment
10 conditions that would require Lubeco stop operating sources of hexavalent chromium at its facility
11 when the prevailing downwind monitor reads 1.0 ng/m³ (measured as an average concentration
12 from the latest three valid samples, and accounting for any possible background contribution).
13 Although modeling and risk analysis may suggest a lower action level should be imposed, this
14 action level is appropriate based on the capabilities of commercially available sampling equipment,
15 the analytical methods used to determine the hexavalent chromium level in the collected samples,
16 the relative location of the three samplers upwind and downwind of Lubeco, and the background
17 subtraction method used to calculate actual hexavalent chromium concentrations emitted by the
18 facility.

19 I declare under penalty of perjury under the laws of the State of California that the
20 foregoing is true and correct. Executed this 16th day of August 2016, at Diamond Bar, California.

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23 Andrea Polidori

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DECLARATION OF TERESA R. BARRERA

I, Teresa R. Barrera, declare:

1. I am a Senior Deputy District Counsel employed by the South Coast Air Quality Management District. If called as a witness in this action, I could and would competently testify to the following.

2. On July 21, 2017, the District filed the pending Petition for Order for Abatement against Lubeco, Inc. That Petition alleges that Lubeco’s emissions of hexavalent chromium are creating a nuisance in violation of District Rule 402 and California Health & Safety Code §41700.

3. Prior to the filing the Petition, I began discussions with counsel for Lubeco regarding a possible stipulated Order for Abatement. We have had both in-person and telephonic discussions. In addition, District staff has had separate meetings with Lubeco’s personnel and consultant.

4. Though these discussions, the parties have developed a proposed order with conditions that will reduce emissions of hexavalent chromium in both the short-term and the longer term. The parties also have agreed to detailed curtailment provisions. Despite these agreements, the parties have reached an impasse with respect to the scope of an attachment to the proposed order. That attachment (Attachment 1) identifies the equipment that will be subject to curtailment.

5. Discussion of the disputed issue is continuing. If the parties cannot agree to the scope of the attachment, we have agreed to present evidence of our positions to the Hearing Board and allow it to make the decision.

6. District Exhibit No. 16 is a true and correct copy of the Draft Proposed Findings and Conditions sought by the District.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 16th day of August 2017.


Teresa R. Barrera