



# South Coast Air Quality Management District

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(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

December 14, 2016

Mr. Gabriel Moreno  
Aerocraft Heat Treating Company, Inc.  
15701 Minnesota Avenue  
Paramount, CA 90723

*Via Email, Certified Mail and return receipt*

## **Notice of Designation of Aerocraft Heat Treating Company, Inc. (Facility ID 23752) as a Potentially High Risk Level Facility**

Pursuant to SCAQMD Rule 1402(g), SCAQMD staff is designating Aerocraft Heat Treating Company, Inc. as a Potentially High Risk Level Facility.<sup>1</sup> The information used to substantiate this designation is discussed below. Based on this designation you are required to expeditiously reduce risks from your facility and provide reports on your toxic emissions and potential health risks to the surrounding community as detailed below.

### **1. Findings From Air Quality and Sampling Data**

#### **a. 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, and Sites #4 through #18 since mid-October. As seen in Table 1, the levels that were recently recorded nearest your facility (e.g., Sites #7, #8, and #9) are substantially higher than typical background levels.<sup>2</sup> Monitors only a few blocks away show much lower levels, with the exception of those located in close proximity to another identified source of hexavalent chromium (Anaplex Corp.). In general, higher concentrations are most typically found closest to the source of emissions. Finally, the only monitors with elevated hexavalent chromium levels on Thanksgiving November 24, 2016 were located close to your facility (Sites 8 and 9), when your facility was the only observed facility operating in the area.

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<sup>1</sup> Pursuant to Rule 1402(c)(14), a Potentially High Risk 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.

<sup>2</sup> SCAQMD's MATES IV study found average monitored levels of hexavalent chromium ranged between 0.03 and 0.11 ng/m<sup>3</sup>.

**Figure 1 – Map of Air Monitoring Sites in Paramount****Table 1 – Hexavalent Chromium Air Monitoring Results (ng/m<sup>3</sup>)**

Sample Date	Site #2	Site #3	Site #4	Site #5	Site #6	Site #7	Site #8	Site #9	Site #10	Site #11	Site #12	Site #13	Site #14	Site #15	Site #16	Site #17	Site #18
Sat, Oct 15, 2016	0.27	0.13	0.28	0.06	1	7.9	N/A	N/A	N/A	N/A	0.08	N/A	N/A	N/A	N/A	N/A	N/A
Tue, Oct 18, 2016	0.53	---	0.43	1.2	0.46	Invalid	N/A	N/A	N/A	N/A	0.2	N/A	N/A	N/A	N/A	N/A	N/A
Fri, Oct 21, 2016	0.14	0.11	0.41	0.68	0.9	1.1	N/A	N/A	N/A	N/A	0.24	N/A	N/A	N/A	N/A	N/A	N/A
Mon, Oct 24, 2016	1.5	---	0.34	0.59	0.89	4.2	N/A	N/A	N/A	N/A	0.24	N/A	N/A	N/A	N/A	N/A	N/A
Thu, Oct 27, 2016	1.1	0.2	0.21	0.28	0.98	5	26	2.7	1.4	17	0.2	N/A	N/A	N/A	N/A	N/A	N/A
Sun, Oct 30, 2016	0.46	---	0.08	0.23	0.29	4.8	25	1.1	0.31	0.15	Invalid	N/A	N/A	N/A	N/A	N/A	N/A
Wed, Nov 2, 2016	0.33	0.15	0.2	0.42	0.53	2.7	12	2.4	1.3	11	0.11	N/A	N/A	N/A	N/A	N/A	N/A
Sat, Nov 5, 2016	0.25	---	N/A	N/A	N/A	3.6	14	1.2	0.80	6.8	N/A	2.3	12	26	0.51	0.61	N/A
Tue, Nov 8, 2016	0.43	0.16	N/A	N/A	N/A	3.4	13	1.8	0.97	6.4	N/A	8.8	18	13	0.28	0.71	N/A
Fri, Nov 11, 2016	0.30	---	N/A	N/A	N/A	2.6	17	2.4	1.8	3.3	N/A	8.4	15	16	0.64	0.44	N/A
Mon, Nov 14, 2016	0.20	0.21	N/A	N/A	N/A	2.7	12	0.87	0.43	9.5	N/A	Invalid	12	14	Invalid	0.79	N/A
Thu, Nov 17, 2016	0.25	---	N/A	N/A	N/A	1.1	17	2.6	1.2	3.4	N/A	4.0	7.0	2.3	0.27	0.32	N/A
Sun, Nov 20, 2016	0.18	0.11	N/A	N/A	N/A	0.42	4.7	0.76	Invalid	3.1	N/A	0.98	3.8	10	0.57	0.14	N/A
Thu, Nov 24, 2016	0.06	0.04	N/A	N/A	N/A	0.10	7.6	6.3	N/A	0.08	N/A	0.11	0.10	0.11	0.06	0.05	0.06
Tue, Nov 29, 2016	Pending	Pending	N/A	N/A	N/A	1.8	12	1.5	N/A	Invalid	N/A	1.8	4.4	5.3	0.35	0.42	Invalid
Fri, Dec 2, 2016	Pending	Pending	N/A	N/A	N/A	0.84	4.9	1.7	N/A	2.0	N/A	1.3	1.6	2.6	0.51	0.14	3.8
Mon, Dec 5, 2016	Pending	Pending	N/A	N/A	N/A	0.44	0.15	0.17	N/A	0.20	N/A	0.27	0.18	0.67	0.27	0.11	0.17

**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.

Site #1 was discontinued in 2013.

Additional monitoring data available for Sites #2 and #3 at: <http://www.aqmd.gov/home/regulations/compliance/air-monitoring-activities>

The average level of hexavalent chromium monitored at the site with the highest concentration next to Aircraft (Site 8) is 13.4 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. The closest resident is located next to Site #7, where the average hexavalent chromium monitored level is 2.8 ng/m<sup>3</sup>. Over many years, this level would also present a cancer risk to residents substantially higher than the Rule 1402 significance risk threshold.

***b. Initial Emissions Sampling Test Results at Aircraft***

On November 17, 2016, District staff collected several samples of air within a few inches to a few feet of three processes at Aircraft.<sup>3</sup> These samples were analyzed for hexavalent chromium at the District laboratory. The results from this sampling are listed in the table below.

<b>Process Emissions Sampled</b>	<b>Cr (VI) Concentration</b>
Water Quench Bath #2	638 ng/m <sup>3</sup>
Heat Treat Furnace #3 with Inconel Parts	376 ng/m <sup>3</sup>
Oil Quench Bath #2	130 ng/m <sup>3</sup>

*\*Average Level 11/5 through 11/17 from Monitor 4219585*

Several process materials were also sampled on the same day and analyzed for hexavalent chromium at the District laboratory. The results from this sampling are in the table below.

<b>Sample Description</b>	<b>Cr (VI) Concentration</b>
Solution Sample from Building #2 Water Quench Tank	46 ppm
Solution Sample from Building #2 Oil Quench Bath Cooling Tower	0.005 ppm
Metal Dust from Intermediate Product Storage	190 ppm
Scale Scraping from Treated Titanium Part	0.018 ppm

Samples, including dust from various process areas and one water sample, were also collected by District staff on November 3, 2016 and analyzed for hexavalent chromium at the District laboratory. The results from this sampling are shown below.

<b>Sample Description</b>	<b>Cr (VI) Concentration</b>
Dust from plasma cutter room	1.4 ppm
Dust from inspection room	4,000 ppm
Dust from waste drum in inspection room	73 ppm
Dust from waste drum in inspection room baghouse catch drum	12 ppm
Dust & debris near furnace #16 in building #4	51 ppm
Water from a quenching tank	49 ppm

These results demonstrate that there are several sources of hexavalent chromium present at Aircraft. Each of these processes and sources has the potential to be emitted to the air. For example, water from the quench baths is circulated through the facility's cooling towers, which could then emit this hexavalent chromium bearing material to the ambient air. Also due to the lack

<sup>3</sup> A report describing this sampling from November 17, 2016 is available here:

<http://www.aqmd.gov/docs/default-source/compliance/Carlton-Forge-Works/aerocraft-16-334.pdf>

of a building enclosure, metal particulate can settle in an around the facility and become airborne with foot traffic, vehicular traffic, and natural elements such as wind and cross-drafts and be emitted into the surrounding neighborhood. The sampling activities described above are not meant to represent a comprehensive analysis of all potential sources of hexavalent chromium emissions from the facility. As part of the requirements of Rule 1402 and Aerocraft's designation as a Potentially High Risk Facility, a comprehensive assessment of all sources of toxic emissions (including other toxic materials besides hexavalent chromium) must be provided. Details regarding this process are described in Section 4 of this letter.

## ***2. Findings From Facility Site Visits and From Information Shared by Aerocraft Representatives***

Based on their visits to your facility on October 26, November 3, 20, 21, 29, December 1, 2, and 11, 2016, District staff identified some potential sources of hexavalent chromium emissions including, but not limited to: the facility's metal heat treating, cooling, cutting, and grinding operations. In addition, during a meeting on December 1, 2016, Aerocraft representatives identified other possible sources of hexavalent chromium emissions after further evaluation of their processes. These sources include but are not limited to water quench tanks, cooling towers, and fugitive dust from various operations or lack of housekeeping.

## ***3. Findings From the District's Investigation of Nearby Facilities***

On December 1, 2016 a Notice of Violation P64520 was issued to Aerocraft for discharge of hexavalent chromium. In addition, District staff has conducted extensive evaluations of dozens of facilities in the surrounding area. For example, the city of Paramount has provided a list of 88 facilities with metal-related operations within the city. District staff has used this list to supplement its investigation of surrounding businesses. To date, the only other major source of hexavalent chromium emissions that has been identified is Anaplex Corporation located at 15547 Garfield Avenue. This facility is also being designated as a Potentially High Risk Facility under Rule 1402. District staff will continue its investigation of surrounding businesses and any pertinent information from this investigation will be made available to Aerocraft and the public.

## **4. Designation of Aerocraft as a Potentially High Risk Facility**

Based on the evidence presented above, your facility has been designated as a Potentially High Risk Facility pursuant to Rule 1402(g).

### **a. Rule 1402 Requirements for Potentially High Risk Facilities**

Aerocraft Heat Treating Company, Inc. is required to submit an Early Action Reduction Plan, an Air Toxics Inventory Report, a Health Risk Assessment, and a Risk Reduction Plan no later than the timelines outlined below.

<b>Deliverable</b>	<b>Due Date</b>	<b>Due Date</b>	<b>Rule Reference</b>
Initial Information for Air Toxics Inventory Report	30 days	1/13/2017	1402(d)(1)
Early Action Risk Reduction Plan	90 days	3/14/2017	1402(g)(2)
Air Toxics Inventory Report	150 days	5/16/2017	1402(d)(2)
Health Risk Assessment	180 days	6/13/2017	1402(g)(3)
Risk Reduction Plan	180 days	6/13/2017	1402(g)(4)

Further, Aerocraft will be required to conduct public notification within 30 days after the Health Risk Assessment is approved and will need to implement the Risk Reduction Plan as quickly as feasible, but no later than two years after the Risk Reduction Plan is approved. Aerocraft is strongly encouraged to aggressively reduce risks to the surrounding neighborhood as quickly as possible, and faster than the timeline provided above.

**b. Guidelines for Preparing Rule 1402 Deliverables**

In accordance with the State of California's Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402, Aerocraft Heat Treating Company, Inc. is required to prepare a detailed Air Toxics Emission Inventory Report (ATIR) for your facility based on your most current operating conditions and emission inventory for calendar year 2016.

Pursuant to SCAQMD Rule 1402(d)(1), your facility is required to submit the **Initial Information** for an ATIR to SCAQMD within thirty (30) days of the date of this letter, on or before **January 13, 2017**. The Initial Information should include a list of device(s) or process(es) to be included in the detailed ATIR and their corresponding toxic pollutants and Reference Sources for each emission factor.

Pursuant to 1402 (g)(2), your facility is required to submit an **Early Action Reduction Plan** to SCAQMD within 90 days of the date of this letter, on or before **March 14, 2017**. The Early Action Reduction Plan should include a list of measures that can be implemented immediately to reduce the facility-wide health risk.

Your facility is required to submit a **detailed ATIR** to SCAQMD within one hundred fifty (150) days of the date of this letter, on or before **May 16, 2017**. In your detailed ATIR, you must include all toxic air contaminant emissions from your facility that are listed in Appendix A of the *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (March 2015)*.

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

Please also include a signed copy of the AB 2588 Air Toxics Document Certification & Application Form (see attachment) along with your ATIR submittal.

The California Air Resources Board (CARB) has developed the "Hot Spots" Analysis and Reporting Program (HARP) which includes the emissions inventory and risk assessment procedures of the "Hot Spots" Program into a set of program modules. Your ATIR must include an electronic file in the HARP Emission Inventory Module (EIM) format. You may obtain a free copy of the HARP software from the following link:

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

You are required to submit your detailed ATIR in accordance with the SCAQMD's *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act*.

<http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf>

Pursuant to Rule 1402 (g)(3), your facility is required to submit a **Health Risk Assessment** to SCAQMD within 180 days of the date of this letter, on or before **June 13, 2017**. You are required

to prepare and submit your HRA using the latest version of the HARP software, which includes the U.S. EPA air quality dispersion model called AERMOD. AERMOD documentation is available at: [http://www.epa.gov/ttn/scram/dispersion\\_prefrec.htm#aermod](http://www.epa.gov/ttn/scram/dispersion_prefrec.htm#aermod)

Meteorological data for use in HARP 2 and AERMOD can be downloaded from: <http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod>

The HRA must be prepared in accordance with *The Air Toxics Hot Spots Program Risk Assessments Guidelines (February 2015)* developed by the State of California Office of Environmental Health Hazard Assessment (OEHHA).

[http://www.oehha.ca.gov/air/hot\\_spots/hotspots2015.html](http://www.oehha.ca.gov/air/hot_spots/hotspots2015.html)

The HRA must also utilize District specific guidance within its *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act* mentioned above. District specific guidance on using AERMOD is also available.

<http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/modeling-guidance>

Air emissions of any substances listed in Appendix A-I of the OEHHA guidelines must be quantified and evaluated in the HRA. Please follow the detailed outline for the HRA report, which is contained in Appendix C of the SCAQMD supplemental risk assessment guidelines mentioned above. Please include a signed copy of the AB 2588 Air Toxics Document Certification & Application Form (Attachment) along with your HRA submittal.

Pursuant to Rule 1402 (g)(4), your facility is required to submit a **Risk Reduction Plan** to SCAQMD within 180 days of the date of this letter, on or before **June 13, 2017**. Guidance for preparing a Risk Reduction Plan can be found in the SCAQMD AB 2588 Supplemental Guidelines mentioned above.

Finally, we appreciate the cooperation that Aerocraft has shown to date and its willingness to take seriously the impact of its emissions. However, given the significant levels of hexavalent chromium emitted by your facility, we strongly encourage you to take all necessary steps to reduce these emissions as quickly as possible. If you have questions regarding the requirements detailed in this letter, please contact me at (909) 396-3244.

Sincerely,



Ian MacMillan  
Planning & Rules Manager  
Planning, Rule Development & Area Sources

cc: Kurt Wiese, SCAQMD  
Phil Fine, SCAQMD  
Bay Gilchrist, SCAQMD  
Susan Nakamura, SCAQMD  
Victoria Moaveni, SCAQMD  
Tom Wood, Stoel Rives LLP (for Aerocraft)

Attachment

ATTACHMENT



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21865 Copley Drive, Diamond Bar, CA 91765-4182

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AB2588 AIR TOXICS DOCUMENT CERTIFICATION & APPLICATION FORM

Please check the appropriate boxes for purpose of submittal:

AIR TOXICS INVENTORY REPORT (ATIR)
FIRST YEAR'S ATIR
UPDATE ATIR

INVENTORY YEAR \_\_\_\_\_

HEALTH RISK ASSESSMENT (HRA)
INITIAL HRA
REVISED HRA

INVENTORY YEAR \_\_\_\_\_

Facility name

[Text box for Facility name]

Company name

[Text box for Company name]

Facility address

[Text box for Facility address]

Mailing address

[Text box for Mailing address]

SCAQMD Facility ID#

[Text box for SCAQMD Facility ID#]

Facility SIC #

[Text box for Facility SIC #]

Contact Person (Company Official)

[Text box for Contact Person]

Telephone (Contact Person)

[Text box for Telephone]

Preparer (if different from above)

Name:

[Text box for Name]

Title:

[Text box for Title]

Company:

[Text box for Company]

Telephone:

[Text box for Telephone]

I SWEAR UNDER PENALTY OF PERJURY THAT THE DATA SUBMITTED WITH THIS DOCUMENT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, AND CONFORM WITH THE INFORMATION REQUESTED BY THE SCAQMD. I FURTHER ACKNOWLEDGE THAT FAILURE TO SUBMIT THE REQUIRED INFORMATION OR KNOWINGLY SUPPLY FALSE INFORMATION IS SUBJECT TO CIVIL PENALTIES PURSUANT TO THE CALIFORNIA HEALTH AND SAFETY CODE SECTIONS 44381(a) AND 44381(b).

Signature Of Responsible Company Official

[Text box for Signature]

Date

[Text box for Date]

Name Of Responsible Company Official (please print)

[Text box for Name]

Title

[Text box for Title]