



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

EMAILED and MAILED: December 11, 2015

December 11, 2015

Mr. Daniel Cunningham
Bowman Plating Company, Inc.
2631 E. 126th Street
Compton, CA 90222

Subject: Amended Approval of AB2588 Health Risk Assessment (HRA) Update
Bowman Plating Company, Inc. (SCAQMD No.: 18989)

This letter provides an amended approval of the HRA update submitted by Bowman Plating Company pursuant to AB2588 and South Coast Air Quality Management District (SCAQMD) Rule 1402, including revisions made by SCAQMD staff. This HRA had previously been approved on November 24, 2015 (see attached letter). Since this time, staff discovered an error in the previously approved health risk calculation, specifically with default parameters used for the multi-pathway risk assessment (e.g., potential ingestion of home-grown produce). This error has been corrected, and a new Health Risk Assessment Summary Form is attached. This amended HRA approval shows a maximum cancer risk of **110.0** in-a-million for a residential receptor and **16.61** in-a-million for a worker receptor. Non-cancer health risks are not above any thresholds specified in Rule 1402.

As stated in the Summary Form, the risks are above public notification and risk reduction thresholds specified in Rule 1402. Bowman Plating is required to notify the public¹ within **30** days of this final approval of the HRA and submit a Risk Reduction Plan (RRP) within **180** days of approval of the HRA. Specifically, the notification letters to those within the impact area must be sent by January 11, 2016 and the RRP must be submitted by June 8, 2016. SCAQMD staff will conduct a public meeting within two to four weeks after the notification letter has been sent. A map showing the areas with health risk levels that exceed public notification threshold is attached to this letter.

While this amended HRA approval does change the timeline for notification and submittal of a RRP, the other requirements described in our November 24, 2015 letter still apply, including the requirement that Bowman Plating provide access for SCAQMD staff to install monitors onsite. Please contact Jason Low at (909) 396-2269 to discuss the details of our monitoring needs within the next two weeks.

¹ Public Notification requirements can be found here:
www.aqmd.gov/docs/default-source/planning/risk-assessment/public-notification-procedures.pdf

If you have any questions regarding this letter, please contact me at (909) 396-3244.

Sincerely,

A handwritten signature in black ink that reads "Ian V. MacMillan". The signature is written in a cursive style with a large initial "I" and "M".

Ian MacMillan
Planning and Rules Manager

Attachments: November 24, 2015 HRA Approval Letter
HRA Summary Form
Public Notification Area Map

cc: Massoud Akhavi, Bowman Plating Company
Jill Whynot, SCAQMD
Victoria Moaveni, SCAQMD
Allen Hoshik Yoo, SCAQMD

ATTACHMENT 1



South Coast Air Quality Management District

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EMAILED and MAILED: November 24, 2015

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Mr. Daniel Cunningham
Bowman Plating Company, Inc.
2631 E. 126th Street
Compton, CA 90222

Subject: Approval of AB2588 Health Risk Assessment (HRA) Update
Bowman Plating Company, Inc. (SCAQMD No.: 18989)

Dear Mr. Cunningham:

This letter provides a final approval of the HRA update submitted by Bowman Plating Company pursuant to AB2588 and South Coast Air Quality Management District (SCAQMD) Rule 1402, including revisions made by SCAQMD staff. The risks in the HRA update have been revised by SCAQMD staff to reflect the recently updated guidance from the state Office of Environmental Health Hazard Assessment (OEHHA)¹ that was incorporated into Rule 1402 in June 2015. As noted in the HRA Summary Form attached to this letter, the risks are above public notification and risk reduction thresholds specified in Rule 1402. Bowman Plating is required to notify the public² within **30** days of approval of the HRA and submit a Risk Reduction Plan within **180** days of approval of the HRA.

Background

In accordance with the Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) and SCAQMD Rule 1402, Bowman Plating submitted an HRA that was based on the fiscal year 2005-06 air toxic emissions inventory and approved in August 2007. This 2007 HRA projected the maximum cancer risk of 14.2 in-a-million that was mainly contributed by hexavalent chromium (Cr VI) emissions from spray booths.

Since 2005-06 HRA, Bowman Plating has reported significantly increased Cr VI emissions in the annual emission reports (AERs) of calendar year 2008 through 2013. Bowman Plating and SCAQMD staff have audited these emissions and found that incorrect Cr VI emission factors for spray booths operation were used. Subsequently, Cr VI emissions were recalculated using default emission factors. This recalculation still resulted in Cr VI emissions that are up to 120%

¹ Available here: http://oehha.ca.gov/air/hot_spots/riskguidancedraft2014.html

² Public Notification requirements can be found here:
www.aqmd.gov/docs/default-source/planning/risk-assessment/public-notification-procedures.pdf

higher than the previous HRA emissions due to increased throughput of Cr VI containing materials.

Subsequently, the SCAQMD staff notified Bowman Plating on March 28th, 2014 that it must submit an HRA update based on information from its recent AER to reflect current operation conditions. Bowman Plating prepared and submitted the HRA update based on 2013 air toxic emissions inventory on October 24th, 2014 pursuant to the request. This HRA update projects the maximum cancer risk of 11.00 in-a-million for a residential receptor and 16.70 in-a-million for a worker receptor.

HRA Results

OEHHA revised its HRA guidance document on March 6th, 2015, and SCAQMD updated its Rule 1402 on June 5th, 2015. Due to these changes, SCAQMD staff re-ran the risk assessment using the new HARP2 software (version 15197) available from the state Air Resources Board³. Further, additional residential receptors were identified by staff adjacent to Bowman Plating to the north. This revised assessment has resulted in the maximum cancer risk of **97.72** in-a-million for a residential receptor and **16.61** in-a-million for a worker receptor. Both risks are primarily caused by Cr VI emissions. The HRA summary of this assessment is available in the attachment.

In addition, SCAQMD staff found that the emission inventories used in the 2013 HRA update and past AERs did not include any fugitive emissions such as from the anodizing/plating tanks, striking tank, sanding table, de-masking table, sludge dryer, etc. As noted during a recent site visit and in the July 29, 2015 Notice of Violation, SCAQMD staff saw indications of poor housekeeping practices that will likely produce sources for fugitive emissions. Air quality monitors have proven useful at other facilities to evaluate the level and nature of fugitive emissions. SCAQMD staff requested to place two monitors onsite during our July site visit and again in a letter dated September 8, 2015. As you are aware, Bowman Plating rejected this request on September 18, 2015. Given the already high risks reported from stack emissions, the sources of fugitive emissions observed during our site visit that are unquantified in the existing HRA, and under authority granted to the SCAQMD under Health and Safety Code §42303, and recognized by §42700(b), Bowman is required to grant SCAQMD access to place monitors onsite. Please contact Jason Low at (909) 396-2269 to discuss the details of our monitoring needs within the next two weeks.

Next Steps

The maximum cancer risks exceed the public notification and risk reduction thresholds specified in Rule 1402. Because of these rule exceedances, Bowman Plating must:

- Conduct public notification pursuant to SCAQMD Public Notification Procedures⁴ within **30** days of this letter; and
- Submit a Risk Reduction Plan (RRP) within **180** days of this letter; and

³ Available here: <http://www.arb.ca.gov/toxics/harp/harp.htm>

⁴ Available here: <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/public-notification-procedures.pdf>

- The HRA included with the RRP that demonstrates its effectiveness must take into account the monitored levels of hexavalent chromium if they demonstrate that there are emissions from the facility that are not accounted for in the approved HRA (e.g., fugitive emissions); and
- Implement the RRP as quickly as feasible, but no later than three years from the initial RRP submittal date.

A map showing the areas with health risk levels that exceed public notification threshold is attached to this letter.

If you have any questions regarding this letter, please contact me at (909) 396-3244. In addition, given the short timeframe for conducting public notification, please schedule a meeting with SCAQMD staff at your earliest convenience to discuss the next steps for public notification.

Sincerely,



Ian MacMillan
Planning and Rules Manager

Attachment: HRA Summary Form
Public Notification Area Map

cc: Massoud Akhavi, Bowman Plating Company

Jill Whynot, SCAQMD
Susan Nakamura, SCAQMD
Victoria Moaveni, SCAQMD
Allen Hoshik Yoo, SCAQMD



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ATTACHMENT 2

HEALTH RISK ASSESSMENT SUMMARY FORM

Facility Name : **Bowman Plating Company**

Facility Address: **2631 E. 126th St., Compton, CA 90222**

Type of Business: **Metal Finishing, Anodizing, Plating, NDT, Coating & Paint**

SCAQMD ID No.: **18989**

Inventory Reporting Year : **2013**

A. Cancer Risks

(One in a million means one chance in a million of getting cancer from being constantly exposed to a certain level of a chemical over a period of time)

1. Maximum Cancer Risks : *(Offsite and residence = 30-year exposure, worker = 25-year exposure)*
- a. Offsite **165.2** in a million Location: Rec#2255 (386792E; 3753792N)
 - b. Residence **110.0** in a million Location: Rec#2253 (386752E; 3753792N)
 - c. Worker **16.6** in a million Location: Rec#2255 (386792E; 3753792N)
2. Substances Accounting for 90% of Cancer Risk: **Hexavalent Chromium**
- Processes Accounting for 90% of Cancer Risk: **Spray Operation**
3. Cancer Burden for a 70-yr Exposure: *(Cancer Burden = [Cancer Risk] x [# of People Exposed to Specific Cancer Risk])*
- a. Cancer Burden **0.10**
 - b. Number of people exposed to 1> per million cancer risk for a 70-yr exposure **42,640**
 - c. Maximum distance to edge of 70-year, 1 x 10⁻⁶ cancer risk isopleth (meters) **2,380**

B. Non-Cancer Risks

*[Long Term Effects (chronic) and Short Term Effects (acute)]
(non-carcinogenic impacts are estimated by comparing calculated concentration to identified reference exposure levels, and expressing this comparison in terms of a "Hazard Index")*

1. Maximum Non-Cancer Chronic Health Risks:
- a. Residence HI: **0.05** Location: Rec#2253 (386752E; 3853792N) toxicological endpoint: **RESPIRATORY**
 - b. Worker HI : **0.10** Location: Rec#2255 (386792E; 3753792N) toxicological endpoint: **RESPIRATORY**
2. Substances Accounting for 90% of Chronic Hazard Index: **Nickel**
3. Maximum 8-hour Chronic Hazard Index:
- 8-Hour Chronic HI: **0.02** Location: Rec#2255 (386792E; 3753792N) toxicological endpoint: **RESPIRATORY**
4. Substances Accounting for 90% of 8-hour Chronic Hazard Index: **Nickel**
5. Maximum Acute Hazard Index:
- PMI: **0.07** Location: Rec#2255 (386792E; 3753792N) toxicological endpoint: **IMMUN**
6. Substances Accounting for 90% of Acute Hazard Index: **Nickel**

C. Public Notification and Risk Reduction

1. Public Notification Required? **Yes**
- a. If 'Yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI >1: **550**
2. Risk Reduction Required? **Yes**

ATTACHMENT 3

PUBLIC NOTIFICATION AREA MAP

December 11, 2015

