

## METAL FINISHING ASSOCIATION OF SOUTHERN CALIFORNIA INC.

August 23, 2006

Ms. Carla Takemoto California Air Resources Board P.O. Box 2815 Sacramento, CA 95812

Dear Ms. Takemoto:

After review by Dean High and others, we at the MFASC and STA are providing in this letter comments on the CARB Proposed Amended Air Toxic Control Measure (PAATCM) Staff Report for Hexavalent Chrome Operations dated 8/11/06.

## Comments on 8/11/06 CARB Staff Report:

**Page 15.** Please identify and quantify the major industrial categories that make up 1000 lb/y of hexavalent chromium. Use consistent units of lb/Y and not tons/Y for mobile sources. Statewide, chrome plating and chromic acid anodizing represents 4 lb/y out of the total of 2,920 lb/y or **0.1 of 1%**! When and what agency made the 2006 estimate of 30 lb/y of hexavalent chromium from chrome plating and chromic acid anodizing operations?

**Page 1.** "This ATCM reduced hexavalent chromium emissions from chromium plating and chromic acid anodizing facilities by well over 90%." On Pages 39 & 40 of the CARB Staff Report "Emission Factor Background," it is clear that uncontrolled emissions from chrome plating and chromic acid anodizing operations were in the range of 4.4 mg/AH all along. Current emission rates for tanks with fume suppressants, by CARB test results, is .04 mg/AH compared to 4.4 mg/AH uncontrolled, which is a 99% reduction. In the SCAQMD, with <sup>3</sup>/<sub>4</sub> of the chrome operations, the use of certified fume suppressants has reduced Cr6 emissions from non-ventilated tanks to 0.01 mg/AH or 99.8% (4.39/4.40). Also within SCAQMD, tanks with add-on controls have reduced Cr6 emissions to 0.0015 mg/AH or lower; this represents 99.97% reduction (4.3985/4.4000). The Staff Report should say: "well over 99%"; otherwise it is misleading.

**Page 13, 2<sup>nd</sup> Paragraph, Line 2: Reword as follows:** "Nine out of the ten facility test locations downwind of the plating shops showed Cr6 concentrations essentially the same as background Cr6 levels measured by SCAQMD in the MATES II Study and as measured by CARB at their air toxic monitoring stations. Based on this monitoring, estimated cancer risks downwind of five facilities ranged from 20-55 per million people exposed <u>including the Cr6 from all other sources</u>. Four facilities had cancer risks of less than 10 per million exposed people <u>including the Cr6 from all other sources</u>. One very small facility had an estimated cancer risk of 450 per million exposed people (SCAQMD 2003a) [SCAQMD worked with this facility to reduce the cancer risk from 450 down to 7 in a million.] The results illustrate the effectiveness of localized air monitoring to identify problem pollution sources."

**Pages ES-10, 2, 78, & 88.** The Staff Report defines BACT for larger facilities (over 200,000 AH/Y) as being HEPA filters. The current ATCM requires add-on controls for hard chrome plating facilities larger than 500,000 AH/Y. We recommend that CARB keep this size separation rather than the proposed 200,000 AH/Y. Only about 15 facilities would be affected by the continued use of 500,000 AH/Y. USEPA's 2004 NESHAP modification allowed hard chrome plating tanks to comply with use of fume suppressants alone. And, the Negotiated Rule-Making for SCAQMD Rule 1469 allows compliance without mandatory HEPA filter systems.

**Pages 45 & 55.** The foaming mechanism, in our judgment, and verified by source tests, is very effective in reducing Cr6 emissions. SCAQMD conducted and supervised source tests to ensure each fume suppressant could meet 0.01 mg/AH, before certifying them. Unless CARB conducts source tests on foaming agents with or without surface tension reducers and/or polyballs, it is totally arbitrary for CARB to <u>de-list</u> any of the approved fume suppressants or not to allow foams to be used under any circumstances to meet the PAATCM.

**Page 46.** The Staff report concludes that the Cr6 emission rate is not impacted by surface tension. **This conclusion is wrong!** We urge CARB to discuss this relationship with fume suppressant manufacturers and with SCAQMD technical staff. There are many empirical and theoretical data sets which show emission rates declining with lowered surface tension. Use of 2 tests on 1 tank **cannot** be considered statistically sound for drawing such a conclusion.

**Page 41.** Tests No. 1 & 2 at Sigma should clarify that liquid carry out off the plating tank probably led to the very high results. Test No. 4 at Van Nuys should clarify that the capture efficiency was only 50-75% so results again cannot be used. These 3 tests would not meet the requirements for approved source tests by local air districts or by the USEPA.

**Page 68.** The conclusion that "...on-site worker exposure to hexavalent chromium at the affected facilities would be reduced as well" is not supported by CARB's in plant data shown on Page 50. There is no significant difference between ventilated and non-ventilated facilities for in-plant concentrations. The swamp cooler at Van Nuys blew all the emissions out of the building. The 4 mg/m3 was not the result of a good ventilation system. In fact it was only 50-75% efficient.

Page 70. Please add a footnote that meteorological data from San Francisco, San Diego, and Fresno were not used.

Page 72. Please add a footnote that the point source curve is only for a low stack.

Page 73. For volume sources, Table VII-5 shows only a small (3,000 sq. ft.) facility modeled. Were medium and large volume sources modeled?

Please call me if you require any additional information, clarification or assistance.

Very truly yours,

Daniel A. Cunningham

Daniel A. Cunningham MFASC Executive Director STA Executive Director



METAL FINISHING ASSOCIATION OF SOUTHERN CALIFORNIA INC.

August 24, 2006

Ms. Carla Takemoto California Air Resources Board P.O. Box 2815 Sacramento, CA 95812

Dear Ms. Takemoto:

After review by Dean High and others, we at the MFASC and STA are providing in this letter comments on the CARB Proposed Amended Air Toxic Control Measure (PAATCM) Appendix A for Hexavalent Chrome Operations dated 8/11/06.

## Comments on 8/11/06 CARB PAATCM, Appendix A:

**Page 3.** Include a definition of BACT as meeting the 0.01 mg/AH for facilities under 20,000 AH/Y and 0.0015 mg/AH for facilities larger than 20,000 AH/Y.

Page 7. Add "or foam blanket" to "included but not limited to polyballs or foam blanket, ..."

Page 15. Delete footnote 5. Leave the requirement for HRA up to the local agency under their Hot Spots Authority.

Page 16. Delete "use an ad-on air pollution control device(s) to control hexavalent chromium emissions and" Page 16. (c)(1)(A) Delete Item A

(c)(2) Delete Item (2) Leave the requirement for HRA up to the local agency under their Hot Spots Authority.

**Page 23.** (b)(1) Delete "add-on" and "device" and reword to say, "The tested air pollution control technique demonstrated..."

**Page 23.** (b)(3) Delete "add-on" and "device" and reword to say, "The test is representative of the air pollution control technique..."

Page 25. 93102.8 Table. Use all of the "approved fume suppressants" certified by SCAQMD or initiate a separate but equivalent CARB approval procedure for fume suppressants.

Page 28. Item 2 at Top of Page. Delete the wording and insert: "wash down quarterly until wash water is clear." [Note: There is no way to see the back of a mesh pad or chevron mist eliminator.]

Please call me if you require any additional information, clarification or assistance.

Very truly yours,

Daniel A. Cunningham

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