State of California
AIR RESOURCES BOARD

Resolution 06-25

December 7, 2006

Agenda Item No.: 06-8-3

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or the Board) to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, under section 39650 of the Health and Safety Code, the Legislature finds and declares that it is the public policy of the State that emissions of toxic air contaminants should be controlled to levels which prevent harm to the public health;

WHEREAS, on January 23, 1986, the Board identified hexavalent chromium as a toxic air contaminant pursuant to article 3 (commencing with section 39660), chapter 3.5, part 2, division 26 of the Health and Safety Code;

WHEREAS, in identifying hexavalent chromium as a toxic air contaminant, the Board determined that there is not sufficient scientific evidence to support identification of a threshold level below which no significant adverse health effects are anticipated (see title 17, California Code of Regulations (CCR), section 93000);

WHEREAS, sections 39658 and 39666 of the Health and Safety Code authorize the Board to establish airborne toxic control measures (ATCM) for substances identified as toxic air contaminants in accordance with specified criteria;

WHEREAS, for a toxic air contaminant for which the Board has not specified a threshold exposure level, section 39666 of the Health and Safety Code requires ATCMs to be designed to reduce emissions to the lowest level achievable through the application of best available control technology (BACT) or a more effective control method, considering factors specified in section 39665, unless the Board determines, based on an assessment of risk, that an alternative level of emissions reduction is adequate or necessary to prevent an endangerment of public health;

WHEREAS, on February 18, 1988, pursuant to section 39666 of the Health and Safety Code, the Board adopted the Hexavalent Chromium for Chrome Plating and Chromic Acid Anodizing Operations, title 17, CCR, section 93102 (Chromium Plating ATCM or ATCM), which established emission limits for chromium plating and chromic acid anodizing operations;

WHEREAS, in 1998, the Board adopted various amendments to the Chromium Plating ATCM; these amendments were necessary to establish equivalency with "National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks" (Chromium Plating NESHAP) adopted by the United States Environmental Protection Agency (U.S. EPA);

WHEREAS, on March 15, 1999, ARB was granted equivalency with the Chromium Plating NESHAP under section 112(l) of the federal Clean Air Act; this action by U.S. EPA means that chromium plating and chromic acid anodizing facilities in California do not need to comply with the Chromium Plating NESHAP and must instead comply with ARB's Chromium Plating ATCM;

WHEREAS, ARB staff has undertaken an evaluation of chromium plating and chromic acid anodizing facilities and has determined that there are still significant public health risks associated with hexavalent chromium emissions from these facilities, especially when facilities are located near homes or schools;

WHEREAS, modeling analyses show that very small amounts of hexavalent chromium emitted from chromium plating and chromic acid anodizing facilities can potentially cause significant health risks to sensitive receptors (such as residences or schools) near these facilities;

WHEREAS, ARB staff has determined that many of the chromium plating and chromic acid anodizing facilities are located near sensitive receptors, and that these sensitive receptors are potentially adversely impacted by hexavalent chromium emissions from chromium plating and chromic acid anodizing facilities;

WHEREAS, ARB staff has conducted an emissions testing program at decorative chromium plating facilities and has determined that hexavalent chromium emissions may have been underestimated; staff has also determined that only certain chemical fume suppressants provide the maximum emission reductions achievable through use of chemical fume suppressants as sole control, and that these chemical fume suppressants can reduce emissions to 0.01 milligrams per ampere-hour or less;

WHEREAS, to reduce hexavalent chromium emissions, all chromium plating and chromic acid anodizing facilities in California are currently using either in-tank controls such as chemical fume suppressants and/or add-on air pollution control devices such as high efficiency particulate arrestor (HEPA) filters;

WHEREAS, while South Coast Air Quality Management District (SCAQMD) Rule 1469 has reduced the estimated cancer risk for facilities in the SCAQMD, the rule does not apply to facilities in the rest of the State and does not achieve the maximum reduction feasible because BACT was not required for all facilities;

WHEREAS, despite significant emission reductions, 30 percent of the chromium plating and chromic acid anodizing facilities still have an estimated potential cancer risk of more than 10 in a million people exposed;

WHEREAS, ARB staff has determined that, due to poor housekeeping practices at some facilities, fugitive emissions from chromium plating and chromic acid anodizing facilities may have an impact on overall facility risk;

WHEREAS, low-income and ethnically diverse communities may be disproportionately impacted by hexavalent chromium emissions from chromium plating and chromic acid anodizing facilities;

WHEREAS, ARB staff has proposed amendments to the Chromium Plating ATCM based upon a technology review, an emissions testing program, an industry survey, and the results of a health risk assessment that identifies potential risks to public health; these proposed amendments are set forth in Attachment A hereto;

WHEREAS, ARB staff has worked with the air pollution control districts and air quality management districts (districts), the affected industry, and the public, as required by Health and Safety Code section 39665, to prepare a report identifying the need for and appropriate degree of regulation for hexavalent chromium;

WHEREAS, ARB staff has prepared a staff report entitled “Initial Statement of Reasons for Proposed Amendments to the Hexavalent Chromium Airborne Toxic Control Measure for Chrome Plating and Chromic Acid Anodizing Operations” (Initial Statement of Reasons) which provides estimates of current hexavalent chromium emissions and potential cancer risk due to airborne concentrations of hexavalent chromium from chromium plating and chromic acid anodizing facilities, identifies BACT, and discusses the potential cost impacts from the proposed amendments on the affected industry, local districts, the State, and local government;

WHEREAS, the Initial Statement of Reasons constitutes the report on the need for further controls and appropriate degree of regulation for chromium plating and chromic acid anodizing facilities as required by Health and Safety Code section 39665;

WHEREAS, in accordance with Health and Safety Code section 39665(c), the report and any relevant comments received during public consultation with the districts, affected sources, and the public, were made available for public review and comment 45 days prior to the public hearing to consider the proposed amendments;

WHEREAS, the report discusses, to the extent data could reasonably be made available, the factors specified in Health and Safety Code section 39665(b);

WHEREAS, the proposed amendments to the ATCM would further reduce hexavalent chromium emissions and health risk from chromium plating and chromic acid anodizing facilities;

WHEREAS, in accordance with Health and Safety Code section 39666(c), the amendments to the ATCM have been designed, in consideration of the factors specified in Health and Safety Code section 39665(b), to reduce emissions of hexavalent chromium to the lowest levels achievable through application of BACT;

WHEREAS, because the ATCM requires the use of a specified method or methods to reduce, avoid, or eliminate the emissions of a toxic air contaminant, section 39666(f) of the Health and Safety Code authorizes a district to approve an alternative method or methods of compliance, if the operator of a source demonstrates that the method is, or the methods are, enforceable, that equal or greater amounts of reduction in emissions and risk will be achieved, and that the reductions will be achieved within the time period required by the ATCM;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project which may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, a public hearing was held on September 28, 2006, at which time the Board heard testimony and comments from stakeholders;

WHEREAS, based on testimony at the September 28, 2006 hearing, the Board continued the hearing and directed staff to work with stakeholders on a revised proposal and to work with the districts on a process for demonstrating compliance through equivalent methods;

WHEREAS, based on comments and testimony at the September 28, 2006 public hearing, comments received during the during the 45-day comment period prior to the public hearing, and on additional comments received since the hearing, staff has proposed modifications to the original proposal; these modifications are set forth in Attachment B hereto;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, the proposed amendments to the ATCM were made available to the public for review and comment, and concepts and drafts of the amendments were discussed at public workshops on June 27, 2006; June 30, 2006; August 21, 2006; and August 23, 2006;

WHEREAS, in consideration of the Initial Statement of Reasons, written comments, and public testimony it has received, the Board finds that:

Existing federal, State, and local regulations do not sufficiently protect public health from hexavalent chromium emissions from chromium plating and chromic acid anodizing facilities;

Chromium plating and chromic acid anodizing facilities emit potentially harmful airborne concentrations of hexavalent chromium, which pose a significant health risk to exposed members of the public;

The amendments approved herein would substantially reduce hexavalent chromium emissions and are necessary to protect public health;

To protect public health, it is appropriate to prohibit any new facility from operating unless it is located outside of an area zoned for residential or mixed use and is located at least 1,000 feet from the boundary of any such area;

The amendments approved herein would reduce fugitive hexavalent chromium emissions by establishing housekeeping requirements;

The amendments approved herein would improve compliance with the ATCM by establishing an ongoing training requirement for facility owners and operators;

The amendments approved herein would further reduce public exposure to hexavalent chromium by prohibiting the sale or use of chromium plating or chromic acid anodizing kits unless they are used at permitted facilities;

The amendments approved herein comply with the requirements of State law for control of sources of toxic air contaminants identified by the Board;

The amendments approved herein require BACT for all facilities, as required by Health and Safety Code section 39666(c);

The economic impacts of the proposed amendments have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the Initial Statement of Reasons;

The benefits to human health, public safety, public welfare, or the environment justify the costs of the regulatory requirements;

No reasonable alternative considered or that has otherwise been identified and brought to the attention of ARB would be more effective in carrying out the purpose for which the amendments are proposed, or be as effective to affected private persons and businesses than the proposed amendments;

The amendments approved herein will reduce exposures to hexavalent chromium emissions for communities with chromium plating and anodizing facilities;

The amendments approved herein are consistent with ARB's environmental justice policy of reducing health risks in communities where chromium plating and chromic acid anodizing facilities are located, with low-income and ethnically diverse communities realizing significant benefits; and

The amendments approved herein are necessary in order to protect public health by reducing hexavalent chromium emissions from chromium plating and chromic acid anodizing facilities;

WHEREAS, the Board further finds, in accordance with Health and Safety Code section 39650(e), that:

While absolute and undisputed scientific evidence may not be available to determine the exact extent of the risk from emissions of hexavalent chromium from chromium plating and chromic acid anodizing facilities, it is necessary to take action to protect public health; and

WHEREAS, pursuant to the requirements of the California Environmental Quality Act and the Board's regulations, the Board further finds that no significant adverse environmental impacts will occur from the amendments approved herein.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the adoption of proposed amendments to section 93102 (renumbered as sections 93102 to 93102.16), title 17, California Code of Regulations, as set forth in Attachment A, with the modifications set forth in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to take final action to adopt the amendments set forth in Attachment A, with the modifications set forth in Attachment B and such other conforming modifications as may be appropriate, after making the modified regulatory language and any additional supporting documents and information available for a supplemental public comment period of at least 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if she determines that this is warranted after review of the comments.

BE IT FURTHER RESOLVED that the Board directs ARB staff to develop and implement a focused educational effort for chromium plating and chromic acid anodizing operators and land-use planners, with the goal of ensuring that sensitive receptors are not sited near existing chromium plating or chromic acid anodizing operations.

BE IT FURTHER RESOLVED that the Board directs staff to work with the California Air Pollution Control Officers' Association (CAPCOA), to develop appropriate methodologies for evaluating alternative methods of compliance to ensure that the

alternative provides equivalent or greater reductions in emissions and risk as provided in the Health and Safety Code section 39666(f).

BE IT FURTHER RESOLVED that local air districts have the responsibility for approving alternative methods for demonstrating compliance with the ATCM pursuant to section 93102.4(b)(3) and Appendix 9.

BE IT FURTHER RESOLVED that the Board directs staff to report back to them in 18 months on compliance with the ATCM.

BE IT FURTHER RESOLVED that the Board directs ARB staff to send the adopted amendments to the districts for implementation and enforcement and provide assistance to the districts in implementing and enforcing the amended ATCM.

I hereby certify that the above is a true and correct copy of Resolution 06-25, as adopted by the Air Resources Board.

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Lori Andreoni, Clerk of the Board

Resolution 06-25

December 7, 2006

Identification of Attachments to the Board Resolution

Attachment A: Adoption of Proposed Amendments to the Hexavalent Chromium Airborne Toxic Control Measure for Chrome Plating and Chromic Acid Anodizing Operations (section 93102, title 17, California Code of Regulations, which has been renumbered as sections 93102 to 93102.16), as set forth in Appendix A to the Initial Statement of Reasons, released August 11, 2006.

Attachment B: Staff's Suggested Modifications to the Original Proposal (distributed at the Board hearing on December 7, 2006).