

State of California  
AIR RESOURCES BOARD

**Resolution 04-44**

December 9, 2004

Agenda Item No.: 04-11-3

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (Board/ARB) 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, on August 8, 1991, the Board identified nickel 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 both hexavalent chromium and nickel as toxic air contaminants, 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, 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 toxic air contaminants 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 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, modeling analyses show that the use of very small amounts of thermal spraying materials containing chromium and nickel can potentially cause significant public health risks;

WHEREAS, ARB staff has surveyed manufacturers of thermal spraying materials and facilities conducting thermal spraying and has determined that materials containing chromium and nickel are sold and used in California;

WHEREAS, ARB staff has determined that most thermal spraying operations are currently using High-Efficiency Particulate Abatement filters, other control devices, and enclosure and ventilation systems to reduce emissions of hexavalent chromium and nickel;

WHEREAS, ARB staff has proposed an ATCM for thermal spraying operations at stationary sources that use materials containing chromium or nickel, based upon results of a health risk assessment that identifies potential risks to public health;

WHEREAS, ARB staff has worked closely 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 control of these toxic air contaminants;

WHEREAS, ARB staff has prepared a staff report entitled *Initial Statement of Reasons for Proposed Airborne Toxic Control Measure to Reduce Emissions of Hexavalent Chromium and Nickel from Thermal Spraying* (Initial Statement of Reasons) which provides estimates of emissions and potential cancer risk due to airborne hexavalent chromium and nickel from thermal spraying operations, identifies feasible control options, and discusses the potential cost impacts from the proposed ATCM on the affected industry, local districts, the State, and local government;

WHEREAS, the Initial Statement of Reasons constitutes the report on the need and appropriate degree of regulation for thermal spraying operations that use materials containing chromium or nickel 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 ATCM;

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 ATCM would reduce hexavalent chromium and nickel emissions from thermal spraying operations at stationary sources;

WHEREAS, in accordance with Health and Safety Code section 39666(c), the requirements of 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 and nickel to the lowest levels achievable through application of best available control technology;

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, based on comments received during the 45-day comment period prior to the public hearing, staff has proposed modifications to the original proposal; these modifications are set forth in Attachment B to this resolution;

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 ATCM was made available to the public for review and comment, and concepts and drafts of the ATCM were discussed at public workshops on May 4, 2004, June 23, 2004, and September 16, 2004;

WHEREAS, in consideration of the staff report, written comments, and public testimony it has received, the Board finds that:

Existing federal, State, and local regulations do not sufficiently protect the public health from hexavalent chromium and nickel emissions from thermal spraying operations;

Thermal spraying operations that use materials containing chromium or nickel may result in potentially harmful airborne concentrations of hexavalent chromium and nickel, which may pose a significant health risk to exposed members of the public;

The proposed ATCM would significantly reduce hexavalent chromium and nickel emissions from thermal spraying operations;

The proposed ATCM complies with the requirements of State law for control of sources of toxic air contaminants identified by the Board;

The provisions of the proposed ATCM constitute the best available control technology, as required by Health and Safety Code section 39666(c);

The economic impacts of the proposed ATCM 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 the ARB would be more effective in carrying out the purpose for which the ATCM is proposed, or be as effective and less burdensome to affected private persons and businesses than the proposed ATCM;

The proposed ATCM will reduce exposures to hexavalent chromium and nickel emissions for all communities with thermal spraying operations using materials containing chromium and nickel;

The proposed ATCM is consistent with ARB's environmental justice policy by reducing health risks from hexavalent chromium and nickel emissions in all communities where thermal spraying operations using materials containing chromium and nickel occur, including those with low-income and ethnically diverse populations; and

The proposed ATCM is necessary in order to protect public health by reducing hexavalent chromium and nickel emissions from thermal spraying operations;

WHEREAS, the Board further finds, in accordance with the 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 and nickel from thermal spraying operations, 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 proposed ATCM.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the adoption of proposed section 93102.5, title 17, California Code of Regulations, as set forth in Attachments A and 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 to the public for a period of 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:

Send the adopted ATCM to the districts for implementation and enforcement and provide assistance to the districts in implementing and enforcing the ATCM; and

Work with districts, industry, and other stakeholders to assess the emissions and potential public health risk from the use of chromium and nickel in temporary portable thermal spraying operations.

I hereby certify that the above is a true and correct copy of Resolution 04-44, as adopted by the Air Resources Board.

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Lori Andreoni, Clerk of the Board

Resolution 04-44

December 9, 2004

**Identification of Attachments to the Board Resolution**

- Attachment A:** Adoption of Proposed Airborne Toxic Control Measure to Reduce Emissions of Hexavalent Chromium and Nickel from Thermal Spraying (section 93102.5, title 17, California Code of Regulations), as set forth in Appendix A to the Initial Statement of Reasons, released October 22, 2004.
- Attachment B:** Staff's Suggested Modifications to the Original Proposal (distributed at the Board hearing on December 9, 2004).

## **Attachment A**

**Proposed Regulation Order:  
Airborne Toxic Control Measure to Reduce Emissions of  
Hexavalent Chromium and Nickel from Thermal Spraying**

## **Attachment B**

### **Staff's Suggested Modifications to the Original Proposal**