California Environmental Protection Agency

# Air Resources Board

Final Statement of Reasons for Rulemaking

# PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE TABLES OF MAXIMUM INCREMENTAL REACTIVITY (MIR) VALUES

Public Hearing Date: November 3, 2009 Agenda Item: 09-11-1

July 2010

Prepared by Research Division

Reviewed by Office of Legal Affairs Stationary Source Division Executive Office

#### I. General

The Initial Statement of Reasons for Proposed Amendments to the Tables of Maximum Incremental Reactivity (MIR) Values (ISOR), released to the public on September 17, 2009, provides a description of the rationale and necessity for the proposed action, and is incorporated by reference herein.

On November 3, 2009, the Chief of the Research Division, Bart Croes (the "hearing officer"), conducted a public hearing to consider the adoption of proposed amendments to the Tables of MIR Values for volatile organic compounds (VOC) and VOC mixtures, contained in section 94700 and 94701, title 17, California Code of Regulations (CCR). The hearing was conducted in accordance with a delegation of authority from the Air Resources Board (the "ARB" or "Board") and from the Executive Officer pursuant to Health and Safety Code sections 39515 and 39516.

This delegation of authority originated in Resolution 00-22, which was approved by the Board at a public hearing on June 22, 2000. At that hearing, the Board approved amendments to the Regulation for Reducing the Ozone Formed from Aerosol Coating Products (the "Aerosol Coating Products Regulation;" sections 94520–94528, title 17, CCR), and Proposed Tables of MIR Values (sections 94700 and 94701, title 17, CCR). The main component of the rulemaking was to establish reactivity limits for 36 aerosol coating categories based on the MIR scale. The amendments became legally effective on July 18, 2001.

In Resolution 00-22, which approved the amendments, the Board directed the Executive Officer to review the MIR values periodically after the effective date of amendments to determine if modifications to the MIR values were warranted. Since any changes to the MIR values would be technical in nature, the Board also delegated to the Executive Officer the authority to adopt regulatory amendments to the Tables of MIR Values, and to conduct public hearings and take other appropriate actions to make such amendments. This delegation of authority allows the Executive Officer (or his delegate) to conduct these activities on behalf of the Board, as provided in Health and Safety Code sections 39515 and 39516. ARB Executive Officer in turn delegated to the hearing officer the authority to conduct a public hearing to consider amendments to the Tables of MIR Values.

After a public hearing on November 3, 2009, the hearing officer prepared a Hearing Officer's Report. This Report contains the hearing officer's findings and conclusions, and recommends that the Executive Officer adopt the regulatory action proposed by ARB staff with the modifications set forth in the first and second 15-day notices described below. As recommended by the hearing officer, the Executive Officer subsequently adopted the proposed regulatory

action by signing Executive Order R-10-011. The amendments to the Tables of MIR Values contained in section 94700, title 17, CCR, were adopted as proposed by ARB staff with the addition of modifications set forth in two 15-day notices. The Hearing Officer's Report is attached to this Final Statement of Reasons as Appendix A.

ARB has determined pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6) that this regulatory action will not create costs or savings to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, or other nondiscretionary savings to state or local agencies.

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on private persons and businesses. ARB is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action. In accordance with Government Code sections 11346.3 and 11346.5(a)(10), ARB has determined that the proposed amendments should have minimal or no impacts on the creation or elimination of jobs within the state of California, minimal or no impacts on the creation of new businesses and the elimination of existing businesses within the state of California, and minimal or no impacts on the expansion of businesses currently doing business within the state of California. Finally, ARB has determined that adoption of the regulatory action will not have a significant, statewide adverse economic impact directly affecting business, including the ability of California's businesses to compete with businesses in other states, or on representative private persons.

No member of the public suggested any alternatives to the proposed amendments before or during the public hearing, or during the two 15-day comment periods. ARB has determined that no reasonable alternative considered by the agency or that has otherwise been identified and brought to the attention of the agency would be more effective in carrying out the purpose for which this regulatory action was proposed, or would be as effective and less burdensome to affected private persons or businesses, than the action taken by ARB.

## II. Modifications to the Original Proposal

At the hearing, staff stated that they would propose modifications to the regulations originally proposed in the Staff Report released on September 18, 2009, for the reasons summarized below. Ultimately, staff made available two 15-day notices of proposed modifications. Each notice included an Attachment A, showing the proposed 15-day modifications to the originally proposed regulatory language.

#### A. Summary of Proposed Modifications in First 15-Day Notice

- 1. Staff inadvertently proposed to add two "LEV" mixtures and six "TLEV exhaust" mixtures. Staff proposed to delete these mixtures, in order to avoid the assumption that they are regulated pursuant to section 94700.
- Staff inadvertently proposed to add fourteen mixtures, such as "mineral spirits." These mixtures are better represented by the 24 "bins" of hydrocarbon solvents included in section 94701 (both current and proposed versions). Staff proposed to delete these mixtures from section 94700 in order to clarify that they are regulated pursuant to section 94701.
- 3. Staff was informed of errors in the calculation of the MIR values for most of the substances listed in section 94700 and all the hydrocarbon bins listed in section 94701, and proposed to modify their values accordingly. The recalculated MIR values changed (mostly increased) by up to about 10% for most substances, and from zero to small positive values for some amines. As a result, staff proposed to replace the entire "New MIR Value" column in the attachment even though MIR values for some substances did not change.
- 4. Staff proposed to add synonyms to several of the names included in the listing of compounds, in order to help readers locate compounds of interest.

### **B.** Summary of Proposed Modifications in Second 15-Day Notice

After the first 15-day notice was published, staff was informed of duplicate entries in the MIR tables for four hydrofluoroethers (HFEs). Staff was also informed that the MIR values provided for the four nonafluoro-ethers (listed in the tables as compounds #1094, 1095, 1111, 1112) were based on estimation methods that appeared to work very poorly for these HFEs, and that the MIR values provided for the four perfluoro-ethers (listed as compounds #1096, 1097, 1109, 1110) were based on experimentally measured values. In consideration of this new information, staff proposed two modifications to the MIR tables in Attachment A.

- 1. Staff proposed to delete the four nonafluoro-ethers and their associated MIR values, as follows.
  - # Description
  - 1094 methyl-nonafluoro-butyl ether; HFE-7100 isomer
  - 1095 methyl-nonafluoro-isobutyl ether; HFE-7100 isomer
  - 1111 ethyl nonafluorobutyl ether; HFE-7200 isomer
  - 1112 ethyl nonafluoroisobutyl ether; HFE-7200 isomer

- 2. Staff proposed to add the four nonafluoro-ethers and HFE synonyms to the descriptions of the four perfluoro-ethers, as follows, and re-number the table accordingly. (Proposed additions indicated with *italics* & *underlining*.)
  - # Description
  - 1096 methoxy-perfluoro-n-butane; <u>methyl-nonafluoro-butyl ether;</u> <u>HFE-7100 isomer</u>
  - 1097 methoxy-perfluoro-isobutene; <u>methyl-nonafluoro-isobutyl ether;</u> <u>HFE-7100 isomer</u>
  - 1109 ethoxy-perfluoro-n-butane; <u>ethyl nonafluorobutyl ether;</u> <u>HFE-7200 isomer</u>
  - 1110 ethoxy-perfluoro-isobutane; <u>ethyl nonafluoroisobutyl ether;</u> <u>HFE-7200 isomer</u>

# III. Summary of Comments and Testimony Received in Response to 45-Day Notice and Two Subsequent 15-Day Notices

One public comment was received in response to the 45-day notice, from Michael E. Bailey, dated September 20, 2009. This comment expressed support for the proposed amendments, and no response is needed.

No public comments were received at the November 3, 2009 Public Hearing, or in response to the 15-day notices.