

State of California  
AIR RESOURCES BOARD

**Addendum to the Final Statement of Reasons for Rulemaking,  
Including Summary of Comments and Agency Response**

PUBLIC HEARING TO CONSIDER THE ADOPTION OF A PROPOSED REGULATION  
FOR SMALL CONTAINERS OF AUTOMOTIVE REFRIGERANT

Public Hearing Date: January 22, 2009  
First Public Availability Dates: April 9, 2009 - April 24, 2009  
Second Public Availability Dates: November 16 – December 1, 2009  
Agenda Item No.: **09-01-02**

**I. BACKGROUND**

At its January 22, 2009, public hearing, the Air Resources Board (ARB or Board) considered the adoption of the proposed Regulation for Small Containers of Automotive Refrigerant (California Code of Regulations title 17, sections 95360 through 95370) and documents incorporated by reference therein, "Certification Procedures for Small Containers of Automotive Refrigerant", "Test Procedure for Leaks from Small Containers of Automotive Refrigerant" (TP-503), and "Balance Protocol for Gravimetric Determination of Sample Weight using a Precision Analytical Balance" (BP-A1). This regulation and incorporated certification and test procedures reduces greenhouse gas (GHG) emissions associated with do-it-yourself (DIY) recharging of motor vehicle air conditioning (MVAC) systems, primarily by establishing certification requirements that mandate containers to be equipped with self-sealing valves, and by establishing a small container deposit and return and refrigerant recovery program. Other components of the regulation include improved container labels and consumer educational materials to promote consumer education of proper MVAC charging practices and of the environmental consequences of releasing refrigerant to the environment.

At the conclusion of the hearing, the Board adopted Resolution 09-1, in which it approved the originally proposed regulation and incorporated certification and test procedures. In accordance with section 11346.8 of the Government Code, the Resolution directed the Executive Officer to adopt the proposed regulation and the documents incorporated by reference therein, along with such other conforming modifications and technical amendments as may be appropriate, and to make such modifications available for a supplemental comment period of at least 15 days. The Executive Officer was then directed either to adopt the amendments with such additional modifications as may be appropriate in light of the comments received, or to

present the regulations to the Board for further consideration if warranted in light of the comments. Resolution 09-1 is available at the following ARB website:  
<http://www.arb.ca.gov/regact/2009/hfc09/res091.pdf>

The text of all the modifications to the originally proposed regulation and incorporated documents were made available for a supplemental 15-day comment period by issuance of a "Notice of Public Availability of Modified Text." This Notice was made available to the public on April 9, 2009, and published on ARB's website for this rulemaking at <http://www.arb.ca.gov/regact/2009/hfc09/hfc09.htm> on April 9, 2009. One written comment was received during the 15-day comment period.

After considering the comment received during the 15-day comment period, the Executive Officer issued Executive Order R-09-005, adopting the modified regulation and the incorporated documents.

On September 1, 2009, the Office of Administrative Law (OAL) partially approved and partially disapproved the proposed regulation. The approved portions of the regulation took effect on October 1, 2009, and established regulations applicable to the sale, supply, and manufacture for sale in California of small containers of automotive refrigerant beginning January 1, 2010.

OAL disapproved the proposed portion of section 95366(a)(2) that read " , and can be increased in \$5 increments as described in section 95367(d)(1) or decreased by such amounts as determined by the Executive Officer in section 95367(d)(2)", and also disapproved proposed section 95367, subdivisions (d) through (g). These provisions primarily specified the conditions under which ARB's Executive Officer could increase or decrease the amount of the deposit applicable to consumers of small containers of automotive refrigerant. OAL disapproved those portions of the proposed regulation because it determined that they did not comply with the consistency standard of Government Code section 11349.1, subdivision (a) in that they "would have prescribed a procedure for the amendment of the regulation specifying the amount of the deposit on small containers of automotive refrigerant that does not comply with the requirements of the Administrative Procedure Act."

To address the concerns noted by OAL, the Board modified several provisions of the regulatory text and incorporated certification and test procedures. The text of all the modifications to the originally proposed regulation and incorporated documents were made available for a supplemental 15-day comment period by issuance of a "Second Notice of Public Availability of Modified Text." This Notice was made available to the public on November 16, 2009, and published on ARB's website for this rulemaking at <http://www.arb.ca.gov/regact/2009/hfc09/hfc09.htm> on November 16, 2009. One written comment was received during this 15-day comment period.

After considering the comment received during this 15-day comment period, the Executive Officer issued Executive Order R-09-020, adopting the modified regulation and the incorporated documents.

This addendum and the other documents in the resubmittal filing supplement the Board's file for the rulemaking denominated as OAL File No. 2009-0721-01 S. The Board addresses each of OAL's cited concerns in its September 8, 2009, Decision of Disapproval of Part of a Regulatory Action, and additionally explains how it amended the proposed regulation and associated certification and test procedures to provide manufacturers additional flexibility and clarification. This addendum also provides a revised summary of the comments received for this rulemaking action and provides responses to the revised summary.

## **II. SUPPLEMENTAL STATEMENT OF REASONS**

As discussed in the "Second Notice of Public Availability of Modified Text," the Board modified the proposed regulation and incorporated certification and test procedures to address each of OAL's cited concerns, and to provide manufacturers greater flexibility and clarification. In order to provide a complete FSOR for this rulemaking, these modifications and clarifications are summarized below:

### **A. Modifications to Regulatory Text of California Code of Regulations, Title 17, Sections 95360 through 95370.**

1. Article 3, "Fees for Sources of Greenhouse Gas Emissions" and subarticles 1, 2, 3, and 4 within Article 4, "Regulations to Achieve Greenhouse Gas Emission Reductions," have been reserved for future rulemakings.
2. Sections 95362(b), 95365(c), 95366(e), and 95368(d) were modified by substituting July 20, 2009 for "January 5, 2010", and adding "As Last Amended: January 5, 2010, in the "Certification Procedures for Small Containers of Automotive Refrigerant" and of Test Procedure (TP-503), "Test Procedure for Leaks from Small Containers of Automotive Refrigerant"
3. Section 95361(a)(15) was modified by substituting "AHRI" and "Air-Conditioning, Heating, and Refrigeration Institute" for "ARI" and "The Air-Conditioning & Refrigeration Institute" to reflect that trade association's current name.
4. Section 95361(a)(21) was modified by substituting "as identified in section 95362(b)" for "as specified by the Executive Officer," in order to more clearly reference the performance criteria applicable to self-sealing valves.
5. Section 95362(b)(1) was modified by deleting the unneeded term "test."
6. Section 95366(a)(2) was amended by clarifying that the deposit on small containers of automotive refrigerant (initially set at \$10), can only be reduced in

\$5 decrements, and cannot be reduced below \$5.

7. Section 95367(d)(1) was modified to clarify the criteria governing increases to the small container deposit amount of section 95366(a) that were disapproved by OAL. First, “the applicable” was substituted for “its” in the second line, and “specified in section 95367(c)” was added to the second and third lines. Second, this section has been modified to now specify that if the two calendar year average return rate does not meet or exceed the applicable return rate of section 95367(c), the Executive Officer “shall” increase the deposit amount of 95366(a) by \$5. Third, this section modifies and clarifies the previously proposed language by restricting and narrowing the types of information that manufacturers and retailers can submit to the Executive Officer and that the Executive Officer can consider before deciding either to increase or to not increase the container deposit amount under this subsection.

The previously proposed (and OAL disapproved) language allowed manufacturers and retailers to submit “any information” to the Executive Officer, and would have also allowed the Executive Officer to consider “any information” in deciding whether or not to increase the container deposit amount of section 95366(a). The currently proposed language now allows manufacturers and retailers to submit only information that is directly related to the calculation of the annual return rate or to the accuracy of the underlying sales or returned can data described in sections 95367(a)(1) through (a)(4) (e.g., a manufacturer might submit information supporting an assertion that its returned can data did not accurately reflect its “true” return rate of used containers because a significant quantity of used containers were accidentally destroyed en route to a recycling facility).

8. Section 95367(d)(2) was modified to propose new criteria governing decreases to the small container deposit amount of section 95366(a) that were disapproved by OAL. The proposed language now specifies that a manufacturer or retailer may request that the Executive Officer or his or designee decrease the container deposit amount specified in section 95366(a) by \$5, provided the deposit amount is not reduced below \$5, if the annual two calendar year average return rate exceeds its target return rate by at least 2.5 percent for two consecutive reporting periods within a four year period of time. The Executive Officer shall reduce the deposit amount \$5 by May 31 of that calendar year, unless he or she has information that demonstrates either that the applicable annual return rates, as described in section 95367(b) were not calculated correctly, or that the underlying sales or returned can data, as described in sections 95367(a)(1) through (a)(4), did not accurately reflect the true return rate of used containers.

The previously proposed (and OAL disapproved) language allowed manufacturers and retailers to request that the deposit amount be reduced if the two calendar year average return rate exceeded the target return rate. The

Executive Officer would then base his or her decision on whether to reduce the deposit, and if so, by what amount, on submitted information, “other data or studies, and/or good engineering judgment regarding whether the proposed reduction would reasonably cause future return rates to not consistently or adequately exceed the target return rates specified by section 95367(c).” The newly proposed language limits the Executive Officer’s discretion whether to reduce the container deposit, and if so, by what decrement. A fixed decrement of \$5 is proposed to minimize manufacturer and retailer burdens related to container labeling and recordkeeping requirements, and to reduce consumer confusion related to fluctuating deposit amounts.

A \$5 minimum deposit is proposed. As stated in Section VII of the Staff Report: Initial Statement of Reasons for Rulemaking, the Automotive Refrigeration Products Institute (ARPI) conducted a brief pilot study in two Southern California cities during the spring of 2008 to determine consumer compliance with a recycling program that included a \$5 container deposit. The container return rate observed from the pilot program was 75 percent, but the pilot program was run in small geographic area with a minimal amount of advertising, and the participants were not previously notified of the existence of the program. In contrast, the small container regulation requires extensive labeling and other consumer education elements on a statewide basis that will ensure consumers are aware of the existence of, and the need for container recycling. Furthermore, the regulation will have been implemented for at least two years before the deposit amount can be decreased. Staff believes that these factors, that were not present in the pilot program, could, in conjunction with a minimum container deposit amount of \$5, result in attainment of the target return rates specified in section 95367(c).

Finally, the criteria of exceedance of the target return rate of 2.5 percent for two consecutive reporting periods within a four year period of time provides better quantitative and objective metric for governing deposit decreases than the previously proposed and disapproved criteria.

9. Section 95367(e) was modified to clarify proposed language that was disapproved by OAL. This section now states that if the Executive Officer increases or decreases the container deposit amount of 95366(a), all containers manufactured after January 1 of the year following the Executive Officer’s decision must have new labels and SKUs that reflect the new deposit rate.
10. Section 95367(f) was modified to incorporate minor, nonsubstantive changes to clarify proposed language that was disapproved by OAL. First, “before” was substituted for “prior to” in the third line. Second, “that” was substituted for “the decision as described in section 95367(d)(1).” This section still states that if the Executive Officer increases the deposit amount of section 95366(a) pursuant to new section 95367(d)(1), any small container that was manufactured or packaged prior to January 1 of the year following that

decision to change the deposit rate may be sold, supplied, or offered for sale in California.

11. Section 95367(g) was modified to clarify and amend previously proposed language that was disapproved by OAL. This section now provides that if the Executive Officer decreases the deposit amount of section 95366(a) pursuant to new section 95367(d)(2), any small container that was manufactured or packaged before January 1 of the year following that decision may be sold, supplied, or offered for sale in California until the December 31 of the year following that decision, and that any such small container that is not sold by December 31 of the year following the decision must be recalled by the manufacturer no later than 90 calendar days after December 31 of year following that decision. For example, if the Executive Officer decreased the deposit rate on May 31, 2014, small containers manufactured or packaged before January 1, 2015, could be sold until December 31, 2015, and manufacturers would be required to recall any unsold containers by March 30, 2016.

This provision provides manufacturers longer sell through and recall periods for existing containers than those specified in the previously proposed language. However, because existing containers would already be certified to demonstrate compliance with all applicable requirements, the extended periods would not adversely affect emissions reductions, and would provide manufacturers greater flexibility in scheduling and implanting recalls of existing containers.

**B. Modifications to Text of “Certification Procedures for Small Containers of Automotive Refrigerant”**

1. “July 20, 2009” was substituted for the “Adoption Date” on the cover page of these procedures and for the “Date of Adoption” of TP-503, Test Procedure for Leaks from Small Containers of Automotive Refrigerant in sections 2.1(C) and 2.1(E) of these Certification Procedures.
2. The term “Diurnal” was removed from the title of TP-503 in sections 2.1(C) and 2.1(E) of these procedures to maintain full consistency with TP-503.
3. The page-numbering references to “B-” in the Table of Contents and in the document footer of these Certification Procedures were removed.
4. Section 2.3(A)(3)(f) of the Certification Procedures was modified to allow a manufacturer to publish required safety precautions, vehicle operating parameters, and vehicle air conditioning recharging procedures on a designated Internet website in lieu of the previously specified Internet site “www.staycoolcalifornia.com” Specifically, Section 2.3(A)(3)(f) substitutes the phrase “a website address” [the website will contain information as described in Certification Procedures 2.4 (A)(6)] for “[www.staycoolcalifornia.com](http://www.staycoolcalifornia.com)”.

5. Section 2.3(B)(3) of the Certification Procedures was modified to reflect the fact that the container deposit amount specified in section 95366(a) may be increased or decreased, as described in sections 95367(d)(1) or (d)(2). Specifically, “XX” has been substituted for “\$10” in the second line of section 2.3(B)(3). Although the deposit amount is initially specified at \$10 by section 95366(a)(2), this amount is, as discussed, subject to adjustment and should therefore not be permanently included in this section.

**C. Modifications to Text of TP-503, Test Procedure for Leaks from Small Containers of Automotive Refrigerant**

1. “July 20, 2009” was substituted for the “Adoption Date” on the cover page of these test procedures and for “[**BARCU will insert**]” of section 2.1(B) of the Certification Procedures for Small Containers of Automotive Refrigerant in sections 1 and 2 of these test procedures.
2. “July 20, 2009” was substituted for the “[**BARCU will insert**]” of Balance Protocol (BP-A1) “Balance Protocol for Gravimetric Determination of Sample Weights using a Precision Balance” in sections 6, 8, 8.4, and 8.10 of these test procedures.

**D. Modifications to Text of BP-A1, Balance Protocol for Gravimetric Determination of Sample Weights using a Precision Balance**

1. “July 20, 2009” was substituted for the “Adoption Date” on the cover page of this balance protocol.
2. The page-numbering references to “D-“ in the Table of Contents and in the document footer of this balance protocol have been removed.

**III. MODIFICATIONS MADE AFTER THE SECOND 15-DAY PUBLIC COMMENT PERIOD**

After the close of the second 15-day public comment period, staff identified two nonsubstantial modifications that were necessary. The formula for calculating air density in Attachment A to TP-503, “Test Procedure for Leaks from Small Containers of Automotive Refrigerant,” contained an inadvertent error in unit conversions, and a superscript was erroneously indicated as a subscript. Staff has made changes to accommodate each of these issues. These modifications constitute a nonsubstantial change to TP-503 because, as described in greater detail below, each modification merely clarifies the requirements or conditions as set forth in the original text or in the original text as modified in the Notice of Public Availability of Modified Text, and does not materially alter those requirements or conditions.

**A. Modifications to TP-503, Test Procedure for Leaks from Small Containers of Automotive Refrigerant**

1. The formula for calculating air density in TP-503 contains an error resulting from unit conversions. Specifically, in Attachment A to TP-503, on page 12, the formula for air density is specified as:

$\rho_{\text{air}}$  = density of air in the balance chamber (g/cm<sup>3</sup>). Calculate using the following approximation

$$\rho_{\text{air}} = [0.348444 * P_{\text{baro}} - (RH / 100) * (0.252 * T - 2.0582)] / (T + 273.15)$$

However, this formula actually calculates the density of air in units of g/L, not g/cm<sup>3</sup>. Therefore, the formula has been modified to:

$$\rho_{\text{air}} = \underline{0.001} * [0.348444 * P_{\text{baro}} - (RH / 100) * (0.252 * T - 2.0582)] / (T + 273.15)$$

2. The reference to the reference density  $\rho_{\text{ref}}$  contains an error in that the subscript “3” should in fact be a superscript, to reference the common unit of volume “cubic centimeter.” Therefore, this reference has been modified to:

$\rho_{\text{ref}}$  = the reference density of the calibration weight (g/cm<sup>3</sup>). Should be 8.0 g/cm<sup>3</sup>.

**IV. SUMMARY OF, AND RESPONSES TO COMMENTS**

During the second 15-day comment period, the ARB received one written comment:

	Name and Affiliation (If Any)	Written Comment Date Submitted
1	Automotive Refrigeration Products Institute (ARPI)	December 1, 2009

Set forth below is a summary of each objection or recommendation made regarding the specific regulatory action proposed, together with an explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. Comments not involving objections or recommendations specifically directed toward the rulemaking or to the procedures followed by the ARB in this rulemaking are not included.



## **Criteria governing increases and decreases to the small container deposit amount of section 95366(a)**

**1. Comment:** The proposed modifications to sections 95367(d)(1) and 95367(d)(2) that limit the Executive Officer's discretion to increase or decrease the container deposit amount of section 95366(a) eliminates the industry's ability to "fairly and effectively provide data or circumstances pertinent to any decision to raise or lower the deposit amount. Basing a decision solely on the naked return figures without consideration of the many other factors which could affect those figures makes any decision by the Executive Officer arbitrary, probably erroneous, and highly detrimental to the manufacturers."

During the development of the regulation, ARPI agreed to provisions establishing target container return rates, and the associated mechanism to increase the container deposit amount if the return rates were not achieved, because the Agency "agreed to allow flexibility in how adjustments would be made based on all relevant information that might affect that decision. The proposed new language destroys that flexibility." For example, situations involving accidental loss or mishandling of containers, catastrophic damage to stores or warehouses, lack of ARB enforcement against retailers refusing to return cans, or lack of container returns "due to shortcomings in the regulation itself" would all affect container return rates, but ARPI believes the proposed modifications would not allow industry to present such information to the Executive Officer.

Manufacturers and retailers should be allowed to submit all information that shows why a return rate for a given year did not meet the regulatory goals. If allowing the Executive Officer to consider such information violates the APA, ARB should eliminate the ability to raise or lower the deposit amount because the proposed modifications would prevent manufacturers and retailers from submitting information that directly affects the return rate and therefore the need to raise or lower the deposit amount. "The proper procedure would be to require that CARB comply with the APA and not take any action to raise or lower the deposit amount unless and until the industry had had a full opportunity to explain why the rates may not be accurate and why raising or lowering them will not accomplish the purposes of the regulation." (ARPI)

**Agency Response:** No change was made in response to this comment. ARB disagrees with the commenter's assertion that the proposed modifications to sections 95367(d)(1) and 95367(d)(2) would prevent manufacturers or retailers from providing information that would allow the Executive Officer to make an informed, reasoned decision to increase or decrease the container deposit amount of section 95366(a), and believes that ARPI has interpreted the restrictions of the proposed modifications too narrowly.

ARB stated in the "Second Notice of Public Availability of Modified Text" that it was proposing these modifications to address the concerns noted by OAL in its Decision of Disapproval of Part of a Regulatory Action, and to provide manufacturers further

flexibility and clarification. ARB further explained in section I.7 of the “Second Notice of Public Availability of Modified Text” that although the proposed language now restricts and narrows the types of information that manufacturers and retailers can submit to the Executive Officer, and that the Executive Officer can consider before deciding either to increase or to not increase the container deposit amount under this subsection, that proposed language still allows manufacturers and retailers to submit information relevant to the calculation of the annual return rate or to the accuracy of the underlying sales or returned can data described in sections 95367(a)(1) through (a)(4). For example, the proposed modifications still allow a manufacturer to submit information showing that its returned can data did not accurately reflect its “true” return rate of used containers because a significant quantity of used containers were accidentally destroyed or lost while en route to a recycling facility (e.g., if a freight train transporting the used containers derailed or a warehouse storing used containers was destroyed by a tornado, hurricane, earthquake, etc.) ARPI’s concern that manufacturers and retailers could not present such information to the Executive Officer is therefore unfounded. ARB believes that information encompassing such circumstances certainly falls within the criteria “that demonstrates either that the applicable annual return rate, as described in section 95367(b) was not calculated correctly, or that the underlying sales or returned can data, as described in sections 95367(a)(1) through (a)(4), did not accurately reflect the true return rate of used containers.” Sections 95367(d)(1) and (2).

ARB also disagrees with the commenter’s assertion that manufacturers and retailers should be allowed to submit all information that shows why a return rate for a given year did not meet the regulatory goals; this approach was expressly rejected by OAL in its Decision of Disapproval of Part of a Regulatory Action, and ARB will pursue an approach that OAL has already determined violates the provisions of the Administrative Procedures Act.

Finally, ARB also disagrees with ARPI’s suggestion that ARB only raise or lower the deposit amount after providing industry “a full opportunity to explain why the rates may not be accurate and why raising or lowering them will not accomplish the purposes of the regulation”. During the January 22, 2009 public hearing a Board member specifically stated that she wanted the regulation to contain a mechanism that would allow the Executive Officer to refine the recycling component of the regulation so that staff need not continually return to the Board in order to “evolve the program properly.” [January 22, 2009 transcript, page 63:8-17.] The Agency believes that the procedures specified in sections 95367(d)(1) and (d)(2) for increasing and decreasing the container deposit amount of section 95366(a), respectively, appropriately balance the extent of the Executive Officer’s discretion to increase or decrease container deposits against the need to engage in a formal rulemaking procedure every time a container deposit increase or decrease is triggered by the container return rates.

### **Minimum Container Deposits for Retailers and Distributors**

**2. Comment:** “The regulation still lacks a minimum specified deposit amount for transactions between the manufacturer and distributors, jobbers and retailers. ... ARPI

strongly urges CARB to take this second opportunity to establish a minimum deposit for non-consumer sales of small containers.”

**Agency Response:** This comment is not directed to a provision of the regulation that was modified during the second notice of public availability of modified text and is therefore beyond the scope of this comment period. Moreover, the Agency fully responded to this comment in the Final Statement of Reasons (see Agency response to comment 16 in the Final Statement of reasons).