

TITLE 17. CALIFORNIA AIR RESOURCES BOARD

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

The Air Resources Board (the Board or ARB) will conduct a public hearing at the time and place noted below to consider the adoption of a proposed regulation for small containers of automotive refrigerant.

DATE: January 22, 2009

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency
Air Resources Board
Byron Sher Auditorium
1001 I Street
Sacramento, CA 95814

This item will be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., January 22, 2009, and may continue at 8:30 a.m., January 23, 2009. This item may not be considered until January 23, 2009. Please consult the agenda for the meeting, which will be available at least ten days before January 22, 2009, to determine the day on which this item will be considered.

For individuals with sensory disabilities, this document and other related material can be made available in Braille, large print, audiocassette, or computer disk. For assistance, please contact ARB's Reasonable Accommodations/Disability Coordinator at (916) 323-4916 by voice or through the California Relay Services at 711, to place your request for disability services, or go to <http://www.arb.ca.gov/html/ada/ada.htm>.

If you are a person with limited English and would like to request interpreter services to be available at the Board meeting, please contact ARB's Bilingual Manager at (916) 323-7053.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

Sections Affected: Proposed adoption of California Code of Regulations, title 17, new Subchapter 10, Article 4, Subarticle 4. Small Containers of Automotive Refrigerant, , sections 95360, 95361, 95362, 95363, 95364, 95365, 95366, 95367, 95368, 95369, and 95370, and the proposed adoption of the incorporated documents: "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).

Background:

The California Global Warming Solutions Act of 2006 (Assembly Bill 32, AB 32, Núñez, Ch. 486, Stats. 2006) creates a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California. AB 32 also requires the Air Resources Board (ARB or Board) to identify a list of discrete early action greenhouse gas reduction measures by June 30, 2007, and to adopt regulations to implement listed early action measures. These early action measures must be enforceable no later than January 1, 2010. Early action measures must also achieve the maximum technologically feasible and cost-effective reductions in GHGs from sources or categories of sources.

In 2007, the Board approved an early action measure to reduce GHG emissions resulting from non-professional (i.e., do-it-yourselfer [DIYer]) recharging of motor vehicle air conditioning (MVAC) systems. ARB staff has worked closely with stakeholders and has developed the proposed discrete early action measure to reduce GHG emissions associated with DIY recharging of MVAC systems. The proposed regulation establishes requirements for the small containers of automotive refrigerants and on the sale, use, and disposal of those containers when the refrigerant in them has a global warming potential greater than 150. These new requirements will help reduce GHG emissions generated from current DIY practices.

HFC-134a is a hydrofluorocarbon (HFC) that is, and has been, the predominant refrigerant used in MVAC systems manufactured since 1995. HFC-134a is not an ozone-depleting substance, but is a potent GHG that has a global warming impact 1,300 times greater than carbon dioxide (CO₂). A single 12-ounce container of this refrigerant is equivalent to 1,000 lbs of CO₂, or roughly the carbon dioxide emissions emitted from an automobile burning 50 gallons of gasoline. Approximately two million small containers of automotive refrigerant are sold annually in California, and an estimated 810,000 metric tons of carbon dioxide equivalent (MTCO₂E) are emitted each year as a result of DIY practices.

Currently, most small containers of automotive refrigerant are not equipped with self-sealing valves. Consequently, when a user punctures a container with a dispensing device to recharge a MVAC system, the refrigerant is either transferred into the MVAC system, released to the atmosphere, or remains in the container. The refrigerant remaining in the can, called the can heel, is eventually released to the atmosphere when the can is discarded. Staff estimates that 33 percent of the refrigerant is released to the atmosphere when DIYers recharge MVAC systems.

A DIYer saves money by recharging his or her MVAC system with small containers of refrigerant compared to having a professional service the MVAC, because small containers typically cost \$10 per container, compared to over one hundred dollars that professionals may charge to diagnose and recharge a MVAC. However, DIYers may

not properly identify or repair repairable leaks because they lack the training and/or equipment possessed by MVAC technicians. Furthermore, DIYers may also unintentionally release more refrigerant than if the recharges were performed by trained and certified MVAC technicians at a licensed auto repair facility. Staff estimates that 1.4 million DIY recharges are performed annually in California.

DESCRIPTION OF THE PROPOSED REGULATORY ACTION

The proposed regulation would be effective as of January 1, 2010, and utilizes a multi-pronged approach that is comprised of the following major components:

- A certification program that would require manufacturers to equip small containers of automotive refrigerant with self-sealing valves and to demonstrate compliance with the designed leak rate. These requirements would help reduce losses occurring during DIY servicing, and would help capture can heels in used containers.
- A container deposit and return program to recover and recycle the can heel in used containers. Consumers would pay a \$10 deposit at the time of purchase, and would return a used container to the retailer within 90 days of purchase to receive a full refund of the deposit. The disposal or destruction of a container of refrigerant would be prohibited to ensure that used containers would be returned to retailers and manufacturers. Retailers would store and transfer the used cans back to manufacturers, who would then recover and reclaim the refrigerant remaining in the containers. Manufacturers are presently already recovering refrigerant from dented containers using existing container-filling equipment. The regulation establishes an initial target recycle rate of 90 percent that increases to 95 percent beginning January, 2012. Staff would determine the recycle rate from manufacturer submitted records, and the regulation would allow the Executive Officer to revise the deposit fee if the container return rate falls below the targeted rate.
- Container labeling and consumer education requirements to promote consumer education of proper MVAC system charging practices, and to inform consumers of the environmental consequences associated with the improper use of refrigerant, and of the container deposit and return program. These requirements would help DIYers reduce refrigerant losses that result from improper servicing techniques.
- Recordkeeping requirements to enable staff to determine the effectiveness of the regulation and to monitor and ensure compliance with the regulation's requirements.

Environmental and Economic Impacts

The proposed regulation achieves GHG emissions reductions of about 260,000 MTCO₂E per year, at an estimated cost effectiveness of \$11/MTCO₂E.

Manufacturers are expected to amortize their compliance costs to consumers, which would increase the retail unit cost of a small container of refrigerant by about \$1. Consumers would also be required to pay an additional \$10 deposit per container, but

this amount would be fully refunded if the consumer returned the used container within 90 days and with a receipt to the place of purchase.

The proposed regulation achieves emission reductions at a minimal cost compared to the regulatory alternative of banning the sale of small containers of automotive refrigerant, and can serve as a model regulatory approach for other states.

COMPARABLE FEDERAL REGULATIONS

Although the Federal Clean Air Act (CAA) and U.S. Environmental Protection Agency regulations generally regulate certain aspects regarding the usage of non-ozone depleting refrigerants used in MVAC systems, they do not currently restrict or regulate the sales or usage of small containers of non-ozone-depleting automotive refrigerant. Therefore, the proposed regulation would establish more stringent requirements than comparable federal regulations.

Section 609(e) of the federal Clean Air Act (CAA) [42 U.S.C. § 7671h(e)] and Title 40, Code of Federal Regulations (CFR) section 82.34(b) have restricted, as of November 15, 1992, the sale, distribution, or offer for sale or distribution of ozone-depleting refrigerants that are suitable for use in motor vehicle air-conditioning systems and that are in containers with less than 20 pounds of refrigerant, except to those technicians that have been trained and certified pursuant to an EPA-approved course. On March 12, 2004, the U.S. EPA decided not to extend a proposed restriction on the sale of small containers of pure HFC or PFC refrigerants to certified technicians.

Section 608(c)(2) of the CAA [42 U.S.C. § 7671g(c)(2)] has generally prohibited any person from venting or releasing any substance that is used as a substitute for an ozone-depleting refrigerant into the atmosphere since November 15, 1995. In 2004, the U.S. EPA amended its regulations regarding refrigerant recycling to clarify that the section 608(c)(2) venting ban also extends to pure HFC and perfluorocarbon (PFC) refrigerants.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

The Board staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The report is entitled "Initial Statement of Reasons for Rulemaking, Proposed Regulation for Small Containers of Automotive Refrigerant." A Technical Support Document has also been prepared which contains a more detailed presentation of the emissions and economic impact of the proposed regulation.

Copies of the ISOR and the full text of the proposed regulatory language may be accessed on the ARB's web site listed below, or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental

Services Center, 1st Floor, Sacramento, CA 95814, (916) 322-2990 at least 45 days prior to the scheduled hearing on January 22, 2009.

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on the ARB's web site listed below.

Inquiries concerning the substance of the proposed regulation may be directed to the designated agency contact persons, Dr. Tao Huai, Manager of the Climate Change Mitigation and Emissions Research Section, at (916) 324-2981 or Mr. Winston Potts, P.E., Air Resources Engineer, Climate Change Mitigation and Emissions Research Section, (916) 323-2537.

Further, the agency representative and designated back-up contact persons to whom nonsubstantive inquiries concerning the proposed administrative action may be directed are Ms. Lori Andreoni, Manager, Board Administration & Regulatory Coordination Unit, (916) 322-4011, or Ms. Amy Whiting, Regulations Coordinator, (916) 322-6533. The Board has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on the ARB Internet site for this rulemaking at www.arb.ca.gov/regact/2009/hfc09/hfc09.htm.

COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulations are presented below.

Pursuant to Government Code sections 11346.5(a)(5), the Executive Officer has determined that the proposed regulation would not impose a mandate on local agencies or school districts. The Executive Officer has further determined pursuant to Government Code section 11346.5(a)(6) that the proposed regulation would result in some additional costs to ARB. In addition, the Executive Officer has determined that the proposed regulatory action would not create costs or savings in federal funding to the state, would not create costs or savings to local agencies or school districts that are required to be reimbursed under Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code, and would not result in other nondiscretionary costs or savings to state or local agencies.

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses, and has determined that those private persons that purchase small containers of automotive refrigerant to recharge their own MVAC systems (estimated at 1.4 million Californians) would incur

additional costs as a result of this regulation. Specifically, the retail cost of a small container of automotive refrigerant would increase by \$1 on average. The average retail price of a small container is approximately \$10, so this estimated price increase only represents a ten percent increase over current prices. Consumers would also be required to pay an additional \$10 deposit per container, but this amount would be fully refunded if the consumer returned the used container within 90 days and with a receipt to the place of purchase.

Manufacturers of small containers of automotive refrigerant would incur additional costs as a result of the proposed regulation, but are expected to amortize these costs into the retail price of small containers. In addition, manufacturers would be able to offset some of these costs with the value of refrigerant that they would recapture under the proposed container recycling component of the proposed regulation.

Both manufacturers and retailers would incur costs associated with the proposed recordkeeping and other administrative components of the proposed regulation, but such costs should be minimal.

The Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action could affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. Jobs are not expected to be lost as a result of the proposed regulatory action, but rather some jobs may be created in order for manufacturers to comply with the proposed container recycling provisions. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

The Executive Officer has also determined, pursuant to the California Code of Regulations, title 1, section 4, that the proposed regulatory action would affect small businesses. Small retailers such as automotive parts stores would incur increased costs resulting from the proposed administrative requirements for recordkeeping, handling container deposit funds, and storing and returning used cans for recycling, but these cost increases should be minimal because most of these activities are already conducted by retailers as part of their normal daily business. Some retailers that do not predominately sell automotive products may decide to stop selling the product, because their projected profit from selling small containers of refrigerant would not compensate them for incurring the additional costs resulting from the proposed regulation.

Small MVAC service centers that purchase small containers of refrigerant would incur the same increased costs as consumers (\$1 per container). These additional costs

should be minimal because it is estimated that only 5 percent of small cans are sold to professional MVAC servicing centers, and these service centers would likely pass these additional costs onto their consumers.

In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), the Executive Officer has found that the reporting requirements of the regulation which apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the Board or that has otherwise been identified and brought to the attention of the Board would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

SUBMITTAL OF COMMENTS

Interested members of the public may also present comments orally or in writing at the meeting, and in writing or by e-mail before the meeting. To be considered by the Board, written comments submissions not physically submitted at the meeting must be received **no later than 12:00 noon, January 21, 2009**, and addressed to the following:

Postal mail: Clerk of the Board
Air Resources Board
1001 I Street
Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Facsimile submittal: (916) 322-3928

Please note that under the California Public Records Act (Government Code section 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request. Additionally, this information may become available via Google, Yahoo, and any other search engines.

The Board requests but does not require that 30 copies of any written statement be submitted and that all written statements be filed at least ten days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The Board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

STATUTORY AUTHORITY AND REFERENCES

This regulatory action is proposed under that authority granted in Health and Safety Code, sections 38501, 38505, 38510, 38550, 38551, 38560, 38560.5, 38580, 39600, and 39601. This action is proposed to implement, interpret and make specific sections 38501, 38505, 38510, 38550, 38551, 38560, 38560.5, 39003, 39500, 39600, and 39601 of the Health and Safety Code.

HEARING PROCEDURES

The public hearing will be conducted in accordance with the California Administrative Procedure Act, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with non substantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action; in such event the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from the ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, CA 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

/s/

James N. Goldstene
Executive Officer

Date: November 25, 2008

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs see our Web –site at www.arb.ca.gov.