

Overview of the “Small Can” Automotive Refrigerants Regulation

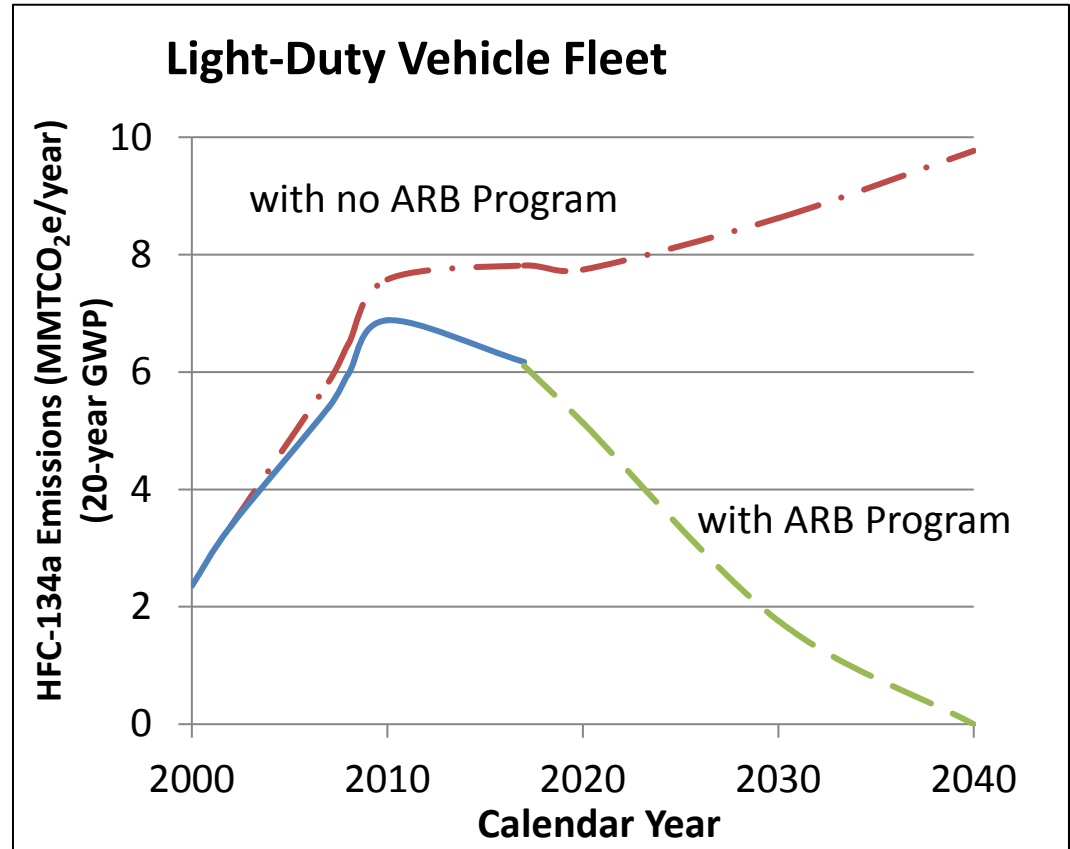


2016 Used Oil/HHW Training & Conference
Sacramento Convention Center
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Overall ARB Program for Automotive Refrigerants

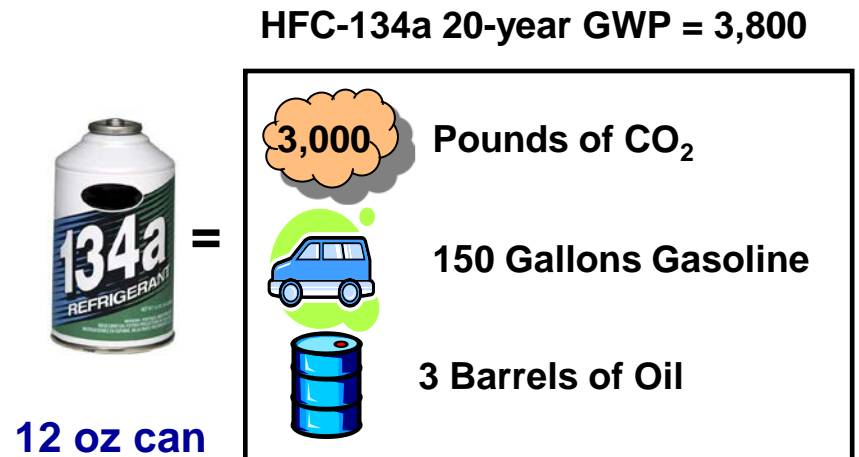
Program elements:

- Low-leak, low-GWP, and more fuel-efficient AC systems for new vehicles
- Improved servicing requirements
- End-of-life recovery of refrigerants



Program elements have been adopted nationwide

Small Containers of Automotive Refrigerant Used for Repairs



Containers used by do-it-yourself (DIY) mechanics to recharge motor vehicle air conditioning systems as a cheaper alternative to service by a professional

Background

- Adopted by the Board in 2009 to reduce HFC-134a emissions from DIY motor vehicle air conditioning servicing and became effective on January 1, 2010.
- Goal of the measure is to reduce venting of unused refrigerant and recover remaining refrigerant
- Works in concert with tighter vehicle air conditioning systems

Existing Regulatory Requirements



Self-sealing valve on all containers



Recycling program with a refundable deposit for used containers



Consumer education program



Container certification and labeling requirements



Annual reporting of container sales and returns

Success at Reducing GHG Emissions

- Greater emission reductions than projected
 - Self-sealing valve allows multiple recharges
 - Container sales dropped from 1.9 million in 2006 to 1.0-1.3 million after 2010
 - Reductions of 1.02 MMTCO₂e/year (20-year GWP) (34%)
- Fewer containers needed means savings for consumers
- U.S. EPA promulgating nationwide rule using same small container technology

Issues Related to Deposit and Recycling Program

- Deposit Program
 - 70% container return rate for \$10 deposit: target 95%
 - Retailers accruing unclaimed deposits
 - Monies intended for the manufacturers to support enhanced consumer awareness efforts
- Recycling Program
 - 2.5% refrigerant recovery: expected 20%
 - ARB studies confirmed the valves are working properly and the can is used multiple times
 - Keeps containers and refrigerant out of landfills

Goals of the Ongoing Amendments

- Preserve GHG reductions
- Maximize the refundable deposit return rate to the consumer
- Ensure unclaimed deposits are being used to the benefit of the consumer and the environment
- Divert more containers from household waste stream

Major elements of the ongoing Amendments

- Clarify the requirement for retailers to transfer future unclaimed consumer deposits to the manufacturers
- Expand the scope for spending the funds
 - Programs to reduce greenhouse gas emissions
 - Improve consumer awareness to increase return rate
 - Executive Officer approval required for expending funds
- Eliminate the deposit adjustment provision
- Other minor changes

Moving Forward

- Amendments become effective around January 2017
- Continue to resolve two major issues of concern
 - Spending plan for the unclaimed deposits (stewardship organization)
 - Improvements or alternatives to the recycling programs (household hazardous waste, HHW)

Short Term - Deposit Program

- Establish working group for the management and spending of the unclaimed deposits
 - Manufacturers have option to designate 3rd party
 - Model on Product Stewardship Programs (CalRecycle)
 - Improve container and deposit return rates
 - Focus benefits on low-income communities and consumers that purchase small containers

Long Term – Recycling Program

- U.S. EPA rule requires self-sealing valves on all “small cans”
 - Used cans disposed of in landfill
 - R-134a not considered toxic by U.S EPA
- CARB Regulation includes can deposit & return program
 - Can heel is only 2-4% - extremely small
 - DTSC classifies R-134a household hazardous waste (HHW) due to its aquatic toxicity
 - Alternatives to address HHW issue?

Summary

- The regulation and ongoing amendments will:
 - Preserve GHG reductions
 - Ensure unclaimed deposits are being used to the benefit of the consumers and the environment
 - Maximize the return rate
- We will continue to work with stakeholders to address deposit and recycling issues.

Questions?

Mike FitzGibbon, P.E.

Branch Chief

Research Division

California Air Resources Board

1001 I street, 5th floor

Sacramento, Ca 95814

Tel: (916) 323-2389

Email: Mike.FitzGibbon@arb.ca.gov