



# DIY Small Can Regulation

Research Division  
January 14, 2020



# Background

- Measure to reduce GHG emissions from automotive refrigerants in small containers
- These small cans contain HFC-134a, a gas with a Global Warming Potential (GWP) 1,430 times that of CO<sub>2</sub>
- Adopted in 2009; and adopted in 2016
- Major regulatory requirements:
  - Self-sealing valve on all containers
  - \$10 Deposit and recycling programs
  - Consumer education program
  - Product certification and labeling requirements
  - Annual reporting of container sales and returns



# Enhanced Education Program (EEP) and Key Players

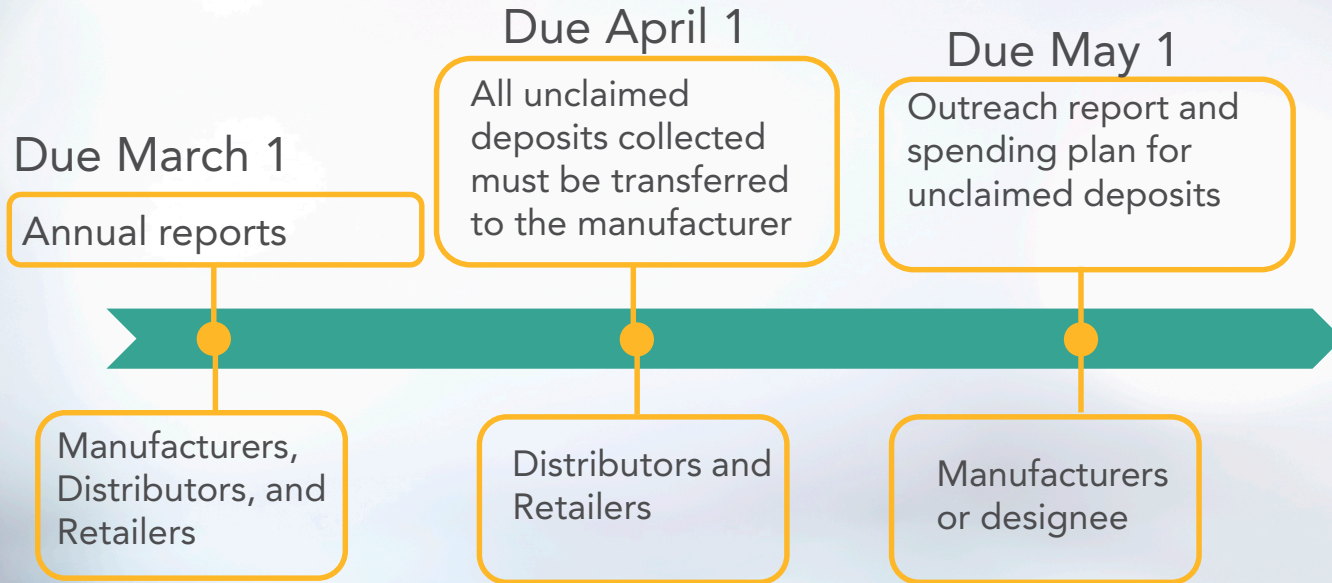
- EEP
  - Designed to inform consumers of measures to reduce GHG emissions associated with DIY recharging of motor vehicle AC systems
- Key Players
  - CARB
  - Manufacturers or their designee- Car Care Council to manage unclaimed deposits
  - Distributors
  - Retailers and Independent Stores
  - DIYers
  - Public

# Major Amendment

- Adopted in April 2016 and became effective on April 13, 2017
- Container deposit fixed at \$10
- Detailed requirements for retailers to transfer unclaimed consumer deposits to manufacturers
- Manufacturers required to manage unclaimed deposits and develop annual spending plan and report
- Expanded scope for spending the unclaimed deposits



# Important Dates for Regulation



# Why Enhanced Education Program (EEP)?

- Return rate =  $\text{No. of cans returned} / \text{No. of cans sold}$ 
  - Initial benchmark return rate expected at 90% and 22% can heel
  - Return rate and can heel much lower than expected

Year	2011	2012	2013	2014	2015	2016	2017	2018
Retailer Return	69%	73%	69%	66%	66%	68%	62%	57%
Manufacturer's Recycling Center	1.16%	1.60%	2.29%	4.29%	2.70%	1.94%	5.16%	5.53%





# Overview of Small Can Retail Compliance Inspections

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# Historical Inspection Comparison

Year	2014	2015	2016	2017	2018	2019
# of inspected stores	94	55	125	114	153	175
Lack of consumer brochures	69%	51%	38%	52%	47%	10%
Lack of placard display	41%	18%	22%	31%	29%	7%
Selling illegal cans	7%	2%	1%	4%	2%	1%
Lack of storage bins	10%	15%	8%	8%	1%	3%
Accepting empty cans only	11%	25%	10%	13%	13%	13%



# Environmental Justice Analysis

- Environmental justice (EJ) communities commonly identified as those where residents are predominantly minorities or low-income, and disproportionately impacted by environmental hazards.
- Communities designated EJ  
<https://oehha.ca.gov/calenviroscreen>.
- These communities are the primary audience for DIY AC servicing products.

	relevant locations	lack brochure	lack placard	illegal cans	lack storage bins	empty cans only
2016-2018	All Stores	49%	30%	3%	4%	13%
2019		10%	7%	1%	3%	13%
2016-2018	EJ	58%	32%	3%	1%	27%
2019		3%	3%	0 %	1%	5%

# Cans Accepted and Destination

- A question that arose during the course of these inspections was about the ultimate fate of the can, as well as which cans were being accepted.
- This revealed issues with not accepting partial cans as well as highlighting that some locations give the cans over to hazmat rather than recycling it.

	Accepted		Returns		
2019	Empty cans only	Partial empty only	returned to manufacturer or recycling center	returned to distributor	returned to hazmat
All Stores	1%	14%	3%	92%	6%



# Summary

- In 2019, stores showed greatly increased compliance in terms of signage and bilingual placard but no change on other items.
- Near total compliance of stores not selling illegal cans.
- CARB is greatly concerned about retailers only accepting empty cans and lack of storage bins and will be actively looking into the issue.

# How to Contact Us

- DIY Contact:
  - Van Tsan, [van.tsan@arb.ca.gov](mailto:van.tsan@arb.ca.gov)
    - (916) 327-8543
- DIY Webpage
  - <https://ww2.arb.ca.gov/our-work/programs/small-containers-automotive-refrigerant>



# Discussion

- Feedback of Enhanced Education Programs
- Return Data Needs
  - Data format easiest for retailers
  - Store by store or zip code
- Can Heel Test with CCC
  - Not successful during vehicle check up event
- Designate Retailer for Accepting Return Cans
  - Financial incentives