



Proposed Amendments to the Air Cleaner Regulation

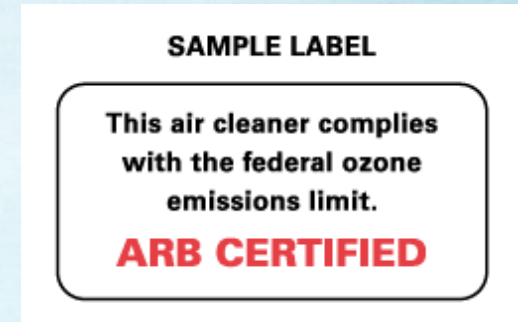
December 12, 2019

Purpose of the Air Cleaner Regulation

- Prior to the original regulation, ozone generating portable air cleaners were readily available
- Pursuant to AB 2276 (2006), CARB adopted the air cleaner regulation under Health and Safety Code 41985 – 41986, which limited ozone emissions from these devices (effective 2008)
 - Nearly 2500 models certified, more than 300 manufacturers
 - List of certified devices used by consumers nationally

What Does the Current Regulation Do?

- Devices sold or distributed in CA must meet the following requirements:
 - Electrical safety standards
 - Ozone concentration limit of 0.05 ppm
 - Notification and record-keeping
 - Labeling and advertising language



Exemptions Provided in the Regulation

- Air cleaners installed in the ductwork of heating, ventilating, and air conditioning systems ("in-duct devices")
 - No approved test method for measuring ozone emissions
 - Lack of data on the California in-duct air cleaner market
- Ozone-producing devices used in specified industrial applications

Exempt Industrial Use Applications

Ozone-producing devices for specific uses in:

- Chemical, electronics, pharmaceutical, biotech, pulp and paper industries
- Water purification
- Certain agricultural processing applications
- Odor and smoke control in the hotel industry*
- Fire/smoke/mold remediation*
- Motor vehicle reconditioning*

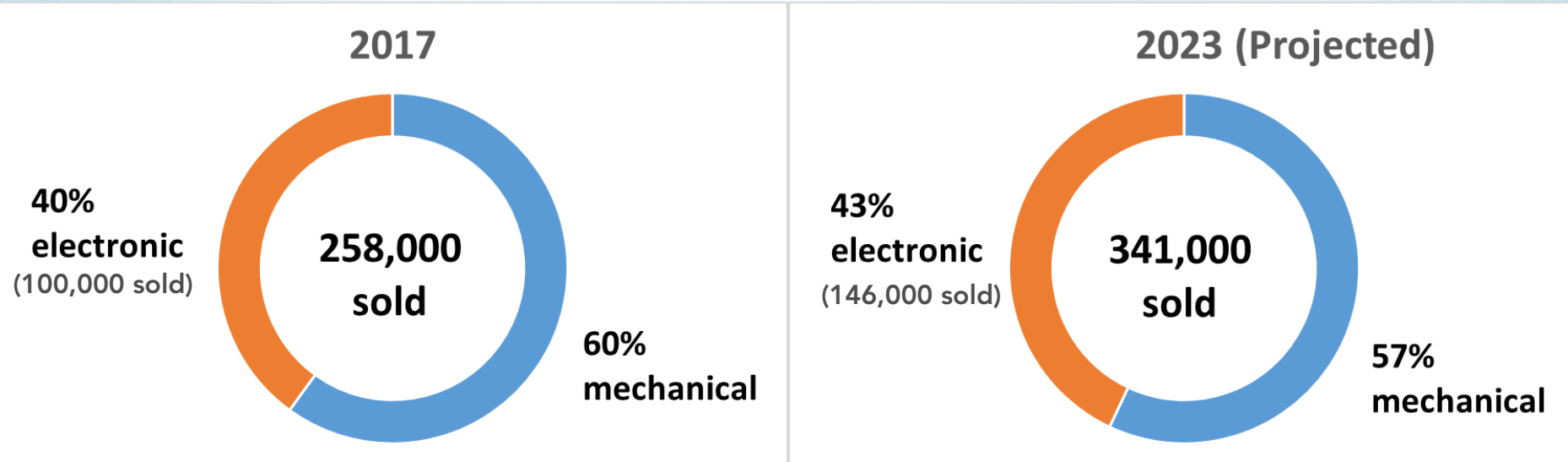
* Allowed for short-term uses when people are not present

Why Are We Here Today?

- Diversified market
 - Online sales
 - New dual-function devices
- California-specific market drivers
 - Health concerns about air pollution
 - Wildfire smoke
- Expanded in-duct market



The Currently Exempt In-duct Air Cleaner Market is Growing Quickly



Goals of Amendments

- A. Strengthen protections against exposure to ozone
- B. Streamline certification process and regulation implementation
- C. Clarify compliance requirements
- D. Minor changes

A. Amendments to Strengthen the Regulation

- Expand the definition of indoor air cleaning devices
- Require the certification of electronic in-duct air cleaners
- Revise industrial use exemptions

Expand Regulatory Coverage

Proposed definition change: Include devices that clean the air entering an enclosed space, such as window AC units

- Windows AC that use only mechanical filter not subject to regulation



**Window AC unit
with ionizer**

Require Certification of Electronic In-duct Air Cleaners

- **Previous issue:** No approved test method for measuring ozone emissions
 - Solution: CSA C22.2 no. 187-15, Sections 7.5 and 7.6
- **Important note:** No certification requirement for mechanical HVAC filters



Revise Industrial Use Applications

Proposed Updates for Industrial Use Applications:

- Clarify that all exempted uses are permitted only when people not present
- Improve advisory label on device
- Require ozone health effects information and ventilation recommendation in manual and installation guides
- Clearly state devices can only be marketed for exempted uses
- Add exemption for mausoleums; eliminate unnecessary exemptions

B. Streamline the Certification Process

- Reduce ozone testing requirement for specific devices
 - Exempt portable UVGI lamp devices
- Eliminate notification requirement for certified air cleaners
 - Only manufacturers with uncertified devices have a notification requirement

C. Amendments to Clarify Re-certification Requirements

Clarify that re-certification required when:

- Device is re-branded by same company or a new company
- The operations or air cleaning technologies are changed
- The manufacturing facility is moved to another country

D. Minor Changes

- Update references to test standards
- Clarify auditing requirements for laboratories
- Clarify condition under which certification may be withheld

Benefits of Amendments

- Extends public health protections
- Protect industrial workers and bystanders including in sectors disproportionately employing low income workers of color
- Reduce administrative burden and provide cost savings to manufacturers of certified devices

Economic Impact of Amendments

- Total net cost: \$970,000 over 10 years
 - **Costs:** \$1.89 M due to ozone testing requirement for in-duct devices
 - **Savings:** \$920,000 to manufacturers from elimination of requirements for notification and ozone testing
 - Does not include benefits of reduced ozone exposures

Regulation Implementation Timeline

Effective Date

Removes notification requirement for manufacturers of certified air cleaners; exempts ozone testing for portable air cleaners with only UVGI bulb

Effective Date + 12 months

Industrial use exemptions, labeling, and advisory requirements

Effective Date + 24 Months

In-duct electronic air cleaners must be certified to be sold in CA

Potential 15-day Changes

- Include statement that manufacturing date of portable devices will be used to determine device compliance requirements
- Clarify definition of a UVGI lamp
- Clarify which air cleaning devices require updated language in owner or operation manuals

Staff Recommendation

- Staff recommends that the Board adopt Resolution 19-33, Amendments to the Regulation for Limiting Ozone Emissions From Indoor Air Cleaning Devices.

Thank you.