

**Control of Emissions from Restaurant Operations** Working Group Meeting

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March 5, 2025

## AGENDA

South Coast Air Quality Management District

2024 PM2.5 Plan

Current Requirements for Rule 1138

Proposed Amended Rule 1138

Next Steps & Staff Contacts

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

- Regulatory agency responsible for improving air quality for the South Coast Air Basin and the Coachella Valley
  - 17 million residents (>40% of CA)
- Key responsibilities:
  - Regulate emissions from >28,000 stationary sources
  - Monitor air quality and comply with federal/state air quality standards
- □ South Coast Air Basin has among the worst fine particulate matter (PM2.5) and ozone pollution in the nation despite great strides
  - "Serious" nonattainment for PM2.5 standards
  - "Extreme" nonattainment for ozone standards







## AIR QUALITY MANAGEMENT PLANS (AQMP)

- □ Regional blueprint demonstrating how to meet federal standards for PM2.5 and ozone
  - NOx reacts in atmosphere to form PM2.5 and ozone
  - PM2.5 can be also directly emitted
- 2022 AQMP to attain the 2015 Ozone Standard
  - Need NOX reduced by 83% below 2018 levels by 2038<sup>1</sup>
- 2024 PM2.5 Plan to attain the 2012 PM2.5 Standard
  - Need NOx reduced by 54% and direct PM2.5 reduced by 6% below 2018 levels by 2030<sup>2</sup>

The 2027 AQMP to attain the more stringent 2024 PM2.5 Standard is in development



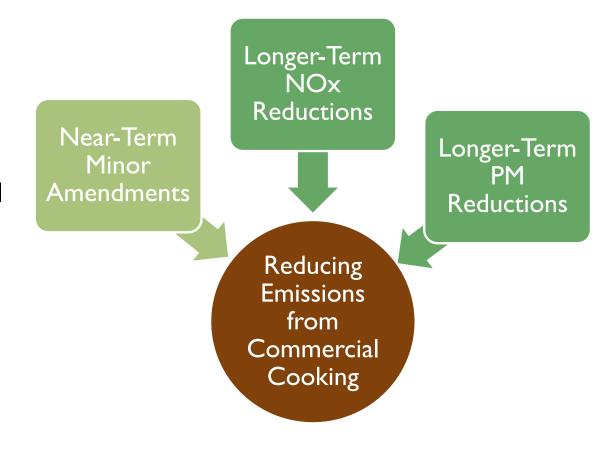
<sup>&</sup>lt;sup>1</sup> 2022 Air Quality Management Plan, ES-4:

https://www.agmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-agmp/final-2022-agmp.pdf

<sup>&</sup>lt;sup>2</sup> South Coast Air Basin Attainment Plan for the 2012 Annual PM2.5 Standard, 4-2:

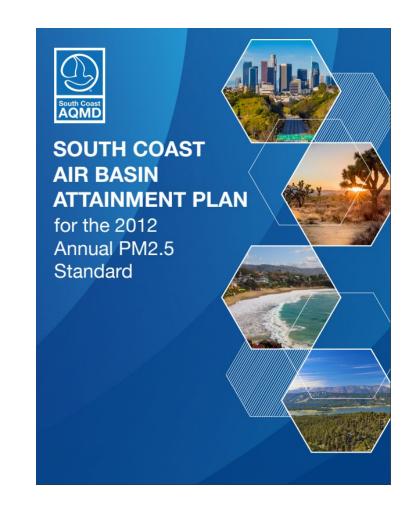
## 2024 PM2.5 PLAN MAIN APPROACHES

- □ Three avenues identified to address emissions from commercial cooking:
  - Near-term = This Rulemaking
    - Minor amendments addressing federal requirements
  - Longer-term <u>after</u> this rulemaking
    - Further NOx emissions
    - Further direct PM2.5 emissions
    - Public process will begin after current rulemaking concludes



## 2024 PM2.5 PLAN

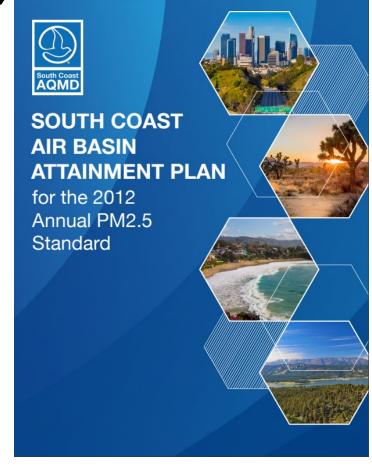
- South Coast Air Basin Attainment Plan for the 2012 Annual PM2.5 Standard was adopted June 7, 2024
  - Provides blueprint to attain the 2012 annual PM2.5 Standard
  - One federal requirement for the plan is the evaluation and implementation of Most Stringent Measures (MSMs)
- South Coast AQMD rules can be no less stringent than the MSM from any other non-attainment or maintenance area in the nation
  - Adoption of MSMs in 2025 allows South Coast AQMD to extend the attainment date to 2030 and avoids federal sanctions



<sup>\*</sup>South Coast Air Basin Attainment Plan for 2012 Annual PM2.5 Standard Chapter 6 & App. III(June 7, 2024):

# 2024 PM2.5 PLAN (CONT.)

- □ Rule 1138 was identified as one of four South Coast AQMD rules that need to be amended for Most Stringent Measure requirements
  - Other rules affect greenwaste composting, large confined animal facilities, and wood burning devices (not at restaurants)
- ☐ Similar rules from other air districts are more stringent (more details later in presentation)
- □ Draft amended rule language reflecting MSM must be made available for public review by mid June 2025 per U.S. EPA

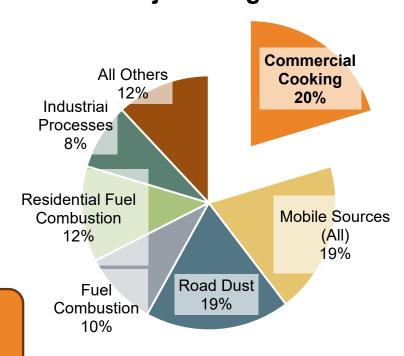


## 2024 PM2.5 PLAN (CONT.)

- □ Emissions from commercial cooking make up ~20% of total direct PM2.5 emissions in the South Coast Air Basin
- South Coast AQMD will continue to work with all stakeholders to identify and develop feasible options to reduce emissions from commercial cooking operations
  - To address long term emission reduction needs

Current effort focuses on implementing MSM for Rule 1138 affecting chain-driven charboilers only

## Direct PM 2.5 Emissions – Major Categories\*\*



<sup>\* 2024</sup> PM 2.5 Plan, Table 3-3: Summary of Emissions by Major Source Category: 2018 Base Year in PM 2.5 Plan, Pg 61: https://www.aqmd.gov/docs/default-source/clean-air-plans/pm2.5-plans/final-pm2.5-plan/2012-annual-pm2-5-plan.pdf

## WHAT ARE CHARBROILERS?

- □ Chain-driven charbroilers are equipped with mechanical chains that automatically moves food through the device as they cook
  - Subject to Rule 1138
- Underfired charbroilers heat food with the heating source located under the grated grill in a fixed position
  - Grill charbroilers, flamebroilers, and direct-fired barbecues are all considered underfired charbroilers
  - Not subject to either current or Proposed Amended Rule 1138 (PAR 1138)









# CHARBROILER: CURRENT REQUIREMENTS & EXEMPTION

### **Rule 1138:**

- Requires chain-driven charbroilers to be equipped with a control device that meets emissions control requirements\*
  - Exempting units with throughput < 875 pounds/week of meat cooked

### **Rule 222:**

- Requires all charbroilers (underfired and chaindriven) to submit registration\*
  - Required regardless of unit meat throughput

(Adopted November 14, 1997)

#### RULE 1138. CONTROL OF EMISSIONS FROM RESTAURANT OPERATIONS

#### (a) Applicabi

This rule applies to owners and operators of commercial cooking operations, preparing food for human consumption. The rule requirements currently apply to chain-driven charbroilers used to cook meat. All other commercial restaurant cooking equipment including, but not limited to, under-fired charbroilers, may be subject to future rule provisions.

#### b) Definition

- CATALYTIC OXIDIZER means a control device which burns or oxidizes smoke and gases from the cooking process to carbon dioxide and water, using an infrastructure coated with a noble metal alloy.
- (2) CHAIN-DRIVEN CHARBROILER is a semi-enclosed cooking device with a mechanical chain which automatically moves food through the device and consists of three main components: a grill, a high temperature radiant surface, and a heat source.
- (3) CHARBROILER means a cooking device composed of the following three major components: a grated grill, a high-temperature radiant surface and a heat source. The heat source heats the high-temperature radiant surface, which provides the heat to cook the food resting on the grated grill. This includes, but is not limited to broilers: grill charbroilers, flamebroilers and direct-fired barbecues.
- EXISTING CHAIN-DRIVEN CHARBROILER means any chain-driven charbroiler operating on or before November 14, 1997.
- (5) MEAT, for the purposes of this rule, includes beef, lamb, pork, poultry fish, and seafood.
- (6) NEW CHAIN-DRIVEN CHARBROILER means any chain-driven charbroiler initially installed and operated after November 14, 1997.
- RESTAURANT means any stationary commercial cooking establishment which prepares food for human consumption.

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https://www.agmd.gov/docs/default-source/permitting/product-certification/charbroilerscatalysts.pdf

<sup>&</sup>lt;sup>+</sup> South Coast AQMD Certified Charbroilers with Integrated Catalysts:

<sup>\*</sup> Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II: <a href="https://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-222.pdf">https://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-222.pdf</a>

## MSM FOR RULE 1138

- □ Rule 1138 must be amended to implement MSM
  - Staff is initiating rulemaking for PAR 1138 to implement the same level of stringency identified as MSM
  - Summary of MSM analysis outlined in the table below

Air District	Rule	Adopted/ Amended	Exemption upper limit (chain-driven)
South Coast AQMD	1138	11/14/1997	<875 lbs/week
Bay Area AQMD	Regulation 6 Rule 2	12/05/2007	<400 lbs/week (beef)
San Joaquin APCD	4692	06/21/2018	<400 lbs/week; or ≤10,800 pounds over 12 months and <875 lbs/week

## PROPOSED AMENDED RULE 1138

**Rule 1138** 

Subdivision (a) - Applicability

Subdivision (b) - Definition

Subdivision (c) - Requirements

Subdivision (d) - Recordkeeping

Subdivision (e) - Exemption

Subdivision (f) - Evaluations

Subdivision (g) – Test Methods

PAR 1138

Subdivision (a) - Applicability

Subdivision (b) - Definitior

Subdivision (c) - Requirements

Subdivision (d) - Recordkeeping

Subdivision (e) - Exemption

Subdivision (f) - Evaluations

Subdivision (g) – Test Methods

Focus of Limited Rule Amendment

Additional administrative revisions will be discussed in future Working Group Meetings

## LOWER EXEMPTION THRESHOLD

- PAR 1138 would implement MSM by amending rule exemption threshold into the following pathways:
  - <400 pounds of meat in any given week; or</li>
  - ≤ 10,800 pounds per 12-month period and <875 pounds of meat in any given week
- Staff believes that this change would result in few additional facilities subject to Rule 1138 emissions control requirements
  - High output nature of chain-driven charbroilers
  - Seeking stakeholder feedback on this and other potential impacts of this change



https://nieco.com/nieco-products-brochure/

## **NEXT STEPS**

Ongoing Reach Out for Stakeholder Feedback Spring Working Group Meeting #2 Release of Preliminary Draft Rule June Language and Preliminary Draft Staff Report July Public Workshop September **Public Hearing** 

## STAFF CONTACTS

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Sign up for the mailing list at: <a href="https://www.aqmd.gov/sign-up">https://www.aqmd.gov/sign-up</a> (select "Rule 1138 – Control of Emissions from Restaurant Operations")

For more information, visit the <u>Proposed Amended Rule 1138 webpage</u>