



San Diego County Air Pollution Control District

PROPOSED NEW RULE 67.26 – COMMERCIAL CHARBROILING OPERATIONS

Public Workshop

Wednesday, December 4th

2024



Background

Charbroiling Operations

- High temperature/flames to cook food.
- Charred/smoky flavor.
- Generate smoke & air pollutants:
 - Particulate matter (PM) &
 - Volatile organic compounds (VOCs)



PM & VOC Emissions

- PM = health problems
- VOCs = ozone precursor
 - Ozone = smog = health problems



Background (*cont.*)

Types of Charbroilers

1. Chain-driven (*conveyorized*)

- Semi-enclosed charbroiler
- Conveyor belts to carry and simultaneously cook the food.
- Common at fast-food restaurants
- Feasible control device

2. Under-fired

- Similar to BBQ grill



Reason for New Rule 67.26

Attainment Status

- SD County in nonattainment with state/federal standards for PM & ozone set by California Air Resources Board (CARB) & the Environmental Protection Agency (EPA).

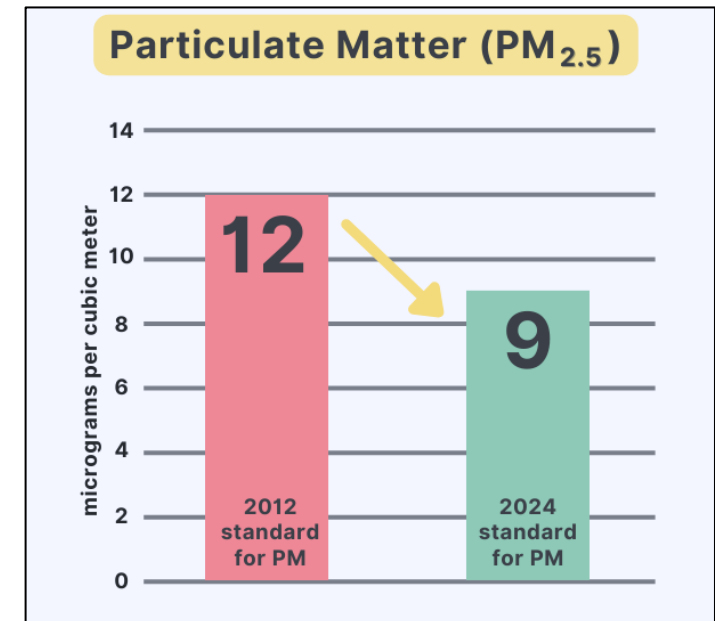


New EPA PM-2.5 standard

- Reduced from 12 $\mu\text{g}/\text{m}^3$ \rightarrow 9.0 $\mu\text{g}/\text{m}^3$ (*more stringent*)

Control PM & VOC Emissions from Chain-driven Charbroilers

- Proposed new rule would help attain state/federal standards & improve air quality.



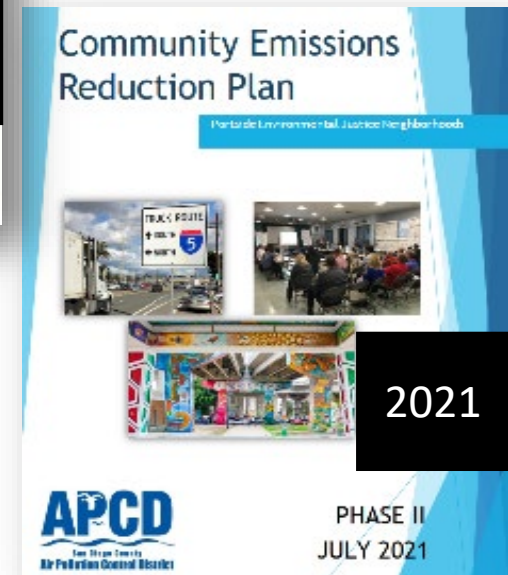
Reason for New Rule 67.26 (cont.)

Air Quality Planning

- 2022 Regional Air Quality Strategy (RAQS)
 - Measure S-6

Community

- 2021 Portside Community Emission Reduction Plan (CERP)
 - Action C3



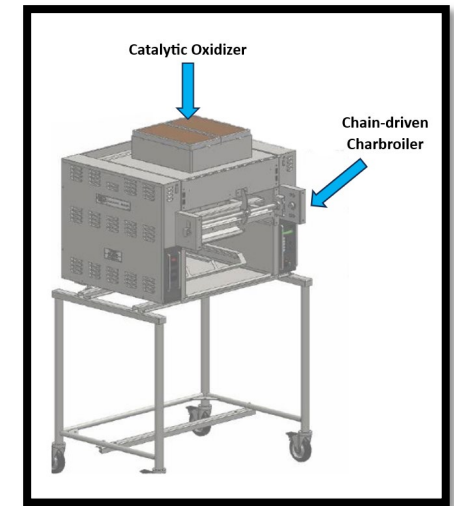
Proposed New Rule 67.26 Requirements (Overview)

Applicability

- chain-driven charbroilers at commercial cooking facilities.
- 415 lbs/week of meat (*similar to SJVAPCD limit*)

Proposed Requirements

- Apply for registration or permit
 - (*approx. \$945 for Initial fees & \$537 for annual renewal fee + other processing/administrative fees*)
- Install catalytic oxidizer (*or alternative control*)
- Control efficiency: **PM - 83%, VOC - 86%.**
- Proper maintenance of equipment.
- Recordkeeping
- Effective July 1, 2025 (tentative, if adopted by the Governing Board in April 2025)



Applicability & Exemptions

Applicability:

- Any person who installs, owns, or operates any charbroiler at a commercial cooking operations facility in San Diego County

Exemptions

- Under-fired charbroilers & flat-top grills/griddles
- Chain-driven charbroilers in microenterprise home kitchens
- Limited use chain-driven charbroilers
 - <415 lbs of meat per calendar week (not to exceed 21,580 lbs during calendar year), or
 - <875 lbs of meat every calendar week during one consecutive 12-week period in most recent calendar year (*i.e. seasonal use*)
- Low-emitting chain-driven charbroilers
 - Emits <0.50 lbs/day of PM and 0.15 lbs/day of VOC (subject to verification by District)

Chain-driven



Under-fired



Key Definitions

Chain-driven Charbroiler, also known as a conveyORIZED charbroiler, means a semi-enclosed cooking device with a mechanical chain, which automatically moves food through the heat sources positioned above and below the grated grill charbroilers at commercial cooking facilities.

Commercial Cooking Operations means any *stationary* facility that cooks food for human consumption and that engages in the retail sale, or offer for sale, of the cooked food. This includes, but is not limited to, restaurants, dinner houses, cafeterias, catering operations, mobile food facilities, commissary facilities, retail markets, satellite food service operations, and hotel or motel food service operations.

Meat, means beef, lamb, pork, poultry, fish, game, plant-based meat substitutes, and seafood, uncooked.

Under-fired Charbroiler, means a charbroiler, other than a chain-driven charbroiler, where the heat source and radiant surface, if any, are positioned at or below the level of the grated grill.

Additional definitions found in Section (c) of Proposed Rule 67.26



Proposed Emission Control Requirements Chain-driven Charbroilers

Catalytic Oxidizer:

- At least 83% control efficiency for particulate matter emissions AND at least 86% control efficiency for VOC emissions.
- Chain-driven charbroiler and catalytic oxidizer combinations certified by South Coast Air Quality Management District (SCAQMD), in accordance with SCAQMD Rule 1138, shall be deemed compliant.

Alternative Controls:

- Non-certified catalytic oxidizers and alternative emission control devices may also be used.
- Must meet same control efficiency % noted above, and subject to approval by APCD Director.

Emission Control Device Maintenance



Proposed District Registration and/or Permitting Requirements

Chain-driven Charbroilers with a certified catalytic oxidizer:

- Apply for Registration pursuant to APCD Rule 12
- Each chain-driven charbroiler + catalytic oxidizer combination

Registration

Chain-driven Charbroilers with non-certified catalytic oxidizer or alternative emission controls:

- Apply for Authority to Construct and/or Permit to Operate pursuant to APCD Rule 10.
- Each chain-driven charbroiler

Authority to Construct

Permit to Operate



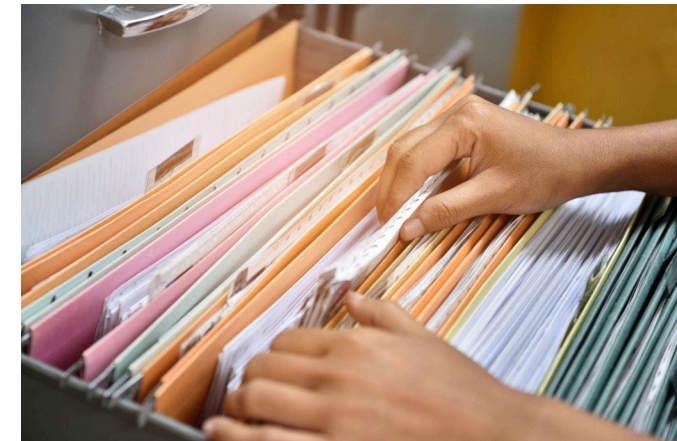
Other Proposed Rule 67.26 Requirements

Recordkeeping

- For chain-driven charbroilers only
- Maintain weekly and annual records of total quantity (lbs) for each type of meat cooked on each charbroiling unit.
- Documentation of installation and maintenance of emission control device
- Records maintained onsite for at least 5 years in electronic and/or hardcopy format and readily available to the District upon request.

Test Methods (as applicable)

- SCQMD Rule 1138, Section (g), for certified/non-certified catalytic oxidizers
- Other methods as applicable for alternative emission control devices and low-emitting units, subject to APCO, CARB, and/or U.S. EPA approval.



Proposed Compliance Schedule

New Chain-driven Charbroilers

- Submit Authority to Construct/Permit to Operate Application prior to purchase and operation.

Existing Chain-driven Charbroilers

- Comply with recordkeeping requirements immediately upon rule adoption
- Within 12 months of rule adoption, submit application for Registration/Authority to Construct/Permit to Operate
- Operate charbroiler with emission control device installed within 18 months of rule adoption.

Low-Emitting Chain-driven Charbroilers

- Comply with recordkeeping requirements immediately upon rule adoption
- Submit test results within 12 months of rule adoption.



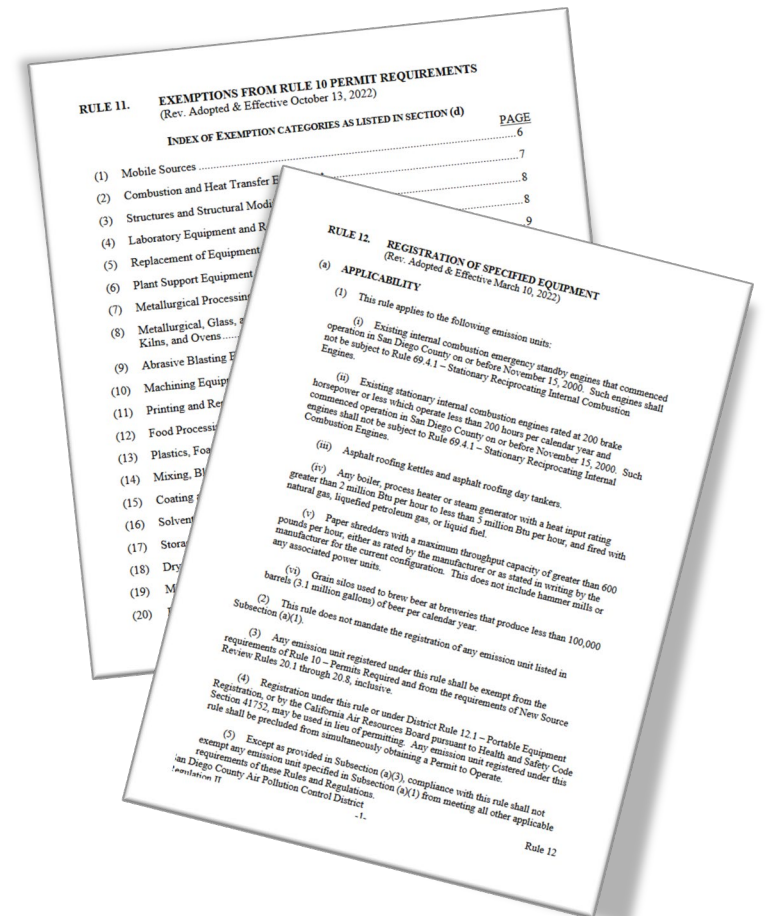
Corresponding & Concurrent Proposed Rule Amendments to Accommodate New Rule 67.26

Rule 11 (Exemptions from Rule 10 Permit Requirements)

- Miscellaneous amendments to remove exemption associated with charbroiling equipment at eating establishments
- *NOTE: District is not soliciting other changes to Rule 11 outside of the scope of proposed Rule 67.26.*

Rule 12 (Registration of Specified Equipment)

- Adding option to register chain-driven charbroilers equipped with a catalytic oxidizer certified by SCAQMD.



Corresponding & Concurrent Proposed Rule Amendments to Accommodate New Rule 67.26 (cont.)

Rule 40

- Adding new fee schedule (Schedule 16) for Chain-driven Charbroilers

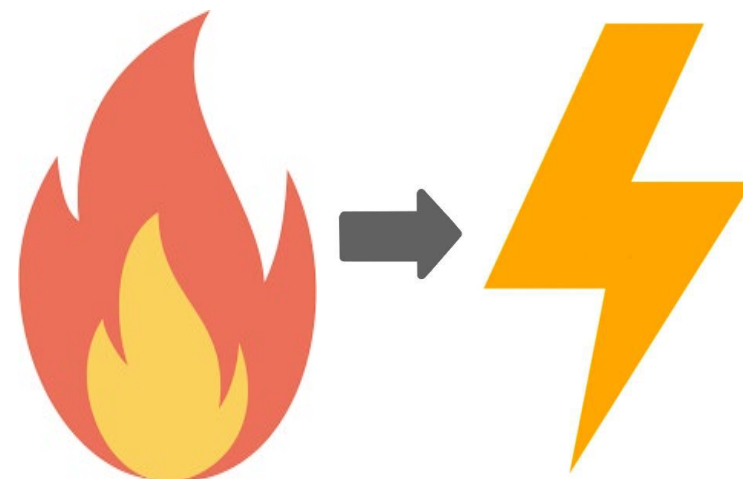
SCHEDULE 16: ~~RESERVED~~ Chain-driven Charbroilers

<u>Fee Unit</u>	<u>(1) Initial Evaluation Fee</u>	<u>(2) Emission Unit Renewal Fee</u>
(a) <u>Each chain-driven charbroiler with a non-certified emission control device</u>	<u>T+M</u>	<u>\$537</u>
(b) <u>Each existing chain-driven charbroiler with certified catalytic oxidizer, Registered Under Rule 12</u>	<u>T+M</u>	<u>\$537</u>
(c) <u>Each new chain-driven charbroiler with certified catalytic oxidizer, Registered Under Rule 12</u>	<u>\$945</u>	<u>\$537</u>



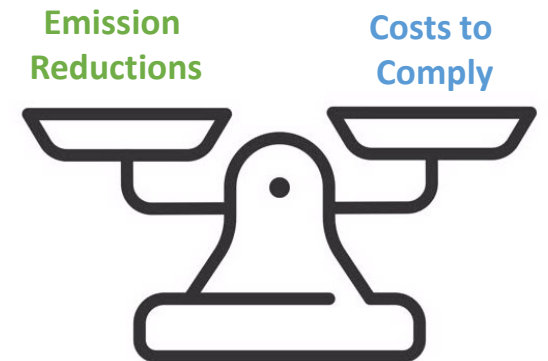
Consideration of Zero-Emission Technology

- Proposed new rule will achieve critically needed PM reductions quickly.
- PM reductions necessary to meet new potential federal attainment deadlines in 2032/2033.
- Requires readily available technology with minimal cost and minimal disruption in style of cooking food that differentiates one restaurant/cuisine from another.



Estimated Costs & Cost-Effectiveness

- District estimated cost-effectiveness
 - PM = \$8.7 per lb.
 - VOC = \$29.1 per lb.
- Estimated cost of emission control device and/or new unit with device already installed
 - New chain driven charbroiler w/ emission device installed = Approx. \$30,000
 - Emission device retrofit installed = Approx. \$10,000
- District staff encourages manufacturers to submit updated costs to APCD to ensure costs and cost-effectiveness are as accurate as possible.



Baseline Emissions, Reductions, & Health Benefits

- **County Department of Environmental Health's list of permitted food facilities (approx. 200 subject facilities).**

- No existing emission controls identified.

- **Baseline Emissions:**

- PM2.5 = 24 tons/year

VOCs = 7.5 tons/year



- **Emission Reductions & health benefits:**

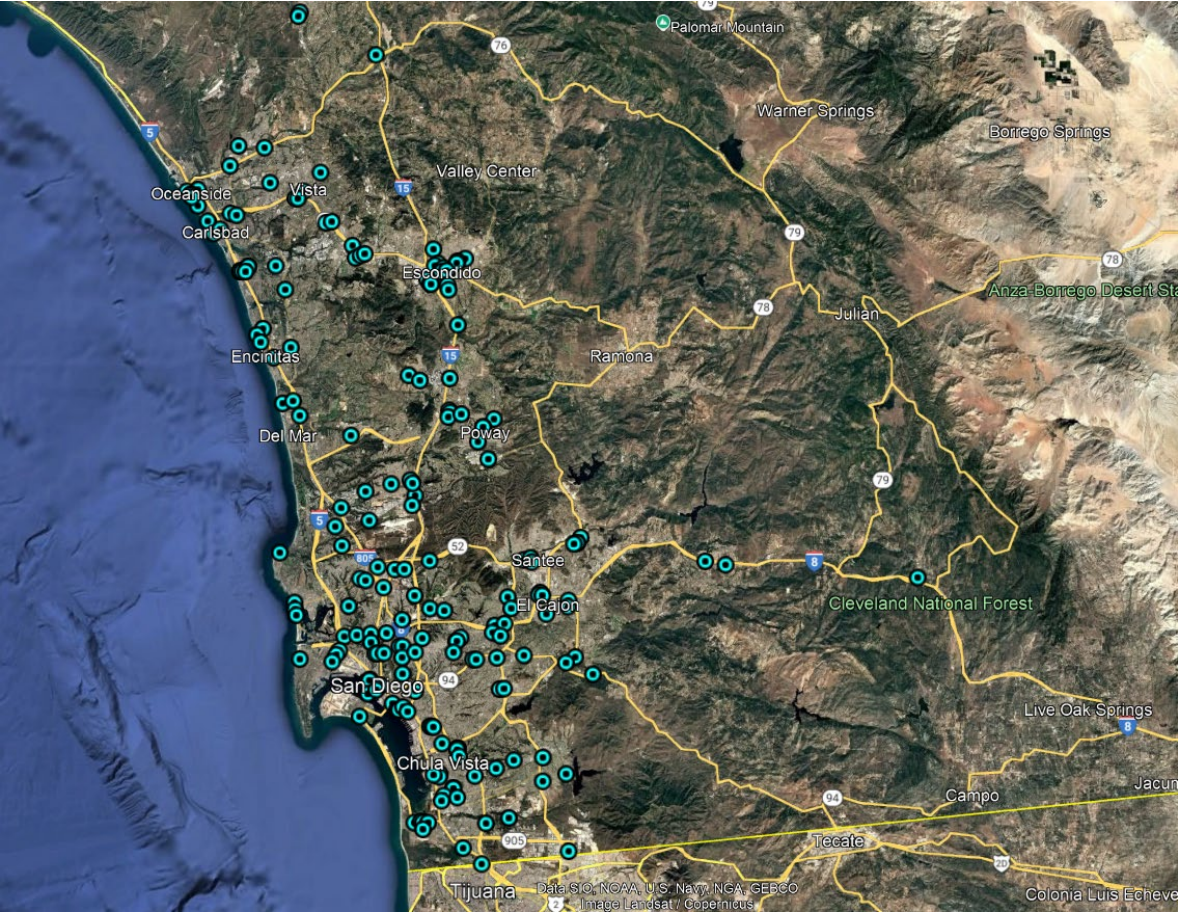
- PM2.5 = 20 tons/year reduced

VOCs = 6 tons/year reduced

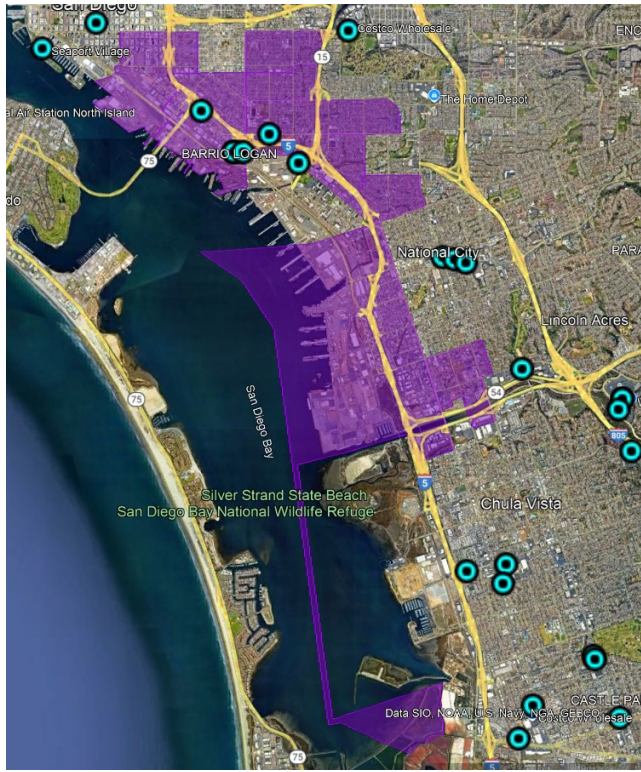
- Improves air quality & reduces risks/health incidents



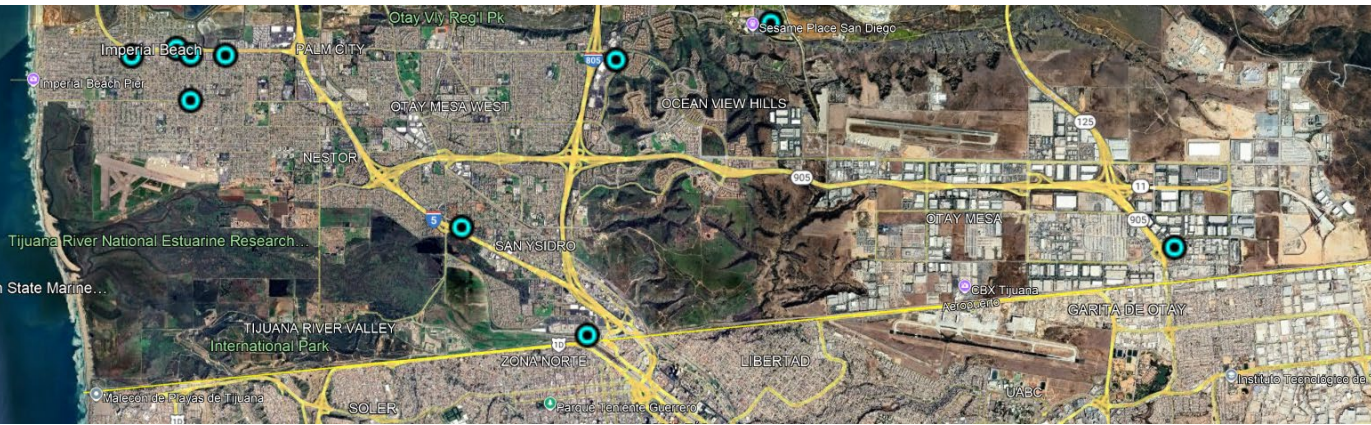
Maps of Potentially Subject Facilities



County (approx. 200)



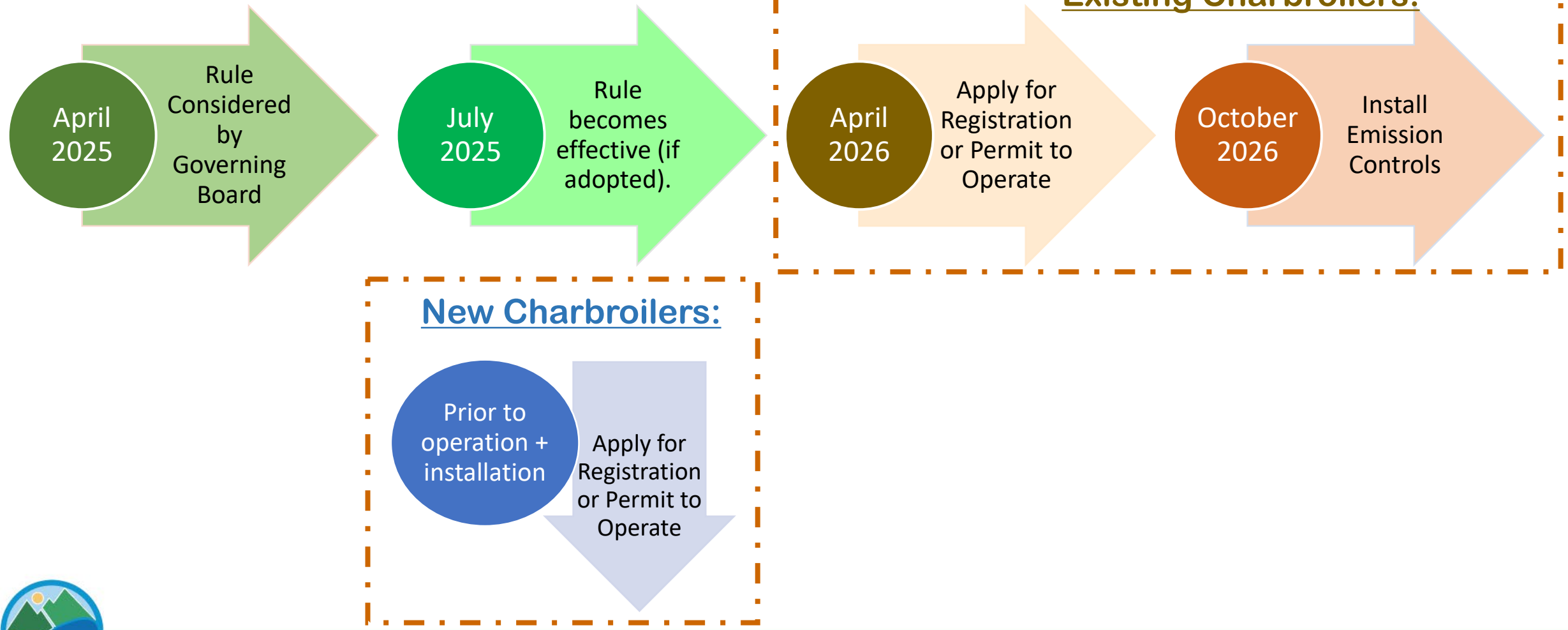
Portside (<5)



International Border (<10)



Proposed New Rule Timeline



Next Steps

- Proposed new rule & bilingual informational videos on District's website (*see QR code below*)
- Written comments due by **December 20th, 2024**
- Questions? E-mail/call Miriam Sanchez
 - miriam.sanchez@sdapcd.org
 - (858) 586-2850



(SDAPCD Website)



Questions/Comments

