State of California Air Resources Board

Board Item Summary

Item # 25-6-5: Public Meeting to Consider Proposed Research

Contract with the University of California, Riverside, Titled "Improving Commercial Cooking Emissions

Estimates in California"

Staff Recommendation:

The California Air Resources Board (CARB or Board) staff recommends that the Board approve funding of the proposed research contract with the University of California, Riverside, titled "Improving Commercial Cooking Emissions Estimates in California."

Discussion:

CARB's Research Program plays an important role in meeting the challenges of increasingly stringent federal air quality standards and long-term climate goals. It serves as the foundation for effective regulatory decisions. This proposed research contract is responsive to CARB's programmatic goals, emerging air quality, health, and climate issues, and public input.

CARB's California Emission Projection Analysis Model estimates that emissions from commercial cooking contributed approximately 3% of total particulate matter 2.5 (PM2.5) statewide emissions in 2023. The project will update the restaurant activity data to refine PM2.5, nitrogen oxides (NO_x), and volatile organic compounds (VOC_x) emission estimates. It will also conduct laboratory-controlled studies to update and expand emission factors from various cooking devices for different cooking processes and provide information on source profiles for PM2.5, NO_x and VOC_x .

Summary and Impacts:

The outcomes of this contract could be used to refine PM2.5, NO_x , and VOC emission estimates from commercial cooking operations in California and inform the emission inventory. The estimated cost to fund this proposed research contract is \$750,000. Board approval will authorize staff to implement this contract to undertake the activities described in this proposal.