



SOUTH COAST AQMD  
CLERK OF THE BOARD

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**VIA EMAIL**

Chair Benoit and Members of the Governing Board  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
Email: [cob@aqmd.gov](mailto:cob@aqmd.gov)

Re: Opposition to Proposed Amendments to Rule 1111- Reduction of NOx Emissions from Natural-Gas Fired, Fan-Type Central Furnaces

Dear Chair Benoit and Members of the Governing Board:

The undersigned organizations are opposed to the proposed amendment to Rule 1111 providing an exemption to current NOx standards for large-scale Natural-Gas-Fired, Fan-Type Central Furnaces installed in specific high-altitude communities. Manufacturers have made progress in reducing emissions across most categories of high-altitude furnaces. Yet, the South Coast Air Quality Management District (“Air District”) is now contemplating a permanent exemption under Rule 1111 for a category of furnaces described as “niche market products”. While some may argue that emissions contributions from these products are small, our region’s air cannot afford these types of compromises—especially not now. An exemption for any product today will result in forgone emissions reductions overtime no matter how small the market. We urge the Air District to continue working with furnace manufacturers to push for innovation across the sector rather than conceding forgone emission reduction for the sake of expediency.

*The Air District Must Continue Pursuing Best Available Retrofit Control Technology*

Under state law, this agency is charged with adopting rules and regulation to carry out its Air Quality Management Plan (“AQMP”). In doing so, the Air District must make every effort to “[r]equire the use of best available control technology for new and modified sources and the

use of best available retrofit control technology for existing sources.”<sup>1</sup> According to staff’s own report on this matter, technology in this area is advancing fast.<sup>2</sup>

The reluctance on the part of some manufacturers to produce compliant products for certain markets should not forestall the agency from continuing to push for further emissions reductions through improvements in technology. Offering exemptions to emissions standards for the sake of convenience –when the South Coast Air Basin is in extreme non-attainment, is antithetical to the Air District’s mission, its obligations under the Clean Air Act and the California Health and Safety Code. The Air District must avoid setting precedents like these that frustrate future efforts to advance “broad deployment” of best available retrofit control technology for existing sources as required by California law.

### *South Coast Air Basin is in Extreme Non-Attainment and Must do more to Reduce Emissions*

For several years now, the South Coast Air Basin has been in extreme nonattainment under the Federal Clean Air Act (CAA) for National Ambient Air Quality Standards. Specifically, the South Coast Air Basin is in extreme nonattainment for 1997 8-hour ozone (0.08 ppm), 2008 8-hour ozone (0.075 ppm), and 2015 8-hour ozone (0.070 ppm). The first attainment date- for the 1997 standards, is fast approaching on June 15, 2024.

Under the California Clean Air Act, the Air District plans must also address and attain state ambient air quality standards “at the earliest practicable date.”<sup>3</sup> Districts with serious air pollution, like the South Coast Air Basin, must include in its attainment plan: (1) no net increase in emissions from new and modified stationary sources; and (2) best available retrofit technology for existing sources. Moreover, nonattainment areas like South Coast must adopt all “feasible measures” to bring their regions into attainment.

In its 2016 AQMP, this agency acknowledged its obligations under the California Clean Air Act stating that in order to meet federal 8-hour ozone standards by the statutory deadlines, “significant additional emissions reductions will be necessary from a variety of sources” and that attainment of ozone, “will require broad deployment of zero and near zero NOx emissions technologies [within that] timeframe”.<sup>4</sup> The plan further states that “[g]iven the magnitude of needed emissions reductions and the time remaining until attainment deadlines, it is important that progress and momentum to identify, and deploy needed technologies be accelerated.”<sup>5</sup>

The agency has shown that it has the capacity to work on the development of newer technology as demonstrated by its Technology Advancement Office. According to Air District Staff, several manufacturers have made progress in testing and providing compliant furnaces for

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<sup>1</sup> Cal. Health & Safety Code § 40440.

<sup>2</sup> South Coast Air Quality Management District, *Draft Staff Report Proposed Amended Rule 1111- Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces*, 1-5 (August 2021). [http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1111/par-1111\\_draft-staff-report\\_073021.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1111/par-1111_draft-staff-report_073021.pdf?sfvrsn=6).

<sup>3</sup> Cal. Health & Saf. Code § 40910.

<sup>4</sup> South Coast Air Quality management District, Final 2016 Air Quality Management Plan, 3-25 (2017), <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>.

<sup>5</sup> *Id* at 4-9.

other high-altitude installations, and many anticipate having compliant furnaces in these areas available later this year.<sup>6</sup> The exemption proposed in PAR 1111 is inconsistent with this pattern of progress and creates an unnecessary loophole for a subset of reluctant manufacturers unwilling to innovate.

### *The Share of Pollution from Heating Residential and Commercial Buildings Continues to Climb*

The Air District proposes this exemption at a time when stronger efforts should be made to further reduce emissions contributions from buildings. Buildings are responsible for an increasing share of NOx pollution in some areas of California as cleaner technologies are implemented in other sectors. According to the most recent state emissions inventory, buildings will emit an increased share of NOx in the coming years.<sup>7</sup> While mobile sources like trucks and construction equipment continue to have higher NOx emissions, the Air District must also prioritize reductions from area sources like appliances in commercial and residential buildings.

Moreover, according to the latest data being used to develop the 2022 AQMP, NOx emissions from space heating in commercial and residential sectors are much higher than previously projected<sup>8</sup>. Projected NOx emissions for space heating jump by nearly 72% for residential and four times higher for commercial when incorporating the most recent data<sup>9</sup>. The increased share of pollution we are projected to see from heating buildings highlights the need to electrify as many fossil-fuel appliances as possible to bring the area closer to achieving the NOx reductions needed to meet air quality standards.

As a public health agency charged with protecting area residents from harmful air quality, the Air District should be concerned with addressing end uses of gas in the building, not only for their contributions to NOx emissions to outdoor air quality, but also the harm they cause to human health. The health impacts of having these gas furnaces inside buildings are becoming more apparent. Removing all gas appliances and replacing them with electric alternatives, for example, is estimated to result in 354 fewer deaths, 596 fewer cases of acute bronchitis, and 304 fewer cases of chronic bronchitis annually in California due to improved air quality.<sup>10</sup>

For these reasons, we respectfully ask that the Air District do the following:

- Reject the portion of the Proposed Amended Rule 1111 that provides an exemption for downflow and large-sized ( $\geq 100,000$  btu/hr) condensing or non-condensing furnaces replaced in high-altitude areas; and

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<sup>6</sup> South Coast Air Quality Management District. *Draft Staff Report Proposed Amended Rule 1111- Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces*, ES-6 (August 2021). [http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1111/par-1111\\_draft-staff-report\\_C73021.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1111/par-1111_draft-staff-report_C73021.pdf?sfvrsn=6).

<sup>7</sup> California Air Resources Board. Emission Inventory Data. <https://www.arb.ca.gov/app/emsinv/2017/emssumcat.php>.

<sup>8</sup> 2022 AQMP: Residential and Commercial Buildings. staff presentation, Working Group Meeting #2 (February 26, 2021) <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/2022-aqmp-residential-and-commercial-buildings-working-group/2022-aqmd-residential-and-commercial-building-wgm-2.pdf?sfvrsn=6>.

<sup>9</sup> *Id.* Slides 6 and 7.

<sup>10</sup> Zhu, et al., *Effects of Residential Gas Appliances on Indoor and Outdoor Air Quality and Public Health in California*. UCLA Fielding School of Public Health, 12-13 (April 2020).

- Instruct staff to continue seeking alternatives to otherwise non-compliant gas-fired furnaces installed in high-altitude communities.

We appreciate your consideration, and we look forward to working with you and staff to strengthen appliance standard rules and help bring the region one step closer to meeting the federal air quality standards deadlines.

Sincerely,

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