

**ACTIVE SGV  
COALITION FOR CLEAN AIR  
EARTHJUSTICE  
INDUSTRIOUS LABS  
SIERRA CLUB**

**VIA: ELECTRONIC MAIL**

February 5, 2024

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**Re: Proposed Rule 1146.2**

Dear Mr. Krause and Ms. Farr:

The undersigned organizations are grateful for the opportunity to comment on Proposed Amended Rule 1146.2. The current proposal – the second major regulation targeting Nitrogen Oxide (NO<sub>x</sub>) emissions after adoption of the 2022 Air Quality Management Plan (AQMP) - marks an important milestone, in that the Air District including zero-emission standards for all equipment covered under the rule. We support moving swiftly to adoption of a true zero-emission regulation. The points below provide feedback on the most recent iteration of the rule and the presentation at Working Group Meeting 5 in December of 2023.

**I. Great Urgency Exists to Pass This Regulation.**

There is great urgency to move forward with these rule amendments no later than the April Governing Board meeting, the proposed date presented at the last Working Group Meeting. The region has failed to attain even the 1997 8-hour ozone standard, much less any of the subsequent ozone standards. The region has also failed to attain the annual PM<sub>2.5</sub> standard. The NO<sub>x</sub> emission reductions achieved by these rule amendments will help the Air District make progress on attainment for both pollutants, resulting in significant health benefits for residents. In addition to banking critical emission reductions, timely adoption of this regulation will maximize lead time for market and complementary policy development and allow staff to move onto other life-saving rules that are dearly needed. It is concerning that Slide 42 of the presentation for Working Group Meeting #5 noted that the April adoption hearing timeline could be “subject to change.” We highly encourage staff not to delay this rulemaking.

The South Coast AQMD has already delayed these amendments to Rule 1146.2. During Working Group Meeting #1 in April of 2023, the AQMD staff projected that these rule amendments were going to be adopted in September of that year. That timeline was later moved

down to November 2023, then over to the first quarter of 2024, before landing on the current proposed date in April 2024.

While we generally understand the motivation behind these timeline changes and have not opposed moving the adoption date, the April 2024 proposal is already a delay of seven months from the proposal originally presented to the public, and we would be unlikely to support additional delays.

As the Air District is aware, these delays have real and serious consequences for public health. The 2022 Air Quality Management Plan (AQMP) makes clear that passing zero-emission regulations for stationary sources must be a top priority. The AQMP aptly states:

Previous AQMPs have relied on increasingly stringent regulations targeting tailpipe and exhaust stack emissions, new engine technologies, or fuel mix improvements. However, these approaches rely on additional reductions from already strictly regulated sources and cannot achieve an additional 67 percent reduction beyond the 2037 baseline. Therefore, there is no viable pathway to achieve the needed reductions without widespread adoption of zero emissions (ZE) technologies across all mobile sectors and stationary sources, large and small.<sup>1</sup>

With so many control measures needing to be accomplished in the near term, the Air District must quickly pass zero-emission regulations on these sources and others. Moreover, given that some facilities covered under these rules will be changing equipment due to the REgional CLean Air Incentives Market (RECLAIM) transition, setting these standards sooner will provide a stronger signal to focus on advancing zero-emission solutions instead of continued combustion technologies.

We support the April adoption date for these amendments and urge that the AQMD stick to this timeline for passing this important life-saving regulation.

## **II. Zero--Emission Standards Are Critical, and Faster Compliance is Feasible.**

Moving to zero-emission equipment where feasible remains critical to attaining federal and state ozone and PM<sub>2.5</sub> standards, and our organizations are pleased that this regulation includes zero-emission standards for all categories of equipment:

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<sup>1</sup> See 2022 Final AQMP, at ES-4, available at <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16>.



## Draft Rule Language Key Revisions (con't)

Modify Requirements:

- Present future effective limits in table format

(2) No person shall manufacture, supply, sell, offer for sale, or install, for use in the South Coast AQMD, any Unit subject to this rule, unless such Unit does not exceed the applicable NOx and CO emission limit and compliance date set forth in Table 2.

Table 2 – NOx and CO Emission Limits, Compliance Schedule, and Unit Useful Life

Equipment Category	NOx and CO Emission Limits (ppmv)	Building Type	Compliance Date	Useful Life (years)
Type 1 Unit*	0	New	January 1, 2025	15
		Existing	January 1, 2029	
Instantaneous Water Heater	0	New	January 1, 2025	25
		Existing	January 1, 2029	
Type 1 Pool Heater	0	New	January 1, 2027	15
		Existing	January 1, 2031	
Type 2 Unit**	0	New	January 1, 2027	25
		Existing	January 1, 2031	
Type 1 High Temperature Unit	0	New	January 1, 2029	25
		Existing	January 1, 2033	
Type 2 High Temperature Unit	0	New	January 1, 2029	25
		Existing	January 1, 2033	

\* Referring to a Type 1 Unit that is not a High Temperature Unit, Type 1 Pool Heater, or Instantaneous Water Heater.

\*\* Referring to a Type 2 Unit that is not a High Temperature Unit.

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Some compliance dates can and should be moved up, however. Importantly, given the need for additional NOx reductions by 2031 to attain the 2008 8-hour ozone standard after more than 20 years of excess impacts to health and air quality, all equipment categories currently listed with 2033 compliance dates should be shifted to 2031. Maximizing emissions reductions in the District by 2031 will be necessary to avoid further years of nonattainment and its concomitant harms to residents of the region.

In a similar vein, equipment categories currently listed with 2029 compliance dates should be bumped up to 2028 in order to allow for a greater penetration of equipment before the 2031 attainment deadline arrives.

### III. The Current Approach of Assuming Natural Gas Will Be Abundant and Cheap for Decades Does Not Comport with Reality.

On December 1, 2022, the California Public Utilities Commission (CPUC) “adopted a new framework to comprehensively review utility natural gas infrastructure investments in order to help the state transition away from natural gas-fueled technologies and avoid stranded assets in the gas system.”<sup>2</sup> There is a cognitive dissonance between air quality planning and these proceedings happening at the state level. The current BARCT assessments assume electricity prices will go up over the next two decades, but natural gas prices are predicted to go down.

These assumptions arise from South Coast AQMD’s use of the gas and electricity rate projections included in the California Energy Commission’s (CEC) California Energy Demand

<sup>2</sup> CPUC Creates New Framework to Advance California’s Transition Away from Natural Gas, Press Release, (December 1, 2022), available at <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-creates-new-framework-to-advance-california-transition-away-from-natural-gas>.

Update 2022-2035<sup>3</sup> – which assumes gas demand will remain steady through time despite California’s many policies to reduce fossil fuel use and corresponding greenhouse gas emissions.<sup>4</sup>

The economic assumptions underpinning the analysis that fossil methane will be cheap and abundant ignore many factors. For example, as more and more people and entities leave the gas system, fewer and fewer users will remain to pay for the fixed infrastructure costs of the increasingly expensive gas system. It is not clear why gas prices in the South Coast Air Basin would defy the tenets of economics and remain cheap for decades to come.

The same year CEC published the document staff is using, the agency published another report, “The Challenge of Retail Gas in California’s Low-Carbon Future,” which takes future demand and future customer base into account and that work finds that gas rates will increase steadily over time especially as California implements its programs to curb air and climate pollution.<sup>5</sup> For example, the chart below shows that building electrification at a high level will result in increased rates for industrial facilities.

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<sup>3</sup> California Energy Demand Update available at <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2022-integrated-energy-policy-report-update-2>.

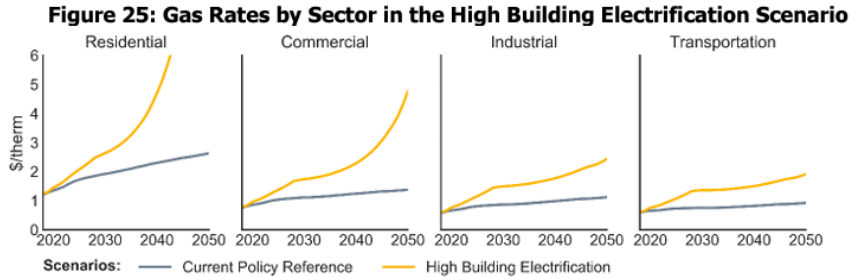
<sup>4</sup> The Environmental Defense Fund (EDF) filed significant comments on the gas assumptions portion of the Integrated Energy Policy Report (IEPR). In particular, EDF pointed out “Currently, the IEPR preliminary model projects stable future gas demand...”

EDF highlights two concerns around these projections. First, stable gas demand is at odds with California’s climate policies aimed at reducing fossil fuel use—including natural gas demand. These state policies include the Senate Bill 32 targets of reducing California’s greenhouse gas emissions by 40% below 1990 levels by 2030, the Assembly Bill 1279 target of reaching net zero by 2045, the California Air Resources Board (CARB) 2022 Scoping Plan targets of reducing total fossil fuel consumption by 86% below 2022 levels by 2045, the California Public Utilities Commission (CPUC) decision to eliminate gas extension subsidies, and various local ordinances on gas appliances...

Second, EDF contends that it is unreasonable to assume constant demand beyond a future point in time simply because no existing projections are available. It is true that no future projection can be made with 100% confidence and accuracy; and that confidence will decline further out into the future the projection is made. However, the entire IEPR process has uncertainty of projections baked in, and holding this one element constant is not worthy of the IEPR process. To project *no change* and assume constant future gas demand beyond a certain point, however, would be to overlook existing market trends of electrification and various state policies.”

EDF Comments on Gas Demand Forecasts in IEPR, (May 2, 2023).

<sup>5</sup> CEC, *The Challenge of Retail Gas in California’s Low Carbon Future*, available at <https://www.energy.ca.gov/sites/default/files/2021-06/CEC-500-2019-055-F.pdf>.



The CEC is currently working on its 2023 Integrated Energy Policy Report (IEPR), which is examining load modifier scenarios, including additional achievable fuel substitution through policies like zero-emission appliance standards. These scenarios are still overly conservative – for example, most assume that SCAQMD will take no action in this area, and CARB’s own statewide zero-emission standards to come are not examined at all – however the agency should monitor the 2023 IEPR process and integrate its updated gas rate projections into BARCT analyses when available.

The context for the assumptions staff use in the BARCT analysis is important as well. While the South Coast AQMD’s primary regulatory concern is reducing traditional criteria pollutants, there is overwhelming consensus that we must dramatically drive down the use of methane to stave off the worst consequences of climate change. The sector being discussed today is a large user of gas, and this rule provides great opportunity for reductions in climate pollution.

As such, equipment covered by this rule will be a priority target for addressing greenhouse gas emissions moving forward. Moreover, we are disappointed in the approach of some working group participants seeking to drop anchors in the process for achieving zero-emissions. We do not have time for delays and half measures to clean up this equipment.

**IV. Our Organizations Support the Definition of “High Temperature Unit.”**

At the workshop, staff requested feedback on the definition of “high temperature unit.” The current temperature is set at 190 degrees Fahrenheit. Commenters question the premise here that arbitrary temperature levels should dictate the speed of clean up of equipment. We also question any presumption – whether express or implied – of the infeasibility of zero-emissions technologies for equipment above 190 degrees. Not only are there zero-emission alternatives like electric boilers available now that can provide zero-emission heat, it is safe to assume that technology will only improve in the coming years as technology forcing regulations such as 1146.2 are implemented. Given technology development is not static, we suggest staff build into its technology review an assessment of this “high temperature unit” definition as technology continues to advance.

**V. Technology Investments.**

Record amounts of funding exists for addressing emissions. The South Coast AQMD Technology Advancement team should work to secure funding for incentive programs to advance zero-emissions equipment in this sector. Given the proposed rule’s zero-emission market signal, it will be important to develop an incentive program in the next couple of years before

compliance dates for existing buildings arrive. As such, the AQMD should establish a \$25 million program, including technical assistance to support entities that want to advance zero-emission technologies quicker than proposed deadlines for equipment covered by this rule. These monies could come from state or federal funds, such as the Food Production Investment Program and the Industrial Decarbonization and Improvement of Grid Operations program, which are administered by the California Energy Commission.

## **VI. Technology Summit.**

The technological changes in this sector are rapidly evolving. To play its proper leading role in this area, SCAQMD should participate in and/or host a technology workshop focused on equipment covered by this rule and other related sectors (e.g., residential space and water heating, or industrial heat). This workshop should be conducted in coordination with our energy agencies (CEC and CPUC), in addition to our electric utilities, and it could be held regularly to capture a variety of sectors and technologies.

As an interim step, we recommend that the South Coast AQMD staff invite the Industrial Heat Pump Alliance to present to the Stationary Source Committee about new clean industrial heat solutions and what the agency can do to start eliminating more sources of health-harming and climate-disrupting fossil fuel combustion.

We appreciate your consideration of these comments, and we look forward to the adoption of these rule amendments to get one step closer to the emissions reductions the region desperately needs.

Sincerely,

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