

January 31, 2022

Michael Regan
U.S. Environmental Protection Agency
Office of the Administrator
1200 Pennsylvania Avenue, NW, MC 28221T
Washington, DC 20460

Comments submitted only electronically via <https://www.regulations.gov>

RE: Comments on Proposed “Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review,” 86 Fed. Reg. 63110, Docket Identification Number EPA-HQ-OAR-2021-0317

Dear Administrator Regan,

The California Air Resources Board (CARB) commends the United States Environmental Protection Agency (EPA) for taking action to reduce oil and gas methane emissions with the proposed Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources (hereafter Proposed Rule). The science unequivocally underscores the need to immediately reduce emissions of short-lived climate pollutants, including methane, due to their outsized impact on climate change in the near term compared to longer-lived greenhouse gases. Reducing emissions of methane will effectively slow the near-term rate of climate change and help improve air quality. The next two decades are critical for emission reductions to avoid climate tipping points and irreversible changes to the planet. Therefore, a comprehensive and robust federal approach to oil and gas methane emission reductions, as described in the Proposed Rule, is necessary because the sector is responsible for approximately 30 percent of methane emissions in the United States.

California has acted via legislation and regulations to reduce methane emissions from primary sources in California, including oil and gas. California’s decisive action to reduce methane emissions has demonstrated both environmental and economic benefits. California’s methane reduction efforts are guided by California legislation (Senate Bill 1383¹) that established the goal of reducing methane emissions by 40 percent below 2013 levels by 2030, as well as California’s Short-Lived Climate Pollutant Reduction Strategy (developed pursuant to Senate Bill 605²), which targeted reductions in fugitive methane emissions from oil and gas sources of 40 percent below 2013 levels by 2025 and 45 percent by 2030. These directives have made California an

¹ Lara, Chapter 395, Statutes of 2016.

² Lara and Pavley, Chapter 523, Statutes of 2014.

international leader in methane mitigation and methane monitoring. In addition, CARB has enacted comprehensive methane emissions reporting requirements and is deploying innovative remote sensing technologies on planes and satellites. Due to this combination of reporting and remote sensing, California regulators and industries can quickly and effectively identify and address methane emissions from oil and gas infrastructure.

To meet methane emission reduction targets across sectors, California created financial incentives to reduce emissions and adopted targeted regulations when appropriate. Each of these mechanisms has their role in our portfolio approach, but it is the regulations that guarantee methane reductions. For example, CARB adopted the Oil and Gas Methane Regulation³ in 2017 to reduce fugitive and vented methane emissions from new and existing oil and gas facilities. Additionally, the California Public Utilities Commission, in consultation with CARB, approved a decision in 2017 that requires gas corporations to implement 26 best practices for methane leak detection, quantification, and mitigation to reduce methane emissions from commission-regulated facilities. These mitigation approaches are well known at this point; California's local air districts have been controlling volatile organic compounds and other pollutants from the industry with these methods for decades. Industry is highly familiar with these approaches to mitigate emissions and can implement cost-effective controls. California's oil and gas industry, including over 300 operators ranging from very small independent entities to large global companies, have complied with CARB's Oil and Gas Methane Regulation without experiencing substantial implementation issues or supply disruptions.

Actions such as those pioneered in California and those outlined in EPA's Proposed Rule must be implemented at the national level to reduce methane emissions, fight climate change, and improve air quality. The oil and gas industry is a substantial source of air pollution nationwide and federal regulations provide important consistency between California and other states. Approximately 90 percent of the natural gas consumed in California is imported from out-of-state. Federal rules will ensure that imported natural gas has similar methane emission controls to that of natural gas produced within California. Federal rules provide important additional enforcement oversight even in states with their own state rules by creating obligations under the federal Clean Air Act that may be enforced by EPA or citizen suit. Most importantly, the national Proposed Rule matters a great deal where other rules are not in force.

As EPA moves forward to implement the proposed emissions guidelines, CARB encourages EPA to approve state plans that are at least as stringent in terms of emission reductions even if those plans do not contain the same specific standards as the emissions guidelines. Some flexibility may be necessary when evaluating the

³ 17 Cal. Code Regs. §§ 95665-77.

stringency of state requirements, and CARB is available to provide input on how best to compare existing state rules to the proposed emissions guidelines. In addition to this comment, we have also provided specific comments on the Proposed Rule in Attachment A.⁴

CARB supports EPA's Proposed Rule and is available to continue to lend our expertise to the federal government and others looking to implement methane emission reduction efforts for the oil and gas sector. In closing, as California's experience shows, EPA and state governments can successfully regulate methane emissions from oil and gas facilities, and we applaud EPA for taking this important step.

Sincerely,



Richard W. Corey
Executive Officer

⁴ California's Attorney General, along with several other jurisdictions' Attorneys General, are also submitting comments in support of the Proposed Rule. CARB agrees with the substance of those legal comments and focuses in this comment primarily on policy and technical considerations.

Attachment A: Specific Comments on EPA's Proposed Rule

Expand fugitive emission monitoring requirements. CARB's Oil and Gas Methane Regulation includes requirements for quarterly leak detection and repair (LDAR) inspections using EPA Reference Method 21 at all facilities in the following segments: onshore and offshore crude oil and natural gas production, natural gas underground storage, natural gas gathering and boosting stations, natural gas processing plants, and natural gas transmission compressor stations. CARB encourages EPA to apply their proposed fugitive emission monitoring requirements to all facility types in the oil and gas sector, including natural gas underground storage facilities. In addition, CARB encourages EPA to allow Method 21 monitoring as an alternative to Optical Gas Imaging (OGI) for the following reasons: some operators may find Method 21 to be a more feasible option; Method 21 includes leak quantification, enabling enforcement and tiered repair timelines based on leak magnitude; and operators in California are familiar with Method 21 because they have been using it for decades to comply with local air district rules.

CARB recommends EPA expand the monitoring requirements in the Proposal by requiring regular monitoring at all well sites, regardless of emissions levels. The Proposed Rule requires an initial survey of low emitting well sites; however, large leaks can occur at any time, even at smaller facilities, and regular monitoring is necessary to detect and mitigate those fugitive emissions. CARB's Oil and Gas Methane Regulation requires quarterly LDAR inspections using Method 21 at all well sites without exemptions. Operators in California, including large and small entities, have complied with the quarterly Method 21 monitoring requirements, demonstrating the feasibility of quarterly monitoring at all well sites.

Furthermore, CARB urges EPA to extend the monitoring requirements for fugitive emissions from well sites to include "wellhead only well sites." Although "wellhead only well sites" have less ancillary equipment and therefore fewer fugitive emissions components, the wellhead itself does have emissions and should be inspected for leaks. A study by Eastern Research Group, Inc. found that gas wellheads and oil wellheads comprise 12.6 percent and 4.1 percent, respectively, of VOC emissions from onshore production in Texas.⁵ CARB's Oil and Gas Methane Regulation requires quarterly Method 21 monitoring of "wellhead only well sites," demonstrating the feasibility of these requirements for a broad group of operators.

⁵ Emissions from Oil and Gas Production Facilities, TCEQ Contract 582-7-84003, Prepared by Eastern Research Group, Inc., August 31, 2007, available at https://www.tceq.texas.gov/assets/public/implementation/air/am/contracts/reports/ei/5820784003FY0701-20090831-ergi-ei_from_old_gas_facilities.pdf. Wellhead emissions were estimated using emission factors, wellhead counts, and production data.

Maintain proposed requirements for reciprocating compressors. CARB supports EPA's proposal to require that operators replace reciprocating compressor rod packing based on annual monitoring when the measured leak rate exceeds 2 standard cubic feet per minute (scfm). CARB's Oil and Gas Methane Regulation includes similar requirements for reciprocating compressors, and operators have been able to successfully comply with the requirements. This demonstrates the feasibility of requiring annual monitoring of reciprocating compressor rod packing.

Identify how compliance will be verified. EPA should consider how compliance will be verified throughout implementation of the Proposed Rule given that operator compliance is critical for regulatory programs to achieve intended emission reductions. CARB's Oil and Gas Methane Regulation requires that operators submit reports annually containing information on LDAR inspections, tank emissions, compressor emission rates, pneumatic device emission rates, liquids unloading vented gas volumes, well casing vent emission rates, and data from underground natural gas storage ambient monitoring. Operators are also required to update their equipment inventories each year if any equipment is added or removed. CARB uses the reported data to verify compliance, evaluate implementation of the regulation, and estimate emission reductions.

Allow states to utilize existing emissions data. CARB would also like to respond to EPA's solicitation for comment on whether it should supersede the requirements of 40 C.F.R. section 60.25a(a) for the purposes of the proposed emissions guidelines for existing sources and replace that requirement with a different emissions inventory requirement that allows states to utilize existing inventories and emissions data. CARB supports EPA allowing states to utilize existing inventories and emissions data, even if that data might not be fully aligned with the designated facilities in the emissions guidelines and may exclude some facilities that are subject to the emissions guidelines. This will allow states to leverage existing data and obviate the need to duplicate work developing emissions inventories. EPA should evaluate the data submitted by states to ensure it is rigorous and comprehensive enough to accurately capture emissions from the oil and gas sector.

Incorporate community insights and innovative emission monitoring. EPA is seeking information on how to empower communities to help stem large emission events by detecting and reporting emissions to operators. When designing a community monitoring program, EPA should recognize that communities have valuable insights into where emission sources are located and when to focus monitoring efforts based on their experiences with odors, health effects, and other impacts. In addition, CARB recommends that EPA considers how publicly available data from satellites and other emerging technologies might be incorporated into a community monitoring program in a way to mitigate emissions, empower communities, and ensure operators take adequate follow-up actions. CARB has deployed new remote sensing technologies on planes and is working on deploying them on satellites in the coming years to better

understand methane emissions in California. In addition to CARB's work in this space, multiple private entities have either already launched or are actively developing satellites capable of detecting large methane emission events. As this technology will likely become more widespread in the future, EPA should leverage data from satellites in community monitoring programs.