

September 16, 2020

Liz Bisbey-Kuehn, Bureau Chief New Mexico Environment Department Air Quality Bureau nm.oai@state.nm.us

Re: Support for Proposed Regulation to Reduce Ozone Precursors from Oil & Gas Production

Dear Bureau Chief Bisbey-Kuehn,

The City of Albuquerque (City) supports the new regulation, 20.2.50 New Mexico Administrative Code, *Oil and Natural Gas Regulation for Ozone Precursors*, proposed by the New Mexico Environment Department (NMED) to reduce emissions of volatile organic compounds (VOCs) and nitrogen oxides (NOx)—which are precursors to ozone formation—from in state oil and gas production and processing activities. Reductions of ozone precursors from oil and gas production are likely to lead to lower ozone levels in Albuquerque - Bernalillo County—the largest economic center and metropolitan area in the state. The NMED rule therefore serves multiple public interests.

Enclosed with this letter is a copy of *Air Quality Modeling of 2017 Ozone Episodes in the City of Albuquerque* (Sonoma Report) prepared by Sonoma Technology, Inc. for the City Environmental Health Department Air Quality Program.^{1,2} The City respectfully requests that the Sonoma Report be incorporated into the rulemaking record and that the Environmental Improvement Board (EIB) consider it as evidence in support of adopting NMED's proposed rule.

The Sonoma Report concludes that decreases in emissions from New Mexico oil and gas production would likely lower ozone levels in Albuquerque - Bernalillo County.³ While the City and County are in attainment for the U.S. Environmental Protection Agency's (EPA's) 70 parts per billion (ppb) National Ambient Air Quality Standard for ozone, local ozone concentrations have been close to or have exceeded the standard (i.e. design value concentrations were 67 ppb in 2015 to 2017; 70 ppb in 2016 to 2018; and 71 ppb in 2017 to 2019).⁴ If air quality exceeds the ozone standard, it negatively impacts

¹ This letter is being provided by email via SmartFile so that the large, electronic Sonoma Report can be included. Please download the report from the following link for entry into the record: https://sfftp.cabg.gov/link/HF Y9IAnH08/.

² Sonoma Technology, Inc. *Air Quality Modeling of 2017 Ozone Episodes in the City of Albuquerque* (Sonoma Report). June 2019. Available at: https://www.cabq.gov/airquality/documents/somoma-report-final-june-2019.pdf.

³ Id. p. 186.

⁴ City of Albuquerque Environmental Health Department Air Quality Program. 2020 Annual Network Review for Ambient Air Monitoring. May 15, 2020. At p. 19. Available at https://www.cabq.gov/airquality/documents/2020-city-of-albuquerque-annual-network-review.pdf

public health in multiple ways, including causing respiratory harm, cardiovascular harm, central nervous system harm, and early death. 5,6,7,8

The City is taking steps to better understand and control ozone within its jurisdiction. By 2021, the City anticipates having a photochemical assessment monitoring station for speciated monitoring of potential ozone precursors. The data collected will be used to develop further control measures to apply to local sources. However, the City has no jurisdiction over sources outside of Albuquerque - Bernalillo County and must depend on NMED.

The Sonoma Report used computer modeling of statewide ozone precursor emissions to study two high ozone episodes in Albuquerque - Bernalillo County during summer 2017. It shows that oil and gas development make contribute to ozone levels in the greater Albuquerque metropolitan area. While further study is needed, the report's conclusions are summarized as follows:

- Long Distance Transport: Meteorological conditions across the state can promote long distance transport of oil and gas ozone precursor emissions from around New Mexico into Albuquerque - Bernalillo County.⁹
- Source Apportionment: Anthropogenic emissions of ozone precursors from industrial
 activity elsewhere in the state¹⁰ contributed as much as 12% to Albuquerque Bernalillo
 County ozone levels during the two summer 2017 high ozone episodes.¹¹ Based on
 emissions inventory, oil and gas production accounts for about two thirds of VOC emissions
 from those activities.¹²
- Sensitivity Analysis: Sonoma's modeling shows that reducing ozone precursor emissions from New Mexico oil and gas activity would reduce ozone levels in Albuquerque Bernalillo County. A hypothetical 25% reduction in New Mexico NOx and VOC emissions from the oil and gas industry led to a modeled reduction in local ozone levels of up to one part per billion.¹³

Based on this evidence, if EIB adopts NMED's proposed regulation, it will protect air quality not only near oil and gas facilities, but also in the most populous urban area in the state. The proposed regulation also satisfies the requirements of the New Mexico Air Quality Control Act, by considering: 1) "the public interest, including the social and economic value of the sources of emissions and subjects of air contaminants;" 14 and 2) "energy, environmental, and economic impacts and other social costs." 15

NMED's proposed rule reduces ozone precursors in certain areas that exceed 95% of the ozone standard, excluding Bernalillo County and Tribal Lands. However, the Sonoma Report indicates that

^{5 40} Code of Federal Regulations §50.2(b)

⁶ Centers for Disease Control and Prevention Website. Ozone and Your Health. Accessed on 8-26-20 from: https://www.cdc.gov/air/ozone.html

⁷ American Lung Association Website. Ozone. Accessed on 8-27-20 from: https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/ozone

⁸ U.S. Environmental Protection Agency, *Integrated Science Assessment for Ozone and Related Photochemical Oxidants*, 2013. EPA/600/R-10/076F

⁹ Sonoma Report, pp. 160 to 163, 186, 203.

¹⁰ The Sonoma Report source apportionment did not break down industrial activity into subcategories, such as oil and gas production. The City anticipates that the results of PAMS monitoring may be used in future photochemical modeling to further study these effects.

¹¹ Sonoma Report, pp. 49, 145.

¹² Id, pp. 49, 92.

¹³ ld, pp. 160 to 163, 186 to 190.

¹⁴ New Mexico Statutes Annotated (NMSA) 1978 § 74-2-5.3(C)(1)

¹⁵ NMSA 1978 § 74-2-5.3(C)(3)

the environmental and public benefits that will be provided by NMED's proposed rule extend into Bernalillo County by reducing ozone levels in New Mexico's largest metropolitan area.

The City has an active climate and sustainability program aiming to equitably reduce Albuquerque's contributions to climate change. This comprehensive program addresses greenhouse gas emissions from energy generation, transportation, and building inefficiencies. In addition to its ozone benefits, the City believes NMED's proposed rule will have important co-benefits for reducing greenhouse gases and criteria pollutants.

We respectfully ask EIB to adopt the proposed regulation, as it is the only agency that has the authority to achieve these important reductions of ozone precursors affecting Albuquerque - Bernalillo County and the rest of New Mexico. Conversely, failure to adopt NMED's proposed rule would have environmental and social costs in Albuquerque - Bernalillo County that could impact a key economic engine of the state.

Thank you for your consideration of this important information. Should you have any questions regarding this comment, please contact Mara Elana Burstein, Deputy Director, Environmental Health Department, at 505-288-2911 or by email at mburstein@cabq.gov.

Sincerely,

Ryan C. Mast

Director, Environmental Health Department

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CC:

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