



July 7, 2022

Mike Foote, Chair, RAQC Board
RAQC Board Members
1445 Market Street
Suite 260
Denver, CO 80202

Dear Mr. Foote and Regional Air Quality Council Board Members,

Local governments in the Denver Metro/North Front Range (DMNFR) ozone nonattainment area are very concerned about the continued adverse health impacts to our residents from high ozone levels and hope to see strong ozone State Implementation Plans (SIPs) approved by the RAQC and the Air Quality Control Commission this year. It is critical that these plans include enforceable control measures that will reduce ozone precursor emissions in the sectors that are most responsible for the majority of emissions in this area. Because of continued problems with the emissions inventory underrepresenting emissions and the past experiences with the modeling analysis predicting lower ozone levels than are measured by air monitors in the nonattainment area, we ask that the SIPs build in extra protections by way of additional control measures that will help the DMNFR attain both the 2008 and 2015 National Ambient Air Quality Standards (NAAQS) for ozone.

Breathing ground-level ozone causes symptoms such as coughing, throat irritation, pain, burning, tightness or discomfort in the chest, and wheezing or shortness of breath. Long-term exposure to ozone causes more frequent and severe asthma attacks, increased hospitalizations, and higher rates of illness and death. While it is a regional pollutant potentially affecting large swaths of Colorado's population, ozone particularly impacts minority and low-income populations that statistically already suffer disproportionately from asthma, cardiovascular disease, and COVID-19. Ozone impacts on these populations are projected to increase with climate change.¹ We cannot allow the harms of ozone to continue impacting residents who are already disadvantaged by socioeconomic stressors. Protecting Colorado's residents from the adverse health impacts of ozone is of utmost importance. The DMNFR accounts for almost 58% of the state's population, with over 3.3 million people residing in the area. Denver ranks among the top 10 U.S. metropolitan areas for number of asthma attacks and is the

¹ Crooks, J.L., Licker, R., Hollis, A.L. et al. The ozone climate penalty, NAAQS attainment, and health equity along the Colorado Front Range. *J Expo Sci Environ Epidemiol* (2021). <https://doi.org/10.1038/s41370-021-00375-9>

eighth most ozone-polluted city in United States.² There is already a clear correlation between these pollutants and respiratory morbidity,³ with greater impact on low-income communities.⁴

While improvements in air quality have been made in some areas, these improvements have generally not been felt as much in marginalized and low-income communities as in more privileged areas. And the fact remains that most ozone monitors in the nonattainment area routinely record ozone exceedances during the summer months. During the summer of 2021, all 13 of the ozone monitors in the nonattainment area recorded one or more exceedances of the more protective 2015 ozone NAAQS of 70 parts per billion (ppb) while 11 monitors exceeded the 2008 NAAQS of 75 ppb. And CDPHE issued a record-setting 75 ozone action alerts for the DMNFR during the 2021 ozone season.

We local governments have had active participants on the RAQC's control strategy workgroups for the entirety of the SIP development process who have advocated for the adoption of many of the control measures that are listed below. Even though the control strategy workgroups have met regularly since September 2021, to our knowledge none of the measures considered by those workgroups will be included in the SIPs and we don't have any analysis or conclusions from the RAQC indicating why these strategies were not included in the SIPs. The SIP development process is fraught from the beginning because the RAQC develops the SIPs and submits them to CDPHE to prepare for rulemaking, yet the RAQC does not have the power to implement control strategies for the oil and gas, stationary source sectors, nor for the transportation sector with regards to vehicle emissions standards. Due to this lack of authority, when the SIPs are submitted by the RAQC to CDPHE it is too late to add new control measures and revise the modeling analysis and attainment demonstration. The process by design excludes the inclusion of control measures for those source categories and rarely significant new control measures are included in the SIPs.

Considering these issues, we are proposing consideration of the following control measures that would bring significant near-term reductions during ozone season in volatile organic compounds (VOCs) and nitrogen oxides (NO_x), the main ozone precursor pollutants. In addition to the state adopting these control measures, local governments can do their part in a few specific areas where we have the authority. The control measures with a checkmark below are those that we as local governments are employing or considering employing. Recognizing that area-wide control measures adopted by the state would be more impactful, local governments want to lead by example where we are able.

² Clean Air Task Force, *Gasping for Breath* (Aug. 2016), available at http://www.catf.us/wp-content/uploads/2018/10/CATF_Pub_GaspingForBreath.pdf.

³ B.L. Alman, et al., *The Association of Wildfire Smoke with Respiratory and Cardiovascular Emergency Department Visits in Colorado in 2012: a Case Crossover Study*, *Environmental Health*, Vol. 15, No. 64 (June 4, 2016), available at <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-016-0146-8>; E.M. Lipner, et al., *Geohealth, The Associations Between Clinical Respiratory Outcomes and Ambient Wildfire Smoke Exposure Among Pediatric Asthma Patients at National Jewish Health, 2012–2015* (Apr. 9, 2019), at 4, available at <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2018GH000142>; J.C. Liu, et al., *Future respiratory hospital admissions from wildfire smoke under climate change in the Western US*, *Environmental Research Letters*, Vol. 11, No. 12 (Dec. 8, 2016), available at <https://iopscience.iop.org/article/10.1088/1748-9326/11/12/124018>.

⁴ P.M. Shrestha, et al., *Impact of Outdoor Air Pollution on Indoor Air Quality in Low-Income Homes during Wildfire Seasons*, *International Journal of Environmental Research and Public Health*, Vol. 16, No. 19 (Oct. 2019), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6801919/>.

Ozone SIP Control Measures that Can be Included in the Severe and Moderate Nonattainment Area SIPs

Transportation:

- **Commitment to adopt Advanced Clean Cars II (ACC II) as soon as possible:** Colorado has already adopted ACC I through the adoption of the low emission vehicles standards (LEV) and zero emission vehicle standards (ZEV) but will need to separately adopt ACC II once the California Air Resources Board (CARB) adopts it. This will likely happen next year after which time all the states that have previously adopted California's rule will need to update their own regulations to follow suit with the more protective standards.
- **Programs that increase transit ridership and bike and pedestrian infrastructure help reduce VMT:** Under the [Clean Air Act](#), Severe ozone nonattainment areas are required to include vehicle miles traveled (or VMT) growth offsets in the SIP. Relying solely on cleaner vehicles does nothing to reduce VMT. Even though ETRP failed in 2021, the SIPs need to include some type of control measure that will decrease VMT. SB22-180 is a start, with free bus fare during August of 2022 and 2023 and increased funding to CDOT for their transit program, but a lot more is needed. South Coast Air Quality Management District is one example of an area with a [VMT reduction rule](#).
- ✓ **Indirect source rules (ISR):** The RAQC should move ahead with the inclusion of ISR for at least one sector, such as the warehouse sector. Transportation is a major contributor to ozone and we need to do more to reduce emissions from this sector but land use is also key to the success of this strategy but is under the purview of local governments.

Oil and Gas:

- **Curtail high emitting oil and gas activities during ozone season:** This could be done through a time-out for oil and gas drilling and/or completions during ozone season. Reductions could also be achieved through curtailing specific ancillary activities such as minimizing vehicle and engine idling, reducing truck and employee traffic, delaying vehicle refueling, suspending or delaying use of gas-powered ancillary equipment, and postponing construction and maintenance activities. Other possibilities are restricting well unloading and non-automated condensate tank load out activities on ozone action days unless there is a safety issue or damage to equipment.
- **Flare minimization plans for oil and gas operations:** Oil and gas operations should submit plans that will minimize their use of flaring.

Industrial Sources:

- **Flaring controls or flare minimization plan at the Suncor refinery:** refinery flaring should be limited; one possibility is a flare minimization plan rule which has been used at several refineries in [California](#).

Area Sources:

- **Adopt California’s non-road engine standards:** California has regulations for [heavy-duty off-road compression-ignition engines](#) and [large off-road spark-ignition engines](#) 25 hp or greater. The RAQC has been researching this and should move ahead with this plan; under the Clean Air Act, other states can adopt California’s engine emissions regulations.
- ✓ **Small off-road engine emissions standards:** Lawn and garden equipment contributes significantly to VOC emissions. Emissions standards for this category should be included in the SIPs to reduce emissions while Colorado waits for a shift in the market to all electric equipment. California’s small off-road engine (SORE) [program](#) is one example of an existing program.
- ✓ **Low NO_x appliance requirements for residential and commercial buildings:** Several other states have rules that could be used as examples. [Utah](#) has a rule for water heaters and [South Coast AQMD](#) has rules that target residential and commercial space and water heating and cooking.

There has been much talk about the source of the ozone pollution and whether the problem should be blamed on wildfires, other states, other countries, or biogenic sources. We need to focus on the portion of ozone pollution that we can control. Local measures in the nonattainment area such as those described above are our responsibility and the only way that we can assure our residents that we’re doing the most we can to protect their health.

For these reasons, we are asking that the RAQC Board either vote to adopt one or more of the control measures summarized above into the SIPs when it approves them in August or to be clear with AQCC what limitations prevented the inclusion of any of these measures in the SIPs and suggesting that the Air Pollution Control Division pursue including more control measures in the SIPs before they’re proposed for AQCC rulemaking this September.

If you would like to discuss any of these matters further, please reach out to Cindy Copeland, Boulder County’s Air & Climate Policy Advisor, at ccopeland@bouldercounty.org or 303-441-1242.

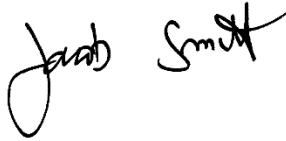
Sincerely,



Commissioner Marta Loachamin, Chair
Boulder County Board of County Commissioners




Mayor Guyleen Castriotta,
City and County of Broomfield



Jacob Smith
Executive Director, Colorado Communities for Climate Action



Jeffrey Moore
Manager, Oil & Gas Division, City of Aurora



Bill Obermann
Air Policy Program Manager, Denver Department of Public Health and Environment

cc: Colorado Air Quality Control Commission
Michael Ogletree, Director, Air Pollution Control Division