



COLORADO
Department of Public
Health & Environment

Deb Thomas
Regional Administrator (Acting) and Deputy Regional Administrator
US Environmental Protection Agency, Region 8
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July 26, 2021

Ms. Thomas,

The State of Colorado is submitting these comments in response to EPA's Weld County Remand 120-Day Letter sent to Governor Polis, dated May 25, 2021, soliciting comments by July 26, 2021. In that letter, EPA referenced the July 10, 2020, decision by the District of Columbia Circuit Court of Appeals, (*Clean Wisconsin v. EPA*, 964 F.3d 1145 (D.C. Cir. 2020)), and identified EPA's intent to expand the ozone nonattainment boundary associated with the 2015 8-Hour Ozone National Ambient Air Quality Standard to include the northern strip of Weld County up to the Wyoming border. Finalizing this stated intention would reverse the final decision made previously on this matter.

On October 1, 2015, EPA revised the primary and secondary Ozone NAAQS. Accordingly, Colorado evaluated appropriate designations within the state and determined that the Denver Metro/North Front Range area (DMNFR) was not attaining the standard. On September 23, 2016, Colorado submitted a recommendation regarding designations including the appropriate nonattainment area boundary. This recommendation maintained consistency between the 2008 Ozone NAAQS and 2015 Ozone NAAQS. On April 30, 2018, EPA finalized nonattainment designations for the 2015 Ozone NAAQS, agreeing with Colorado's recommended boundary. Multiple petitioners challenged EPA's attainment designations for various areas around the Country. In July 2020, the D.C. Circuit Court of Appeals remanded the decision for various areas, including northern Weld County, back to EPA for further consideration. Following the remand, EPA solicited input from Colorado on how to address the remand. Colorado indicated its preference was for EPA to remand the issue back to Colorado for further technical assessment to determine whether the facts supported a modification of the original boundary recommendation.

In light of the issues raised by petitioners and ultimately the court's finding, Colorado agrees that the underlying technical analysis supporting the nonattainment boundary associated with the 2015 8-Hour Ozone NAAQS should be further evaluated. At the same time, Colorado is very aware of the DMNFR ozone nonattainment status for both the 2008 and 2015 8-Hour Ozone NAAQS, and is currently actively planning to revise the ozone element of Colorado's



State Implementation Plan to satisfy them both. The boundary is critical to all planning efforts, and having two slightly different nonattainment boundaries adds complexity to the planning efforts. Regardless, petitioners have raised questions and the court has agreed that questions about the DMNFR nonattainment boundary determination associated with the 2015 8-Hour Ozone NAAQS should be reviewed.

Colorado appreciates the time and effort EPA put forth in the HYSPLIT back trajectory analysis included in the document, “Denver Metro/North Front Range Nonattainment Area Intended Area Designations for the 2015 Ozone National Ambient Air Quality Standards Technical Support Document (TSD) for Counties Remanded to EPA”. Colorado has conducted an initial review of that analysis and has the following concerns: 1) use of flagged data associated with wildfire and/or stratospheric intrusion events and 2) correlation between high ozone events and contribution from northern Weld County.

Flagged Data

EPA’s analysis used Colorado’s flagged data associated with wildfires and/or stratospheric intrusions. EPA’s analysis included all ozone exceedance days during the 2014-2016 time period for several monitors (Fort Collins West, NREL, Rocky Flats North, Welch, and Chatfield). For regulatory decisions, EPA excludes data where they concurred with exceptional event demonstrations that had been submitted by the air quality agency. Note that Colorado did not submit and therefore EPA had not concurred with any Colorado specific exceptional events during the 2014-2016 time period. This should not be interpreted to mean that there were no events that could be deemed as an exceptional event and thus removed from consideration for this analysis. The vast majority of ozone events influenced by wildfire smoke and/or stratospheric intrusions are not developed into exceptional event packages because they have no regulatory impact, require a significant amount of resources and time to complete, and EPA has historically not acted on exceptional events demonstrations when they have no regulatory impact.

Nonetheless, Colorado flags these types of events for informational purposes, including informing on whether the data is representative and should be considered in future analyses, such as the EPA HYSPLIT back trajectory analysis. During the 2014-2016 time frame, Colorado flagged data from these events for informational purposes as reported in EPA’s Air Quality System. Colorado believes that any day with an informational flag should be excluded from the HYSPLIT analysis. According to Colorado’s initial review, this would remove 48 of the 174 sets of back trajectories from EPA’s analysis.

Correlation to Northern Weld County’s Contribution

EPA’s analysis does not account for the degree of impact from northern Weld County at the monitors during the high ozone events. Colorado identified 12 individual days from EPA’s analysis where at least one back trajectory transected or originated in northern Weld County. Of those 12 days, 3 had been given informational flags for wildfire smoke or stratospheric intrusions (7/18/14, 6/18/16, 6/28/16) by Colorado. As stated above, Colorado believes any day with an informational flag should be excluded from the HYSPLIT analysis due to the



influence of wildfire smoke and/or stratospheric intrusions. The remaining 9 days were given further consideration and evaluation. Of those 9 days, 6 were identified as having potential ozone enhancement due to wildfire smoke (most of them due to smoke from the nearby Beaver Creek wildfire in 2016) and 1 due to a stratospheric intrusion. This left only 2 days (6/21/15, 6/30/15) from the EPA HYSPLIT analysis which Colorado identified as ozone exceedances where at least 1 back trajectory transected or originated in northern Weld County, with no apparent ozone enhancement due to wildfire smoke and/or stratospheric ozone.

The HYSPLIT back trajectories found in Figures 11-15 of the TSD just zoom in on Colorado. Colorado believes that a larger-scale, regional view of the back trajectories is more appropriate. Colorado was able to obtain from EPA a Google Earth file of each of the Figures 11-15 from the TSD and discovered that, although several back trajectories transected northern Weld County, very few actually originated in northern Weld County. The vast majority of 24-hour back trajectories that transected northern Weld County originated far to the north or northwest in interior parts of Wyoming or the Nebraska panhandle. This is significant, as any increase in geographic area covered by a 24-hour back trajectory decreases the proportion of ozone precursors from any one individual area, including northern Weld County. These back trajectories contrast to back trajectories in central and southern parts of Weld County where 24-hour back trajectories are predominantly much shorter in length and largely remain in the same geographic area, making it much more definitive to identify the prime source region of the precursor emissions for individual exceedance days.

In addition to the technical questions discussed above, Colorado notes that northern Weld County has low population density. The majority of emissions are anticipated from industrial point sources of air pollution, and in particular oil and gas point sources, as opposed to non-road or on-road mobile emissions, area sources, etc. An initial review of reported emissions data from stationary sources in northern Weld County identified only 5 stationary sources (all in the oil and gas sector) with a potential to emit equal to or greater than 100 tons per year of VOC and/or NOx. Colorado has aggressive state-wide oil and gas regulations specific to VOCs that apply in northern Weld County. Further, equipment appears to be subject to Best Available Control Technology and/or federal New Source Performance Standards. Colorado intends to look closer at these sources to better understand opportunities for emissions reductions, as well as understand the degree of ozone precursor pollutant contribution at the monitors.

In summary, Colorado has questions about the data used, and assumptions made, in EPA's analysis and believes that any decision to expand the boundary should be informed by representative data and analysis. Colorado would appreciate the opportunity to complete a more thorough analysis, confer with the EPA, and collaboratively respond to the court's remand. With that in mind, Colorado respectfully requests EPA reconsider moving forward with expanding the ozone nonattainment boundary associated with the 2015 Ozone NAAQS at this time.



If you have follow-up questions please contact Dena Wojtach, dena.wojtach@state.co.us in the Air Pollution Control Division on this important matter. Thank you for your consideration.

Sincerely,



Garrison Kaufman, Director
Air Pollution Control Division
Colorado Department of Public Health and Environment

