

October 7, 2013

Will Allison Director Colorado Air Pollution Control Division 4300 Cherry Creek Drive South Denver, CO 80246 <u>William.allison@state.co.us</u>

Dear Mr. Allison:

As the official ozone monitoring season has come to an end in the State, WildEarth Guardians is writing to express serious concerns over the state of the air along Colorado's Front Range and the implications for our health, environment, and economy moving forward.¹ We are most troubled that in the past year, ozone violations across the Front Range have become more severe and widespread. The consequences of this year's elevated ozone are staggering: greater public health and environmental risks, sanctions from the U.S. Environmental Protection Agency ("EPA"), more stringent federal regulation and oversight, the stigma of being a polluted area, and a decline in our quality of life.

For our environmental and economic well-being, the Air Pollution Control Division ("APCD") must not only reassess its current approach to protecting our clean air, but must move quickly on bold solutions that effectively keep dangerous air pollution in check, including reducing emissions significantly from oil and gas drilling and fracking operations along the Front Range. Below, we detail our concerns and the basis for our call to action.

Front Range Ozone Situation

We are extremely troubled by the state of the air along Colorado's Front Range after the 2013 ozone season. Formed when volatile organic compounds ("VOCs") and nitrogen oxide ("NOx") emissions react with sunlight, ozone is a poisonous gas that poses myriad adverse health and environmental risks. Along the Front Range, ozone concentrations appear to getting more severe, with more monitors than ever now registering violations of federal health limits. At this point, it appears that Colorado will not be able to meet the Clean Air Act's deadline for attaining the federal ozone standard, which was established to safeguard public health. Such an outcome will lead to increased EPA oversight, the potential for sanctions, and the imposition of more stringent and rigid emission control standards (including increased offset requirements for

¹ According to federal rules, ozone must, at a minimum, be monitored in Colorado from March to September every year. *See* 40 C.F.R. § 58, Appendix D.

new source permitting and across the board 15% annual emission cuts). Although if necessary, we are certainly in support of such an outcome given the health ramifications of elevated ozone, we do not believe that this path is the most advantageous for Colorado.

Already, the nine-county Denver Metro/North Front Range region, including Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson, and portions of Larimer and Weld, is designated "nonattainment" under the Clean Air Act due to violations of the federal ozone standard. This standard limits concentrations of ground-level ozone in the air to no more than 0.075 parts per million ("ppm") over an eight hour period. *See* 40 C.F.R. § 50.15. A violation of this standard occurs whenever the three-year average of the fourth highest annual ozone concentrations (often referred to as a "design value") measured at a monitoring site exceed 0.075 ppm. In other words, for a violation to occur, numerous exceedances of the standard over a multi-year period must occur.

The Front Range's ozone designation was initially made in April of 2012 on the basis of ozone monitoring data gathered between 2008 and 2010. *See* 77 Fed. Reg. 30088 (May 21, 2012). At that time, the monitoring data showed that only two monitors in the entire Denver Metro/North Front Range region were violating the standard.² One, located at northern Rocky Flats in Jefferson County, registered a design value of 0.078 ppm, barely above the federal health standard. The other, located at Chatfield State Park in Douglas County, registered a design value of 0.076 ppm, also barely above the standard. Even though only two monitors registered violations, the entire region was designated "nonattainment" due to the contribution of emissions throughout the nine-county region to the violations.

The region was classified as "marginal" nonattainment area given that it was barely violating the ozone standard. Based on this classification, the EPA imposed an attainment deadline of December 31, 2015. *See* 77 Fed. Reg. 30167 (May 21, 2012).

Since that time, the ozone situation along Colorado's Front Range has worsened considerably. After 2012, eight monitors along the Front Range fell into violation, including monitors in Douglas, Jefferson, Arapahoe, Larimer, and Weld Counties. Peak ozone concentrations reached as high 0.101 ppm, 35% higher than the health limit. Not only that, but design values increased from 0.078 ppm to 0.080 ppm at Rocky Flats North and from 0.076 to 0.082 at Chatfield State Park. The table below presents the 2010-2012 design value data.

² The EPA would not rely on 2009-2011 data for Colorado in making its designation because it asserted the data was not yet certified. However, we understand data for the Denver Metro/North Front Range area was certified as of the date of EPA's designation. The 2009-2011 data showed three monitors in the region were in violation, including one in Fort Collins.

Monitor	Location	Highest Ozone Level Recorded in 2012 (ppm)	Three-year Average of Fourth Highest, 2010-2012 (ppm)
Fort Collins West	Fort Collins	0.093	0.078
Weld County Tower	Greeley	0.090	0.077
Rocky Mountain National Park	Larimer County	0.090	0.077
Rocky Flats North	Northern Jefferson County	0.101	0.080
Welch	Southern Jefferson County	0.090	0.076
National Renewable Energy Laboratory	Golden	0.095	0.079
Highland Reservoir	Centennial, Arapahoe County	0.094	0.078
Chatfield State Park	Douglas County	0.098	0.082

Violating Ozone Monitors Along the Front Range, 2010-2012

With the end of the 2013 ozone monitoring season, the worsening ozone pollution along the Front Range does not appear to be relenting. According to the latest ozone monitoring data table prepared by the APCD, 10 monitors in the Denver Metro/North Front Range nonattainment area are now in violation of the standard.³ Monitoring sites in Adams and Boulder Counties triggered violations for the first time. Furthermore, design values are climbing. When designated nonattainment, the Rocky Flats North and Chatfield State Park monitors were barely violating. Their design values are now both 0.083 ppm. Four monitoring sites now have design values at 0.080 ppm or higher. By all measures, the severity of the ozone problem along the Front Range is increasing. The table below presents the 2011-2013 design value data.

³ APCD's data is available online at <u>http://www.colorado.gov/airquality/html_resources/ozone_summary_table.pdf</u>.

Monitor	Location	Highest Ozone Level Recorded in 2013 (ppm)	Three-year Average of Fourth Highest, 2011-2013 (ppm)
Welby	Adams County	0.082	0.076
South Boulder Creek	Boulder County	0.086	0.077
Fort Collins West	Fort Collins	0.091	0.080
Weld County Tower	Greeley	0.080	0.076
Rocky Mountain National Park	Larimer County	0.082	0.076
Rocky Flats North	Northern Jefferson County	0.093	0.083
Welch	Southern Jefferson County	0.084	0.078
National Renewable Energy Laboratory	Golden	0.090	0.082
Highland Reservoir	Centennial, Arapahoe County	0.085	0.079
Chatfield State Park	Douglas County	0.086	0.083

Violating Ozone Monitors Along the Front Range, 2011-2013

At this point, it appears extremely unlikely that the Denver Metro/North Front Range nonattainment area will be brought into attainment by December 31, 2015. Notably, for the Fort Collins West, Rocky Flats North, National Renewable Energy Laboratory, and Chatfield State Park monitoring sites to come into compliance, the fourth maximum values in 2014 and 2015 must achieve levels that have not been achieved for many years, if ever. For Rocky Flats North, the average fourth highest value for 2014 and 2015 must be 0.072 ppm or lower. Yet in the last 15 years, Rocky Flats North has never had a fourth maximum reading as low as 0.072 ppm.

If the Denver Metro/North Front Range nonattainment area is not brought into attainment by December 31, 2015, the area will be reclassified as a "moderate" nonattainment area, otherwise known as a "bump up." The consequences of being "bumped up" are significant. APCD would be obligated to develop and submit a more comprehensive state implementation plan ("SIP") for approval by the EPA. This plan will need to, among other things, ensure a 15% reduction in VOC (and likely NOx) emissions annually until the region is brought into attainment, requires that reasonably available control technology ("RACT") is installed on every major source of VOC (and likely NOx) emissions requires that vapor recovery systems be installed at all gasoline stations, requires a motor vehicle inspection and maintenance program be implemented everywhere in the nonattainment area, and increases the offset requirements for the permitting or modification of major sources. *See* 42 U.S.C. § 7512(b).⁴ If after December 31,

⁴ The EPA proposed specific rules for the implementation of Clean Air Act moderate ozone nonattainment area planning requirements in June. *See* 78 Fed. Reg. 34178 (June 6, 2013). These rules will implement the general requirements under 42 U.S.C. § 7512.

2015, the region is "bumped up," the APCD would have only three additional years—or by December 31, 2018—to bring the region into attainment, an extremely tall task if ozone concentrations remain as elevated as they are today.

The Need for Expeditious and Bold Action

While the consequences of failing to attain the ozone standard by December 31, 2015 raise serious public health alarms, it should raise red flags for all. Although we would certainly welcome the full imposition of moderate area planning requirements should ozone violations continue to persist, the fact is that Clean Air Act requirements for moderate nonattainment areas are more rigid, stringent, and bring on greater EPA oversight, including possible sanctions (in the form of restricted highway funding and more extreme pollution offset requirements) due to the failure to attain. This cannot be ideal for our economy. It certainly is not ideal for our health and environment to allow ozone violations to fester for so long.

If the Front Range was brought into attainment by the end of 2015, there would be no need to bring on these additional regulatory demands. To this end, we call on the APCD to immediately and aggressively begin to cut VOC and NOx emissions across the region.

We acknowledge that the APCD has already signaled its intent to strengthen emission controls for the oil and gas sector along the Front Range and possibly the rest of the State. This is a sensible step forward given that industry's own emission data shows that they are responsible for the vast majority of statewide and Front Range VOC emissions, as well as a large contributor to NOx emissions statewide and along the Front Range. While Colorado has undertaken several rulemakings over the years (since at least 2004) to adopt pollution controls for the oil and gas sector, the renewed pace in drilling (and the emergence of shale gas and oil development), coupled with refined emissions information, indicates that there remains important opportunities to significantly reduce ozone forming pollution.

Unfortunately, these efforts have been delayed and it appears unlikely that such rules would even take effect in time to affect ozone levels in 2014. Furthermore, it is unclear whether such rules would even be sufficient to keep ozone levels in check so that the Front Range could attain the ozone standard as required by the Clean Air Act. The APCD has cited the need to work with stakeholders as reason for delay, yet we cannot imagine that talk would take priority over the need to curtail ozone and avoid the environmental, health, and economic consequences of a failure to attain. Ultimately, the delay in addressing oil and gas industry emissions would only enhance the burden faced by other industries, as well as motorists.

In light of this, we strongly urge you to immediately undertake the following as expeditiously as possible:

• Strengthen emission controls for existing oil and gas drilling and fracking operations both within the nonattainment area and statewide. These efforts should ensure strengthened leak detection and repair requirements (including for well-site operations), emission controls for storage tanks, reduced emission completion requirements, and pneumatic device emission controls;

- Adopt rules to ensure that, starting March 1, 2014, the oil and gas sector reduces both VOC and NOx emissions from existing facilities in the nonattainment area by at least 25% below total nonattainment area inventories. We urge the APCD to consider implementing an offset or emissions banking program to ensure these emission reductions are achieved;
- Adopt rules to ensure that, starting January 1, 2014, all new and modified oil and gas operations within the nine county nonattainment area install and operate emission controls that constitute the lowest achievable emission rates, as defined by the Clean Air Act; and
- Adopt a contingency plan to ensure that if design values along the Front Range in 2014 remain at 0.080 ppm at any single monitoring site, that emissions from oil and gas be reduced by an additional 25% and that reasonably available control technology be installed and operated at all major sources of NOx and VOCs along the Front Range.

These rules are necessary to safeguard public health. And although they would mandate deep pollution cuts that have yet to be considered by the APCD, they will ensure that, overall, the burden of reducing air pollution is strategically focused on the largest and most intense sources of ozone forming emissions, rather than on minor contributors, such as motor vehicles and gasoline stations. However, they will also serve as our last best chance to avoid even more stringent clean air rules that, while necessary, may yield more serious consequences for our economy. The APCD must act swiftly and boldly now to avoid more burdensome regulation in the future. This will only serve to better protect public health and our environment.

We appreciate your time and attention to this matter. If you have any questions or concerns, please contact me at the information below.

Sincerely,

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cc: Governor John Hickenlooper Colorado Air Quality Control Commission Shaun McGrath, EPA Region 8 Administrator Carl Daly, EPA Region 8 Air Program Director