

Paula Wilson  
Idaho Department of Environmental Quality  
1410 N. Hilton, Boise, ID 83706  
paula.wilson@deq.idaho.gov

October 7, 2016

Re: Comments on proposed rule amendment to Idaho Crop Residue Burning Program, docket no. 58-0101-1601, published in Idaho Administrative Bulletin September 7, 2016 at page 291.

Dear Ms. Wilson,

For the reasons set forth below, the following organizations strongly oppose the above-referenced proposal: Conservation Voters for Idaho, Idaho Conservation League, American Lung Association in Idaho, and Safe Air for Everyone.

**1. Health Threat from Field Burning:** The burning of thousands of acres of Idaho cropland each year generates large plumes of air pollution that can travel for many miles, impacting communities not only in Idaho, but also in other states and Canada.<sup>1</sup> The pollution includes not only airborne particulates, but also nitrogen oxides (NOx) and volatile organic compounds (VOCs) that form ozone, a dangerous air pollutant that damages the lungs, sends people to emergency rooms, and in some cases kills. Idaho physicians have repeatedly reported serious health impacts on their patients due to field burning.

In proposing to weaken Idaho's protections against pollution from field burning, DEQ is irresponsibly endangering people's health. DEQ is specifically proposing to weaken protections against elevated ozone levels. Ozone is a corrosive air pollutant that inflames the lungs and constricts breathing. 80 Fed. Reg. 65,308/3-09/1; Dkt<sup>2</sup>-0405. It causes asthma attacks, hospitalizations for serious bronchial conditions, and other serious health harms. *E.g.*, Dkt-0404, 3-18, 3-26 to -29, 3-32. Ozone-induced health problems can force children to stay indoors and require people to take medication and miss work or school. *E.g.*, *id.* 4-12. Because their respiratory tracts are not fully developed, children are physiologically especially vulnerable to ozone pollution, particularly when they have elevated respiratory rates, as when playing outdoors. *E.g.*, *id.* 3-81 to -82. People with lung disease and the elderly also have heightened vulnerability, but ozone can affect healthy adults too. *See* 80 Fed. Reg. 65,310/3. Asthmatics suffer more severe impacts

---

<sup>1</sup> Statements in this section of our comments are supported by the record in *Safe Air for Everyone v. EPA*, No. 05-75269 (9<sup>th</sup> Cir. filed 9-5-2005). That record is incorporated herein by reference.

<sup>2</sup> All "Dkt" references are to document numbers in EPA docket EPA-HQ-OAR-2008-0699 (*e.g.*, "Dkt-0405" means EPA-HQ-OAR-2008-0699-0405).

from ozone exposure than healthy individuals do and are more vulnerable at lower levels of exposure. *Id.* 65,311/1 n.37, 65,322/3. And ozone is linked to thousands of premature deaths each year. EPA, *Health Risk and Exposure Assessment for Ozone* (August 2014) at 8-6 to 8-7.

When Idaho's current crop burning rules were adopted, all parties – including DEQ - agreed that protection of public health warranted prohibiting burning when pollution exceeded, or was projected to exceed within 24-hours, 75% of any national ambient air quality standard (NAAQS). Now, after EPA has determined that ozone is even more dangerous than previously thought, and at lower levels, DEQ irrationally proposes to weaken the 75% threshold to 90% for ozone. The proposal arbitrarily treats ozone differently from other air pollutants for this purpose. There is no scientific or other reasoned basis for such differential treatment. And the choice of 90% as the new threshold for ozone means weaker protection in absolute as well as percentage terms. Under the pre-existing (2008) ozone standard of 75 parts per billion (ppb), the 75% threshold meant that burning could not occur if ozone levels exceeded or were predicted to exceed 56 ppb (75% of 75 ppb). Under the proposed rule amendment, burning will be allowed unless ozone levels exceed or are predicted to exceed 63 ppb --90% of the 70 ppb standard adopted in 2015. In other words, DEQ is using the occasion of EPA's strengthening the ozone standard (based on science showing ozone is more dangerous than previously thought) to weaken protection against ozone in Idaho and nearby states. Such an approach is not only irrational in the extreme, but also flouts DEQ's responsibility to protect public health. ID STAT. §39-102A(1)(establishing DEQ "to protect human health and the environment as its sole mission").

We further note that leading medical societies and health organizations, including the American Medical Association, American Lung Association, American Academy of Pediatrics, American Thoracic Society, and American Heart Association all urged EPA to adopt a more protective ozone standard of 60 ppb, based on evidence that ozone harms people's health at (and even below) that level. Dkt-2720,- 3863. DEQ's proposal would thus allow burning to occur even when ozone pollution already exceeds (or is expected to exceed) a level deemed unsafe by medical professionals.

Nor is there any basis for claiming that violations of the NAAQS will not occur under the new weaker threshold. DEQ says it will provide supporting analysis later that purports to so demonstrate, but that approach is indefensible. It puts the cart before the horse: DEQ is weakening protection before it actually has proof that the weakening will not threaten violation of the NAAQS. At worst, it indicates that DEQ has already prejudged the outcome of such an analysis, rather than planning a truly objective, unbiased approach.

Further, DEQ is not analyzing the cumulative impacts from all pollutants of concern, most notably how human health will be impacted due to both PM<sub>2.5</sub> and ozone concentrations in the air. Ozone and PM<sub>2.5</sub> pollution are both associated with adverse human health effects such as lung structure dysfunction, inflammation and infection, asthma, and premature deaths. A review of peer-reviewed scientific journal articles

discussing threats to human health highlights the potential compounding effects of these pollutants (e.g. Fan et al., 2012 and Hou et al. 2015). Given the potential compounding effects PM<sub>2.5</sub> and ozone can have on human health, analyses of health impacts need to account for the combined effects of both pollutants. DEQ irrationally disregards such combined impacts, and instead analyzes the threats to human health from ozone and PM<sub>2.5</sub> on an individual basis with little regard to the cumulative or synergistic impact. DEQ's chosen method of analyzing these pollutants is not scientifically sound and therefore should not be deemed acceptable as protective of human health.

Additionally, during the initial CRB rulemaking session, Dr. Craig Dietrich – a toxicologist with the Idaho Department of Health and Welfare – presented information on the health effects from ozone and PM<sub>2.5</sub>. Dr. Dietrich's presentation included recent science available that analyzed data over variable geographic regions and time periods (both annually and seasonally). The science shows that for some significant health endpoints, PM<sub>2.5</sub> is even more harmful than ozone.

In a later rulemaking session on July 20<sup>th</sup>, 2016, Dr. Dietrich made verbal comments providing a clear, thorough, and scientific justification as to why reducing both ozone and PM<sub>2.5</sub> was critical for the protection of human health. To briefly summarize, high ambient concentrations of ozone put sensitive populations at an increased risk for respiratory issues. High ozone combined with high PM<sub>2.5</sub> concentrations creates a compounding effect, exacerbating the stresses inflicted upon these populations. Although we strongly oppose weakening of protections against either pollutant, DEQ's proposal to weaken ozone protection without strengthening PM<sub>2.5</sub> protection makes the threat to public health even worse.

Of upmost concern is the underlying motivation for the changes in regulatory thresholds. DEQ asserts their decision is supported by science, yet it is clear that the science they are utilizing has been selectively chosen in order to fit their narrative. Any science evoking doubt on the selected course of action has been intentionally ignored and left out of consideration. Human health advocates present in the negotiated rulemakings found it concerning that proposals for better protection of human health were met with a high-degree of scrutiny and ultimately dismissed, whereas proposals for weakening protection were accepted by DEQ relatively unchallenged. When verbally questioned over this discrepancy during rulemaking sessions, DEQ's AG responded that this was due to the State Legislature and their general unwillingness to pass more stringent rules. It is clear that the proposed rule changes are being influenced by politics and not the best available science. Regardless of political pressure, these rules must be protective of human health, and the science used to justify these changes cannot be selectively chosen in order to be politically appealing.

## **2. Breach of Agreement**

The proposal represents a deplorable breach of the agreement reached by all parties in good faith on a resolution of the field burning issue in 2008. This proposal is not only a breach of an agreement, but a breach of trust. Public officials and others regularly urge concerned citizens and environmental groups to work cooperatively with agencies and business interests to achieve consensus-based solutions to their disagreements. Yet DEQ now seeks to renege on the very agreement they made with affected citizens only a few years ago. This duplicity is all the more inexcusable given that members of the CRB Board and affected citizens offered a constructive compromise proposal to address concerns that were raised, but DEQ refused to seriously consider it.

The fact that the ozone NAAQS was revised hardly justifies a breach of the original agreement. The parties agreed to the “percent of the NAAQS” approach knowing full well that EPA is required to review and update the NAAQS every five years, that the NAAQS could therefore change, and knowing that EPA’s science advisers had recommended a range of ozone standards going down to as low as 60 ppb. It is too late in the day for DEQ and agri-business to pull a bait-and-switch to support a weaker approach.

Relatedly, DEQ here failed to comply with the requirements for negotiated rulemaking. By statute, negotiated rulemaking is defined as “a process in which all interested persons and the agency seek consensus on the content of a rule.” ID ST §67-5220(2). There was no consensus on the content of the rule here. As indicated by the record, citizen and environmental group representatives strongly disagreed with the final proposal developed by DEQ. Further, DEQ arbitrarily refused to accept a compromise framework verbally agreed to by the growers and the public health representatives, with DEQ present, under which the PM<sub>2.5</sub> threshold would be tightened proportionately in exchange for a loosening of ozone restrictions. DEQ simply ignored the consensus proposal and drafted the rule to only loosen ozone protections. It is therefore unlawful, arbitrary, and grossly misleading to present the proposal as a negotiated rulemaking.

## **3. DEQ’s Justifications for the Proposal are Unsupported and Irrelevant:**

In support of the proposal, DEQ cites potential economic hardship to growers if the existing rule isn’t revised. Under the Clean Air Act, however, claims of economic impact are not sufficient to support a SIP revision. The state must show that the revision will not cause or contribute to a NAAQS violation, or interfere with any applicable requirements of the Act. Moreover, promoting the economic interests of agribusiness is not DEQ’s function. See ID STAT. §39-102A(1). In any event, the record lacks a reasoned analysis supported by evidence showing that economic hardship is likely. Bare assertions by agri-business interests do not suffice as actual evidence and do not provide a rational basis for claiming proof or likelihood of hardship. Even if retention of the current rule would result in materially fewer burn days, there is no showing of why that would result in hardship. Moreover, DEQ has not considered or evaluated alternatives to

burning, such as those adopted or encouraged in other states. In Washington, the State mandated a phase-out of grass residue burning after an exhaustive research and public participation process determined that alternatives were economically available and feasible, and after a peer-reviewed study showed that the public health costs from grass residue burning outweighed the economic benefits. See attached EPA Itr. Research conducted by Washington State University and Oregon State University supports the conclusion that there are economically viable alternatives available that reduce or eliminate the need for burning. Id.

DEQ also asserts without factual support that field burning has minimal impact on ozone levels. It well established that biomass burning produces substantial emissions of NO<sub>x</sub> and VOCs, the main ozone-forming pollutants. Moreover, studies have shown that field burning and wildland fires do in fact contribute significantly to elevated ozone levels. See, e.g., [https://www3.epa.gov/ttn/chief/conference/ei21/session5/reid\\_pres.pdf](https://www3.epa.gov/ttn/chief/conference/ei21/session5/reid_pres.pdf) ; <https://www2.ucar.edu/atmosnews/news/916/wildfires-cause-ozone-pollution-violate-health-standards-new-study-shows>. Indeed, the first of the foregoing cites found that ozone resulting from field burning was the “but-for” cause of ozone NAAQS violations.

DEQ also asserts that 75% of the ozone NAAQS is close to background ozone concentrations in rural Idaho. But DEQ cites no data to support of this claim, and in any event it is truly beside the point. Because ozone pollution at levels in excess of the NAAQS is dangerous, especially to children, asthmatics, and senior citizens, it does not matter whether the ozone is “background” or not. On those days when ozone exceeds or is predicted to exceed 75% of the NAAQS, it is approaching levels that EPA has determined are unsafe: That is why the current rule correctly prohibits burning at such times.

For all the foregoing reasons, DEQ must withdraw the proposed rule. These comments were prepared with the assistance of attorneys from Earthjustice.



Patti Gora-McRavin  
Safe Air for Everyone



Heather Kimmel  
American Lung Association in Idaho

*Austin H.*

Austin Hopkins  
Idaho Conservation League

*Courtney E. Washburn*

Courtney E. Washburn  
Conservation Voters for Idaho