NATIONAL TRIBAL AIR ASSOCIATION FACT SHEET

EPA'S PROPOSED UPDATE TO THE NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) FOR GROUND-LEVEL OZONE POLLUTION

WHAT ARE THE PROPOSED UPDATES TO THE NAAQS FOR OZONE POLLUTION?

On July 13, 2020, the U.S. Environmental Protection Agency (EPA) proposed to retain, without revision the primary and secondary ozone National Ambient Air Quality Standards (NAAQS). The standards, established in 2015, are currently set at 70 parts per billion (ppb), in terms of a 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentrations. EPA's proposal is based on its judgement that the current NAAQS protect the public health, including the health of at-risk populations with asthma, and protect the public welfare from adverse effects. The deadline for comment will be 45 days after it is published in the Federal Register.

The Clean Air Act requires EPA to set National Ambient Air Quality Standards (NAAQS) for "criteria pollutants" which are ozone, carbon monoxide, lead, nitrogen oxides, particulate matter, and sulfur dioxide. It is required by law that EPA review these standards, at least every five years, to provide protection for the health and welfare of the public. The Clean Air Act also directs EPA to set these standards to protect public health including at-risk groups with an adequate margin of safety.

The existing primary standard, was established in 2015, New information on the proposed decision concludes that the existing proposal also protects from metabolic effects. The existing secondary ozone standard is welfare-based and provides protection against adverse effects to the public welfare and from harmful ozone exposure on vegetation and the environment. Ozone circulated around the globe is also known to have effects on climate. New information on the proposed decision provides support and understanding on its effect on vegetation, ecosystems, and climate.

BACKGROUND: WHAT IS OZONE?

According to the EPA, ozone is a gas made up of three atoms of oxygen and it occurs in both the Earth's upper atmosphere and at ground level . Good ozone is found in the upper atmosphere known as stratospheric ozone, which provides a protective layer that shields us from harmful ultraviolet (UV) rays. Bad ozone is found in the lower atmosphere and is formed by pollutants emitted by cars, power plants, indus**Quick Facts:**

- The existing primary and secondary standards were established in 2015 at 70 parts per billion (ppb)
- » This Proposed Rule seeks to retain the decision, without changes to both the Primary and Secondary ozone NAAQS Standards
- » NTAA recommends that EPA set the Standard to 60 ppb

trial boilers, refineries, chemical plants, and other sources where these react chemically with sunlight (See image)¹. Bad ozone can trigger many health concerns in vulnerable populations like elders, children, and those who are immunocompromised. These health concerns include; lung disease, asthma, shortness of breath, cough, can damage airways, and lead to chronic obstructive pulmonary disease (COPD) and may make one susceptible to infection (see image below).



Figure 1 (right): Photo courtesy of the Maricopa County Air https://www.maricopa.gov/DocumentCenter/View/4508/Ozone-Frequently-Asked-Questions-PDF

^{1.} U.S. EPA 2019 https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution



Muscles contract, path-

Good air quality Healthy lungs have wide open pathways

Figure 2 (above): Healthy lung function. Photo courtesy of UCAR https://scied.ucar.edu/learning-zone/air-quality/effects-air-pollution

WHAT DOES THIS MEAN FOR TRIBES AND THE EFFECTS OF OZONE?

American Indian and Alaskan Native Tribal members are disproportionately susceptible to the health effects of ground-level ozone pollution, especially for children and the elderly. According to the U.S. Department of Health and Human Services Office of Minority Health, American Indian/ Alaskan Native children are 60% more likely to have asthma than non-Hispanic white children². The Proposed Rule labels children as most "at risk" to develop asthma due to bad ozone exposure. In the same 2015 study, roughly 240,000 Native American adults reported that they currently have asthma.



Figure 4 Navajo elders. Photo courtesy of Johns Hopkins University https://www.jhsph.edu/ covid-19/articles/partners-in-fighting-coronavirus-among-native-americans.html



Figure 3 (above): Progression of ozone damage (A=none to F=severe) on watermelon foliage. Photo courtesy of G.J. Holmes, NCSU https://extension.umd.edu/learn/air-pollution-effects-vegetables

For most Tribes, cultural identity is tied to the value of elders and children. Elders carry deep traditional and intrin sic knowledge of cultural practices and lifeways around their homelands. The adverse effects of ozone on sensitive vegetation and trees species has the potential to directly impact the traditional cultural practices and lifeways of Native Americans who use those plant species for subsistence, medicines, and other traditional practices. NTAA

> provided EPA with comments in 2015 with a listing of thirty (30) known ozone-sensitive plant species to which Tribes ascribe cultural significance³.

> NTAA is recommending that EPA further review the available studies and evaluations of health effects to at-risk populations and set a stronger primary ozone standard of 60 ppb. A level of 60 ppb corresponds to the lowest exposure concentration that would minimize severe lung function decrements and reduce the risk of respiratory mortality, but not stop those affects to the at-risk population. Even at 60 ppb, the studies and reports conclude that some asthmatic children would continue to suffer from exposures to ozone at that level, and reduce, but not end, the number of deaths associated with short-term exposures.

HOW TO COMMENT:

EPA accepts comments for 45 days after the proposed decision is published in the Federal Register.

- Deadline for comment: October 01, 11:59pm EST and a virtual hearing held on August 28. Email Regina Chappell at • chappell.regina@epa.gov by August 27 to register to speak at the virtual hearing.
- To Comment Online: Go to https://www.regulations.gov/ and follow the instructions using the Docket ID No. EPA-• HQ-OAR-2018-0279
- And Email: Send comment to a-and-r-Docket@epa.gov and use the Docket ID No. in the subject line
- For additional submission methods, please visit www. www.epa.gov/dockets/commenting-epa-dockets

WHERE CAN I FIND MORE INFORMATION?

- To download a copy of the proposed rule, click here.
- The proposed decision and other background information are also available electronically and at EPA's electronic pub-• lic docket and comment system.
- For further technical information about the rule, please contact Deirdre Murphy, with EPA's Office of Air Quality Planning and Standards, at (919) 541-0729 or murphy.deirdre@epa.gov

U.S. Department of Health and Human Services Office of Minority Health https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=30 2.

U.S. EPA, 2014 https://www3.epa.gov/ttn/naaqs/standards/ozone/data/20140829pa.pdf 3.