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# National Tribal Air Association

## FACT SHEET

### PROPOSED DECISION: REVIEW OF THE SECONDARY NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OXIDES OF SULFUR, OXIDES OF NITROGEN AND PARTICULATE MATTER

Docket ID No. EPA-HQ-OAR-2014-0128

*The comment deadline is **June 14, 2024**. Your comment letter can be submitted electronically to the Federal Rulemaking Portal. <https://www.regulations.gov/> OR email to [a-r-Docket@epa.gov](mailto:a-r-Docket@epa.gov).*

On April 3, 2024, the U.S. Environmental Protection Agency (EPA) proposed to revise the secondary National Ambient Air Quality Standards (NAAQS) for oxides of sulfur (SO<sub>x</sub>) and to retain the secondary standards for oxides of nitrogen (N oxides) and particulate matter (PM).

#### Background

- The EPA sets secondary standards to protect the public welfare against adverse effects – including ecological effects such as damage to vegetation – caused by certain air pollutants. The EPA last reviewed the secondary standards for ecological effects of SO<sub>x</sub> and N oxides in 2012, and PM in 2013.
- The ecological effects addressed in this review include direct effects on vegetation, as well as ecological effects related to atmospheric deposition of sulfur and nitrogen compounds in sensitive ecosystems. Deposition-related effects include acidification and nutrient enrichment, which can damage sensitive ecosystems. These deposition effects were not specifically considered when the existing secondary standards for SO<sub>x</sub>, NO<sub>x</sub>, and PM were put in place.
- Based on the latest scientific evidence, the EPA is proposing to revise the existing secondary sulfur dioxide (SO<sub>2</sub>) standard to an annual standard with a level within the range of 10 - 15 ppb, averaged over 3 years.
- Emissions of SO<sub>2</sub> and N oxides have trended downward for the past 20 years. SO<sub>2</sub> emissions decreased by 92% (2002 to 2022), and emissions of the two most highly emitted N oxides, nitrogen dioxide (NO<sub>2</sub>) and nitrogen oxide, decreased by 71% (2002 to 2022). As a result, ambient air concentrations of SO<sub>2</sub> & NO<sub>2</sub> have also declined.



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- To assess whether any additional emissions reductions might be needed to meet the proposed secondary annual SO<sub>2</sub> NAAQS, the EPA prepared an air quality analysis for all monitor sites with SO<sub>2</sub> data.
    - For areas with monitors that meet the current primary SO<sub>2</sub> NAAQS (1-hour standard of 75 ppb), no emissions reductions are expected to be needed to meet the proposed secondary annual SO<sub>2</sub> standard.
    - For areas with monitors that do not meet the current primary SO<sub>2</sub> NAAQS, after adjusting air quality to meet the current primary NAAQS, no additional emissions reductions are expected to be needed to meet the proposed secondary annual SO<sub>2</sub> standard. As a result, the EPA does not anticipate additional emissions reductions would be needed to meet the proposed secondary standards beyond those already needed for some areas with monitors to meet the current primary SO<sub>2</sub> NAAQS.

## **EPA Proposal**

- The EPA is taking comment on the following proposed decisions and alternate options for the SO<sub>2</sub>, NO<sub>2</sub> and PM secondary standards.
- *Oxides of Sulfur* -based on the scientific review, the EPA is proposing:
  - The current short-term secondary SO<sub>2</sub> standard (3-hour standard set at 500 parts per billion (ppb), not to be exceeded more than once per year) is inadequate.
  - Revise the existing secondary SO<sub>2</sub> standard to an annual standard with a level within the range of 10 - 15 ppb, averaged over 3 years.
  - Taking comment on alternatives, including an annual SO<sub>2</sub> standard level as low as 5 ppb, revising the secondary SO<sub>2</sub> standard to be identical to the primary SO<sub>2</sub> standard in all respects, and retaining the existing 3-hour standard in addition to the proposed new annual secondary standard.
- *Oxides of Nitrogen* - based on the scientific evidence, the EPA is proposing to:
  - Retain the existing NO<sub>2</sub> standard (annual average of 53 ppb).
  - Take comment on alternatives, including revising the annual NO<sub>2</sub> standard to a level of 35-40 ppb, averaged over 3 years.
- *Particulate Matter* – based on the scientific review, the EPA is proposing to:
  - Retain the current secondary PM<sub>2.5</sub> annual standard of 15 µg/m<sup>3</sup>.
  - Take comment on alternatives, including revising the secondary PM<sub>2.5</sub> annual standard to a level of 12 µg/m<sup>3</sup>.

## **What does this mean for Tribes?**

- The secondary standards look to protect public welfare, such as ecosystems, vegetation and visibility. The secondary standards can also play an important role in protecting vulnerable cultural resources for Tribes. For example, emissions of SO<sub>2</sub> transforms to sulfuric acid and can lower the PH of water bodies such as rice lakes and can impact the health of these ecosystems. The lower PH also contributes to mobilization of mercury making it more bioavailable and can make subsistence and cultural fishing practices unavailable to Tribal



members. Additionally, excess NO<sub>x</sub> deposition acts as a fertilizer in aquatic ecosystems and cause eutrophication of lakes, and streams causing algal blooms and oxygen decreases in these systems which can lead to fish die offs and other impacts.

- Because the current analysis of the proposed changed standard will not require additional emissions reduction, no additional nonattainment area should be created by this NAAQS revision.
- The revised standards will provide additional protection for Tribes that have concerns about acidification of subsistence resources such as damage to sensitive vegetation, acidification of water ways, which can mobilize mercury in the ecosystem, by placing more constraints on growth in emissions of SO<sub>2</sub>.
- This change will be more supportive of the Air Quality Related Values established by the Forest County Potawatomi's Class I redesignation, by reinforcing the impacts of SO<sub>2</sub> and other pollutants on important cultural resources for the Tribe.

#### **How to comment:**

- Comments are due June 14, 2024
- Written comments, should be submitted to Docket ID No. EPA-HQ-OAR-2014-0128, may be submitted by one of the following methods:
  - Go to <https://www.regulations.gov/> and follow the online instructions for submitting comments.
  - Send comments by email to [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov), Attention Docket ID No. EPA-HQ-OAR-2014-0128 in the subject line of the message.
  - Mail your comments to: EPA Docket Center, Environmental Protection Agency, Mail Code: 28221T, 1200 Pennsylvania Ave, NW, Washington, DC 20460, Attention Docket ID No. EPA-HQ-OAR-2014-0128.