

Testimony

U.S. Senate Committee on Environment and Public Works

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by Karen Peters, Director

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Introduction

Mr. Chairman, members of the Committee, my name is Karen Peters; I am the Director of the Arizona Department of Environmental Quality, appointed by Governor Katie Hobbs. I welcome the opportunity to testify today on EPA's newly-adopted Good Neighbor Plan for the 2015 ozone National Ambient Air Quality Standards (NAAQS) and thank the Committee for its invitation.

The Clean Air Act requires states to submit a State Implementation Plan (SIP) that provides for implementation, maintenance, and enforcement of each primary or secondary NAAQS. A key provision of the Act, the "Good Neighbor" provision, requires that these SIPs ensure that emissions from sources within the state do not contribute significantly to nonattainment or interfere with maintenance of the NAAQS in other states.

As I'll explain, the ability of state and local governments to protect public health from the effects of ozone concentrations exceeding the NAAQS is limited. Programs, such as the Good Neighbor Plan that provide a mechanism to address pollution originating outside a state's boundaries, are therefore a crucial component of the effort to address ozone pollution.

Limited State Jurisdiction over Sources of Ozone Pollution

One factor that restricts a state's ability to address ozone pollution is the limit on state regulatory jurisdiction imposed by the Clean Air Act.

Ozone is produced by the chemical reaction of oxides of nitrogen (NO_x) and volatile organic compounds (VOC) in the presence of sunlight. In the Phoenix-Mesa ozone nonattainment area, motor vehicles and nonroad engines are responsible for approximately 50 percent of the local emissions of VOC and 90 percent of the local emissions of NO_x.¹

¹ 2020 Periodic Emissions Inventory for Ozone Precursors

As you are probably aware, states other than California are preempted by the Clean Air Act from adopting emission standards for new motor vehicles or new or existing nonroad engines.² Given these restrictions, Arizona has gone about as far as any state can in regulating emissions from mobile sources. The state was an early adopter of a vehicle inspection and maintenance (I/M) program to reduce emissions from existing motor vehicles.³ And in 1998, the state obtained a waiver from federal preemption for its clean burning gasoline program.⁴ We were fortunate to do so before 2005 amendments to the Clean Air Act sharply curtailed EPA's authority to grant waivers and made adoption of such programs all but impossible.⁵

Since the implementation of these measures, in order to address ground level ozone, Arizona and its local government partners have had to focus primarily on local industrial sources, but I think it's fair to say we've reached the point of diminishing returns.

The Phoenix-Mesa area has a long history with the ozone problem. The area was classified as a moderate nonattainment area for the 1-hour NAAQS after enactment of the Clean Air Act Amendments of 1990. The NAAQS, of course, has been amended three times since then in 1997, 2008, and 2015. Because an old NAAQS isn't revoked until it's attained, the area at one point found itself classified as serious for the 1-hour NAAQS and at the same time as moderate for the 1997 8-hour standard. The area later attained both those NAAQS but is currently a moderate nonattainment area for both the 2008 and 2015 ozone NAAQS.⁶

Every nonattainment designation and reclassification requires submission of a new nonattainment plan, and with the exception of a marginal area plan, every nonattainment plan must provide for emission reductions leading to attainment and for annual emission reductions until attainment is reached.⁷ Arizona has been through so many iterations of this process that there are very few, if any, remaining emission reductions available from the Phoenix-Mesa

<https://www.maricopa.gov/DocumentCenter/View/78701/2020-Periodic-Emissions-Inventory-for-Ozone-Precursors-PDF>

² Clean Air Act (CAA) § 209(a), (e); 42 U.S.C. § 7543(a), (e).

³ See 60 Fed. Reg. 22518, 22518-20 (May 8, 1995).

⁴ 63 Fed. Reg. 22518 (Feb. 10, 1998).

⁵ See CAA § 211(c)(4)(v); 42 U.S.C. § 7545(c)(4)(v), added by the Energy Policy Act of 2005, Pub. L. 109-58 § 1541(b), 119 Stat. 1107-08.

⁶ 40 C.F.R. § 81.303.

⁷ See, generally, CAA §§ 181, 182; 42 U.S.C. §§ 7511, 7511a.

industrial sector. Without continued action by EPA to achieve additional reductions from vehicles and nonroad engines, there is little chance Phoenix-Mesa will attain healthy air quality.

Out-of-State Sources

Another factor that restricts the ability of a state to attain the ozone NAAQS on its own is that ozone pollution is not just a local but also a regional and international phenomenon. Pollutants travel through the air, affecting areas far from the source. Recognition of this fact lies at the heart of the Good Neighbor provision.

In the Phoenix-Mesa nonattainment area, for example, only 40 percent of ozone concentrations are attributable to in-state anthropogenic sources of VOC and NOx. About 6 percent is attributable to anthropogenic sources in neighboring states, and about 2 percent to sources in Mexico. The remainder is attributable to natural background and other international and interstate sources.⁸

These circumstances will make it extremely difficult, if not impossible, to achieve the ozone NAAQS in the Phoenix-Mesa area without programs such as the Good Neighbor Plan; but the situation is even more dire in Yuma, Arizona, a city in southwestern Arizona near the California border with a population of less than 100,000 people.

Yuma was designated a nonattainment area for the 2015 ozone NAAQS in 2018 and classified as marginal. *Statewide* emissions account for only ten percent of ozone concentrations in Yuma. Local emissions of NOx and VOC are negligible. Yuma is heavily impacted by ozone transport from California and Mexico.⁹ There is virtually nothing that can be done in terms of local emission reductions to reduce ozone pollution in the Yuma nonattainment area. Yet the enhanced controls that come with nonattainment status apply, likely limiting opportunities for economic growth.

If the ozone standard is again revised downward, other areas of Arizona, including rural areas, would likely find themselves in Yuma's predicament. The design value, which is the average of monitored values used to determine compliance with the NAAQS, for the Arizona monitors

⁸ R. Nsanzineza, Phoenix Ozone Source Apportionment, slides 5-7 (presentation on results of ADEQ Air Quality Division modeling study).

⁹ *Id.*

located to measure background ozone, is only 3 to 8 parts per billion below the current 70 parts per billion NAAQS.¹⁰ The margin for compliance is slim throughout our state.

Fortunately, Yuma monitors showed attainment with the 2015 standard by the marginal area deadline in 2021. But the modeling included in the Good Neighbor Plan shows that the upwind regional reductions included in the plan are the key to keeping the area from falling back into nonattainment in the future.¹¹

Conclusion

Since its inception, the Clean Air Act has appropriately recognized the primary responsibility of state and local governments for improving air quality, and we happily accept this responsibility in Arizona. I hope, however, that my brief presentation today has made it clear that federal programs, such as the Good Neighbor Plan, are also essential to achieving healthy air quality.

I would be happy to answer any questions.

¹⁰EPA, [Final GNP O3 DVs Contributions.xlsx](#) (data for Chiricahua National Monument, Petrified Forest, Alamo Lake, and Grand Canyon monitors on “2021 & 2022 DVs & 4th Highs” worksheet).

¹¹ Id. (data showing projected 2023 Yuma design values and contributions from other states on “2023gf Ozone Contributions” and “2026gf Ozone Contributions” worksheets).