

Background Paper on Expected New Ozone Regulations

Issue

- The Environmental Protection Agency (EPA) is considering whether to lower the current 75 parts per billion (ppb) National Ambient Air Quality Standard (NAAQS) for ozone, which was established in 2008, to a level within the range of 65 – 70 ppb. Pursuant to a court-ordered deadline, EPA is obligated to issue a final rule by October 1, 2015.
- Atmospheric ozone is not a pollutant directly emitted into the air; rather, it is the product of chemical reactions among nitrogen oxides, volatile organic compounds, carbon monoxide and methane. Sunlight and hot weather accelerate the formation of ozone, thus it is principally a summertime air pollutant. There are also natural sources of ozone, including from vegetation, microbes, animals, forest fires and lightning.
- U.S. ground-level ozone levels are also affected by international transport of ozone from Asia and by intrusions of stratospheric ozone into the troposphere.
- In setting the ozone standard, EPA is to establish a level “requisite to protect the public health” with an “adequate margin of safety.” Costs or attainability are not taken into consideration in setting the health-based NAAQS. EPA’s Clean Air Scientific Advisory Committee (CASAC) has recommended that EPA set the standard somewhere between 60 and 70 ppb.
- Ozone precursor pollutants have been regulated since the Clean Air Act was passed in 1970. As a consequence, ozone levels have declined in many parts of the country (national average ozone levels are 67 ppb) to near natural background levels. As we approach natural background levels, meeting a lower standard increasingly will be difficult, if not impossible, for many areas of the country. If areas do not meet the standard, they are designated by EPA as “nonattainment” areas.
- The consequences of nonattainment designation are not to be taken lightly. Nonattainment brings with it retrofit requirements for existing sources, lowest achievable emissions rate technology (regardless of cost) for new or modified existing sources, the need to offset increased emissions by more than one-to-one, additional permitting burdens, and transportation consistency requirements.
- Nonattainment designation acts as a brake on economic development. Today, more than one-third of the U.S. population lives in areas that do not meet the 2008 75 ppb standard, and approximately 100 million people live in areas that do not meet the 1997 standard of 84 ppb.

Key Points

- New scientific evidence since EPA's last review of the ozone standard does not support a change in the existing standard. Given the significance of setting a new lower NAAQS, multiple clinical studies showing statistically- significant adverse effects are needed to justify changing the current standard. EPA placed no such evidence in the record. While CASAC has recommended a lower standard, Roger O. McClellan, former chairman of CASAC, has submitted comments for the record stressing that "the promulgation of a final NAAQS for ozone will involve a set of policy judgments that can only be made by the EPA Administrator. The available scientific information does not preclude those policy judgments resulting in reaffirmation of the 2008 Standard which has not yet been formally implemented."
- We are reaching a tipping point at which further reductions in ozone levels in many parts of the country will become impossible to achieve, even after costly reductions in ozone precursor emissions.
- By lowering the ozone standard to levels at or near background, EPA will require many local communities to achieve the unachievable — at any and all cost and using non-existent, "unknown controls." If these "unknown controls" fail to materialize on the modeled path, or if an area's background ozone contribution is already at the standard, a large part of the predicted health benefits will be illusory.
- While EPA acknowledges the issues presented with stratospheric-to-tropospheric intrusions, Asia transport and natural background, it has proposed no solutions to these very real problems that will prevent many areas from meeting a lower standard. Until there is a satisfactory resolution of these issues, lowering the standard will mean more nonattainment designations with the attendant economic consequences and no real improvement in air quality. The structure of the Clean Air Act makes it vitally important that these issues be addressed before standards are set, not when a lower standard is implemented and many consequences of nonattainment cannot be avoided.
- EPA has not fully implemented the 2008 standards. It makes little sense to lower the ozone NAAQS before the current standard has been implemented. States and industry could find themselves in the untenable position of working toward attaining both the 2008 standard and an even tighter standard at virtually the same time.

Business Roundtable Recommendations

1. Maintain the current 75 ppb standard and focus resources on achieving more widespread attainment with that standard;
2. Provide states with the maximum flexibility possible under the Clean Air Act to address unique regional circumstances; and
3. Consider modifications to the Clean Air Act to lengthen the five-year review schedule to a more realistic 10 or more years, and allow the consideration of costs and feasibility in setting standards that rapidly approach background levels.