

U.S. EPA: We Need Tougher Ozone Standards

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On November 25, 2014, the U.S. Environmental Protection Agency (EPA) published its Proposal to Update the Air Quality Standards for Ground-Level Ozone, a very significant rule that would tighten the air quality control standard for ozone at ground level. In practical terms, this means that users or emitters of any volatile organic compounds (VOCs) (e.g. coating solvents, cleaning solvents, gasoline exhaust etc.) and owners of processes that produce nitrogen oxides (NOx) (e.g. fossil fuel combustion processes for automobiles, heating and electricity production) will have to significantly reduce emissions in coming years. The proposal has the potential to impede or even prohibit future new plant construction in nonattainment areas of the United States, which likely will be most of the country in the early years of implementation after about 2018.

The current ground level ozone standard is still undergoing implementation efforts in several locations nationwide. The proposal would change both the primary and secondary ozone standards. The present primary National Ambient Air Quality Standard requires that a 75 parts per billion (ppb) level measured over eight hours be maintained in a given area based on the fourth highest readings in a given year over a three-year averaging period. The proposal would lower the National Ambient Air Quality Standards (NAAQS) for ozone to a range of 65 to 70 ppb. But it also invites commenters to justify going to a 60 ppb standard. Ozone is rarely directly emitted into the atmosphere from human endeavors. VOCs and NOx are precursors of ozone, which is formed in atmospheric reactions with sunlight generally in warmer months of the year.

In an op-ed published November 26, 2014 on CNN.com, [EPA Administrator Gina McCarthy called for these new ozone air quality standards based on the latest science](#). She stated that reliance on this science is required by Clean Air Act provisions:

That's why the Clean Air Act requires EPA to update air quality standards every five years, to ensure standards "protect public health with an adequate margin of safety" based on the latest scientific evidence.

So today, following science and the law, I am proposing to update national ozone pollution standards to clean up our air, improve access to crucial air quality information, and protect those most at-risk — our children, our elderly, and people already suffering from lung diseases like asthma.

The EPA's new proposal is more than 600 double-spaced pages and accompanied by a supporting document of about the same length, with numerous references to other studies and materials. It will soon appear in the Federal Register and public comments will be taken at least until 90 days after the Federal Register publication. The rule is slated for adoption by October 1, 2015. If that deadline is met, it would trigger a process of several years duration in which the EPA and the states work on designating areas in need of control and developing state-sponsored strategies for attainment.

Industrial and other trade groups have been quick to caution that the proposed changes could not practically be attained, and that in some areas the rule proposed would require air quality that is at or below natural background levels.

Issues include what reliable science says, what protecting public health means, and whether any cost-benefit analysis or reasonable attainment scenario is required or allowed under the Clean Air Act.

We suggest that people need to understand the very tiny percentage of the atmosphere that is under regulation and the level of uncertainties on medical/social/economic judgment here. A current air quality level of 75 ppb means that ozone must comprise no more than 7.5-millionths of one percent of the atmosphere over a given measuring/averaging period. The EPA is asserting that there would be billions of dollars of additional health benefits to the nation by reducing this amount further by one-millionth of one percent. The agency asserts that the cost of compliance will be outweighed three-to-one by benefits.

Given the breadth and type of judgment calls that are involved in assertions and calculations of health and welfare impacts at such miniscule concentration levels, it is little wonder that representatives of science policy organizations and energy and manufacturing firms are going to be highly critical of this proposal. The science itself will be challenged. Some critics indicate that the EPA's conclusions are drawn from error-ridden studies and, for example, that it is nonsensical to believe a miniscule reduction of 5 – 10 ppb ozone in the ambient air we breathe can yield a scientifically reliable public health effects prediction.

The EPA generally takes the position that the Clean Air Act prohibits it from cost-benefit analysis as the basis of making air quality rules. However, the agency is supposed to analyze the benefits and costs of any major rule under provisions of the act that direct consultations with an independent science board, requirements of executive orders, and according to guidelines from the White House Office of Management and Budget. Members of Congress have written the EPA indicating that it is flaunting its responsibility to hear the views of truly independent scientists, because EPA's science advisory board consists almost entirely of federal employees.

Benefits projected by the EPA for the proposal vary with the stringency of the actual rule adopted, with a 65 ppb rule alleged to create \$6 billion – \$25 billion more benefits than a 70 ppb rule. The health benefit claimed for the 49 states other than California is between \$6.4 and \$38 billion dollars annually compared to present rules.

The EPA's breakdown of alleged benefits includes prevention of:

- 750 – 4,300 premature deaths

- 320,000 – 960,000 asthma attacks among children
- 330,000 – 1 million days when children miss school
- 65,000 – 180,000 missed work days
- 1,400 – 4,300 asthma-related emergency room visits
- 790 – 2,300 cases of acute bronchitis among children

The Clean Air Act directs that the EPA adopt “*ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health.*” These phrases in the law that was passed in 1970 are certain to bear serious re-examination as the process of comment, review and eventual adoption and judicial challenge moves forward.

In contrast to the benefits claimed, a study commissioned by the National Association of Manufacturers (NAM) estimates that the tightest form of the new proposal (a 60 ppb standard) would cost the economy \$270 billion dollars per year from 2018 onward. The study indicates that great stress would occur on all combustion sources due to the production of NOx:

Despite the extensive controls already expected to occur through 2018 from other regulations and measures, another 3.9 million tons [of NOx reduction] would need to be reduced to achieve a 60 ppb ozone standard nationally. This reduction is equivalent to about 40 percent of the EPA's baseline NOx emissions for 2018, a 55 percent reduction from current NOx emissions levels and a 77 percent reduction from 1990. Accounting for the effects of economic growth on emissions, this represents a 90 percent reduction in the emission rate.

In addition to pressure on existing sources, given the expectation of vast areas of the country being in nonattainment, there is significant fear that major new plant construction will be slowed or stopped, due to strict permitting requirements in all nonattainment areas. The NAM also fears that reductions in emissions due to other regulations that the EPA claims will occur are unlikely to happen to the degree that the agency projects, thus making eventual attainment doubtful.

Hinshaw & Culbertson LLP provides environmental law counseling to its clients. The firm includes attorneys with years of experience in air emission regulations and permitting under the complex provisions of the Clean Air Act and its interrelationship with state regulatory efforts. We are counseling clients to take this proposed rule seriously and determine whether its intended further restriction of ground level ozone by one-millionth of a percentage point makes sense for their and the community's future, particularly if they rely on fuel combustion or solvents for their operations.

This alert has been prepared by Hinshaw & Culbertson LLP to provide information on recent legal developments of interest to our readers. It is not intended to provide legal advice for a specific situation or to create an attorney-client relationship.

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