

EPA'S PROPOSED OZONE STANDARDS

EPA is currently in the process of reviewing the 2008 National Ambient Air Quality Standards (NAAQS) for ozone, in accordance with the Clean Air Act mandate for reviewing the rule every five years. A new proposed rule resulting from this review is expected to be released in the latter half of 2013, followed by the adoption of a final rule in late 2014. The current review process will take into account recent technical and scientific documents pertaining to health risks and ozone levels that were not considered in the 2008 rulemaking. It is expected that the level of the 8-hour ozone standard may be decreased from its current level of 0.075 parts per million (ppm) to a level between 0.060 and 0.070 ppm in the new rule. With the review process ongoing, EPA is concurrently working to implement the 0.075 standard that became effective with the 2008 ozone rule.

Industries and Transportation Affected by the Ozone Rule

Volatile organic compounds (VOCs) and nitrogen oxides (NO_x) combine with sunlight in the atmosphere to create ozone. Thus, companies that shape, paint or coat metals; that print, coat or dye anything from fabrics to packaging and advertising materials; or that make or use paints, solvents, inks, degreasers or plastics (and hence emit VOCs) are affected by ozone regulations. Public transportation (cars and buses) and companies that have on-site boilers or furnaces (and hence emit NO_x) are also likely to be affected.

EPA estimates that the costs for industry to implement the 0.075 ppm standard from the 2008 NAAQS rule would range from a low of \$7.6 billion to a high of \$8.8 billion annually in 2020. Estimated costs for the expected new rule in 2014 range from \$19 billion annually (corresponding to a 0.070 ppm standard) to \$90 billion annually (corresponding to a 0.060 ppm standard).

Consequences of Nonattainment Status

Businesses and local governments located in a county or region that does not meet ozone standards and is designated as a "nonattainment area" face several consequences. First, as soon as nonattainment status is determined, it will become very difficult in those areas for printing and packaging companies, manufacturers and others to obtain a permit to either modify an existing facility or to build a new facility in a way that increases the emissions of any pollutant because the area itself is not attaining the new standard. Second, affected manufacturers and others in nonattainment areas will over time have to implement stringent VOC and NO_x containment and destruction technologies or make significant process changes to reduce emissions. Finally, some

counties and regions will be forced to impose transportation restrictions because NO_x is a by-product of combustion and is emitted from cars and buses.

EPA anticipates that certain available control technologies may be employed to satisfy new emission requirements. For example, manufacturing facilities may try to control VOC emissions by installing incinerators to destroy organics. Printing facilities may operate “permanent total enclosures” intended to capture 100% of VOC emissions coupled with incinerators to destroy the captured emissions. EPA admits that permanent total enclosures would raise OSHA issues regarding worker safety. In order to adequately reduce VOC emissions, companies that paint or coat surfaces would potentially have to switch to ultra low solvent or powder based paints. With respect to NO_x, the technologies EPA expects industry to use include catalytic converters (which can be expensive to install and operate) and low NO_x burners coupled with flue gas recirculation or selective catalytic reduction. For NO_x non-attainment counties, transportation restrictions would also have to be implemented.

Implementation of the 2008 Ozone Standards

On December 9, 2011, EPA issued “120-day letters”¹ to states and tribes indicating which areas it anticipates designating as nonattainment areas based on the 2008 ozone standards, based on recommendations from the states and tribes. EPA revised its responses to recommendations from Illinois, Indiana, and Wisconsin based on updated ozone air quality data submitted by Illinois. Based on the updated data and recommendations, EPA anticipates for now designating 44 areas in 26 states and the District of Columbia as nonattainment areas, affecting 210 counties and 31 partial counties. EPA plans to make final designations in spring 2012.

On February 14, 2012, EPA published a proposed rule establishing a method for classifying ozone nonattainment areas—those areas that do not meet the 2008 standards. A second proposal guiding implementation of the 2008 rule is expected to follow. For the purposes of discussion, the proposed rule assumes 52 hypothetical nonattainment areas where ozone levels exceed the 0.075 ppm standard based on data from 2008-2010 (the list contains considerably fewer nonattainment areas than the 2009 review). Of the 52 areas, 43 have been listed in the “Marginal” category, meaning that many of the mandatory measures of the 2008 standards under the Clean Air Act will not yet be required as the areas are expected to achieve attainment within three years. EPA also expects approximately half of the 52 areas to achieve attainment with the 2008 standards by 2015 as a result of the emission reducing rules already in place or in the process of being finalized (such as the Cross-State Air Pollution Rule and the MACT Standards for Boilers). The nine areas listed for now as “Moderate” and “Serious” include Sacramento Metro, Los Angeles – San Bernardino counties, Baltimore, Dallas – Fort Worth, and San Diego. These areas would have more time to achieve compliance with the standard due to the severity of their ozone concentrations.

¹ 120-day letters are required to be sent 120 days before final nonattainment designations are published if EPA has altered a state’s recommendation as to the attainment or nonattainment status of a particular area or county.

EPA is currently involved in litigation regarding timing of the nonattainment assignments that will likely alter the schedule outlined in 2008 for implementation of the rule. Additionally, nonattainment designations and deadlines will likely shift again based on the results of the ongoing review of the 2008 NAAQS, which is expected to be completed in mid-2014.

On April 4, 2012, EPA announced a new program called Ozone Advance², which encourages attainment areas that meet current ozone standards to develop local emission reduction strategies and programs for maintaining future compliance with these standards. Areas that have been designated as “nonattainment” areas for the 2008 ozone NAAQS standard are not eligible to participate. EPA encourages participating local governments, states, and tribes to achieve multi-pollutant reductions when possible (particularly with NO_x and PM emissions).³ Although areas participating in Ozone Advance are not precluded from being designated as “nonattainment” areas as a result of future ozone standards, EPA notes that the reductions these areas achieve through participation in the program will likely place them in a better position for achieving attainment. Hence, if EPA tightens ozone standards in the new rule scheduled to be proposed in late 2013 and promulgated in 2014, then areas that have implemented Ozone Advance programs will have at least partially progressed towards achieving the likely more stringent 2014 standards.

Regulatory Actions

The current 0.075 ppm limit was established in the 2008 final NAAQS rule promulgated under the Bush administration, which faced opposition from environmental groups including EPA’s Clean Air Scientific Advisory Committee (CASAC) for being too lenient with the standard. CASAC instead recommended a primary ozone standard in the range of 0.060 to 0.070 ppm as well as a separate, seasonally-adjusted secondary standard. In response to these concerns, EPA announced in September 2009 that it would reconsider the 2008 rule to ensure that it was scientifically validated and that it adequately protected public health and the environment.

As part of this reconsideration, EPA issued a proposed rule in January 2010 seeking to establish an 8-hour primary ozone standard between 0.060 and 0.070 ppm as well as a seasonal secondary standard to protect sensitive vegetation and ecosystems. A primary standard of 0.060 ppm would have put approximately 650 counties into nonattainment status and cost up to \$90 billion annually. After receiving comment on this proposal, EPA submitted a follow-up draft rule to the Office of Management and Budget in July 2011 that would have established a primary standard of 0.070 ppm, putting up to 515 counties into nonattainment status and costing between

² Ozone Advance is similar to EPA’s 2001 and 2006 Ozone Flex programs, but it differs in that it extends participation to more areas and includes simplified requirements for program participation.

³ EPA envisions that a program similar to Ozone Advance but focusing on PM emissions in near-nonattainment areas may follow soon.

\$19 and \$25 billion annually. However, on September 2, 2011, President Obama prevented the release of this draft rule in order to avoid regulatory burdens and uncertainty given the upcoming NAAQS review period in 2013, after which a new rule would likely be promulgated anyway.

On September 22, 2011, EPA Administrator Lisa Jackson announced to Congress that EPA would comply with the President's decision but that it would be implementing the 2008 NAAQS while the scheduled review process continued, thereby replacing the previous 1997 standard of 0.084 ppm with the 2008 standard of 0.075 ppm. This action was once again met with criticism and lawsuits from environmental groups that argued that this standard was not stringent enough. However, at this time, it is unlikely that any alternative standards could be adopted before the expected release of a new final rule after the conclusion of the current NAAQS review. The new more stringent standard of 0.060 ppm to 0.070 ppm is as noted above expected to be proposed in 2013 and adopted in 2014.