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January Sees Changes to EPA’s Particulate Standards

In response to a 2009 remand of the previous standard, on January 15, 2013, EPA finalized a revised, more-stringent National Ambient Air Quality Standard (NAAQS) for fine particulate matter (PM_{2.5}). In the same month, the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit or court) issued two rulings overturning portions of EPA’s implementation rules for previous standards. This brief provides an overview of these three actions and examines their implications.

Background

On February 24, 2009, the D.C. Circuit remanded the primary annual and secondary PM_{2.5} NAAQS promulgated by EPA in 2006. The court cited EPA’s inadequate explanations of how the 2006 annual standards were “sufficient to protect the public health while providing an adequate margin of safety.” Notably, the 2006 PM_{2.5} NAAQS were the first set outside the range recommended by the Clean Air Scientific Advisory Committee (CASAC). In response to the 2009 remand, on December 14, 2012, EPA released final revisions to the PM NAAQS.¹ Separately, on January 4, 2013, the D.C. Circuit remanded EPA’s PM implementation rules promulgated in 2007 and 2008, and on January 22, 2013, the court also remanded and vacated additional portions of the PM implementation regime with regard to Prevention of Significant Deterioration (PSD) permitting, promulgated in 2010.

The 2013 PM NAAQS

The final rule released on December 14, 2012, revises the annual primary standard to 12 µg/m³, within the range that CASAC advised the Agency to consider. EPA retained the current primary 24-hour PM_{2.5} and PM₁₀ standards as well as the current secondary PM_{2.5} standard, as outlined in the table below. The proposed secondary standard was based on the contribution of PM, especially fine particles, to visibility impairment. However, after considering public comments on the proposed rule and further analyzing air quality monitoring data, EPA concluded that the current secondary 24-hour PM_{2.5} standard of 35 µg/m³ will provide visibility protection that is equal to, or greater than, the proposal’s 30 deciviews target level of protection.

To address other non-visibility welfare effects including ecological effects, effects on materials, and climate impacts, EPA retained the current suite of secondary PM standards generally, but revised the form of the secondary annual PM_{2.5} standard to remove the option for spatial averaging consistent with the change to the primary annual PM_{2.5} standard.

	2006 NAAQS	2013 Final Rule
Annual Primary PM _{2.5}	15 micrograms per cubic meter (µg/m ³)	12 µg/m ³
24-Hour Primary PM _{2.5}	35 µg/m ³	<i>Retained</i>
24-Hour Primary PM ₁₀	150 µg/m ³	<i>Retained</i>
Secondary 24-Hour PM _{2.5} (Visibility)	n/a	<i>Proposed Standard Not Finalized</i>

¹ These were published in the Federal Register January 15, 2013, and will be effective March 18, 2013.

	2006 NAAQS	2013 Final Rule
Secondary PM _{2.5} (Other welfare effects)	15 µg/m ³ annually; 35 µg/m ³ over 24 hours	<i>Retained</i>
Secondary PM ₁₀	150 µg/m ³	<i>Retained</i>

D.C. Circuit Rules on Implementation Rules

On January 4, 2013, in *Natural Resources Defense Council v. EPA*, the D.C. Circuit remanded two rules constituting the implementation requirements for the PM_{2.5} NAAQS: Final Clean Air Fine Particle Implementation Rule (72 FR 20,586) and Implementation of the New Source Review Program for Particulate Matter Less Than 2.5 Micrometers (73 FR 28,321) (collectively, implementation rules). In particular, the Petitioners challenged EPA’s decision to promulgate the final rules under the general implementation provisions of Subpart 1 of Part D of Title I of the Clean Air Act, 42 U.S.C. §§ 7501-7509a (Subpart 1), rather than the PM-specific provisions of Subpart 4 of Part D of Title I, id. §§ 7513-7513b (Subpart 4).

The court agreed with the Petitioners and held that “EPA erred in applying the provisions of Subpart 1 rather than Subpart 4.” Thus, the court remanded the rule to EPA to re-promulgate the rules consistent with Subpart 4 (42 U.S.C. §§ 7513-7513b) of the Clean Air Act.

Part D of CAA Title I governs “Plan Requirements for Nonattainment Areas”, with Subpart 1 addressing “Nonattainment Areas in General.” Subparts 2 through 4 address additional provisions for ozone,² carbon monoxide, and PM. In particular, differences between the Subparts include classifications, treatment of precursors, reclassification requirements, extensions of attainment dates, and state implementation plan (SIP) requirements, including implementation of reasonably available control measures (RACM) and reasonably available control technology (RACT). The court reasoned that because the Act defines PM₁₀ to mean “particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers” (42 U.S.C. § 7602(t)), the Act’s references to PM₁₀ include PM_{2.5}. Thus, the court concluded that EPA must enforce the requirements of Subpart 4.

D.C. Circuit Rules on SMC, Punts on SIL

On January 22, 2012, the D.C. Circuit ruled in *Sierra Club v. EPA* that EPA’s rules governing Significant Impact Levels (SIL) and Significant Monitoring Concentrations (SMC) for determining PSD permitting requirements for new and modified sources of PM_{2.5} were inconsistent with the Clean Air Act. At issue before the court was EPA’s 2010 rule that established the SIL and SMC for PM_{2.5} (75 FR 64,864), which the Sierra Club challenged. In the 2010 rule, EPA noted that the SIL for PM_{2.5} reflected “the level of ambient impact below which the EPA considers a source to have an insignificant effect on ambient air quality.” However, during the litigation, EPA acknowledged that the SIL provisions, as finalized, were flawed. EPA explained in its brief that “the regulatory text it adopted does not allow permitting authorities the discretion to require a cumulative impact analysis, notwithstanding that the source’s impact is below the SIL, where there is information that shows the proposed source would lead to a violation of the NAAQS or increments.” In other words, it would be possible for a source to be below the SIL but still have a projected impact sufficient to cause a violation of the PM_{2.5} increment or NAAQS. Given that this was not EPA’s intent, EPA requested that the court vacate and remand the regulatory text at 40 CFR §§ 51.166(k)(2) and 52.21(k)(2), and the court agreed to do so.

The Sierra Club also requested that the court determine whether EPA has the authority to promulgate SILs, but the court concluded that it was not necessary to decide that question at this time. The court explains that “[i]f EPA promulgates new SIL provisions for PM_{2.5} and those provisions are challenged, we can then consider the lawfulness of

² The ozone standard underwent a similar process in the transition from the 1-hour standard: the court here notes that “In *Whitman*, the Supreme Court reviewed EPA’s decision to implement its ‘8-hour’ 0.08 ppm NAAQS for ozone—which replaced the previous 1-hour ozone standard of 0.12 ppm—under Subpart 1’s general nonattainment area provisions rather than under Subpart 2’s ozone-specific provisions added in 1990. ... The Court concluded that, in the main, the new ozone NAAQS should be implemented pursuant to Subpart 2 notwithstanding Subpart 2 was enacted to address the former 1-hour standard and some provisions might therefore be ‘ill fitted to implementation of the revised standard’ and thus leave ‘gaps’ for EPA to fill.”

those SIL provisions.” The court also rejects UARG’s argument to affirm the SIL provisions as well as UARG’s request that the court not vacate the SIL provisions.

With respect to the SMC, the Sierra Club argued that EPA does not have the *de minimis* authority to promulgate an SMC for PM_{2.5} that would exempt an owner of a proposed source or modification from undertaking the year-long pre-construction air quality monitoring required under §165(e)(2) of the Clean Air Act. EPA argued it had the authority to create the SMC, although the court disagreed. Thus, permit applicants will be required to provide one year of monitoring data, unless the permitting authority determines that less is appropriate. Specifically, §165(e) states that “[s]uch data shall be gathered over a period of one calendar year preceding the date of application for a permit under this part unless the State, in accordance with regulations promulgated by the [EPA], determines that a complete and adequate analysis for such purposes may be accomplished in a shorter period. The results of such analysis shall be available at the time of the public hearing on the application for such permit.”

Key Implications

Implementation of 2013 PM NAAQS

EPA will provide limited grandfathering from PSD/NSR requirements associated with the revised PM NAAQS for permit applications that the permitting agency has deemed complete prior to December 14, 2012, or for which the public notice for a draft permit or preliminary determination has been published prior to March 18, 2013, the date the revised PM standards become effective. All permit applications that do not meet these criteria will be subject to the new standards.

In the final rule, EPA anticipated that initial designations for the revised primary standards would be finalized in late 2014 and effective in 2015, establishing a 2018 SIP deadline and a 2020 attainment deadline for primary standards. However, EPA released this final rule prior to the D.C. Circuit’s January 4, 2013, decision remanding PM implementation rules, which may affect timing of designations and attainment deadlines. At the same time, EPA must begin to rewrite the implementation rules under the more-stringent CAA Title I Subpart 4 requirements, which will have implications for sources in states not in attainment with the 1997, 2006, and/or 2013 PM NAAQS.

Implementation of 1997 and 2006 PM NAAQS

The implementation rules were not vacated and will thus continue to govern implementation of the 1997 and 2006 NAAQS in areas not attaining these standards. However, the PM_{2.5} SMC was vacated and we may see challenges to any proposed project whose permit relies on them. Similarly, with the vacatur of the SIL, there is no effective SIL for PM_{2.5} until EPA rewrites the rule and, thus, proposed projects whose permits rely on the SIL with no further demonstrations should anticipate further scrutiny.

Implementation of Other NAAQS

As noted in above, the ozone standard underwent a similar process in the transition from the 1-hour standard in which EPA initially promulgated regulations under the more-general Subpart 1. Thus, the January 4, 2013, decision has limited precedence for implementation of the ozone NAAQS because the court has already ruled specifically on that pollutant. We would expect, however, that any future implementation rules for carbon monoxide would include the requirements of Subpart 3 as well as the general Subpart 1 requirements.

With regard to implications of the January 22, 2013, decision regarding SILs and SMCs for other pollutants, we expect that SILs for future NAAQS revisions would include similar caveats as EPA plans to add to the remanded PM SIL to ensure that permitting authorities retain discretion to require further analysis even if a proposed new or modified source would not exceed the SIL. With regard to SMCs, the January 22nd decision would appear to provide the basis for successfully challenging any future SMC EPA would establish, such as for the upcoming ozone revision. While challenges to existing SMCs may be time-barred, pending permits utilizing an SMC may be vulnerable to challenge. However, it is important to note that given the delays in implementing the 2008 ozone NAAQS, no SMC has yet been established for ozone and would now appear unlikely.

We expect EPA to issue guidance to regions and states regarding steps the Agency intends to take in light of the recent decisions. Companies with pending permits that rely on the PM_{2.5} SMC, SIL, or flexibilities of the Subpart 1 implementation regime should be in touch with the relevant permitting authority to determine specific project implications.

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