

phased in and is fully effective in 2007 (February 10, 2000, 65 FR 6697). This regulation will reduce the sulfur content of gasoline by approximately 90%.⁶ Second, in 2006 the low sulfur diesel program begins to be phased in and is fully effective by 2009 (January 18, 2001, 66 FR 5001). This regulation will reduce the sulfur content of diesel fuel by approximately 97% nationally.

Projections of on-road emissions of SO₂ in 2020 in the 372 potential PM_{2.5} nonattainment counties based on 1999–2001 air quality data indicates that on-road sources will be responsible for less than 1% of the total SO₂ emissions in 2020 in these counties.⁷ These projections confirm that the implementation of the fuel regulations discussed above will ensure that SO₂ emissions from on-road sources remain at insignificant levels.

NH₃ precursor emissions. EPA believes that both proposed options are appropriate and consistent with the statute by only requiring NH₃ conformity analyses if it is found significant in a given area. States and EPA should have a better understanding of the effect of NH₃ reductions on PM_{2.5} concentrations by 2007, when PM_{2.5} SIPs would be due. Based on the limited state of knowledge about on-road mobile source NH₃ contributions to PM_{2.5} and indications that such emissions may be small, EPA does not generally believe that any areas should be required to consider NH₃ in conformity before SIPs are submitted, unless the State or EPA determines that NH₃ emissions are significant.

First, the 2003 NARSTO–PM report states that in most areas, insufficient information exists at this time to predict how particle mass and composition would change in response to changing NH₃ emissions. In some areas, reductions in NH₃ could actually lead to formation of acid aerosols that could worsen air quality. Second, existing emissions data show that on-road sources are a relatively small contributor to national NH₃ emissions, approximately 5%. In addition, information on 1999 emissions indicates that about 17% of the NH₃ in the 372 potential PM_{2.5} nonattainment counties (based on 1999–2001 air quality data) comes from on-road sources. Although this information provides some

evidence that on-road NH₃ emissions can be important in some urban areas, this is likely due to urbanized counties having fewer agricultural and other NH₃ sources.

IX. Re-entrained Road Dust in PM_{2.5} Regional Emissions Analyses

A. Background

Fugitive dust is released into the atmosphere by the mechanical disturbance of granular material. Common sources of fugitive dust include agricultural operations, construction, and on-road motor vehicle activity. Motor vehicles produce direct particulate emissions of dust through resuspension of loose material on the road surface, also known as re-entrained road dust.

Re-entrained road dust can come from both paved and unpaved roads, including pavement wear and decomposition, atmospheric deposition onto the road surface, mud and dirt carry-out from off-road sites, and sand, salt, and other materials applied for ice or skid control. In the preamble to the 1993 final conformity rule, EPA identified re-entrained road dust as a potential on-road mobile source contributor to some local PM₁₀ nonattainment problems. EPA stated, “All highway and transit related source categories that contribute to the nonattainment problem should be identified and included in the motor vehicle emissions budget, including exhaust, evaporative, and re-entrained dust emissions (including emissions from antiskid and deicing materials, where treated as mobile source emissions by the SIP).” (November 24, 1993, 58 FR 62194)

B. What Are We Proposing?

This part of the proposal addresses when direct PM_{2.5} from re-entrained road dust would be included in conformity analyses in PM_{2.5} nonattainment and maintenance areas. Once a PM_{2.5} SIP is submitted, re-entrained road dust would be included in regional emissions analyses if road dust is considered significant in the context of the SIP’s air quality modeling and included in an adequate or approved PM_{2.5} motor vehicle emissions budget. EPA would consider the significance of road dust in its adequacy review or approval of a submitted PM_{2.5} SIP. The following two options address road dust emissions in the time period before adequate or approved PM_{2.5} SIP budgets are established.

The first option would require that, prior to adequate or approved PM_{2.5} SIP budgets, re-entrained road dust would

only be included in regional emissions analyses if the State air quality agency or EPA Regional Administrator determines that re-entrained road dust *is a significant contributor* to the PM_{2.5} regional air quality problem. In other words, PM_{2.5} areas could presume that re-entrained road dust is not a significant contributor and not include road dust in PM_{2.5} transportation conformity analyses prior to the SIP, unless the State or EPA finds road dust significant. The proposed regulatory text for this option can be found in § 93.102(b)(3).

EPA requests comment on whether the first proposed option should be modified to require certain PM_{2.5} areas that are also PM₁₀ areas to include road dust in PM_{2.5} conformity analyses, if road dust is currently included in PM₁₀ conformity analyses. Such a caveat would result in a limited number of PM_{2.5} areas including road dust in all PM_{2.5} conformity analyses prior to a PM_{2.5} SIP, unless the State or EPA found that road dust is not a significant contributor to the regional air quality problem. This proposal does not affect how re-entrained road dust is addressed in conformity for the PM₁₀ standard.

The second proposed option would require that re-entrained road dust be included in conformity analyses in all PM_{2.5} nonattainment areas prior to adequate or approved PM_{2.5} SIP budgets, unless the State air quality agency or EPA Regional Administrator determines that re-entrained road dust *is not a significant contributor* to the regional air quality problem. For this option, MPOs and DOT would document in their conformity determinations that regional emissions analyses for direct PM_{2.5} do not include road dust emissions when EPA or the State has determined that such emissions are insignificant.⁸

An EPA or State air agency finding of significant or insignificant re-entrained road dust emissions (a “significance finding”) would be based on a case-by-case review of the following factors for either proposed option: the contribution of road dust to current and future PM_{2.5} nonattainment; an area’s current design value for the PM_{2.5} standard; whether control of road dust appears necessary to reach attainment; and whether increases in re-entrained dust emissions may interfere with attainment. Such a review would include consideration of local air quality data and/or air quality modeling results. Today’s proposed options for PM_{2.5} road dust are consistent with EPA’s existing

⁶ In addition, California has adopted its own rule which addresses the sulfur content of gasoline in that State. California’s regulation is similar in stringency to the federal regulation.

⁷ EPA 420–R–00–020, October 2002, “Procedures for Developing Base Year and Future Year Mass and Modeling Inventories for the Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel (HDD) Rulemaking.”

⁸ The public would be notified when road dust is considered insignificant through the documentation in a conformity determination for this option.