

EPA Releases “SmartWay SIP and Transportation Conformity Guidance: Accounting for NO_x Reductions from Trailer Aerodynamic Kits and Low-Rolling Resistance Tires”

The U.S. Environmental Protection Agency (EPA) developed the SmartWay Transport Partnership to reduce greenhouse-gas emissions and air pollution from the ground freight-transport industry, including long-haul diesel trucks. EPA has developed a guidance document that describes how to quantify and use reductions in nitrogen oxides (NO_x) that result when trucks are outfitted with two specific SmartWay fuel-efficient technologies: trailer aerodynamic kits and low-rolling resistance tires.

EPA wants to encourage the adoption of SmartWay projects as a cost-effective way to achieve NO_x emission reductions needed for state air-quality plans (i.e., state implementation plans known as “SIPs”) and transportation conformity determinations.

How can SmartWay projects help in air-quality planning?

Because SmartWay aerodynamic kits and low-rolling resistance tires reduce air pollution from trucks, these reductions can be quantified and used to help demonstrate achievement of air-quality goals in a SIP or in a transportation conformity determination. Therefore, this guidance is of interest primarily to ozone and particulate matter (PM_{2.5} and PM₁₀) nonattainment and maintenance areas who are considering additional ways to reduce NO_x for reasonable further progress SIPs, attainment demonstrations, maintenance plans, or in transportation conformity determinations.

A SmartWay project under this guidance may be part of a larger effort to provide incentives for private and public agencies or truck owners to apply “SmartWay

Upgrade Kits” to a truck or fleet of trucks. The document released today provides the remaining guidance needed for agencies to quantify and use the NO_x reductions from SmartWay Upgrade Kits in SIPs and conformity. Additional general information about the SmartWay Transport Partnership, including the upgrade kits, can be found at: www.epa.gov/smartway/swresources.htm.

How are SmartWay trailer aerodynamic kits and low-rolling resistance tires quantified for SIPs and transportation conformity determinations?

For states other than California, EPA recommends the use of the National Mobile Inventory Model to estimate emission reductions from SmartWay aerodynamic kits and low-rolling resistance tires for SIPs and for transportation conformity analyses. The model estimates the impact of these technologies for the particular years to which they apply under local conditions. Due to the nature of the aerodynamic kits and low-rolling resistance tires, emission reductions from them will vary based on the average speed of the vehicles. See Chapter 2 of the guidance for more information.

State and local agencies developing SIPs and conformity analyses for California should consult with EPA Region 9 for information on the current version of the emissions factor model approved for use in California and for information on how to apply Chapter 2 of this guidance with California’s model.

What are the basic requirements for using NO_x reductions from aerodynamic kits and low-rolling resistance tires in SIPs?

Chapter 3 of the guidance explains the basic requirements that all control measures must meet to be included in a SIP. Emission reductions must be quantifiable, surplus, enforceable, permanent, and adequately supported. These requirements can be met with aerodynamic trailer kits and low-rolling resistance tires.

Can these SmartWay technologies be included in a SIP under the Voluntary Measures policy guidance?

Yes. If emission reductions from these technologies are approved into the SIP under EPA’s Voluntary Measures policy guidance, the state is responsible for assuring that the reductions credited in the SIP occur. The state would need to make an enforceable SIP commitment to monitor, assess, and report on the emission reductions resulting from the voluntary measure, and to remedy any shortfalls from forecasted emission reductions in a timely manner. See Chapter 3 of the guidance for more information.

How can NO_x reductions from aerodynamic kits and low-rolling resistance tires be included in transportation conformity?

Chapter 4 of the guidance covers this question in detail. Retrofits of highway vehicles (such as buses and trucks) can be included in transportation conformity determinations without a SIP revision by meeting the requirements in the conformity regulation at 40 CFR 93.122(a).

For More Information:

- You can access the guidance at www.epa.gov/otaq/stateresources/transconf/policy.htm
- For more information about the SmartWay Transport program, visit: www.epa.gov/smartway or contact Cheryl Bynum of EPA's Office of Transportation and Air Quality at 734-214-4844 or bynum.cheryl@epa.gov.
- For technical questions regarding the use of the National Mobile Inventory Model for calculating emission reductions from aerodynamic kits and low-rolling resistance tires, please e-mail mobile@epa.gov.
- For general questions concerning the use of NO_x reductions from aerodynamic kits and low-rolling resistance tires in SIPs or in transportation conformity, please contact Laura Berry of EPA's Office of Transportation and Air Quality at 734-214-4858 or berry.laura@epa.gov or Gary Dolce (also of OTAQ) at 734-214-4414 or dolce.gary@epa.gov.