

ITEM 8 - Action

June 15, 2005

Briefing on the Transportation Conformity Rule Amendments for the new PM2.5 National Ambient Air Quality Standard and Release for Public Comment of the Draft Scope of Work for Conducting the PM2.5 Conformity Analysis of the 2005 CLRP and FY 2006-2011 TIP

Staff

Recommendation: Receive briefing on final PM2.5 regulations and release for public comment the draft scope of work for conducting the PM2.5 conformity analysis of the 2005 CLRP and FY 2006-2011 TIP.

Issues: None

Background: The final Transportation Conformity Rule Amendments for the New PM2.5 National Ambient Air Quality Standard were released by the Environmental Protection Agency (EPA) on May 6.



MEMORANDUM

District of Columbia

Bowie

College Park

Frederick County

Gaithersburg

Greenbelt

Montgomery County

Prince George's County

Rockville

Takoma Park

Alexandria

Arlington County

Fairfax

Fairfax County

Falls Church

Loudoun County


Manassas

Manassas Park

Prince William County

June 8, 2005

To: Transportation Planning Board

From: Michael J. Clifford 
Systems Planning Applications DirectorSubject: Scope of Work (Attachment A) for the Fine Particles Standards
Supplemental Air Quality Conformity Assessment of the 2005 Constrained
Long Range Plan (CLRP) and the FY2006-2011 Transportation
Improvement Program (TIP)**Introduction**

In December 2004 EPA designated the Washington, DC-MD-VA area as nonattainment for fine particles (particulate matter less than or equal to 2.5 micrometers in diameter, called PM_{2.5}). Attachment B contains EPA's *Fact Sheet* and *Press Release* on the subject, which provide an overview of their action. These designations became effective on April 5, 2005. Nonattainment areas are required by early 2008 to submit to EPA a state air quality implementation plan (SIP) to define the expected methods for reducing the fine particulate matter level in the air and emissions of PM_{2.5} precursors. However, the new standards affect transportation conformity planning requirements immediately: areas have a 1-year grace period which start April 5, 2005 in which to demonstrate conformity of transportation plans and programs to the new standards. If a plan and TIP which conform to the new standards are not in place (including both TPB and federal approvals) by April 6, 2006, the conformity status lapses. Since work is currently underway to assess the 2005 CLRP and FY2006-2011 TIP with respect to ozone and Winter carbon monoxide, staff drafted the attached work scope to address the PM_{2.5} requirements as a supplement to the ongoing work efforts.

Transportation Conformity PM_{2.5} Regulations

Transportation conformity requirements for PM_{2.5} address directly emitted particles as well as precursor emissions. EPA issued its first set of transportation conformity regulations for PM_{2.5} in the July 1, 2004 Federal Register (excerpts are contained in Attachment C). That rule established the overall context and evaluation requirements for only directly emitted PM_{2.5} particles. EPA issued its second set of PM_{2.5} regulations in the May 6, 2005 Federal Register (see Attachment D for EPA's associated *Regulatory Announcement*); these conformity rule amendments addressed the PM_{2.5} precursor requirements.

Scope of Work

With the federal requirements completely issued, staff proceeded to draft a scope of work for the conformity assessment. The attached scope presents an outline of the work tasks required to address transportation conformity for the fine particles standards. The schedule of work activities contained in the work scope is designed to ensure that all requirements are addressed, including both TPB and federal approvals, in a time frame to avoid a conformity lapse.

Next Steps

Staff recommends that at the June 15, 2005 Board meeting the TPB release this scope of work for 30 day public comment and interagency consultation.

Attachments A - D

**DRAFT
5-31-05****FINE PARTICLES (PM_{2.5}) STANDARDS
AIR QUALITY CONFORMITY ASSESSMENT****SCOPE OF WORK****Supplement to the Air Quality Conformity Assessment
of the 2005 Constrained Long Range Plan Amendments and
FY2006-2011 Transportation Improvement Program****I. INTRODUCTION**

On December 17, 2004 the Environmental Protection Agency (EPA) designated 224 counties, as well as the District of Columbia, that exceeded the health-based standards for fine particles (PM_{2.5}) as nonattainment areas. PM_{2.5} standards refer to particulate matter less than or equal to 2.5 micrometers in diameter. The Washington, DC-MD-VA area (consisting of the Washington metropolitan statistical area, excluding Stafford County, Virginia, and Calvert County, Maryland) was designated nonattainment for PM_{2.5} and is required to attain clean air as soon as possible but no later than 2010.

As published in the January 5, 2005 Federal Register, these PM_{2.5} nonattainment designations became effective on April 5, 2005. Nonattainment areas are required by early 2008 to submit to EPA a state implementation plan (SIP) to define the expected methods for reducing the fine particulate matter level in the air and emissions of PM_{2.5} precursors. However, the new standards affect transportation conformity planning requirements immediately: areas have a one year grace period starting April 5, 2005 in which to demonstrate conformity of transportation plans and programs to the new standards. If a plan and TIP which conform to the new standards are not in place (including both TPB and federal approvals) by April 6, 2006, the conformity status lapses.

This scope of work presents an outline of the work tasks, including preparation of both direct particles and precursors, to address the conformity requirements of the fine particles standards. It supplements the ongoing TPB work activities directed at the 8-hour ozone and Winter carbon monoxide (CO) standards, to ensure that all requirements are addressed in performing the Air Quality Conformity Assessment of the 2005 CLRP and FY2006-2011 TIP.

II. REQUIREMENTS AND APPROACH

A. Criteria (See Exhibit 1)

As described in the 1990 Clean Air Act Amendments, conformity is demonstrated if transportation plans and programs:

1. Are consistent with most recent estimates of mobile source emissions,
2. Provide expeditious implementation of TCMs, and
3. Contribute to annual emissions reductions.

B. Approach

1. Analytical: The analytical approach outlined here supplements the current conformity assessment efforts underway to analyze the 2005 CLRP and FY2006-2011 TIP with respect to 8-hour ozone and Winter CO standards. Specifically, travel demand estimates for each analysis year being prepared as part of that work will be utilized in conjunction with the development and application of PM_{2.5} emissions rates to yield required PM_{2.5} emissions levels. (I.E. Round 7 Cooperative Forecasts, and all network inputs and technical methods approved by the TPB at its April 20, 2005 meeting, are therefore relevant to this PM_{2.5} analysis.) Emissions will be inventoried for yearly totals instead of on a daily basis.
2. Evaluation: Criteria and procedures for demonstrating conformity with respect to PM_{2.5} in the interim period before state implementation plans (SIPs) are filed differ from ozone or wintertime carbon monoxide assessments in that there are no existing budgets which can be applied. In a case such as this EPA provides two options for regional emissions analysis to be used until motor vehicle emissions budgets are established in the SIP. For both PM_{2.5} directly emitted particles and precursors, one of the following requirements must be met:

Option 1. "The emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario, and this can be reasonably expected to be true in the periods between the analysis years; or

Option 2. "The emissions predicted in the "Action" scenario are not greater than 2002 emissions."

A SIP has not yet been prepared to inventory point, area and mobile categories to define the extent of the problem by source in the Washington area. However, since base year 2002 on-road mobile source direct and precursor PM_{2.5} emissions are necessary for the SIP, it is recommended that option 2, reductions from the base 2002 inventory, be utilized as the relevant regional emissions test for conformity. The MOBILE6.2 model will be used to generate emissions factors for PM_{2.5} direct particles and NO_x precursors.

III. CONSULTATION

1. Execute TPB consultation procedures as outlined in the consultation procedures report adopted by the TPB on May 20, 1998.
2. Participate in meetings of MWAQC, its Technical Advisory Committee and its Conformity Subcommittee to discuss the scope of work activities, TERM development process, and other elements as needed; discuss at TPB meetings or forums, as needed, the following milestones:
 - Project solicitation
 - Scope of work
 - TERM proposals
 - Project submissions: documentation and comments
 - Analysis of TERMS, list of mitigation measures
 - Conformity assessment: documentation and comments
 - Process: comments and responses

IV. WORK TASKS

1. Prepare 2002 base conditions
 - Develop and apply Mobile6.2 emission factors for PM2.5 direct particles and NOx precursors
 - Calculate yearly (not daily) emissions for total PM2.5 and NOx precursors using latest seasonal traffic adjustments
2. Prepare 2010 emissions estimates
 - Develop and apply Mobile6.2 emission factors
 - Calculate emissions as above
3. Prepare 2020 emissions estimates
 - As in year 2010 tasks
4. Prepare 2030 emissions estimates
 - As in year 2010 tasks
5. Analyze results of above technical analysis

- Reductions from 2002 base
 - With review by the Travel Management Subcommittee, the Technical Committee and the TPB, identify and recommend additional measures should the plan or program fail the regional emissions test in any year and incorporate
6. Assess conformity and document results in a report
- Document methods
 - Draft conformity report
 - Forward to technical committees and policy committees
 - Make available for public and interagency consultation
 - Receive comments
 - Address comments and present to TPB for action
 - Finalize report and forward to FHWA and FTA

V. SCHEDULE

The schedule for the execution of these work activities is shown in Exhibit 2, attached. This schedule shows the adoption of the PM2.5 conformity determination by the TPB in October 2005, which allows sufficient time for distribution, review and final approval by federal agencies in order to meet the April 5, 2006 deadline for avoiding a conformity lapse.

Exhibit 1

Conformity Criteria

All Actions at all times:

Sec. 93.110	Latest planning assumptions.
Sec. 93.111	Latest emissions model.
Sec. 93.112	Consultation.

Transportation Plan:

Sec. 93.113(b)	TCMs.
Sec. 93.118 or Sec. 93.119	Emissions budget or Emission reduction.

TIP:

Sec. 93.113(c)	TCMs.
Sec. 93.118 or Sec. 93.119	Emissions budget or Emission reduction.

Project (From a Conforming Plan and TIP):

Sec. 93.114	Currently conforming plan and TIP.
Sec. 93.115	Project from a conforming plan and TIP.
Sec. 93.116	CO and PM10 hot spots.
Sec. 93.117	PM10 control measures.

Project (Not From a Conforming Plan and TIP):

Sec. 93.113(d)	TCMs.
Sec. 93.114	Currently conforming plan and TIP.
Sec. 93.116	CO and PM10 hot spots.
Sec. 93.117	PM10 control measures.
Sec. 93.119	Interim emissions in areas without motor vehicle emissions budgets

Sec. 93.110 Criteria and procedures: Latest planning assumptions.

The conformity determination must be based upon the most recent planning assumptions in force at the time of the conformity determination.

Sec. 93.111 Criteria and procedures: Latest emissions model.

The conformity determination must be based on the latest emission estimation model available.

Sec. 93.112 Criteria and procedures: Consultation.

Conformity must be determined according to the consultation procedures in this subpart and in the applicable implementation plan, and according to the public involvement procedures established in compliance with 23 CFR part 450.

Sec. 93.113 Criteria and procedures: Timely implementation of TCMs.

The transportation plan, TIP, or any FHWA/FTA project which is not from a conforming plan and TIP must provide for the timely implementation of TCMs from the applicable implementation plan.

Sec. 93.114 Criteria and procedures: Currently conforming transportation plan and TIP.

There must be a currently conforming transportation plan and currently conforming TIP at the time of project approval.

Sec. 93.115 Criteria and procedures: Projects from a plan and TIP.

The project must come from a conforming plan and program.

Sec. 93.116 Criteria and procedures: Localized CO and PM10 violations (hot spots).

The FHWA/FTA project must not cause or contribute to any new localized CO or PM10 violations or increase the frequency or severity of any existing CO or PM10 violations in CO and PM10 nonattainment and maintenance areas.

Sec. 93.117 Criteria and procedures: Compliance with PM10 control measures.

The FHWA/FTA project must comply with PM10 control measures in the applicable implementation plan.

Sec. 93.119 Criteria and procedures: Interim emissions in areas without motor vehicle budgets

The FHWA/FTA project must satisfy the interim emissions test(s).

NOTE: See EPA's May 6, 2005 conformity regulations for the full text associated with each section's requirements.

Exhibit 2

**PROPOSED PM2.5 STANDARD SUPPLEMENT TO THE YEAR
2005 CLRP AND FY 2006-2011 TIP
AIR QUALITY CONFORMITY SCHEDULE**

June 3, 2005	TPB Technical Committee Reviews Draft Work Scope for the Air Quality Analysis
*June 15, 2005	TPB Releases Draft Work Scope for Public Comment and Inter-Agency Review
*July 20, 2005	TPB Reviews Public Comments, Approves Draft Scope of Work
September 9, 2005	TPB Technical Committee Reviews Draft Conformity Report
September 15, 2005	Draft Conformity Report Released for Public Comment and Interagency Review
*September 21, 2005	TPB Receives Briefing on Draft Air Quality Conformity Determination
*October 19, 2005	TPB Reviews Public Comments on Draft Document, Approves Responses to Comments, and Adopts the PM 2.5 Air Quality Conformity Determination

*TPB Meeting

WORK SCOPE ATTACHMENT A

POLICY AND TECHNICAL INPUT ASSUMPTIONS PM2.5 STANDARDS CONFORMITY ASSESSMENT

1. Land Activity

- Round 7 Cooperative Forecasts

2. Policy and Project Inputs

- Highway, HOV and transit projects and operating parameters
- Financially constrained project submissions advanced by the TPB on 4/20/2005

3. Travel Demand Modeling Methods

- 'Version 2.1 D #50' Travel Model
- All HOV facilities at HOV-3 in 2010
- Transit "capacity constraint" procedures (2010 constrains later years)

4. Emission Factors

- Emission factors methods as developed and applied in the SIP and in the 2004 CLRP conformity process: MOBILE6.2, 2002 registration data, VMT mix specific to each analysis year
- Enhanced I/M in DC, MD, and VA, using state-specified standards
- Refinements based upon EPA's Mobile6.2 guidance
- PM2.5 factors for total directly emitted particles and NOx precursors

5. Emissions Modeling Methods / Credits

- Updated post-processor methods to reflect EPA guidance associated with Mobile6.2 model release updates for local road speed profiles in rural areas
- Yearly PM2.5 emissions (total PM2.5 and NOx precursors) using latest seasonal traffic adjustments
- Offline emissions analyses

6. Conformity Assessment Criteria

- 5/6/05 EPA's "*Transportation Conformity Rule Amendments for the New PM2.5 National Ambient Air Quality Standard: PM2.5 Precursors*"
- Analysis years: 2010, 2020, 2030



U.S. Environmental Protection Agency Fine Particle (PM 2.5) Designations

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Areas Designated Nonattainment for the Fine Particle National Air Quality Standards

FACT SHEET December 17, 2004

ACTION

- Today, the Environmental Protection Agency (EPA) designated areas for the Fine Particle National Air Quality Standards.
- These designations play an important role in letting the public know whether air quality in their area is healthy. When designations take effect, they become an important component of state, local and tribal governments' efforts to reduce fine particle pollution. By law, nonattainment areas are subject to a number of requirements to reduce particles and the pollutants that form them.
- Fine particle pollution is a mixture of microscopic solids and liquid droplets suspended in air. Fine particles can be emitted directly (such as smoke from a fire) or formed in the atmosphere from power plant, industrial and mobile source emissions of gases such as sulfur dioxide and nitrogen oxides.
- Fine particles less than or equal to 2.5 micrometers in diameter (called PM_{2.5} and measuring about one-thirtieth the diameter of an average human hair), pose the greatest risk. These particles can get deep into the lungs, and some may even get into the bloodstream.
- Areas not meeting the national air quality standards are called nonattainment areas. These areas have had (or have contributed to) PM_{2.5} levels higher than allowed under EPA's national air quality standard. The standards are designed to protect the public from exposure to PM_{2.5} at levels that may cause health problems. While fine particles are unhealthy for anyone to breathe, people with heart or lung disease, asthmatics, older adults, and children are especially at risk.
- States and tribes with designated nonattainment areas must submit plans that outline how they will meet the PM_{2.5} standards. Areas are required to attain clean air as soon as possible but no later than 2010. EPA may grant attainment date extensions of up to five years in areas with more severe PM_{2.5} problems and where emissions control measures are not available or feasible.
- The Bush Administration has made the reduction of fine particle pollution a critical element of a comprehensive national clean air strategy. This strategy includes EPA's recent Clean Air Nonroad Diesel Rule to reduce pollution from nonroad diesel engines, Clear Skies legislation and the proposed Clean Air Interstate Rule to reduce pollution from power plants in the eastern U.S. These two rules are important components of EPA's efforts to help states and localities meet the more protective fine-particle and 8-hour ozone national air quality standards. Together these rules will help all areas of the country achieve cleaner air.

ABOUT DESIGNATIONS

- Areas that have been designated as nonattainment will need to take action to improve their air quality.
- The Clean Air Act requires state, local and tribal governments to take steps to control particle pollution in nonattainment areas. Those steps may include stricter controls on industrial facilities and additional planning requirements for transportation sources.
- State, local and tribal governments must detail these control requirements in plans demonstrating how they will meet the PM_{2.5} national air quality standard. Those plans are known as State or Tribal Implementation Plans, or SIPs/TIPs. States and tribes must submit their plans to EPA within three years after the Agency's final designations become effective.
- Nonattainment areas are subject to a measure known as "transportation conformity," which requires local transportation and air quality officials to coordinate planning to ensure that transportation projects, such as road construction, do not affect an area's ability to reach its clean air goals. Transportation conformity requirements become effective one year after an area is designated as nonattainment.
- Once designated, nonattainment areas also are subject to New Source Review requirements. New Source Review is a permitting program for industrial facilities to ensure that new and modified sources of pollution do not impede progress toward cleaner air.
- Areas designated as "attainment" have monitored air quality that meets the level of EPA's health-based national air quality standards for fine particle pollution and/or do not contribute to air quality problems in other areas. While these areas will not have to take steps to improve air quality, they must prevent their air quality from significantly deteriorating.
- In February and April 2003, EPA provided guidelines to states and tribes for recommending nonattainment area boundaries for the PM_{2.5} standard. Consistent with the Clean Air Act, the guidances instructed states and tribes to begin their analysis of attainment and nonattainment area boundaries based on the boundaries of metropolitan areas. The guidances also instructed states to include in nonattainment areas any nearby counties with sources contributing to fine particle pollution in those metropolitan areas. The guidances recommended that states and tribes consider using common boundaries for areas to be designated as nonattainment for both the PM_{2.5} and 8-hour ozone standards. Common boundaries will help states and tribes facilitate future planning and implementation activities.
- EPA recommended states and tribes to use metropolitan area boundaries to ensure that they consider population density, traffic and commuting patterns, commercial development and area growth when recommending areas for attainment and nonattainment designation.
- EPA also asked states and tribes to consider the following factors as they developed their boundary recommendations:
 - emissions and air quality in adjacent areas
 - population density and commercial development in adjacent areas
 - traffic and commuting patterns
 - extent, pattern and rate of growth
 - weather and transport patterns
 - mountains or other air basin boundaries
 - jurisdictional boundaries
 - level of control of emission sources

- In mid-February 2004, states and tribes recommended PM2.5 designations to EPA for areas to be designated as "nonattainment." EPA revised these recommendations and responded to the states and tribes on June 28 and 29.

FINE PARTICLE STANDARDS BACKGROUND

- In July 1997, EPA issued National Ambient Air Quality Standards for Fine Particles (PM2.5). The standards include an annual standard set at 15 micrograms per cubic meter, based on the 3-year average of annual mean PM2.5 concentrations and a 24-hour standard of 65 micrograms per cubic meter, based on the 3-year average of the 98th percentile of 24-hour concentrations.
- A number of events delayed the implementation of the PM2.5 standard.
 - EPA's new standards were challenged by the American Trucking Association, the U.S. Chamber of Commerce and other state and business groups.
 - The Transportation Equity Act for the Twenty-first Century (TEA-21) revised the deadline to publish nonattainment designations in order to provide additional time to collect three years of air quality monitoring data.
- In February 2001, the Supreme Court upheld EPA's authority under the Clean Air Act to set National Ambient Air Quality Standards that protect the American public from harmful effects of air pollution. The Supreme Court also sent the case back to the D.C. Circuit Court of Appeals to resolve several additional issues. In March 2002, the DC Circuit Court rejected all remaining legal challenges to EPA's 1997 ambient air quality standards for PM2.5.
- The health effects associated with exposure to fine particles are significant. Scientific studies have shown significant associations between elevated fine particle levels and premature mortality. Effects associated with fine particle exposure include aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days), lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and cardiac arrhythmia.

FOR MORE INFORMATION

- For more information on the designation process for the fine particle standards, go to EPA's Web site at www.epa.gov/pmdesignations.

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EPA Announces Final Designations for First Fine Particle Standard

Contact: Cynthia Bergman 202-564-9828 / bergman.cynthia@epa.gov

(Washington, D.C. – December 17, 2004) Twenty governors were told by the Environmental Protection Agency (EPA) today that certain areas of their states do not meet the nation's first fine particle (PM_{2.5}) air quality standards. While the great majority of the nation's counties meet the new health-based standards, all or part of 224 counties nationwide, as well as the District of Columbia, are not in attainment with the standards.

"The good news for 30 states is that they already meet the fine particle standards," Administrator Mike Leavitt said, "The good news for the remaining areas of the country is that we have new rules both proposed and in place to help these states make their air cleaner to breathe."

Thirty states and their 2,909 counties received the good news that they meet PM_{2.5} air quality standards. These states will need to continue their progress by sustaining clean air. "The Particle Pollution Report: Current Understanding of Air Quality and Emissions through 2003," issued earlier this week reported that 2003 PM levels were the lowest since monitoring began.

Administrator Leavitt noted that, "Today's cleaner air represents more than four decades of progress since the signing of the first Clean Air Act in 1963, followed by the Clean Air Act of 1970 and the Amendments in 1990. This is a clean air relay that gets better with each generation, and we are making more progress than ever before."

The reduction of fine particle pollution is a critical element of the Bush Administration's comprehensive national clean air strategy -- a strategy that makes clean air and clean energy a centerpiece of public health protection and a vital economy. This strategy includes Clear Skies legislation, the Clean Air Interstate Rule, and the Administration's recent rule to reduce pollution from non-road diesel engines. These rules are important components of EPA's efforts to help states and localities meet the protective national fine particle and 8-hour ozone air quality standards. Together these rules will help all areas of the country achieve cleaner air.

PM_{2.5} – approximately 1/30th the size of an average human hair – can aggravate heart and lung diseases and has been associated with a variety of serious health problems including heart attacks, chronic bronchitis and asthma attacks. Today's action officially notifies states that they need to do more to reduce fine particle pollution in order to protect human health.

Meeting these standards will prevent at least: 15,000 premature deaths; 75,000 cases of chronic bronchitis; 10,000 hospital admissions for respiratory and cardiovascular disease; hundreds of thousands of occurrences of aggravated asthma; and 3.1 million days when people miss work because they are suffering from symptoms related to particle pollution exposure.

States with nonattainment areas must submit plans by early 2008 that outline how they will meet the PM_{2.5} standards. They are expected to attain clean air as soon as possible and not later than 2010. EPA can grant one five-year extension for areas with more severe problems. The attainment date for those areas would be 2015.

To develop these final designations, EPA requested recommendations from state governors and tribal leaders on the appropriate boundaries for nonattainment areas. EPA carefully reviewed the state and tribal recommendations and revised them in June 2004 - adding more than 100 counties that EPA believed contributed to air quality violations. The Agency then provided the opportunity for state and tribal

representatives to respond. EPA's recommendations included counties where monitors show violations of the PM2.5 standards and surrounding counties that contribute to those violations.

For more information on the particle pollution, visit: <http://www.epa.gov/pmdesignations/> .

For more information on the 2004 Clean Air rules, visit: <http://www.epa.gov/cleanair2004> .

For more information on particulate matter trends, visit: <http://www.epa.gov/airtrends> .

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Federal Register

Thursday,
July 1, 2004

Part II

Environmental Protection Agency

40 CFR Part 93

**Transportation Conformity Rule
Amendments for the New 8-hour Ozone
and PM_{2.5} National Ambient Air Quality
Standards and Miscellaneous Revisions
for Existing Areas; Transportation
Conformity Rule Amendments: Response
to Court Decision and Additional Rule
Changes; Final Rule**

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 93

[FRL-7774-6]

RIN 2060-AL73; 2060-AI56

Transportation Conformity Rule Amendments for the New 8-hour Ozone and PM_{2.5} National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments: Response to Court Decision and Additional Rule Changes

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Today we (EPA) are amending the transportation conformity rule to finalize several provisions that were proposed last year. First, today's final rule includes criteria and procedures for the new 8-hour ozone and fine particulate matter (PM_{2.5}) national ambient air quality standards (NAAQS or "standards"). Transportation conformity is required under Clean Air Act section 176(c) to ensure that federally supported highway and transit project activities are consistent with ("conform to") the purpose of a state air quality implementation plan (SIP). We are conducting this rulemaking in part to revise the conformity regulation in the context of EPA's broader strategies for implementing the new ozone and PM_{2.5} standards.

The final rule also addresses a March 2, 1999 ruling by the U.S. Court of Appeals for the District of Columbia Circuit (*Environmental Defense Fund v. EPA, et al.*, 167 F. 3d 641, D.C. Cir. 1999). This final rule incorporates into the transportation conformity rule the EPA and Department of Transportation (DOT) guidance that has been used in place of certain regulatory provisions of the rule since the court decision.

DOT is EPA's federal partner in implementing the transportation conformity regulation. We have consulted with DOT on the development of this rulemaking, and DOT concurs with this final rule.

EPA notes that a supplemental notice of proposed rulemaking will be published in the near future to request additional comment on options related to PM_{2.5} and PM₁₀ hot-spot requirements. EPA is also not finalizing at this time any requirements for addressing PM_{2.5} precursors in transportation conformity determinations for PM_{2.5} nonattainment and maintenance areas. EPA is

considering the transportation conformity rule's PM_{2.5} precursor requirements in the context of EPA's broader PM_{2.5} implementation strategy. All of these issues will be addressed in a separate final rule to be issued before PM_{2.5} designations become effective.

EFFECTIVE DATE: August 2, 2004.

ADDRESSES: Materials relevant to this rulemaking for the November 5, 2003 proposal (68 FR 62690) are in Public Docket I.D. No. OAR-2003-0049. Materials relevant to this rulemaking for the June 30, 2003 proposal (68 FR 38974) are in Public Docket I.D. No. OAR-2003-0063. For more information about accessing information from the docket, see Section I.B. of the **SUPPLEMENTARY INFORMATION** section.

FOR FURTHER INFORMATION CONTACT: Meg Patulski, State Measures and Conformity Group, Transportation and Regional Programs Division, U.S. Environmental Protection Agency, 2000 Traverwood Road, Ann Arbor, MI 48105, patulski.meg@epa.gov, (734) 214-4842; Rudy Kapichak, State Measures and Conformity Group, Transportation and Regional Programs Division, U.S. Environmental Protection Agency, 2000 Traverwood Road, Ann Arbor, MI 48105, kapichak.rudolph@epa.gov, (734) 214-4574; or Laura Berry, State Measures and Conformity Group, Transportation and Regional Programs Division, U.S. Environmental Protection Agency, 2000 Traverwood Road, Ann Arbor, MI 48105, berry.laura@epa.gov, (734) 214-4858.

SUPPLEMENTARY INFORMATION:

The contents of this preamble are listed in the following outline:

- I. General Information
- II. Background on the Transportation Conformity Rule
- III. Conformity Grace Period and Revocation of the 1-hour Ozone Standard
- IV. General Changes in Interim Emissions Tests
- V. Regional Conformity Tests in 8-hour Ozone Areas That Do Not Have 1-hour Ozone SIPs
- VI. Regional Conformity Tests in 8-hour Ozone Areas That Have 1-hour Ozone SIPs
- VII. Regional Conformity Tests in PM_{2.5} Areas
- VIII. Consideration of Direct PM_{2.5} and pm_{2.5} Precursors in Regional Emissions Analyses
- IX. Re-entrained Road Dust in PM_{2.5} Regional Emissions Analyses
- X. Construction-Related Fugitive Dust in PM_{2.5} Regional Emissions Analyses
- XI. Compliance with PM_{2.5} SIP Control Measures
- XII. PM_{2.5} Hot-spot Analyses
- XIII. PM₁₀ Hot-spot Analyses
- XIV. Federal Projects
- XV. Using Motor Vehicle Emissions Budgets from Submitted SIPs for Transportation Conformity Determinations

- XVI. Non-federal Projects
- XVII. Conformity Consequences of Certain SIP Disapprovals
- XVIII. Safety Margins
- XIX. Streamlining the Frequency of Conformity Determinations
- XX. Latest Planning Assumptions
- XXI. Horizon Years for Hot-spot Analyses
- XXII. Relying on a Previous Regional Emissions Analysis
- XXIII. Miscellaneous Revisions
- XXIV. Comments Not Related to Rulemaking
- XXV. How Does Today's Final Rule Affect Conformity SIPs?
- XXVI. Statutory and Executive Order Reviews

I. General Information

A. Regulated Entities

Entities potentially regulated by the conformity rule are those that adopt, approve, or fund transportation plans, programs, or projects under title 23 U.S.C. or title 49 U.S.C. Regulated categories and entities affected by today's action include:

Category	Examples of regulated entities
Local government.	Local transportation and air quality agencies, including metropolitan planning organizations (MPOs).
State government.	State transportation and air quality agencies.
Federal government.	Department of Transportation (Federal Highway Administration (FHWA) and Federal Transit Administration (FTA)).

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this final rule. This table lists the types of entities of which EPA is aware that potentially could be regulated by the conformity rule. Other types of entities not listed in the table could also be regulated. To determine whether your organization is regulated by this action, you should carefully examine the applicability requirements in § 93.102 of the transportation conformity rule. If you have questions regarding the applicability of this action to a particular entity, consult the persons listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. How Can I Get Copies of This Document?

1. *Docket.* EPA has established official public dockets for today's final rule. Materials relevant to this rulemaking for the November 5, 2003 proposal (68 FR 62690) are in Public Docket I.D. No. OAR-2003-0049. Materials relevant to this rulemaking for the June 30, 2003 proposal (68 FR 38974) are in Public Docket I.D. No. OAR-2003-0063. The

adequate or inadequate for use in transportation conformity on EPA's website. The website will also include EPA's response to comments if any comments were received during the public comment period.

(vi) If after EPA has found a submission adequate, EPA has cause to reconsider this finding, EPA will repeat actions described in paragraphs (f)(1)(i) through (v) or (f)(2) of this section unless EPA determines that there is no need for additional public comment given the deficiencies of the implementation plan submission. In all cases where EPA reverses its previous finding to a finding of inadequacy under paragraph (f)(1) of this section, such a finding will become effective immediately upon the date of EPA's letter to the State.

(vii) If after EPA has found a submission inadequate, EPA has cause to reconsider the adequacy of that budget, EPA will repeat actions described in paragraphs (f)(1)(i) through (v) or (f)(2) of this section.

(2) When EPA reviews the adequacy of an implementation plan submission simultaneously with EPA's approval or disapproval of the implementation plan,

(i) EPA's **Federal Register** notice of proposed or direct final rulemaking will serve to notify the public that EPA will be reviewing the implementation plan submission for adequacy.

(ii) The publication of the notice of proposed rulemaking will start a public comment period of at least 30 days.

(iii) EPA will indicate whether the implementation plan submission is adequate and thus can be used for conformity either in EPA's final rulemaking or through the process described in paragraphs (f)(1)(iii) through (v) of this section. If EPA makes an adequacy finding through a final rulemaking that approves the implementation plan submission, such a finding will become effective upon the publication date of EPA's approval in the **Federal Register**, or upon the effective date of EPA's approval if such action is conducted through direct final rulemaking. EPA will respond to comments received directly and review comments submitted through the State process and include the response to comments in the applicable docket.

■ 12. Section 93.119 is amended by:

- a. Revising the section heading and paragraphs (a) and (b);
- b. Redesignating paragraphs (c), (d), (e), (f), (g) and (h) as paragraphs (d), (f), (g), (h), (i) and (j);
- c. Adding new paragraphs (c) and (e);
- d. Revising newly redesignated paragraphs (d) introductory text and (d)(1);

■ e. Revising newly redesignated paragraph (f)(5), removing the period at the end of newly redesignated paragraph (f)(6) and adding a semicolon in its place, and adding new paragraphs (f)(7) and (f)(8);

■ f. Revising newly redesignated paragraph (g);

■ g. In newly redesignated paragraphs (h) introductory text and (i) introductory text, revising the reference "paragraphs (b) and (c)" to read "paragraphs (b) through (e)"; and,

■ h. In newly redesignated paragraph (j), revising the reference "paragraphs (b) and (c)" to read "paragraphs (b) through (e)".

The revisions and additions read as follows:

§ 93.119 Criteria and procedures: Interim emissions in areas without motor vehicle emissions budgets.

(a) The transportation plan, TIP, and project not from a conforming transportation plan and TIP must satisfy the interim emissions test(s) as described in § 93.109(c) through (l). This criterion applies to the net effect of the action (transportation plan, TIP, or project not from a conforming plan and TIP) on motor vehicle emissions from the entire transportation system.

(b) *Ozone areas.* The requirements of this paragraph apply to all 1-hour ozone and 8-hour ozone NAAQS areas, except for certain requirements as indicated. This criterion may be met:

(1) In moderate and above ozone nonattainment areas that are subject to the reasonable further progress requirements of CAA section 182(b)(1) if a regional emissions analysis that satisfies the requirements of § 93.122 and paragraphs (g) through (j) of this section demonstrates that for each analysis year and for each of the pollutants described in paragraph (f) of this section:

(i) The emissions predicted in the "Action" scenario are less than the emissions predicted in the "Baseline" scenario, and this can be reasonably expected to be true in the periods between the analysis years; and

(ii) The emissions predicted in the "Action" scenario are lower than:

- (A) 1990 emissions by any nonzero amount, in areas for the 1-hour ozone NAAQS as described in § 93.109(c); or
- (B) 2002 emissions by any nonzero amount, in areas for the 8-hour ozone NAAQS as described in § 93.109(d) and (e).

(2) In marginal and below ozone nonattainment areas and other ozone nonattainment areas that are not subject to the reasonable further progress requirements of CAA section 182(b)(1) if

a regional emissions analysis that satisfies the requirements of § 93.122 and paragraphs (g) through (j) of this section demonstrates that for each analysis year and for each of the pollutants described in paragraph (f) of this section:

(i) The emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario, and this can be reasonably expected to be true in the periods between the analysis years; or

(ii) The emissions predicted in the "Action" scenario are not greater than:

- (A) 1990 emissions, in areas for the 1-hour ozone NAAQS as described in § 93.109(c); or
- (B) 2002 emissions, in areas for the 8-hour ozone NAAQS as described in § 93.109(d) and (e).

(c) *CO areas.* This criterion may be met:

(1) In moderate areas with design value greater than 12.7 ppm and serious CO nonattainment areas that are subject to CAA section 187(a)(7) if a regional emissions analysis that satisfies the requirements of § 93.122 and paragraphs (g) through (j) of this section demonstrates that for each analysis year and for each of the pollutants described in paragraph (f) of this section:

(i) The emissions predicted in the "Action" scenario are less than the emissions predicted in the "Baseline" scenario, and this can be reasonably expected to be true in the periods between the analysis years; and

(ii) The emissions predicted in the "Action" scenario are lower than 1990 emissions by any nonzero amount.

(2) In moderate areas with design value less than 12.7 ppm and not classified CO nonattainment areas if a regional emissions analysis that satisfies the requirements of § 93.122 and paragraphs (g) through (j) of this section demonstrates that for each analysis year and for each of the pollutants described in paragraph (f) of this section:

(i) The emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario, and this can be reasonably expected to be true in the periods between the analysis years; or

(ii) The emissions predicted in the "Action" scenario are not greater than 1990 emissions.

(d) *PM₁₀ and NO₂ areas.* This criterion may be met in PM₁₀ and NO₂ nonattainment areas if a regional emissions analysis that satisfies the requirements of § 93.122 and paragraphs (g) through (j) of this section demonstrates that for each analysis year and for each of the pollutants described

in paragraph (f) of this section, one of the following requirements is met:

(1) The emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario, and this can be reasonably expected to be true in the periods between the analysis years; or

* * * * *

(e) *PM_{2.5} areas.* This criterion may be met in *PM_{2.5}* nonattainment areas if a regional emissions analysis that satisfies the requirements of § 93.122 and paragraphs (g) through (j) of this section demonstrates that for each analysis year and for each of the pollutants described in paragraph (f) of this section, one of the following requirements is met:

(1) The emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario, and this can be reasonably expected to be true in the periods between the analysis years; or

(2) The emissions predicted in the "Action" scenario are not greater than 2002 emissions.

(f) * * *

(5) VOC and/or NO_x in *PM₁₀* areas if the EPA Regional Administrator or the director of the State air agency has made a finding that one or both of such precursor emissions from within the area are a significant contributor to the *PM₁₀* nonattainment problem and has so notified the MPO and DOT;

(6) * * *

(7) *PM_{2.5}* in *PM_{2.5}* areas; and

(8) Reentrained road dust in *PM_{2.5}* areas only if the EPA Regional Administrator or the director of the State air agency has made a finding that emissions from reentrained road dust within the area are a significant contributor to the *PM_{2.5}* nonattainment problem and has so notified the MPO and DOT.

(g) *Analysis years.* (1) The regional emissions analysis must be performed for analysis years that are no more than ten years apart. The first analysis year must be no more than five years beyond the year in which the conformity determination is being made. The last year of the transportation plan's forecast period must also be an analysis year.

(2) For areas using paragraphs (b)(2)(i), (c)(2)(i), (d)(1), and (e)(1) of this section, a regional emissions analysis that satisfies the requirements of § 93.122 and paragraphs (g) through (j) of this section would not be required for analysis years in which the transportation projects and planning assumptions in the "Action" and "Baseline" scenarios are exactly the same. In such a case, paragraph (a) of this section can be satisfied by

documenting that the transportation projects and planning assumptions in both scenarios are exactly the same, and consequently, the emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario for such analysis years.

* * * * *

■ 13. Section 93.120 is amended by revising paragraph (a)(2) to read as follows:

§ 93.120 Consequences of control strategy implementation plan failures.

(a) * * *

(2) If EPA disapproves a submitted control strategy implementation plan revision without making a protective finding, only projects in the first three years of the currently conforming transportation plan and TIP may be found to conform. This means that beginning on the effective date of a disapproval without a protective finding, no transportation plan, TIP, or project not in the first three years of the currently conforming transportation plan and TIP may be found to conform until another control strategy implementation plan revision fulfilling the same CAA requirements is submitted, EPA finds its motor vehicle emissions budget(s) adequate pursuant to § 93.118 or approves the submission, and conformity to the implementation plan revision is determined.

* * * * *

■ 14. Section 93.121 is amended by:

■ a. Revising paragraph (a)(1), redesignating paragraph (a)(2) as (a)(3), adding a new paragraph (a)(2) and revising newly redesignated paragraph (a)(3);

■ b. Amending paragraph (b) introductory text by removing the reference "§ 93.109(g)" and adding in its place a reference for "§ 93.109(l)", and revising paragraph (b)(1); and

■ c. Adding new paragraph (c).

The revisions and additions read as follows:

§ 93.121 Requirements for adoption or approval of projects by other recipients of funds designated under title 23 U.S.C. or the Federal Transit Laws.

(a) * * *

(1) The project comes from the currently conforming transportation plan and TIP, and the project's design concept and scope have not changed significantly from those which were included in the regional emissions analysis for that transportation plan and TIP;

(2) The project is included in the regional emissions analysis for the currently conforming transportation

plan and TIP conformity determination (even if the project is not strictly included in the transportation plan or TIP for the purpose of MPO project selection or endorsement) and the project's design concept and scope have not changed significantly from those which were included in the regional emissions analysis; or

(3) A new regional emissions analysis including the project and the currently conforming transportation plan and TIP demonstrates that the transportation plan and TIP would still conform if the project were implemented (consistent with the requirements of §§ 93.118 and/or 93.119 for a project not from a conforming transportation plan and TIP).

(b) * * *

(1) The project was included in the regional emissions analysis supporting the most recent conformity determination that reflects the portion of the statewide transportation plan and statewide TIP which are in the nonattainment or maintenance area, and the project's design concept and scope has not changed significantly; or

* * * * *

(c) Notwithstanding paragraphs (a) and (b) of this section, in nonattainment and maintenance areas subject to § 93.109(j) or (k) for a given pollutant/precursor and NAAQS, no recipient of Federal funds designated under title 23 U.S.C. or the Federal Transit Laws shall adopt or approve a regionally significant highway or transit project, regardless of funding source, unless the recipient finds that the requirements of one of the following are met for that pollutant/precursor and NAAQS:

(1) The project was included in the most recent conformity determination for the transportation plan and TIP and the project's design concept and scope has not changed significantly; or

(2) The project was included in the most recent conformity determination that reflects the portion of the statewide transportation plan and statewide TIP which are in the nonattainment or maintenance area, and the project's design concept and scope has not changed significantly.

■ 15. Section 93.122 is amended by:

■ (a) Redesignating paragraphs (c), (d), and (e) as paragraphs (d), (e) and (g), respectively;

■ (b) Adding new paragraphs (c) and (f); and

■ (c) Revising newly redesignated paragraphs (g)(1) and (g)(2) introductory text, and adding new paragraph (g)(3).

The revisions and additions read as follows:



Regulatory Announcement

Final Rule to Add PM_{2.5} Precursors to the Transportation Conformity Rule

This final rule is part of EPA's overall strategy for assisting state and local governments in implementing the new ozone and PM_{2.5} national ambient air quality standards. Specifically, this final rule provides new PM_{2.5} nonattainment areas with the requirements for considering PM_{2.5} precursor emissions when making determinations that transportation activities will not interfere with the area's air quality goals. EPA's designations for the new PM_{2.5} standard were effective April 5, 2005, at which point a one-year conformity grace period began. The grace period allows time for the newly designated PM_{2.5} nonattainment areas to prepare their first conformity determinations.

Background

Transportation conformity is a Clean Air Act requirement that ensures that federally supported highway and transit projects are consistent with ("conform to") a state air quality implementation plan (SIP). Conformity ensures that public health is protected by early consideration of transportation decisions in cities with air quality challenges.

On November 5, 2003, EPA published a proposal to address conformity requirements under the new ambient air quality standards (68 FR 62690), including proposals to address PM_{2.5} precursor emissions in conformity. The majority of the provisions from the November 2003

proposal were finalized in our July 1, 2004, final conformity rule. Subsequently, Environmental Defense, the Natural Resources Defense Council, Sierra Club and TRANSDEF filed suit against portions of the July 1, 2004 rule. This suit specifically challenges the omission of PM_{2.5} precursor requirements from that rule.

EPA did not include PM_{2.5} precursor requirements in the July 1, 2004, final rule because, at that time, EPA had not yet proposed a broader PM_{2.5} implementation rule to seek comment on options for addressing PM_{2.5} precursors in the New Source Review program and in other SIP planning activities. However, several facts now lead us to believe it is necessary and appropriate to issue this final rule addressing precursor emissions in transportation conformity determinations:

- EPA's designations for the new PM_{2.5} standard were effective April 5, 2005, at which point a one-year conformity grace period began. It is important that transportation conformity implementers know the requirements during the grace period, as it takes time to prepare a conformity determination. Conformity determinations for the PM_{2.5} standard will be due at the end of the one-year grace period: April 5, 2006.
- This final rule has been developed in coordination with the PM_{2.5} implementation rule proposal that is currently being prepared. This final rule will not prejudice the outcome of the PM_{2.5} implementation rule.

Description of Final Rule

This final rule adds NO_x, VOCs, SO_x, and ammonia to the transportation conformity regulations and specifies when each of these precursors must be considered in conformity determinations in PM_{2.5} nonattainment and maintenance areas, before and after PM_{2.5} SIPs are submitted.

Specifically, once a PM_{2.5} SIP is submitted, a PM_{2.5} precursor must be considered in an area's conformity determinations if the SIP determines that emissions for that precursor are a significant contributor to the area's PM_{2.5} air quality problem.

Prior to the submission of a SIP, NO_x emissions must be considered in PM_{2.5} conformity determinations, unless both the state air agency and the EPA Regional Administrator make a finding that NO_x is *not a*

significant contributor to the PM_{2.5} air quality problem. Conversely, VOC, SOx and ammonia emissions do not have to be considered in conformity, unless either the state air agency or EPA Regional Administrator makes a finding that on-road emissions of any of these precursors *is a significant contributor* to the area's PM_{2.5} air quality issue.

Key Elements of the Final Rule

- This final rule balances the need to protect air quality with the need to conserve the limited resources of state and local transportation and air quality agencies. NOx is the only PM_{2.5} precursor that must be examined in conformity analyses (unless a finding is made), because data indicate that NOx contributes to the air quality problem in most PM_{2.5} nonattainment areas. However, VOC, SOx and ammonia precursor emissions only need to be examined if they are found to be significant for a particular area. EPA believes this final rule is consistent with existing statutory requirements and scientific information that supports the consideration of PM_{2.5} precursor emissions in transportation conformity.
- This final rule provides new PM_{2.5} nonattainment areas with the requirements for considering PM_{2.5} precursor emissions in transportation conformity determinations. Transportation conformity for the PM_{2.5} air quality standard will apply in new nonattainment areas on April 5, 2006 – that is, one year after the effective date of their designation.
- This final rule is consistent with EPA's PM_{2.5} implementation strategy proposal currently being prepared. However, this rule should not be seen as prejudging our decision on the PM_{2.5} implementation rulemaking. While EPA's final decisions on PM_{2.5} precursors must be legally consistent, EPA could take differing positions with respect to various precursors in other programs as appropriate to the programmatic needs, legal requirements and pollution sources relevant to the differing programs.
- EPA has worked closely with the U.S. Department of Transportation in the development of this final rule.

- This rule is based on the November 2003 proposal and the public comments that were received in response to that proposal. EPA consulted with state and local transportation and air quality agencies and interest groups in its initial development of the conformity options for the new standards that were proposed in November 2003.

Health and Environmental Impacts

By providing new PM_{2.5} nonattainment areas with the requirements for considering PM_{2.5} precursor emissions in conformity determinations, EPA believes this final rule will support the Clean Air Act's air quality standards to protect the public and environmental health.

For More Information

You can access the final rule and related documents electronically on EPA's Web site at:

www.epa.gov/otaq/transp/traqconf.htm