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OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Policy Guidance on the Use of MOBILE6.2 and the December 2003 AP-42 Method for Re-Entrained Road Dust for SIP Development and Transportation Conformity

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TO: EPA Regional Air Division Directors

EPA has released a final version of MOBILE6.2, which expands the capabilities of MOBILE6 to include the estimation of both direct particulate matter (PM) emissions and the emissions of certain particulate precursors, as well as air toxics emissions for cars, trucks, buses, and motorcycles. One significant difference between MOBILE6.2 and its predecessor for PM emissions, PART5, is that MOBILE6.2 does not include the capability of estimating the emissions of re-entrained road dust as the result of motor vehicle activity. EPA has also finalized new methods for the estimation of re-entrained road dust emissions from cars, trucks, buses, and motorcycles on paved and unpaved roads which are incorporated in the December 2003 edition of Chapter 13 of Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. MOBILE6.2 and the December 2003 AP-42 method are both significant improvements on previous models and methods.

Attached is the final policy guidance that describes how and when to use MOBILE6.2 and the December 2003 AP-42 method in state implementation plan (SIP) development and transportation conformity determinations. EPA will be publishing a Federal Register notice of availability in the near future to approve MOBILE6.2 and the December 2003 AP-42 re-entrained road dust methods for official purposes. Upon publication of the Federal Register notice, MOBILE6.2 will become EPA's approved motor vehicle emission factor model for estimating particulate matter (PM) emissions from passenger cars, motorcycles, light-duty and heavy-duty trucks by state and local agencies outside of California. The December 2003 AP-42 methods will become EPA's approved method for estimating re-entrained road dust emissions with the limitations and provisions for approving alternate methods described in Question 3 of the guidance.

MOBILE6.2 also incorporates the capability to estimate the emissions of air toxics. SIP and transportation conformity requirements do not apply to air toxics and the inclusion of air toxics in MOBILE6.2 does not create SIP or conformity requirements for air toxics.

If there are any questions regarding this memorandum, please send an email to mobile@epa.gov for general MOBILE6.2 issues, contact Bill Kuykendal (919-541-5372) for the December 2003 AP-42 methods, and Gary Dolce (734-214-4414) for transportation conformity and SIP issues.

Attachment

Attachment

1. What pollutants are included in MOBILE6.2 and how does it differ from MOBILE6?

MOBILE6, which was officially released on January 29, 2002, is a computer model that is designed to estimate emission factors of hydrocarbons (HC), oxides of nitrogen (NOx), and carbon monoxide (CO) for cars, trucks, buses, and motorcycles. Since the release date, MOBILE6 has been EPA's officially approved model for HC, NOx, and CO estimation in SIP development and transportation conformity analyses.

MOBILE6.2 is an update to MOBILE6 which adds the capability to estimate direct particulate matter (PM) emission factors for PM₁₀ and PM_{2.5}, emission factors for particulate precursors, and air toxics emission factors to the original MOBILE6 model. In other words, MOBILE6.2 allows the estimation of emission factors for HC, NOx, CO, air toxics, gaseous SO₂, ammonia, and direct PM from vehicle exhaust and brake and tire wear. MOBILE6.2 also corrects some minor coding errors in the portion of the model code that estimates HC, NOx, and CO emission factors, and it adds the capability of entering hourly relative humidity values. MOBILE6.2 also incorporates some revisions to CO emission factors for cars and light duty trucks that meet NLEV, LEV, and Tier 2 vehicle standards. Functionally, MOBILE6.2 now replaces MOBILE6 as the highway vehicle emission factor model that EPA will maintain and support.

MOBILE6.2 does not include the capability of estimating the emissions of re-entrained road dust as the result of motor vehicle activity. Motor vehicle emissions inventories for PM are comprised of four components: exhaust emissions, emissions from brake wear, emissions from tire wear, and re-entrained road dust. In the past, the PART5 model estimated emissions from all of these components. However, it became very difficult to keep one emissions model current with the latest developments in estimation techniques for each of the four components, to the point where PART5 has for some time been out of date with respect to re-entrained road dust. As a result, EPA decided to include only vehicle exhaust and brake and tire wear emissions in MOBILE6.2. EPA's Office of Air Quality Planning and Standards (OAQPS) has developed separate revised AP-42 methodologies for estimating re-entrained road dust from paved and unpaved roads. The use of this revised AP-42 methodology is addressed in more detail in Question 3 below.

2. How does the release of MOBILE6.2 affect state implementation plans (SIPs) or conformity determinations for ozone or CO?

MOBILE6.2 adds the capability to estimate PM and air toxics emissions from highway vehicles to the MOBILE model. Because it expands the capabilities of MOBILE6, it is also possible to estimate HC, NOx, and CO emission factors using MOBILE6.2. MOBILE6.2 corrects some minor coding errors in the model code that estimates HC, NOx, and CO emissions. It also adds one additional feature, the ability to enter hourly humidity values, that should make it more convenient to use for creating HC and NOx emissions inventories. However, none of these

changes result in significant differences in VOC or NOx emissions estimates between MOBILE6 and MOBILE6.2.

MOBILE6.2 also includes some revisions to CO emission factors for cars and light duty trucks meeting NLEV, LEV, and Tier 2 standards. These revisions result in lower CO emissions estimates for cars and light trucks that meet NLEV, LEV, and Tier 2 standards. The impact of these effects begins nationwide in the 2001 calendar year and gradually increases over time as NLEV and Tier 2 vehicles become a larger portion of the fleet.

All states other than California should use MOBILE6.2 for future VOC, NOx, and CO SIPs and conformity analyses in order to take full advantage of the improvements incorporated in this version. SIPs and conformity analyses already in progress with MOBILE6 can be completed using MOBILE6 as determined through the interagency consultation process. Because changes in HC, NOx, and CO emissions estimates in MOBILE6.2 are small, the release of MOBILE6.2 does not start a new grace period before MOBILE6.2 is required to be used for all new transportation conformity analyses in ozone or CO nonattainment or maintenance areas and it does not trigger the need for any new ozone or CO SIP revisions. The guidance given in this document does not supersede the guidance given in the January 18, 2002 memo¹ on the use of MOBILE6 for ozone and CO SIPs and conformity determinations. Questions 4 and 5 below provide more information on when MOBILE6.2 must be used in SIPs and conformity analyses in PM₁₀ nonattainment and maintenance areas.

As noted above, MOBILE6.2 also incorporates the capability to estimate the emissions of air toxics. SIP and transportation conformity requirements only apply to certain criteria pollutants (ozone, carbon monoxide, particulate matter, lead, sulfur dioxide, and nitrogen dioxide for SIPs; ozone, carbon monoxide, particulate matter, and nitrogen dioxide for transportation conformity). The inclusion of air toxics in MOBILE6.2 does not create a SIP or conformity requirement for air toxics. The impact of MOBILE6.2 on air toxics evaluation under the National Environmental Policy Act (NEPA) is addressed in Question 10 below.

3. What should states use to estimate re-entrained road dust emissions from paved and unpaved roads?

As noted above, EPA has developed new methodologies for estimating re-entrained road dust emissions from paved and unpaved roads. These new methods for estimating road dust emission factors for paved and unpaved roads are being incorporated in EPA's document AP-42. These new AP-42 methodologies (AP-42, Sections 13.2.1, Paved Roads and 13.2.2, Unpaved Roads, each dated December 2003) replace PART5 emission factors and earlier AP-42 methods for these categories and are EPA's approved method for estimating re-entrained road dust

¹"Policy Guidance on the Use of MOBILE6 for SIP Development and Transportation Conformity", Memorandum from John Seitz and Margo Oge to EPA Regional Air Division Directors, January 18, 2002.

emissions for SIP and conformity purposes as further described in Questions 4 and 5 below. AP-42 is the approved method only for situations for which silt loading, mean vehicle weight, and mean vehicle speed fall within ranges given in AP-42 section 13.2.1.3 and with reasonably free flowing traffic. For other conditions, areas may use an appropriate method approved by EPA on a case-by-case basis, as described in the next paragraph.

Some nonattainment or maintenance areas have historically used alternative methods for estimating re-entrained road dust emissions that may be more appropriate than the AP-42 method given specific local conditions. EPA will evaluate such alternative approaches in the context of their planned use to determine if they can continue to be used as an approved alternative to AP-42. Other nonattainment or maintenance areas may develop alternatives to the AP-42 method in the future. State and local agencies should consult with EPA Regional Offices about the technical validity of proposed alternative approaches and about how this policy guidance would apply to those approaches prior to using an alternative method to develop a SIP or conformity determination for re-entrained road dust. EPA Regional Offices can approve alternatives to AP-42 in consultation with OAQPS and the EPA's Office of Transportation and Air Quality (OTAQ).

AP-42 estimates dust emission releases from the roadway, but does not estimate the air quality impacts of these emissions. The air quality impacts can be influenced by transport, deposition, and dispersion of re-entrained road dust. It is currently the practice of EPA and some other organizations to apply adjustments to re-entrained road dust emissions when using some types of air quality models to evaluate regional air quality impacts. The approval of AP-42 does not affect this practice. States and others should continue to consult with EPA Regional Offices on specific cases of the application of such adjustments. EPA has requested comment on the application of such adjustments in the 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 (68 FR 62698-62729).

In the rest of this document, unless otherwise indicated, "AP-42" refers to the December 2003 edition of Sections 13.2.1 and 13.2.2 of AP-42 which can be found at www.epa.gov/ttn/chief/ap42/ch13/index.html.

4. How will the release of MOBILE6.2 and AP-42 affect PM₁₀ SIPs that have already been submitted and/or approved or PM₁₀ SIPs that are currently under development?

In general, EPA believes that MOBILE6.2 and AP-42 should be used in PM₁₀ SIP development as expeditiously as possible. The Clean Air Act and EPA's regulations require that SIP inventories and control measures be based on the most current information and applicable models that are available when a SIP is developed.² The release of MOBILE6.2 and AP-42 in most areas would not require a SIP revision based exclusively on the release of the new model.

²See Clean Air Act section 172(c)(3) and 40 CFR 51.112(a)(1).

The following paragraphs articulate EPA's policy for the use of MOBILE6.2 and AP-42 in the development of PM₁₀ SIPs.

The release of MOBILE6.2 and AP-42 in most areas would not require a PM₁₀ SIP revision based on the new model. EPA believes that the Clean Air Act would not require states that have already submitted PM₁₀ SIPs, or will submit PM₁₀ SIPs shortly after the release of MOBILE6.2 and AP-42, to revise these SIPs simply because new motor vehicle emissions models are now available. EPA believes that this is supported by existing EPA policies and case law [*Delaney v. EPA*, 898 F.2d 687 (9th Cir. 1990)]. Of course, States can choose to use MOBILE6.2 and AP-42 in these SIPs, to ensure the best possible agreement between analyses done for the SIP and for conformity determinations. However, EPA does not believe that the State's use of PART5 or older AP-42 methods should be an obstacle to EPA approval for attainment or maintenance SIPs that have been or will soon be submitted, assuming that such SIPs are otherwise approvable and significant SIP work has already occurred (e.g., attainment modeling for an attainment SIP has already been completed with PART5). It would be unreasonable in these cases to require the States to revise these SIPs with MOBILE6.2 and AP-42 since significant work has already occurred, and EPA intends to act on these SIPs in a timely manner.

States should use MOBILE6.2 and AP-42 where PM₁₀ SIP development has not yet begun, is in its initial stages, or has not progressed far enough along that switching to MOBILE6.2 would create a significantly adverse impact on State resources. For example, PM₁₀ SIPs that will be submitted late in 2004 should be based on MOBILE6.2 and AP-42 since there is adequate time to incorporate the new methods. MOBILE6.2 and AP-42 should be incorporated into these SIPs since these emissions estimates are based on the best information currently available. EPA also believes that the legal basis for approving a SIP based on a previous model is less clear the longer the new approaches are in place and available for use. Since SIPs must be based on current inventories as required by Clean Air Act section 172 (c)(3), it could be difficult for EPA to approve a SIP developed with a previous model significantly after MOBILE6.2 and AP-42 become available. If you have questions about which model should be used in your SIP, please consult with your EPA Regional Office.

Incorporating MOBILE6.2 and AP-42 into the SIP now could also help to avoid inconsistencies between the estimates of on-road emissions used in the SIP and future conformity determinations. This would assist areas in mitigating possible transportation conformity difficulties in the future after the conformity grace period ends for the new models. As addressed in Question 5, new PM₁₀ conformity analyses started after the conformity grace period is over must be based on MOBILE6.2 and AP-42 (40 CFR 93.111). See Question 5 for more information on MOBILE6.2, AP-42, and conformity.

5. When will MOBILE6.2 and AP-42 be required for PM₁₀ transportation conformity determinations?

Background: Transportation conformity is a Clean Air Act requirement to ensure that federally supported highway and transit activities are consistent with (“conform to”) the SIP. Conformity to a SIP means that a transportation activity will not cause or contribute to new violations; worsen existing violations; or delay timely attainment.

The transportation conformity rule (40 CFR part 93) requires that conformity analyses be based on the latest motor vehicle emissions model approved by EPA. Section 176(c)(1) of the Clean Air Act states that “...[t]he determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel, and congestion estimates....” When EPA approves new emissions models like MOBILE6.2 and AP-42, EPA establishes a grace period before the model is required to be used for conformity analyses. The conformity rule provides for a grace period for new emissions models of between 3-24 months, to be established by notification in the Federal Register.

EPA articulated its intentions for establishing the length of a conformity grace period in the preamble to the 1993 transportation conformity rule (58 FR 62211):

“EPA and [the Department of Transportation (DOT)] will consider extending the grace period if the effects of the new emissions model are so significant that previous SIP demonstrations of what emission levels are consistent with attainment would be substantially affected. In such cases, States should have an opportunity to revise their SIPs before MPOs must use the model’s new emissions factors.”

In consultation with DOT, EPA considers many factors in establishing the length of the grace period, including the degree of change in emissions models and the effects of the new model on the transportation planning process (40 CFR 93.111).

Duration and starting point of conformity grace period: Upon consideration of all of these factors, EPA and DOT have decided to establish a 2-year grace period before MOBILE6.2 and AP-42 are required for new PM₁₀ conformity determinations in most cases. During this grace period, areas should use the interagency consultation process to examine how MOBILE6.2 and AP-42 will impact their future conformity determinations. Areas should carefully consider whether the PM₁₀ SIP and motor vehicle emissions budget(s) should be revised with MOBILE6.2 and AP-42 before the end of the conformity grace period, since doing so may be necessary to ensure conformity in the future. EPA intends to publish a notice of availability in the Federal Register to announce the release of the final version of MOBILE6.2 and AP-42 in the near future. The effective date of this Federal Register notice will constitute the start of the conformity grace period.

However, the grace period will be shorter than 2 years for PM₁₀ if an area revises its PM₁₀ SIP and budgets with MOBILE6.2 and AP-42, and such budgets become applicable for conformity purposes prior to the end of the 2-year grace period. For example, if an area revises a previously submitted (but not approved) PART5-based PM₁₀ SIP with MOBILE6.2 and AP-42 and EPA finds the revised PM₁₀ budgets adequate for conformity, such budgets would apply for conformity on the effective date of the Federal Register notice announcing EPA's adequacy finding. In this example, if an area was in nonattainment or maintenance for PM₁₀, the new grace period would end for PM₁₀ conformity analyses once EPA found the new SIP budgets adequate.

In addition, if an area revises a previously approved PM₁₀ SIP, the revised budgets based on MOBILE6.2 and AP-42 would be used for conformity purposes once EPA approves the SIP revision in most cases. In general, submitted SIPs cannot supersede approved budgets until such SIPs are approved. The Federal Register notice announcing the grace period will state that the grace period will be 2 years unless new budgets become applicable sooner, in which case the grace period will end once the applicability of new MOBILE6.2 and AP-42 based budgets becomes effective.

This grace period for MOBILE6.2 and AP-42 applies only to PM₁₀ conformity analyses. NO_x, HC, and CO conformity analyses are covered under the MOBILE6 grace period, which ends in January 2004. As a result, all new NO_x, HC, and CO conformity analyses begun after January 29, 2004 must be based on either MOBILE6 or preferably MOBILE6.2 as described in Question 2 of this document.

Implementation of grace period: During the grace period, areas can use earlier PM models, such as PART5, for PM₁₀ conformity analyses or choose to use MOBILE6.2 and AP-42. When the grace period ends, MOBILE6.2 will become the only approved motor vehicle emissions model for transportation conformity purposes in states outside California. AP-42 will become the approved method for estimating re-entrained road dust unless an alternative method is approved as described in Question 3. In general, this means that all new conformity analyses started after the end of the grace period must be based on MOBILE6.2 and AP-42 (or an approved alternate method), even if the PM₁₀ SIP is based on PART5 or other models. As discussed above, the grace period for new conformity analyses would be shorter for PM₁₀ if an area revised its SIP and budgets with MOBILE6.2 and AP-42 and such budgets became applicable for conformity purposes prior to the end of the generally applicable 2-year grace period. EPA strongly encourages areas to use the consultation process to examine how MOBILE6.2 and AP-42 will affect future conformity determinations so, if necessary, PM₁₀ SIPs and budgets can be revised with MOBILE6.2 and AP-42 or transportation plans and programs can be modified prior to the end of the grace period.

Finally, the conformity rule provides some flexibility for analyses that are started before the end of the grace period. Regional PM₁₀ conformity analyses that begin before or during the grace period may continue to rely on PART5 as determined through the interagency consultation process. In addition, conformity determinations may also be made that rely on a previous

regional analysis (40 CFR 93.122(e)), after the grace period, even if the previous regional analysis was based on the previous model, unless, as stated above, the applicable budgets were revised with MOBILE6.2 and AP-42. Conformity determinations for transportation projects may also be based on a previous model if the emissions analysis was begun before or during the grace period, and if the final environmental document for the project is issued no more than three years after the issuance of the draft environmental document. (40 CFR 93.111(c)). The interagency consultation process should be used if it is unclear if an analysis was begun before the end of the grace period.

6. When existing PM₁₀ SIPs and motor vehicle emissions budgets are revised with MOBILE6.2 and AP-42, what do States need to submit to show that the SIP's purpose continues to be demonstrated?

General policy: EPA will rely on its existing SIP policy and past experience in answering this question. Whenever motor vehicle emissions inventories and budgets in SIPs are revised, it is important to ensure that the SIP continues to demonstrate its Clean Air Act purpose (e.g., attainment, maintenance). For example, if a State revises a maintenance plan to add or delete control measures, the State needs to show in its revised SIP that maintenance continues to be demonstrated with the new mix of control measures. EPA has always required under the Clean Air Act that revisions to existing SIPs and budgets continue to demonstrate the purpose of the SIP. Similarly, States that revise existing PM₁₀ SIPs with MOBILE6.2 and AP-42 must show that the SIP continues to support reasonable further progress, attainment, or maintenance with the new level of motor vehicle emissions calculated by the new model, assuming all other Clean Air Act requirements are met.

The transportation conformity rule (40 CFR 93.118(e)(4)(iv)) requires that "the motor vehicle emissions budget(s), when considered together with all other emissions sources, is consistent with applicable requirements for reasonable further progress, attainment, or maintenance (whichever is relevant to the given implementation plan submission)." This criterion must be satisfied before EPA can find submitted budgets adequate for use in the conformity process. The following paragraphs articulate EPA's policy for existing PM₁₀ SIPs that are revised with MOBILE6.2 and AP-42. This policy would apply to all PM₁₀ SIP revisions completed with MOBILE6.2 and AP-42.

Use of latest planning assumptions: If PM₁₀ SIPs are revised with MOBILE6.2 and AP-42, base year, milestone year, and attainment/maintenance year motor vehicle emission inventories will need to be recalculated with the latest available planning assumptions. As required by Clean Air Act §172(c)(3) and EPA's regulation at 40 CFR 51.112(a), states must use the latest planning assumptions available at the time that the SIP is developed, including but not limited to the latest information for vehicle miles traveled (VMT), speeds, fleet mix, and SIP control measures. All inventories must use the best data available. Future year projection inventories must be based on the latest data available. If planning assumptions have not changed

since the original PM₁₀ SIP was submitted, the State should document this in its new PM₁₀ SIP submission.

In addition, States must consider whether growth and control strategy assumptions for non-motor vehicle sources (i.e., point, area and non-road mobile sources) are still accurate at the time that the PM₁₀ SIP revision is developed with MOBILE6.2 and AP-42. Such assumptions include population and economic assumptions and any allowable emissions relied upon for stationary sources. If these assumptions have not changed, the State can simply re-submit the original PM₁₀ SIP with the revised motor vehicle emission inventories and budgets, assuming all other requirements are met. Otherwise, the emissions categories in the SIP that have changed must be brought up to date.

Milestone, attainment or maintenance demonstration: As discussed above, PM₁₀ SIP revisions based on MOBILE6.2 and AP-42 must continue to show that the SIP still demonstrates its purpose (e.g., attainment or maintenance) when the PART5-based motor vehicle emission inventories are replaced with MOBILE6.2 and AP-42 inventories. The level of effort needed for this demonstration can vary depending upon how MOBILE6.2 and AP-42 affects the level of motor vehicle emissions and whether non-motor vehicle inventories require updating. The method used in the original demonstration could also be a factor.

Areas can revise their motor vehicle emissions inventories and budgets using MOBILE6.2 and AP-42 without revising the entire PM₁₀ SIP or completing additional modeling if: 1) the SIP continues to demonstrate its purpose when the PART5-based motor vehicle emission inventories are replaced with MOBILE6.2 and AP-42 base year and milestone/attainment/maintenance year inventories; and, 2) the State can document that the growth and control strategy assumptions for non-motor vehicle sources (i.e., point, area and non-road mobile sources) continue to be valid and any minor updates do not change the overall conclusions of the PM₁₀ SIP. If using the latest planning assumptions for emissions estimates results in changes to other emissions categories (e.g., point or area emissions), the demonstration would apply to the entire inventory, rather than just the on-road mobile inventory.

If both of the above criteria are met, the State can simply re-submit the original PM₁₀ SIP with the revised MOBILE6.2 motor vehicle emissions inventories, assuming all other SIP requirements are met. As described further below, EPA will work with areas on a case by case basis to determine if these criteria are met. If either criterion is not met, the emissions categories in the PM₁₀ SIP that have changed must be brought up to date. Any changes in mobile or non-mobile control strategies, including stationary source inventories, must be factored in to both base and future year inventories if they would indicate a nonattainment problem. However, a State would not necessarily have to revise a non-mobile emissions inventory category just to account for a regulatory or permit change that *reduces* these emissions in an attainment, maintenance, or milestone year relative to the existing PM₁₀ SIP.

It should be noted that a more rigorous reassessment of the SIP's demonstration may be necessary if a State decides to reallocate possible excess emission reductions to the motor vehicle emissions budget as a safety margin. In other words, the State will need to assess how its original attainment demonstration is impacted by using MOBILE6.2 and AP-42 vs. PART5 before it reallocates any apparent PM₁₀ motor vehicle emission reductions resulting from the use of MOBILE6.2 and AP-42.

EPA assistance: States are expected to consult with their EPA Regional Office prior to submitting MOBILE6.2 and AP-42 PM₁₀ SIP revisions. Early consultation can limit delays in EPA's adequacy or approval processes. EPA will work with States on a case-by-case basis to decide what additional documentation or analyses are necessary to show that the PM₁₀ SIP revision demonstrates its intended purpose. For example, EPA is available to discuss whether additional SIP documentation for validating or updating non-motor vehicle emissions inventories or air quality modeling is needed. EPA will consider issuing additional SIP guidance in the future if additional issues and questions arise.

7. Will the release of MOBILE6.2 and AP-42 trigger the need for conformity hot-spot modeling for PM?

The release of MOBILE6.2 and AP-42 does not trigger the need for quantitative conformity hot-spot modeling to estimate concentrations of PM₁₀ at this time. However, qualitative hot spot analyses are still required in PM₁₀ nonattainment and maintenance areas.

8. How will MOBILE6.2 and AP-42 affect the development of future attainment or maintenance PM SIPs?

In general, PM emissions derived from MOBILE6.2 are likely to be lower in future years than PM emissions derived from PART5 due to the benefits of new vehicle standards incorporated in MOBILE6.2. However, the exact impact on air quality depends upon the unique circumstances of each nonattainment or maintenance area. The emissions comparisons depend very heavily on the pollutants of concern, the dates of concern, and on existing local regulations, traffic patterns, fleet age, and mix of cars and trucks. Moreover, because of the complex chemistry and meteorology involved in air pollution, the policy consequences of changes in highway vehicle emissions may not be clear until multiple years are examined and the new emissions levels are applied to an air quality model. Relative differences in emissions over time from PART5 to MOBILE6.2 and AP-42 may be as important, or more important than differences in any one year. As a result, even an estimate of higher emissions under MOBILE6.2 and AP-42 may not necessarily result in a need for additional controls, if the reduction in emissions over time predicted in MOBILE6.2 and AP-42 is greater than the reduction predicted in PART5. Therefore, it is impossible to make general predictions about the implications of using MOBILE6.2 and AP-42 in nonattainment or maintenance SIPs. Likewise, MOBILE6.2 and AP-42 users should not immediately assume that increases or decreases in PM₁₀ emissions in any

single year imply the need for more or fewer SIP control measures until those changes in emissions have been put in the complete SIP context.

If, due to local conditions, modeling with MOBILE6.2 and AP-42 indicates an increase in projected emissions, this may affect an area's ability to demonstrate conformity for their transportation plan and transportation improvement program (TIP). Areas are encouraged, through the interagency consultation process, to consider whether MOBILE6.2 and AP-42 will have any potential impact on their future conformity determinations. Areas should determine whether the SIP and motor vehicle emissions budgets should be updated using MOBILE6.2 and AP-42 or whether the transportation plan/TIP should be modified during the MOBILE6.2 and AP-42 conformity grace period to facilitate future conformity determinations. After the grace period ends, all new conformity analyses must be based on MOBILE6.2 and AP-42 (unless another dust methodology has been approved for local use) even if the SIP was based on an earlier model. Please see Questions 4 and 5 for further information on MOBILE6.2, AP-42, SIPs, and conformity.

9. What model should be used for preparing PM_{2.5} inventories for SIPs and conformity determinations?

EPA has not yet finalized implementation policy for the PM_{2.5} National Ambient Air Quality Standards (NAAQS). However, when that policy is finalized and PM_{2.5} nonattainment areas have been designated, MOBILE6.2 (except in California) and AP-42 (except in areas where another dust methodology has been approved) will be the approved models for estimating motor vehicle exhaust, brake and tire wear, and re-entrained road dust emissions in PM_{2.5} SIPs and conformity determinations, until they are replaced by newer models or methods.

10. What does the release of MOBILE6.2 mean for analyses of mobile source air toxics impacts under the National Environmental Policy Act?

While MOBILE6.2 is EPA's best available tool for quantifying toxics emissions from on-road vehicles, its availability has no direct bearing on the administration of the National Environmental Policy Act (NEPA). The Department of Transportation has responsibility for implementing NEPA for Federally funded or approved transportation projects, and it is currently developing a policy on how mobile source air toxics should be addressed in NEPA analyses, in consultation with EPA.

11. Will EPA provide new technical guidance on how specific features of MOBILE6.2 should be used in the creation of emission inventories for PM₁₀ and PM_{2.5} SIP and conformity submissions?

While MOBILE6.2 incorporates significant changes in internal structure, underlying assumptions, and input and output options compared to PART5 for exhaust PM emissions, it is almost identical to MOBILE6 with respect to most other input options. EPA has already released

a separate document (“Technical Guidance on the Use of MOBILE6 for Emission Inventory Preparation”, January 2002) that provides detailed guidance on the use of MOBILE6 in creating motor vehicle emissions estimates for SIPs and transportation conformity determinations. Most of the technical guidance in that document will also apply to MOBILE6.2. EPA will release a revision to the existing technical guidance document which will address any PM-specific issues not covered in the previous technical guidance document. Information on the use of AP-42 for re-entrained road dust estimation is incorporated in Sections 13.2.1 and 13.2.2 of AP-42.