UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
AIR AND RADIATION

MEMORANDUM:

SUBJECT: Policy Guidance on the Use of MOBILE6 for SIP Development and Transportation Conformity

FROM: Lydia N. Wegman for
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TO: EPA Regional Air Division Directors

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Attached is the final policy guidance that describes how and when to use MOBILE6 in state implementation plan (SIP) development and transportation conformity determinations. MOBILE6 will become EPA's approved motor vehicle emission factor model for estimating volatile organic compounds (VOCs), nitrogen oxides (NOx), and carbon monoxide (CO) from passenger cars, motorcycles, light-duty and heavy-duty trucks. The MOBILE model is used by state and local agencies outside of California. EPA will be publishing a Federal Register notice of availability in the near future to approve the new model for official purposes.

EPA provided state, local, and tribal agencies an opportunity to comment on the draft policy guidance in the fall of 2001. Our preview release allowed the agencies required to use the model to better understand when MOBILE6 will be used in SIP and conformity processes. We have appreciated working closely with you and your staff and the Department of Transportation (DOT) in the development of this guidance. The attached questions articulate EPA's policy for MOBILE6 use in the development of SIPs and transportation conformity determinations.

If there are any questions regarding this memorandum, please send an email to mobile@epa.gov for general issues, contact Laurel Driver (919-541-2859) for the National Emission Inventory (NEI), John Silvasi (919-541-5666) for mid-course reviews, and Meg Patulski (734-214-4842) for transportation conformity.

1. How will MOBILE6's release affect state implementation plans (SIPs) that have already been submitted and/or approved or SIPs that are currently under development?

In general, EPA believes that MOBILE6 should be used in SIP development as expeditiously as possible. The Clean Air Act requires that SIP inventories and control measures be based on the most current information and applicable models that are available when a SIP is developed.[1] However, it is also important to recognize the time and level of effort that States have already undertaken in SIP development with MOBILE5. The following paragraphs articulate EPA's policy for the use of MOBILE6 in the development of SIPs.

The release of MOBILE6 in most areas would not require a SIP revision based on the new model. There are exceptions for certain nonattainment and maintenance areas that have included interim MOBILE5-based estimates for the Tier 2 standards.[2] See question 3 for more information on the use of MOBILE6 in SIPs in these areas.

EPA believes that the Clean Air Act would not require states that have already submitted SIPs or will submit SIPs shortly after MOBILE6's release to revise these SIPs simply because a new motor vehicle emissions model is 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 in these SIPs, for example, if it is determined that future conformity determinations would be ensured through such a SIP revision. However, EPA does not believe that the State's use of MOBILE5 should be an obstacle to EPA approval for reasonable further progress, attainment, or maintenance SIPs that have been or will soon be submitted based on MOBILE5, 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 MOBILE5). It would be unreasonable to require the States to revise these SIPs with MOBILE6 since significant work has already occurred, and EPA intends to act on these SIPs in a timely manner.

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States should use MOBILE6 where SIP development is in its initial stages or has not progressed far enough along that switching to MOBILE6 would create a significantly adverse impact on State resources. For example, SIPs that will be submitted later in 2002 should be based on MOBILE6 since there is adequate time to incorporate the new model. MOBILE6 should be incorporated into these SIPs since MOBILE6's emissions estimates are based on the best information currently available. EPA also believes that the legal basis for approving a MOBILE5-based SIP is less clear the longer that MOBILE6 is in place and available for use. Since SIPs must be based on applicable models and data inputs, it could be difficult for EPA to

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

[2]The final rule on Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements ("Tier 2 standards") for passenger cars, light trucks, and larger passenger vehicles was published on February 10, 2000 (65 FR 6698).

approve a SIP developed with MOBILE5 significantly after MOBILE6 becomes available. If you have questions about which model should be used in your SIP, please consult with your EPA Regional Office.

Incorporating MOBILE6 into the SIP now could also assist areas in mitigating possible transportation conformity difficulties in the future after the MOBILE6 conformity grace period ends. New conformity analyses started after the grace period is over must be based on MOBILE6 (40 CFR 93.111), so having MOBILE6-based SIP motor vehicle emissions budgets in place at that time could help ensure positive transportation conformity determinations. See question 2 for more information on MOBILE6 and conformity.

2. When will MOBILE6 be required for 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 we approve a new emissions model like MOBILE6, we establish 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.

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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 is

required for new conformity determinations in most cases. During this grace period, areas should use the interagency consultation process to examine how MOBILE6 will impact their future conformity determinations. Areas should carefully consider whether the SIP and motor vehicle emissions budget(s) should be revised with MOBILE6 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 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 a given pollutant if an area revises its SIP and budgets with MOBILE6, 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) MOBILE5-based ozone SIP with MOBILE6 and EPA finds the revised MOBILE6 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 for ozone and CO, the MOBILE6 grace period would end for ozone once EPA found the new MOBILE6-based SIP budgets adequate. However, MOBILE5 could continue to be used for CO conformity determinations until the end of the MOBILE6 grace period.

In addition, if an area revises a previously approved SIP, the revised MOBILE6 budgets would be used for conformity purposes once EPA approves the MOBILE6 SIP revision in most cases. In general, submitted SIPs cannot supersede approved budgets until they are approved. However, see question 3 for more information about when revised MOBILE6 budgets will apply for conformity purposes if interim MOBILE5-based Tier 2 estimates were included in an approved SIP. 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-based budgets becomes effective.

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Implementation of grace period: During the grace period, areas can use an approved version of MOBILE5[3] for conformity determinations or choose to use MOBILE6 on a faster time frame. When the grace period ends, MOBILE6 will become the only approved motor vehicle emissions model for transportation conformity purposes in states outside California. In general, this means that all new conformity analyses started after the end of the grace period must be based on MOBILE6, even if the SIP is based on an earlier version of the MOBILE model. As discussed above, the grace period for new conformity analyses would be shorter for a given pollutant if an area revised its SIP and budgets with MOBILE6 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

[3]Please refer to EPA's Office of Transportation and Air Quality's August 11, 1997 memorandum entitled, "Summary of Comments on and Guidance for Use of MOBILE5b," which describes our policy on when MOBILE5a or 5b can be used in conformity determinations.

MOBILE6 will affect future conformity determinations so, if necessary, SIPs and budgets can be revised with MOBILE6 or transportation plans and programs can be modified prior to the end of the grace period.

To avoid any inconsistencies in analyses resulting from use of estimated credit, EPA encourages areas that have incorporated interim MOBILE5-based Tier 2 estimates into their SIPs to continue to use MOBILE5 (instead of MOBILE6) for conformity analyses until new MOBILE6 budgets are submitted and found adequate (unless the grace period ends before this occurs). These areas have committed to submit SIP revisions within 1-2 years of MOBILE6's release, so we know that motor vehicle emissions budgets based on MOBILE6 should be in place within that time frame, at a minimum.

Finally, the conformity rule provides some flexibility for analyses that are started before the end of the grace period. Regional conformity analyses that begin before or during the grace period may continue to rely on an approved version of MOBILE5. Conformity determinations for transportation projects may also be based on an approved version of MOBILE5 if the 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 a MOBILE5-based analysis was begun before the end of the grace period.

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3. How will MOBILE6's release affect nonattainment and maintenance areas that have included MOBILE5-based Tier 2 estimates in their SIPs?

All States whose attainment demonstrations or maintenance plans include interim MOBILE5-based estimates of the Tier 2 standards were required to commit to revise and resubmit their motor vehicle emissions budgets within 1-2 years of the final release of MOBILE6 in order to gain SIP approval. EPA will soon publish a notice of availability in the Federal Register to officially release the final version of MOBILE6. The effective date of this Federal Register notice will constitute the start of the 1 or 2-year time periods for these SIP revisions. In November of 1999, EPA issued two memoranda[4] to articulate our policy regarding States that incorporated Tier 2 benefits into their SIPs and budgets. Although these memoranda primarily targeted certain serious and severe ozone nonattainment areas, EPA has implemented this policy in all other areas that have made use of Tier 2 benefits from EPA's April 2000 MOBILE5 guidance, "MOBILE5 Information Sheet #8: Tier 2 Benefits Using MOBILE5."

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[4]November 3, 1999 EPA memorandum entitled, "Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations," and November 8, 1999 EPA memorandum entitled, "1-Hour Ozone Attainment Demonstrations and Tier 2/Sulfur Rulemaking." These memoranda are available at EPA's conformity website (http://www.epa.gov/otaq/, click on "conformity" button).

EPA offered two options for revising SIPs and budgets that relied on MOBILE5 Tier 2 estimates. States could commit to revise their budgets within 1 year after MOBILE6. Alternatively, States could commit to revise their budgets within 2 years after MOBILE6 is released, if the State also commits that conformity will not be determined during the second year unless there are adequate[5] SIP budgets in place that were developed using MOBILE6.[6] EPA proposed this second option to allow States to adjust their air quality planning schedules as appropriate. We believe that allowing areas an additional year to revise their budgets using MOBILE6 will not result in environmental harm as long as during that time there are no new conformity determinations that rely on the older MOBILE5 budgets. States selecting this option also agreed to inform affected metropolitan planning organizations and their State transportation departments of this requirement.

Any SIPs that rely on interim Tier 2 estimates must be accompanied by one of these two types of commitments in order for EPA to find the budgets adequate for conformity purposes, and in order for EPA to approve the SIP. These commitments must be subject to a public hearing and fully enforceable as part of the SIP.

EPA has always stated that the benefits of the Tier 2 program cannot be accurately estimated until MOBILE6 is released. The MOBILE5 Tier 2 estimates were interim approximations based on national defaults rather than local information, and were not completely compatible with a MOBILE5 baseline. MOBILE6 emissions estimates for an area may be substantially different from those based on the interim MOBILE5 Tier 2 estimates.

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States completing mid-course reviews: SIP revisions that revise interim MOBILE5 Tier 2 estimates with MOBILE6 are not intended to duplicate any technical analyses required for mid-course reviews in those areas. The MOBILE6 SIP and budget revisions are primarily intended to revise the motor vehicle emissions inventories with the new model. Although the overall SIP must continue to demonstrate attainment or maintenance with these revised MOBILE6 inventories as described in question 5 of this guidance, EPA believes that new attainment modeling or additional control measures to ensure attainment may be delayed until the mid-course reviews. EPA will work with these States on a case-by-case basis to decide what

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[5]The transportation conformity rule establishes criteria for EPA to use in determining if submitted motor vehicle emissions budgets are adequate for conformity purposes prior to EPA's approval action. For more information on adequacy findings, see 40 CFR 93.118(e) or EPA's May 14, 1999 guidance entitled, "Conformity Guidance on Implementation of March 2, 1999 Conformity Court Decision."

[6]This concept was initially discussed in a letter dated March 6, 2000 from John S. Seitz, Director, Office of Air Quality Planning and Standards, to Ralph Marquez, Commissioner, Texas Natural Resources Conservation Commission. EPA also proposed this additional option in its July 28, 2000 supplemental notice of proposed rulemaking for certain ozone areas (65 FR 46383).

additional documentation is necessary to show that the MOBILE6 SIP revision demonstrates attainment.

If the State cannot demonstrate that the SIP shows attainment with the revised MOBILE6 inventories as described in question 5 of this guidance, the State can submit an enforceable commitment to do one of the following in its mid-course review: 1) submit additional measures needed to fill any emission reduction shortfall (if a shortfall is confirmed in the mid-course review); or 2) document that the mid-course review reflects that there is no emission reduction shortfall. Such a commitment, if needed, would be submitted as part of the MOBILE6 SIP revision, and this commitment is necessary for EPA to find the revised MOBILE6-based motor vehicle emission budgets adequate for conformity purposes.

When do budgets apply? If EPA approves SIPs and budgets that include interim MOBILE5 Tier 2 estimates, these budgets will apply for transportation conformity purposes only until there are revised, adequate budgets based on MOBILE6 in place. The revised MOBILE6 budgets will apply for conformity purposes as soon as they are submitted and we find them adequate. As EPA approves these SIPs with interim MOBILE5 Tier 2 estimates, we are limiting the duration of these approvals because we are approving the SIPs and their budgets based solely on the fact that the States have committed to revise them. Therefore, once we have confirmed that the revised MOBILE6 budgets are adequate, they must be used instead of the approved MOBILE5 budgets for conformity purposes, pursuant to EPA's conformity rules and the limitations imposed by these SIP approval actions. In addition, if a state subsequently revises a MOBILE6 budget to incorporate new planning assumptions, for example, the revised MOBILE6 budget would supersede the original MOBILE6 budget once EPA finds it adequate for conformity purposes (assuming the original MOBILE6 budget has not yet been approved).

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4. Why must some areas taking credit for Tier 2 standards revise their SIPs within 1-2 years of MOBILE6's release while other areas can take the full 2-year conformity grace period?

EPA believes it is critical that SIPs and motor vehicle emissions budgets that relied on MOBILE5-based Tier 2 estimates be recalculated as expeditiously as possible to ensure that public health is protected and that Clean Air Act transportation conformity goals are achieved. As discussed above, the benefits of the Tier 2 vehicle and fuel standards cannot be accurately estimated until MOBILE6 is released. The MOBILE5-based Tier 2 estimates are interim approximations that were based on national defaults rather than local information.[7] MOBILE6 emissions estimates for an area may be substantially different from those based on the MOBILE5 Tier 2 benefits. Recalculating motor vehicle emissions with MOBILE6 will ensure that

[7]November 3, 1999 EPA memorandum entitled, "Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations," and November 8, 1999 EPA memorandum entitled, "1-Hour Ozone Attainment Demonstrations and Tier 2/Sulfur Rulemaking."

attainment or maintenance continues to be demonstrated by the SIP. Therefore, EPA will only approve SIPs based on interim MOBILE5 Tier 2 estimates if States commit to revise SIPs and budgets within 1-2 years of MOBILE6's release. Affected States have included such commitments in the SIP, and will be able to start the SIP development process promptly once the official release of MOBILE6 is announced in the Federal Register.

In contrast, States that did not rely on interim Tier 2 estimates in their SIPs are not required to revise their SIPs with MOBILE6. However these states may choose to revise their SIPs and budgets with MOBILE6 to assist in passing conformity in the future. Such revisions are not required because they do not need to account for the limitations of the interim MOBILE5 Tier 2 estimates.

States that incorporated MOBILE5-based Tier 2 estimates are committing to revise their SIPs, and consequently, will be able to start the SIP development process immediately once MOBILE6 is released. However, States that have not made such commitments will require additional time to decide if a MOBILE6 SIP revision is necessary to ensure future conformity determinations. EPA considered this additional time when we decided to establish a 2-year grace period before MOBILE6 is required in new conformity determinations for most areas that have not committed to revise their SIPs in the short-term.

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5. When existing attainment and maintenance SIPs and motor vehicle emissions budgets are revised with MOBILE6, 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 attainment or maintenance 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 SIPs with MOBILE6 must show that the SIP continues to support attainment or maintenance with the new level of motor vehicle emissions calculated by the new model.

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 SIPs that are revised with MOBILE6, including ideas for how to streamline these revisions whenever possible.

This policy will apply to all SIP revisions completed with MOBILE6, including revisions to SIPs and budgets that relied on interim MOBILE5-based Tier 2 estimates.

Use of latest planning assumptions: If SIPs are revised with MOBILE6, base 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. Base year and historical year inventories should use the best data available for those years. Future year projection inventories must be based on the latest data available. If planning assumptions have not changed since the original SIP was submitted, the State should document this in its new 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 MOBILE6 SIP revision is developed. 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 SIP with the revised motor vehicle emission inventories and budgets. Otherwise, the emissions categories in the SIP that have changed must be brought up to date.

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Attainment or maintenance demonstration: As discussed above, SIP revisions based on MOBILE6 must continue to demonstrate that the SIP still demonstrates its purpose (e.g., attainment or maintenance) when the MOBILE5-based motor vehicle emission inventories are replaced with MOBILE6 inventories. The level of effort needed for this demonstration can vary depending upon how MOBILE6 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 without revising the entire SIP or completing additional modeling if: 1) the SIP continues to demonstrate attainment or maintenance when the MOBILE5-based motor vehicle emission inventories are replaced with MOBILE6 base year and 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 SIP. For example, consistent with EPA's SIP modeling guidance for various pollutants, if an ozone SIP relied on changes in emissions from the base year to an attainment or maintenance year inventory to estimate relative changes in monitored ozone levels, the first criterion could be satisfied by demonstrating that the relative emission reductions between the base year and the attainment or maintenance year are the same or greater using MOBILE6 than they were using MOBILE5. Alternatively, if an ozone attainment SIP relied on absolute model predictions for the future attainment year, then the first criterion could be satisfied by demonstrating that the MOBILE6 estimates are equal to or lower

than the MOBILE5 estimates for the future attainment year. Or, if a carbon monoxide (CO) maintenance plan relied on either a relative or absolute demonstration, the first criterion could be satisfied by documenting that the relative emission reductions between the base year and the maintenance year are the same or greater using MOBILE6 as compared to MOBILE5. In any case, 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 SIP with the revised MOBILE6 motor vehicle emissions inventories. If either criteria are not met, the emissions categories in the 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 to determine 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 or maintenance year relative to the existing SIP.

It should be noted that regardless of the technique used for attainment or maintenance demonstrations, 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 vs. MOBILE5 before it reallocates any apparent motor vehicle emission reductions resulting from the use of MOBILE6.

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<u>States completing mid-course reviews:</u> As described in question 3 of this guidance, if a State that has committed to complete a mid-course review cannot demonstrate that the SIP shows attainment with the revised MOBILE6 inventories, the State can submit an enforceable commitment to do one of the following in its mid-course review: 1) submit additional measures needed to fill any emission reduction shortfall (if a shortfall is confirmed in the mid-course review); or 2) document that the mid-course review reflects that there is no emission reduction shortfall. Such a commitment, if needed, would be submitted as part of the MOBILE6 SIP revision, and this commitment is necessary for EPA to find the revised MOBILE6-based motor vehicle emission budgets adequate for conformity purposes.

<u>EPA assistance:</u> States are expected to consult with their EPA Regional Office prior to submitting MOBILE6 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, analyses, and for mid-course review areas, other commitments (as described above) that are necessary to show that the SIP revision demonstrates its intended purpose (e.g., attainment or maintenance). 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.

6. <u>How will MOBILE6 affect the development of future attainment or maintenance SIPs?</u>

The answer to this question 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. In some cases, a change from MOBILE5 to MOBILE6 may result in increased emissions estimates, while in other cases it may result in decreased emissions estimates for various time periods.

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 MOBILE5 to MOBILE6 may be as important, or more important than differences in any one year. As a result, an estimate of higher emissions under MOBILE6 may not necessarily result in a need for additional controls, if the reduction in emissions over time in MOBILE6 is greater than the reduction in MOBILE5. Therefore, it is impossible to make general predictions about the implications of using MOBILE6 in nonattainment or maintenance SIPs. Likewise, MOBILE6 users should not immediately assume that increases or decreases in 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.

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An increase in emissions due to MOBILE6 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 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 or whether the transportation plan/TIP should be modified during the MOBILE6 conformity grace period to facilitate future conformity determinations. After the grace period ends, all new conformity analyses must be based on MOBILE6 even if the SIP was based on an earlier MOBILE model. Please see question 2 for further information on MOBILE6 and conformity.

7. <u>How will MOBILE6 play a role in mid-course reviews required in certain serious and severe ozone nonattainment areas?</u>

States that relied on a weight-of-evidence test in their attainment demonstrations for the 1-hour ozone standard had originally committed to submit a mid-course review by the end of 2003, a date that would allow consideration of the benefits of the NOx SIP call reductions. EPA received comments on our December 16, 1999 proposed approvals of these SIPs (64 FR 70318) recommending that the submission deadline be extended. Moreover, in the NOx SIP call litigation, the court issued an order requiring EPA to allow states to establish a source

compliance date as late as May 31, 2004. Because the NOx reductions are critical to attainment for these areas, EPA is contemplating an extension of the mid-course review submission date to December 2004 for States affected by the NOx SIP call. It is expected that MOBILE6 will be in use in 2003 in SIP development and conformity, and a number of States will have already revised their SIPs and motor vehicle emissions budgets by that time. Therefore, EPA expects States to use MOBILE6 in any emission-related analyses for their mid-course review. EPA does not believe that the continued use of MOBILE5 in any emissions-based analyses in the 2003-2004 time frame is appropriate.

The December 1999 notices of proposed rulemaking (NPRMs) on the 1-hour attainment SIPs for serious ozone areas with proposed attainment dates of 2004 or earlier (Atlanta and Western Massachusetts) acknowledged that to approve attainment SIPs for the serious areas requesting an attainment date extension to a year prior to 2005, a review that occurs at a midpoint prior to the attainment date would be impractical in terms of timing. Therefore, for these areas, EPA requested the State's commitment to a mid-course review be a commitment to perform an early attainment assessment to be submitted by the end of the attainment year. EPA expects that such an early attainment assessment should follow EPA's technical guidance for mid-course reviews. This early attainment assessment will help guide the State and EPA in determining what further action might be required if the area does not attain by its attainment date.

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8. <u>How will MOBILE6's release affect the NOx SIP call submissions or how States show compliance with their emission reduction rules that are designed to meet their NOx budgets?</u>

In the NOx SIP call, EPA recognized that projections of emissions from mobile sources would change as EPA improved its emissions models. However, EPA stated that these changes, in and of themselves, would not require recalculation of the NOx budgets (63 FR at 57419-20; October 27, 1998). The EPA does not intend to recalculate and repromulgate a State's NOx budget due to the availability of MOBILE6. Regarding determining compliance, the NOx SIP call stated that States will neither be penalized by any new emission calculation technique nor will they be allowed to benefit from such a new technique (63 FR at 57427; October 27, 1998 and 62 FR at 60365-66; November 7, 1997). The 2007 Statewide NOx budgets are an accounting mechanism to ensure that States have adopted and are implementing controls designed to achieve the necessary emissions reductions to address interstate transport. When EPA evaluates each State's NOx emissions reports, EPA will focus on whether the State has implemented the measures to the level that its approved NOx budget demonstration had shown would, based on the applicable base case inventories, achieve the Statewide budget levels.

<u>9. What role will MOBILE6 play in EPA's 1999 National Emissions Inventory?</u>

The National Emission Inventory (NEI) is a data base of criteria and hazardous air pollutant (HAP) emission estimates for all types of sources, covering every county in the United States. It is used for a variety of EPA purposes related to public information, air quality trends analysis, and regulatory impact analysis. EPA also welcomes others to use the NEI. For example, most Regional Planning Organizations will use it as a starting point for the development of more refined regional emissions inventories for purposes of regional haze assessment and planning.

EPA is planning to prepare three versions of the 1999 National Emissions Inventory. The following paragraphs address how criteria pollutants from highway vehicles will be estimated for each version.

Version 1 and 1.5 - EPA has already released a first version of the 1999 NEI, containing highway vehicle emission estimates that were developed by EPA with MOBILE5. Other emission source categories were estimated by applying growth and control factors to 1996 estimates many of which came from state agencies. Version 1.5, a minor revision of this inventory to reflect the final 1999 vehicle miles traveled (VMT) reports, with an extension to cover the year 2000, has been posted on EPA's FTP server (ftp://ftp.epa.gov/EmisInventory/net_99v15/) and will be released in one or more summary formats approximately December 31, 2001.

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Version 2 - EPA has begun work on Version 2 of the 1999 NEI. Version 2 will be the first that incorporates data submitted by state and local agencies on actual emissions in 1999. For the most part, these agencies submitted data on point sources, with some states also supplying estimates for some area and non-road mobile source categories. Some states supplied VMT estimates for highway vehicles. A draft edition, not intended for actual use, is now in a public review period of October 1, 2001 through January 31, 2002. (See ftp://ftp.epa.gov/EmisInventory/draftnei99ver2/ and http://www.epa.gov/ttn/chief/net/index.html#draft.) State estimates of highway vehicle emissions were not incorporated into this draft edition. Instead, EPA has used MOBILE5 to estimate highway vehicle emissions for all states (except California, which has submitted estimates using its own emissions model). In light of the eventual transition to MOBILE6, these MOBILE5 estimates will be short-lived. We therefore have advised the public that comments on these MOBILE5 estimates should be focused on issues that would also be relevant to the eventual development of MOBILE6 estimates. To emphasize the short-lived nature of these highway estimates, they were not incorporated into the draft Version 2 data files; instead, they were available as part of Version 1.5 of the 1999 NEI.

We expect our first MOBILE6-based estimates to be released publicly in June 2002. June 2002 is the planned release date for the final edition of the second version of the 1999 NEI. We will need to decide whether the MOBILE5 or the MOBILE6 estimates will appear in this final edition of the second version. If our confidence in how we

prepared the MOBILE6 estimates is high we likely will formally incorporate the MOBILE6-based estimates into the final edition of the second version. If we do this, we will warn users that the MOBILE6 estimates have not yet undergone public review as other parts of the NEI will have by then. If our confidence is lower and we believe more public review is appropriate before giving them status in the NEI, we may keep the MOBILE5 estimates in the inventory, and present the MOBILE6-based estimates as still-draft alternative estimates for those interested. In the latter situation, we would also regard the MOBILE6-based estimates as the first step in the development of the highway vehicle portion of the third version of the NEI.

Version 3 - We fully expect that all states that wish to have their MOBILE6 highway vehicle emissions inventory incorporated into the 1999 National Emission Inventory will have adequate opportunity to submit their inventory in time for it to be incorporated into the June 2003 final edition of the third version of the 1999 NEI. For states that do not submit their own estimates, EPA will use MOBILE6 to make estimates. These may have improvements over the estimates available in June 2002. The draft edition of the third version will be released in October 2002.

Version 1 of the 1999 NEI did not include any estimates of hazardous air pollutants (HAP). Our approach to HAP emissions for highway vehicles for the second and third versions of the 1999 NEI is not fully settled and may be affected by the timing of a new version of MOBILE6 that addresses these pollutants. The HAP estimates for 1996 that are now available were based on an approximate modeling approach (MOBTOX) that was intermediate between MOBILE5 and MOBILE6. This approach is laborious to apply. In light of the expected release in 2002 of a final version of MOBILE6 that includes HAP emissions, we are not planning on generating 1999 HAP emission estimates with MOBTOX. The October 2001 draft edition of the second version of the 1999 NEI does not contain any estimates of HAP emissions from highway vehicles.

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10. Will EPA provide new guidance on how specific features of MOBILE6 should be used in the creation of emission inventories for SIP and conformity submissions?

MOBILE6 incorporates significant changes in internal structure, underlying assumptions, and input and output options compared to MOBILE5. In particular, MOBILE6 has much greater input flexibility than MOBILE5, including many more input options. These new options are designed to allow users to more accurately model local conditions or to expand the use of MOBILE6 beyond the regional-scale modeling for which it was originally designed. For some of these input options, it may take some time for users to develop reliable sources of local information. EPA is releasing a separate document ("Technical Guidance on the Use of MOBILE6 for Emission Inventory Preparation") that provides detailed guidance on the use of MOBILE6 in creating motor vehicle emissions estimates for SIPs and transportation conformity determinations.