UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBLECT: Using the MOVES and EMFAC Emissions Models in NEPA Evaluations

FROM: Susan E. Bromm
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TO: NEPA/309 Division Directors
Regions I-X

On December 20, 2010, EPA approved the use of the MOVES2010a and EMFAC2007 emissions models for certain quantitative hot-spot analyses in project-level transportation conformity determinations.[1] With this action, MOVES2010a became EPA's approved model for completing quantitative carbon monoxide (CO) and particulate matter (PM_{10} and $PM_{2.5}$) transportation conformity hot-spot analyses by state and local agencies outside of California; EMFAC2007 became EPA's approved model for completing PM_{10} and $PM_{2.5}$ hot-spot analyses within California. EPA's approval establishes a two-year grace period before (1) MOVES2010a must be used for new CO, PM_{10} and $PM_{2.5}$ hot-spot analyses required by the transportation conformity rule, and (2) EMFAC2007 must be used for PM_{10} and $PM_{2.5}$ hot-spot analyses within California.[2] EPA's rationale for establishing the grace period can be found in the *Federal Register* notice.

In order to facilitate the maximum possible coordination between the transportation conformity and NEPA processes, and to minimize confusion, EPA recommends that federal agencies use the same model for assessing the criteria air pollutant impacts of a given project in their NEPA documents as is used for determining transportation conformity. Although not required during the two-year grace period, EPA recommends that agencies begin using MOVES2010a and EMFAC2007 at the earliest practicable time for transportation conformity, general conformity, and NEPA purposes.

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[1] 75 FR 79370.

[2] The grace period applies for MOVES2010a and future versions of the MOVES model unless EPA notes otherwise, as EPA may provide minor, periodical updates to the MOVES model in order to improve its functionality and performance. The grace period also applies for future versions of the EMFAC model unless EPA notes otherwise. EPA previously approved EMFAC2007 for use in CO hot-spot analyses in California (73 FR 3464).

After the conclusion of the grace period, agencies will be required to use MOVES2010a and EMFAC2007 (in California) for new PM hot-spot analyses and MOVES2010a for new CO hot-spot analyses for transportation conformity purposes. At that time, those models should be used to complete the corresponding emissions and air quality analyses for NEPA and general conformity as well. However, the transportation conformity rule (40 CFR 93.111(c)) allows conformity determinations for projects based on the previous version of an emissions model to be completed after the end of the grace period, if the analysis was begun before the end of the grace period. More specifically, conformity determinations may continue to be based on the previous model if the analysis was begun prior to or during the grace period and if the final NEPA environmental document for the project is issued no more than three years after the issuance of the draft environmental document.[3]

There could be situations where a draft environmental impact statement (DEIS) for a project is released either before or within the two-year grace period, and the final environmental impact statement (FEIS) will not be released until after the grace period has ended. In light of both 40 CFR 93.111(c) and EPA's desire to facilitate coordination of the conformity and NEPA processes, when an agency includes the previous model's results in the DEIS, it may continue to rely on such an analysis in the FEIS, provided the FEIS is released no more than three years after the issuance of the DEIS. For those limited cases in which the DEIS and FEIS for a project may use results from different emissions models (e.g., the FEIS is issued more than three years after the DEIS), EPA recommends that agencies develop an explanation for use in their NEPA documents of why the air quality section of the FEIS uses a different model than the DEIS, and the inevitable differences in modeling results between the two. In these cases, EPA recommends that the proposing agency consider whether an appended technical evaluation or supplementation, of their NEPA document would be appropriate.

The transportation conformity requirement to conduct CO, PM_{10}, and $PM_{2.5}$ hot-spot analyses applies only to certain projects within areas designated nonattainment and maintenance for these pollutants. In cases where project sponsors are conducting local emissions analyses for NEPA purposes and not transportation or general conformity, EPA recommends that MOVES2010a and EMFAC2007 (in California) be used at the earliest practicable time. However, EPA also acknowledges that project sponsors may not have the necessary expertise to use MOVES2010a immediately. As such, EPA would accept the use of the previous model for these analyses while the grace period established for conformity is in place.

For determining motor vehicle emissions in general conformity analysis, the general conformity regulations in 40 CFR 93.159(b)(1) require the most current version of the motor vehicle emissions model specified by EPA and available for use in the preparation or revision of SIPs in that State must be used for the general conformity analysis. Since EPA has announced the use of MOVES2010 for transportation conformity regional emissions analyses and all SIP development in its March 2, 2010 notice (75 FR 9411-9414), the two-year grace period from that notice which ends March 2012 also applies to general conformity analysis. When MOVES2010a

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[3] For CO hot-spot analyses, the previous model is MOBILE6.2 (outside of California). For PM_{10} and $PM_{2.5}$ hot-spot analyses, the previous model is considered to be a qualitative analysis. The Federal Register notice contains details on using these models during the conformity grace period.

was released, EPA stated that this grace period applies to the use of MOVES2010a as well. As a result, agencies would use MOVES2010a for Federal actions requiring general conformity analysis consistent with the March 2010 grace period.

Additionally, MOVES2010a is currently the best tool EPA has for estimating motor vehicle emissions of multiple mobile source air toxics (MSATs, including benzene, 1,3-butadiene, formaldehyde, acetaldehyde, acrolein, naphthalene, ethanol, MTBE, and diesel PM). These emissions are not regulated under transportation conformity, but analysis of their impacts may be required to comply with NEPA. In these cases, EPA encourages agencies to use MOVES2010a for MSAT emissions at the earliest practicable time.

Finally, MOVES2010a is also currently the best tool EPA has for estimating greenhouse gas (GHG) emissions from the transportation sector. It is a significant improvement over MOBILE6.2 and previous versions of MOVES for GHG estimation. Agencies estimating GHG emissions for NEPA purposes should consider using MOVES2010a for these GHG emissions analyses at the earliest practicable time.

Should you have any questions regarding this issue, please feel free to contact Bob Hargrove, Director, NEPA Compliance Division, or James G. Gavin at (202) 564-7157 or (202) 564-7161, respectively.

cc: Regional 309 Environmental Review Coordinators