



Linda S. Adams
Secretary for
Environmental Protection

Air Resources Board

Robert F. Sawyer, Ph.D., Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov



Arnold Schwarzenegger
Governor

April 18, 2007

Ms. Deborah Jordan, Director
U.S. Environmental Protection Agency
Air Division, Region 9
75 Hawthorne Street
San Francisco, California 94105

Dear Ms. Jordan:

The Air Resources Board (ARB) is pleased to transmit California's current motor vehicle emissions model, EMFAC2007, to the U.S. Environmental Protection Agency (U.S. EPA). We request your approval of EMFAC2007 for use in State Implementation Plans (SIP) and transportation conformity analyses in California.

EMFAC2007 is tailored specifically to represent the many diverse regions of California. As a result, EMFAC2007 addresses regional variations in fleet composition, travel patterns, applicable regulations, temperatures and other factors. Because of its ability to produce a more detailed emission inventory over 45 model years using California conditions, regulations and region specific data, we believe EMFAC2007 is the best tool for motor vehicle emissions estimation in California.

The transportation conformity rule requires U.S. EPA to approve the emissions model for SIP purposes before it can be used to determine conformity of a transportation plan or program. We are specifically asking U.S. EPA to approve the emission factor elements of EMFAC2007, not the default travel activity data included in the model. Each region may update its activity data as part of a SIP revision or subsequent conformity analysis independent of the EMFAC2007 model, and both of these actions require opportunity for public comment and U.S. EPA approval.

EMFAC2007 incorporates multiple important improvements over its predecessor, EMFAC2002. These include:

- Revisions to the methodology and data used to characterize the on-road vehicle fleet.
- Modification of mileage accrual rates.
- Updates to vehicle miles traveled and speed distributions.
- Modifications to the inspection and maintenance program algorithms.
- Corrections to reflect the effects of ethanol permeation.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

Ms. Deborah Jordan
April 18, 2007
Page 2

- Revision of heavy-heavy duty diesel truck emission factors and speed correction factors.
- Redistribution of heavy-heavy duty diesel truck vehicle miles traveled in California.
- Revisions to brake wear PM emission factors.
- Updates to on-road fuel correction factors.
- Revisions to planning humidity profiles.
- Revisions to planning temperature profiles.
- Corrections to heavy-duty truck gas cap benefits from the inspection and maintenance program.

These improvements are summarized in the attachment to this letter. Complete documentation can be found in technical memos posted on ARB's website at: <http://www.arb.ca.gov/msei/msei.htm> . Other technical support information on EMFAC can be found at: <http://www.arb.ca.gov/msei/onroad/doctabletest.htm>.

In particular, the revisions to the motor vehicle fleet information incorporate the latest information from the California Department of Motor Vehicles about the vehicles on the road in California. This information represents the latest planning assumptions for use in transportation conformity. As we stated in our letter to the Federal Highway Administration and U.S. EPA on January 31, 2006, ARB is committed to keeping the latest planning assumptions in the EMFAC model by continuing to update EMFAC on a three year cycle. This is the first official transmittal of EMFAC on this three year cycle.

The public process has been essential to the development of EMFAC2007. Three public workshops were held in March 2005 to solicit input from the public and stakeholders in Sacramento, Fresno and El Monte. Three more public workshops were held in 2006 on September 11 and November 15 in Sacramento, November 16 in Diamond Bar and December 15 in Fresno. ARB staff also presented our proposed model improvements and schedule for model release and U.S. EPA approval at these public meetings. EMFAC2007 was released to the public on November 1, 2006.

The release of EMFAC2007 is a critical step in the development of California SIPs and their associated emissions budgets for the new 8-hour ozone standard and the PM2.5 standard. We look forward to prompt U.S. EPA action to approve EMFAC2007 to keep SIP development and conformity assessments on track in California. ARB staff is ready to work with U.S. EPA to support approval of EMFAC2007.

Ms. Deborah Jordan
April 18, 2007
Page 3

Enclosed is a diskette containing EMFAC2007, as well as an updated User's Guide. You may also download the model from our website at:
<http://www.arb.ca.gov/msei/onroad/latestversion.htm> .

If you have any technical questions please call Michael Benjamin, Chief of the Mobile Source Analysis Branch at (916) 323-2915. Questions relating to SIP development can be directed to Mr. Kurt Karperos, Chief of the Air Quality and Transportation Planning Branch at (916) 445-5610.

Sincerely,

/s/

Lynn Terry
Deputy Executive Officer

Enclosures

cc: See next page

Ms. Deborah Jordan
April 18, 2007
Page 4

cc: Mr. Gene Fong
Division Administrator
California Division
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, California 95814-4708

Mr. Will Kempton, Director
California Department of Transportation
P.O. Box 942873
Sacramento, CA 94273-0001

Ms. K. Sue Kiser, Director
Planning and Right of Way
California Division
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, California 95814-4708

Air Pollution Control Districts

Metropolitan Transportation Planning Organizations

Regional Transportation Planning Agencies

Mr. Kurt Karperos
Air Resources Board

Mr. Michael Benjamin
Air Resources Board