

C. Why Does EPA Consider EMFAC2002 as a Major Update to EMFAC?

EMFAC2002 includes significant changes to its model interface, new data and methodologies regarding calculation of vehicle emissions, revisions to implementation data for control measures, and corrections to technical errors mentioned in our prior approval of EMFAC2000. The new WIS interface makes EMFAC2002 both more user friendly and allows users to change input data updated for factors that had previously been embedded within the model (e.g. fleet vehicle data). EMFAC2002 includes updated data estimating idle emissions from heavy duty trucks and school buses. Base emission rates for light-duty vehicles are now drawn from the real-world unified drive cycle. EMFAC2002 accounts for gross evaporative emissions (i.e., "liquid leakers") and updates particulate emissions to account for smoking vehicles. The model also accounts for recent amendments to California's low emissions vehicle and fuels regulations, as well as updated heavy-duty truck standards. Full chassis dynamometer tests, rather than engine dynamometer tests, are now the source of heavy-duty truck emissions factors. CARB's web site describes these and other model changes at http://www.arb.ca.gov/planning/emfac2002/encl_a.pdf.

D. How Were Stakeholders and the Public Involved in the EMFAC Development Process?

Since 1999, CARB has held a series of public workshops to discuss proposed model updates and receive comments on interim versions of the new model. In the most recent workshops, held June 11 and 13, 2002, CARB described the latest EMFAC changes under consideration and sought public input. Those changes are reflected in the final EMFAC2002 model released in October 2002. Two additional public information briefings were held on November 6 and 7, 2002, to share the emissions estimates resulting from use of the final model with updated travel activity, as well as plans for transmittal of EMFAC2002 to U.S. EPA. CARB has also discussed both the model and the activity update methodology with affected transportation and air agencies as part of the interagency consultation process.

CARB also released a series of technical memos, that describe each update to the model, and a public information document that summarizes the changes from earlier versions of the model. The technical memos are available on CARB's Web site at: http://www.arb.ca.gov/msei/on-road/latest_revisions.htm. Each memo describes the model update, the reason for the change, how the change was incorporated into the EMFAC model, and the resulting emissions impact. The public information document is also available on the CARB Web site at: <http://www.arb.ca.gov/msei/on-road/briefs/2002.pdf>. This document summarizes the major changes to the EMFAC model and contains tables showing the impacts of the changes both statewide and by county for VOC, CO, NO_x and PM. The detailed description of all major model updates since EMFAC7F is an enclosure to the transmittal package and available on the CARB Web site at: http://www.arb.ca.gov/planning/emfac2002/encl_a.pdf.

E. Will a Transportation Conformity Grace Period Be Set by This Approval?

Yes. The transportation conformity rule (40 CFR 93.111) requires that conformity analyses be based on the latest motor vehicle emissions model approved by EPA for SIP purposes for a state or area. Section 176(c)(1) of the CAA 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 such as EMFAC2002, a grace period is established before the model is required for conformity analyses. However, areas have the option of using the new model prior to the end of the grace period. The conformity rule provides for a grace period for new emissions models of between 3 to 24 months.

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In consultation with the 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).

Upon consideration of all of these factors, EPA is establishing a 3-month grace period before EMFAC2002 is required for new conformity analyses. The grace period begins today and ends on June 30, 2003. As discussed earlier in the notice, several prior versions of EMFAC (EMFAC7F, EMFAC7G) are no longer used in California for new regional emissions analyses for transportation plan and transportation improvement program (TIP) conformity determinations. Therefore it is appropriate to set a short grace period since all areas in California will need to use EMFAC2002 to begin any new

regional conformity analyses. A longer grace period would provide no practical benefit for transportation plan and TIP conformity determinations, since older EMFAC models cannot be used in new regional analyses.

When the grace period ends on June 30, 2003, EMFAC2002 will become the only approved motor vehicle emissions model for new regional and hot-spot transportation conformity analyses across California. In general, this means that all new VOC, NO_x, PM-10, and CO regional conformity analyses and CO hot-spot analyses started after the end of the 3-month grace period must be based on EMFAC2002, even if the SIP is based on an earlier version of the EMFAC model.

F. Can Areas Use Any Other Models During the Grace Period?

Yes, in limited cases. The only area in California with motor vehicle emission budgets developed with EMFAC2000 and approved to use EMFAC2000 is the Bay Area. During the grace period, the Bay Area can continue to use EMFAC2000 for regional analyses for ozone precursors or choose to use EMFAC2002 on a shorter time frame. DOT's May 2, 2002 memo did not preclude the continuing use of EMFAC2000 for use in new regional conformity determinations. In addition, the Bay Area could proceed with transportation plan and TIP conformity analyses for ozone precursors based on EMFAC2000 if the analysis was begun before or during the grace period. (40 CFR 93.111(c))

Conformity determinations for transportation projects can also be based on EMFAC7F if the analysis was begun before the end of 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 (see 40 CFR 93.111(c)). The interagency consultation process should be used if it is unclear whether an EMFAC7F or EMFAC7G based analysis was begun before the end of the grace period.

G. Related SIP Development Actions

The Bay Area 2001 ozone SIP included a commitment from CARB to revise the SIP with the latest technical information as part of its mid-course review in April 2004. This commitment was referenced in EPA's approval of EMFAC2000 (67 FR 1464, January 11, 2002), with the understanding that CARB would submit revisions to the EMFAC model (e.g., EMFAC2002) in early 2003, so that the Bay Area SIP revision would occur within one year of EPA's approval of EMFAC2002. This is