



To: Interested Parties
From: Tom Moore, Technical Coordinator
Date: August 28, 2002
Subject: Additional WRAP §309 Modeling Simulations

Following is a list of modeling simulation runs to provide information for states and tribes to use in their decisions about opting into developing §309 Regional Haze implementation plans. These runs are listed in priority order, with dates for run completion, analysis completion, and “delivery to the customer”. Each of the runs also conceptually identifies the emissions effect to be modeled, and the test to be applied, so that the modeling results answer the appropriate policy question(s). “Delivery to the customer” would be defined as presenting the model results and participating in a discussion at a meeting of the appropriate WRAP Forum(s). The results of each modeling run, or grouping of runs, would be documented in a technical memorandum that describes the analysis requested by the WRAP policy or joint Forum, and the meaning of the technical data resulting from the modeling simulation(s).

- 1) **2018 Regional (9–state GCVTC region) Mobile Emissions Significance Test for the 16 GCVTC Class I Areas.**
 - a. Emissions’ effect to be modeled: on- and off-road tailpipe/brakes/evaporative/tire wear
 - b. Test to be applied: visibility change emissions on minus emissions off
 - c. Run completion date: end of August 2002
 - d. Analysis completion date: mid-September 2002
 - e. Delivery date: Present results at a Mobile Sources Forum meeting after any subsequent needed runs are completed, in the second half of October 2002 (Denver)

- 2) **2018 California Mobile Emissions Significance Test for the 16 GCVTC Class I Areas.**
 - a. Emissions’ effect to be modeled: on- and off-road tailpipe/brakes/evaporative/tire wear
 - b. Test to be applied: visibility change emissions on minus emissions off
 - c. Run completion date: end of August 2002
 - d. Analysis completion date: mid-September 2002
 - e. Delivery date: Present results at a Mobile Sources Forum meeting after any subsequent needed runs are completed, in the second half of October 2002 (Denver)

- 3) **2018 Phoenix, AZ MSA Mobile Emissions Significance Test for the 16 GCVTC Class I Areas.**
 - a. Emissions’ effect to be modeled: on- and off-road tailpipe/brakes/evaporative/tire wear
 - b. Test to be applied: visibility change emissions on minus emissions off
 - c. Run completion date: mid-September 2002
 - d. Analysis completion date: end of September 2002
 - e. Delivery date: Present results at a Mobile Sources Forum meeting after any subsequent needed runs are completed, in the second half of October 2002 (Denver)

- 4) **2018 Las Vegas, NV MSA Mobile Emissions Significance Test for the 16 GCVTC Class I Areas.**
 - a. Emissions' effect to be modeled: on- and off-road tailpipe/brakes/evaporative/tire wear
 - b. Test to be applied: visibility change emissions on minus emissions off
 - c. Run completion date: mid-September 2002
 - d. Analysis completion date: end of September 2002
 - e. Delivery date: Present results at Mobile Sources Forum meeting after any subsequent needed runs are completed, in the second half of October 2002 (Denver)

- 5) **Evaluation of Visibility Impacts of 2018 Prescribed Fire Control Strategy Options (Optimal Smoke Management, Base Smoke Management, and No Smoke Management)**
 - a. Emissions' effect to be modeled: prescribed fire management scenarios
 - b. Test to be applied: visibility differences between the 3 levels of prescribed fire management
 - c. Run completion date: end of September 2002
 - d. Analysis completion date: mid-October 2002
 - e. Delivery date: Meet with Fire Forum representatives later in Fall 2002 (location TBD)

- 6) **Stationary Source (Market Trading Forum) PM and NO_x 2018 Sensitivity Evaluations, to estimate the impact of potential NO_x and PM (PM is defined as primary fine PM other than sulfate, including fine OC, and fine EC) reductions on visibility for §309(d)(4)(v). The MTF is required to assess the need for backstop trading programs to keep these pollutants at their lowest levels, for stationary sources greater than 100 tons/year in the GCVTC 9-state region.**
 - a. Emissions' effect to be modeled: % reduction scenarios for PM and NO_x in 2018
 - b. Tests to be applied: visibility changes due to separate simulations of a 50% reduction in NO_x, a 50% reduction in PM, and a 25% increase in NO_x and PM simultaneously
 - c. Run completion date: mid-October 2002
 - d. Analysis completion date: end of October 2002
 - e. Delivery date: Meet with Market Trading Forum in late 2002 (location TBD)

- 7) **2018 All Control Strategies Combined – Projection of Visibility Improvement**
 - a. Emissions' effect to be modeled: all §309 emissions control strategies combined
 - b. Test to be applied: visibility differences between the 1996 base case and the combined 2018 control strategies
 - c. Run completion date: end of October 2002
 - d. Analysis completion date: mid-November 2002
 - e. Delivery date: Meet with representatives of affected Forums in late 2002 (location TBD)

These modeling simulation runs are all of the §309 modeling to be completed by the WRAP Regional Modeling Center before Spring 2003, to allow time for the RMC team to prepare the Modeling section of the Technical Support Document.

Please contact me at 602-771-2319, or at moore.tom@ev.state.az.us, if you have any questions or need additional information.