

MINUTES OF THE  
MARICOPA ASSOCIATION OF GOVERNMENTS  
AIR QUALITY TECHNICAL ADVISORY COMMITTEE MEETING

Thursday, March 20, 2003  
MAG Office  
Phoenix, Arizona

MEMBERS PRESENT

Stephen Cleveland, City of Goodyear, Chairman Avondale: Michael Powell	Associated General Contractors: Amanda McGennis for David Martin
*Chandler: Jim Weiss	*Homebuilders Association of Central Arizona: Connie Wilhelm-Garcia
*Gilbert: Tami Ryall	American Institute of Architects - Central Arizona: Stephen J. Andros
Glendale: Doug Kukino	*Valley Forward: Peter Allard
Mesa: Collum Hunter for Christine Zielonka	University of Arizona - Cooperative Extension: Patrick Clay
Phoenix: Joe Gibbs for Gaye Knight	Arizona Department of Transportation: Pat Cupell
Scottsdale: Larry Person	Arizona Department of Environmental Quality: Peter Hyde
*Surprise: Robert Zobel	Maricopa County Environmental Services Department: Renee Schindler for Jo Crumbaker
*Tempe: Tom Moore	*Arizona Department of Weights and Measures: Mark Ellery
Citizen Representative: Bill Pfeifer for Walter Bouchard	Federal Highway Administration: Ed Stillings for Dennis Mittelstedt
*Arizona Lung Association: David Feuerherd	Arizona State University: Judi Nelson
Salt River Project: Chris Janick	Salt River Pima-Maricopa Indian Community: Stan Belone for B. Bobby Ramirez
Southwest Gas Corporation: Brian O'Donnell	*Citizen Representative: David Rueckert
Arizona Public Service Company: Jim Mikula for Scott Davis	
**Western States Petroleum Association: Gina Grey	
Valley Metro: Randi Alcott for Bryan Jungwirth	
*Arizona Motor Transport Association: Dave Berry	
Maricopa County Farm Bureau: Jeannette Fish	
*Arizona Rock Products Association: Rusty Bowers	
*Greater Phoenix Chamber of Commerce: Heidi Koopman	

\*Members neither present nor represented by proxy.  
\*\*Participated via telephone conference call.

OTHERS PRESENT

Ruey-in Chiou, Maricopa Association of Governments	Lindy Bauer, Maricopa Association of Governments
Roger Roy, Maricopa Association of Governments	Taejoo Shin, Maricopa Association of Governments
Dean Giles, Maricopa Association of Governments	Mohan Toopal, Arizona Department of Environmental Quality
Cathy Arthur, Maricopa Association of Governments	Jean Parkinson, Pinal County Air Quality Control District
Julie Kicksey, Maricopa Association of Governments	Carolyn Novak, Stevens & Stevens, P.C. Max W. Wilson, Maricopa County

1. Call to Order

A meeting of the MAG Air Quality Technical Advisory Committee was conducted on March 20, 2003. Stephen Cleveland, City of Goodyear, Chairman, called the meeting to order at approximately 1:40 p.m. Gina Grey, Western States Petroleum Association, attended the meeting via telephone conference call.

2. Approval of the January 30, 2003 Meeting Minutes

The Committee reviewed the minutes from the January 30, 2003 meeting. Doug Kukino, City of Glendale, moved and Joe Gibbs, City of Phoenix, seconded and the motion to approve the January 30, 2003 meeting minutes carried unanimously.

3. Ozone Maintenance Plan (1-Hour Standard)

Ruey-in Chiou, Maricopa Association of Governments, gave a status report on the development of the Ozone Maintenance Plan for the 1-hour ozone standard. Ms. Chiou presented the Air Quality Modeling in support of the MAG Ozone Maintenance Plan. She mentioned that the EPA's Guidelines on Ozone Modeling is the basis of the Protocol and that it was prepared and reviewed by the Planning Team in May 2002. She indicated that the episode days were July 17, 1998 and August 24, 1999 and that the MOBILE6/M6Link and UAM Models are being used. She showed a map that displayed the ozone modeling domain as well as the monitoring sites.

Ms. Chiou informed the Committee of the core model inputs for the MAG Modeling System and provided an illustration of how the Urban Airshed Model (UAM) operates. Additionally, she showed the extent to which quality assurance is given for the model inputs. A list of diagnostic tests and operational performance evaluation processes for the UAM were also given.

Ms. Chiou indicated that the purpose of the modeling is to demonstrate that the model works by using historical data. Ms. Chiou supplied draft emissions inventories for NO<sub>x</sub> and HC on the two episode days. Sample time-series plots, sample scatter plots, and ground level ozone contour plots were also shown. The sample statistical measures demonstrated the model's accuracy by providing percent accuracy numbers below EPA's recommended range. Ms. Chiou concluded her presentation by mentioning the control measures to be used in the maintenance plan. She indicated that they were discussed at the Air Quality Planning Team meeting.

Mr. Cleveland asked who are the Air Quality Planning Team members. Lindy Bauer, Maricopa Association of Governments, replied that ADEQ, ADOT, Maricopa County, and MAG are members of the Air Quality Planning Team.

Collum Hunter, City of Mesa, inquired about the large percent of biogenic emissions in the emission inventories. Ms. Chiou responded that it is difficult to compare data across different years. The modeling domain has changed and now contains a larger amount of forest and mountain areas resulting in a larger percentage of biogenic emissions.

Peter Hyde, Arizona Department of Environmental Quality, referred to the ground level ozone contour plots and asked what was the highest predicted concentration and where is it located. Ms.

Chiou responded by saying the peak usually does not occur where there are stations. She pointed out that in 1998 the observed peak was in West Phoenix at 118 parts per billion (ppb) and the regional peak was 130 ppb.

Doug Kukino asked what would happen if the control measures listed were not enough. Ms. Bauer replied that if that were to happen, the plan would come back to the Committee. She indicated that credit has not been taken for some control measures in the past. Also, funding is uncertain for some measures such as the Voluntary Retrofit and Vehicle Repair Program and a stable funding source is needed. Ms. Bauer added that MAG is proposing to model three new measures: Maricopa County Rule 331; Maricopa County Rule 348; and Maricopa County Rule 358.

Larry Person, City of Scottsdale, referred to a Draft Emission Inventories pie chart in the presentation asking the difference between high and low point emissions. Ms. Chiou responded that the monitors slice both vertically and horizontally. Mr. Person mentioned that the statistical measures for July 17, 1998 show a negative mean bias. He asked if a negative or positive number is preferred. Ms. Chiou indicated that the model tends to over or under predict. Ms. Bauer noted that modeling is a predictive tool. For the validation, the objective is to predict a known value in the present as accurately as possible.

Mike Powell, City of Avondale, inquired what level sparks a High Pollution Advisory and if it is possible to make the advisories for neighborhoods where the concentration is high instead of a regional advisory. Ms. Bauer responded that ozone is not directly emitted. It is hard to predict where high ozone concentrations will occur. A combination of volatile organic compounds and nitrogen oxides “cook” in the high temperatures and then the ozone chemical reaction can take place. Ms. Chiou noted that the model is used at an urban scale and cannot be used in making neighborhood predictions.

Mr. Person mentioned that people are more concerned with what the concentration is in their own neighborhoods. He then referred to the 1998 ground level ozone contour plot. Mr. Person mentioned that Ms. Chiou earlier stated that the model may over predict. He inquired about Ms. Chiou’s comfort level with the model simulations. Ms. Bauer responded that the goal is a 100 percent correlation. She added that historically, the modeling has been good and that the accuracy has been reflected at the monitors. The last violation for carbon monoxide was in 1996 and the region has not recorded any violations of the one-hour ozone standard since 1996.

Joe Gibbs asked what assurance is there if maintenance cannot be demonstrated and if it is possible to require selected portions of the region, where concentrations are higher, to follow stricter regulations. Ms. Bauer replied that this is only preliminary data and that the EPA rules must be followed. She added that many factors go into the selection of design days, and the fact that we did not exceed the 1-hour standard on the design days is good.

Mr. Hyde mentioned that other areas of the country are making advances in ozone monitoring and, in possibly a few years, MAG and ADEQ may be able to develop a way to provide neighborhoods with predictions of ozone concentration levels.

4. Status Report on the PM-10 Air Quality Lawsuit

Ms. Bauer provided the Committee with a status report on the Arizona Center for Law in the Public Interest lawsuit which challenges the EPA approval of the Revised MAG 1999 Serious Area Particulate Plan for PM-10 for the Maricopa County Nonattainment Area. On January 17, 2003, the Center filed its second brief in the lawsuit to refute the EPA defense of the plan. Ms. Bauer reviewed the main arguments in the Center's second brief, including: EPA's interpretation of Best Available Control Measures (BACM) and Most Stringent Measures (MSM) is contrary to the intent of Clean Air Act and EPA guidance; EPA and the State did not provide an acceptable justification for rejecting CARB diesel fuel; and Agricultural Best Management Practices do not meet the requirements for Reasonably Available Control Measures (RACM) and BACM. Another argument in the Center's second brief is that without CARB diesel and all feasible agricultural controls, the plan does not include MSM.

Ms. Bauer indicated that the second brief states EPA abused its discretion in granting an extension of the attainment date and that the State of Arizona has repeatedly and historically resisted complying with the requirements of the Clean Air Act. Ms. Bauer presented an update on the lawsuit timeline. A possible court decision may be forthcoming in July 2003. Mr. Person asked if the Court would consider arguments in both briefs together. Ms. Bauer replied that this is correct.

Mr. Cleveland asked how this will affect the ability to move forward. Ms. Bauer responded that if the court upholds EPA's approval of the plan, we will continue implementing the plan. If the court vacates EPA's approval, we could be five months away from the loss of highway funds and the conformity could lapse on the Transportation Improvement Program and the Long Range Transportation Plan. Also, 2 to 1 offsets could be applied to industrial sources. Ms. Bauer explained that the court could issue a ruling just as the Transportation Policy Committee is about to consider the Regional Transportation Plans.

5. Status Report on the Carbon Monoxide Maintenance Plan

Ms. Bauer gave a status report on the Draft MAG Carbon Monoxide Maintenance Plan. She indicated that the plan has experienced delays. On February 21, 2003, MAG received a letter from the EPA clarifying issues regarding an intermediate year maintenance plan budget for conformity. Consequently, an intermediate year budget for 2006 is now being developed. Ms. Bauer asked Ms. Chiou to discuss the intermediate year budget. Ms. Chiou mentioned that the UAM is the core model and the base year is 1994. She added that the approach used for the intermediate year budget will be consistent with the modeling for the 2015 maintenance year.

6. 8-Hour Ozone Standard Area Designations

Ms. Bauer provided an update on the process to designate nonattainment area boundaries for the 8-hour ozone standard. She indicated that on February 27, 2003, EPA announced that additional time will be given for states to recommend nonattainment area boundaries. The date was extended from April 15, 2003 to July 15, 2003. She also stated that EPA will stay on its deadline to promulgate air quality designations

for the 8-hour ozone standard by April 15, 2004. Ms. Bauer distributed a map with locations of the 8-hour ozone monitoring sites. In addition, she provided the Committee with a map of the Air Quality Modeling Domains.

7. Visibility Index

The Arizona Department of Environmental Quality requested that the visibility index presentation be postponed.

8. Call to the Public

An opportunity was provided to members of the public to address the MAG Air Quality Technical Advisory Committee. No comments were presented.

9. Call for Future Agenda Items

Mr. Cleveland announced that the next meeting of the Committee is tentatively scheduled for May 1, 2003. Mr. Cleveland recognized Max Wilson, Maricopa County Supervisor.