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

Thursday, January 26, 2006
MAG Office
Phoenix, Arizona

MEMBERS PRESENT

*Stephen Cleveland, City of Goodyear, Chairman
Avondale: Michael Powell
*Buckeye: Lucky Roberts
*Chandler: Jim Weiss
*Gilbert: Tami Ryall
Glendale: Cathy Chaberski for Doug Kukino
Mesa: Scott Bouchie
Phoenix: Gaye Knight
#Scottsdale: Larry Person
Surprise: Tony DeLaCruz for Jim Nichols
Tempe: Oddvar Tveit
*Citizen Representative: Walter Bouchard
*American Lung Association of Arizona: Bill Pfeifer
*Salt River Project: Sunil Varma
Southwest Gas Corporation: Brian O'Donnell
*Arizona Public Service Company: Jim Mikula
#Western States Petroleum Association: Gina Grey
*Valley Metro: Randi Alcott
*Arizona Motor Transport Association: Dave Berry
Maricopa County Farm Bureau: Jeannette Fish
Arizona Rock Products Association: Russell Bowers
*Greater Phoenix Chamber of Commerce: Michelle Rill
Associated General Contractors: Amanda McGennis
*Homebuilders Association of Central Arizona: Connie Wilhelm-Garcia
*American Institute of Architects - Central Arizona: Stephen J. Andros
#Valley Forward: Mannie Carpenter for Peter Allard
University of Arizona - Cooperative Extension: Patrick Clay
Arizona Department of Transportation: Beverly Chenausky
Arizona Department of Environmental Quality: Peter Hyde
Environmental Protection Agency: Wienke Tax
Maricopa County Air Quality Department: Jo Crumbaker
Arizona Department of Weights and Measures: Duane Yantorno
*Federal Highway Administration: Ed Stillings
Arizona State University: Judi Nelson
*Salt River Pima-Maricopa Indian Community: B. Bobby Ramirez
*David Rueckert, Citizen Representative

*Members neither present nor represented by proxy.
#Participated via telephone conference call.
+Participated via video conference call.

OTHERS PRESENT

Lindy Bauer, Maricopa Association of Governments
Cathy Arthur, Maricopa Association of Governments
Dean Giles, Maricopa Association of Governments
Julie Hoffman, Maricopa Association of Governments
Joe Gibbs, City of Phoenix
Scott Di Biase, Pinal County
Christine Zielonka, City of Mesa
Jermaine Hannon, Federal Highway Administration
Nancy Wrona, Arizona Department of Environmental Quality
Emily Bonanni, Arizona Department of Environmental Quality
Theresa Rigney, Arizona Department of Environmental Quality
Steve Trussell, Arizona Rock Products Association
William Crowley, Citizen

1. Call to Order

A meeting of the MAG Air Quality Technical Advisory Committee was conducted on January 26, 2006. Gaye Knight, City of Phoenix, Acting Chair, called the meeting to order at approximately 1:45 p.m. Larry Person, City of Scottsdale, Gina Grey, Western States Petroleum Association, and Mannie Carpenter, Valley Forward, attended the meeting via telephone conference call.

2. Call to the Audience

Ms. Knight stated that, according to the MAG public comment process, members of the audience who wish to speak are requested to fill out comment cards, which are available on the table adjacent to the doorway inside the meeting room. Citizens are asked not to exceed a three minute time period for their comments. Public comment is provided at the beginning of the meeting for nonagenda items and nonaction agenda items.

Ms. Knight recognized public comment from William "Blue" Crowley, Citizen. Mr. Crowley distributed a bike map and indicated that there are five areas in Glendale where bike routes cross Grand Avenue. The bike route on Grand Avenue stops at Interstate 17 and starts up on the other side. He said this is not seamless and that a tunnel or bridge is needed. Mr. Crowley mentioned that the new route 685 is not in the bus book. He commented that only 1,800 of the 6,914 bus stops have shelters. Mr. Crowley stated that the funds are going to covered parking lots instead of bus shelters. He asked how covered parking helps. Mr. Crowley indicated that the violations of the PM-10 standard began 14 days after the drought started. He commented on the number of buses that sit with their engines running at the bus stops. Ms. Knight thanked Mr. Crowley for his comments.

3. Approval of the October 6, 2005 Meeting Minutes

The Committee reviewed the minutes from the October 6, 2005 meeting. Oddvar Tveit, City of Tempe, moved and Scott Bouchie, City of Mesa, seconded and the motion to approve the October 6, 2005 meeting minutes carried unanimously.

4. Particulate Pollution Update

Lindy Bauer, Maricopa Association of Governments, reported that in recent weeks, this region has experienced high readings at two of the PM-10 monitor sites. She said that although these readings will need to be checked by Maricopa County air quality personnel, it appears that MAG will need to initiate the preparation of a Five Percent Plan for submission to the Environmental Protection Agency (EPA) by December 31, 2007. Ms. Bauer advised that every monitor in the nonattainment area must be clean in 2007, 2008, and 2009 in order for the region to attain the standard by 2009.

Ms. Bauer discussed the PM-10 monitor data for 2004 and 2005 and the trend in PM-10 exceedance days from 1988 through 2005. She discussed the requirements for a Five Percent Plan and the sources of PM-10 emissions in 2006 as identified in the Revised MAG 1999 Serious Area PM-10 Plan. She also discussed the committed control measures used for numeric credit towards attainment in 2006 and the contingency measures which are being implemented. Ms. Bauer reviewed the

tentative schedule for the PM-10 Five Percent Plan and a sanctions timeline if there are plan issues that are not corrected within 18 months and within 24 months.

Ms. Bauer stated that the EPA proposed new particulate standards, including a stricter fine particulate standard, a new coarse particulate standard, and revoking the 24-hour PM-10 standard except in areas with violating monitors and a population of 100,000 or more. Ms. Bauer stated that representatives from Phoenix, Maricopa County, and MAG met to increase dust control efforts in hotspot areas. She updated the Committee on recent actions taken, including observations at the monitors by ADEQ, Maricopa County, and MAG, installing "No Parking" signs, transmitting the City of Peoria ordinance to member agencies, holding a model dust control ordinance workshop, providing information to industries, and inquiries on agricultural measures. She indicated that MAG was very appreciative of the efforts made by the City of Phoenix and Maricopa County Department of Transportation in the hotspot areas.

Ms. Knight requested that the cities be notified of any action they need to take as early as possible. Ms. Bauer responded that every effort will be made. Ms. Knight asked if the 2005 emissions inventory will reflect the recent unusual weather conditions. Ms. Bauer replied that the base year for the emissions inventory will be 2005. She added that MAG will take the inventory prepared by Maricopa County and develop a modeling inventory based on 2005. The process will include design day selection. Cathy Arthur, Maricopa Association of Governments, stated that there are two prongs to the emissions inventory. The region will have to show at least 10 percent reductions (five percent in 2008 and 2009) in the regional emissions inventory. There are also inventories for each monitor, which may look very different from the regional emissions inventory. The modeling will have to show attainment at each monitor as well.

Gina Grey, Western States Petroleum Association, asked if any of the exceedances could be classified as exceptional events. Ms. Bauer replied that Maricopa County is looking at the data to see if any exceedance days can be classified as natural or exceptional events. Jo Crumbaker, Maricopa County Air Quality Department, stated that of the 19 exceedance days in 2005, 17 occurred under stagnant conditions and therefore are not eligible for consideration as a natural or exceptional event. Ms. Knight asked if there were a couple of days earlier in 2005 that were classified as natural or exceptional events. Ms. Crumbaker replied that the earlier days in 2005 were not classified as natural or exceptional events since they did not meet the criteria. Ms. Crumbaker added that exceedances on January 19, 2006 and January 24, 2006 occurred under windy conditions and an analysis is being conducted to determine if the exceedances qualify as natural or exceptional events.

Ms. Grey asked if the fines collected by Maricopa County can be used to fund additional staff. Ms. Crumbaker replied that the program staff budget is set at the beginning of each year and the fines go into a fund balance that is reappropriated by the Maricopa County Board of Supervisors. Ms. Knight inquired about the windy days. Ms. Crumbaker responded that the wind events were of short duration, but powerful when they came through.

Russell Bowers, Arizona Rock Products Association, commented on the Arizona Department of Environmental Quality (ADEQ) revising the policy for natural and exceptional events. He indicated that it was revised since it did not contain exceptional status for rain being associated with a dust

storm. Mr. Bowers inquired about why the current drought and stagnant conditions are not considered exceptional events. He stated that an effort should be made to see if the exceedance days that occurred under stagnant conditions can be flagged. Peter Hyde, Arizona Department of Environmental Quality, stated that he is not aware of any situations where exceedances occurring under stagnant conditions have been classified as natural or exceptional events. He indicated that ADEQ has done a careful review of how the air is moving and found that the lower atmosphere is no more restrictive in 2005 than a year earlier. According to the ADEQ meteorologists, the higher concentrations of PM-10 are tied to the number of days without rain. Mr. Hyde indicated that he will speak with his colleagues regarding this issue.

Mr. Hyde commented on the Five Percent Plan. He asked if the five percent reductions would be based on the 2005 emissions inventory. He commented on the fluctuation in exceedance days over the last 15 years and asked if the region needs two additional years of attainment following the first year the region would attain. Ms. Bauer responded that, according to the Clean Air Act, for a Five Percent Plan, there needs to be an annual reduction in PM-10 or PM-10 precursor emissions within the area of not less than five percent of the amount of such emissions from the date of plan submission as reported in the most recent inventory prepared for such area. Ms. Bauer stated that the 2005 emissions inventory will be the most recent. Ms. Bauer added that, for attaining the standard, five percent for two years (a total of 10 percent) may be needed to model attainment. She indicated that at least three years of clean data is needed at the monitors. Mr. Hyde asked if years two and three are clean, are five percent reductions required for those two years. Ms. Bauer responded that not less than five percent per year in emission reductions are needed until attainment is met.

Mr. Hyde commented on a question raised earlier on whether the base year emissions inventory will reflect the unusual weather conditions. He stated that the emission factors account for the irregularity of rain. Therefore, there are ways to build inventories to effectively account for the unusual meteorology during the base year.

Mr. Bowers asked that the factors be checked now. Ms. Bauer responded that MAG can check the factors. She added that the EPA 1986 Natural and Exceptional Events Policy did consider unusual lack of precipitation and high winds a natural event. The recent exceedance days did occur during a long period with no precipitation, but with low winds.

Ms. Grey commented that Las Vegas should be contacted to see if they are experiencing a similar situation in terms of weather conditions and PM-10 exceedances. Ms. Arthur stated that Las Vegas has not been exceeding the PM-10 standard. She added that there are plans to meet with Clark County in Las Vegas to determine what has been contributing to their success. Ms. Grey commented on the weather patterns in Nevada. She indicated that Las Vegas may have received more rain.

Mr. Bouchie inquired about how the data looks for all monitors, not just those exceeding. Ms. Crumbaker referred to the exceedances on December 12, 2005. She described the location and sources for the monitors and indicated that there is a significant regional issue. Ms. Crumbaker added that many monitors are close to exceeding the PM-10 standard.

Ms. Knight commented on the pollution that flows up and down the Salt River and background concentrations. Ms. Crumbaker replied that there are high background concentrations. She added that river bottoms are the low spots so air flows to those areas.

Larry Person, City of Scottsdale, inquired about the West 43rd Avenue and Durango monitors. Ms. Crumbaker responded that the two monitors were designed to be located within the grid square that has the highest emission concentrations. She added that this is one of the requirements for the PM-10 monitoring network. Mr. Person asked what is contributing to the exceedances at the two monitors. Ms. Crumbaker referred to the Salt River State Implementation Plan for the Salt River Area. She mentioned that the contributors are different for low-wind and high-wind inventories. She added that the low-wind inventories are dominated by reentrained road dust and industrial sources. Mr. Hyde indicated that the West 43rd Avenue and Durango monitors are both in areas of high emissions. He mentioned the local and regional emissions at the two monitors and stated that the West Phoenix monitor is further from the high emissions area.

Mr. Person commented on a strategy where control measures would begin once a pattern develops. Ms. Knight mentioned that the City of Phoenix and Maricopa County did daily street sweeping near the monitors in addition to a number of other activities to try to prevent exceedances in the Salt River Area. Mr. Person commented that the source of the dust on the roads needs to be determined.

Mr. Bowers commented on what triggers an emergency response to exceedances. Mr. Person referred to the exceedances in November 2005. He indicated that the concentrations continued to get higher. Mr. Bowers commented on the dust rising off state land near the Four Peaks Region and in the West Valley. He discussed being stricter on areas outside city limits.

Mr. Person asked if the agricultural and mining industry sources are exempt from the Five Percent Plan. Ms. Knight responded that agricultural and mining sources are not exempt from the Five Percent Plan.

Ms. Knight recognized public comment from Mr. Crowley who commented that bike lanes are needed on all major arterial roads. He indicated that, next to black ice, dust and gravel are the most dangerous things to a bicyclist. He stated that the PM-10 concentrations are getting higher because single occupancy vehicles keep adding to the problem. Mr. Crowley asked if the dust collected is being analyzed. He indicated that he is affected by the pollution. Mr. Crowley mentioned that there were more High Pollution Advisory days than exceedances. He commented that the top three employers in the region should make sure their employees are using alternatives. Mr. Crowley indicated that government employees need to be part of the solution. Ms. Knight thanked Mr. Crowley for his comments.

5. New Particulate Standards Proposed by EPA

Ms. Arthur provided an overview of the new particulate standards proposed by the Environmental Protection Agency. On December 20, 2005, EPA proposed two new 24-hour standards for particulate pollution: a stricter fine particulate standard and a new coarse particulate standard. EPA is also proposing to revoke the existing 24-hour PM-10 standard, except in areas that have violating monitors and a population of 100,000 or more, such as Maricopa County. In these areas, the current

24-hour PM-10 standard will remain in place until EPA has completed nonattainment designations for the new coarse standard in July 2013. Ms. Arthur added that EPA has indicated that there may be legal challenges of the new coarse particulate standard.

Ms. Arthur indicated that the Federal Register Notice was published on January 17, 2006 and that there is a 90 day comment period. She mentioned that the new coarse standard only applies to coarse particles emitted in urban areas by sources such as: high-density traffic on paved roads, industrial sources, and construction activities. She added that the new coarse standard does not apply to: windblown dust and soils, agricultural sources, or mining sources. This means that the new coarse standard will require each region to discriminate the sources at the monitors.

Mr. Person commented that the three sources that are exempt from the new coarse particulate standard are virtually a definition of the desert southwest. Ms. Arthur responded that, according to EPA, if an exceedance is predominately caused by one or more of the three exempt sources, the exceedance would be excluded. Mr. Person asked if agricultural and mining sources are exempt from control measures. Ms. Arthur replied that is her understanding, based on the proposed rule. Mr. Person commented that a federal piece of legislation should not exempt any stakeholders out of the process at the very beginning. Ms. Knight stated that comments can be submitted to EPA on the new particulate standards until April 17, 2006.

Mr. Bowers asked if the new coarse particulate standard applies to Maricopa County since the region is still a nonattainment area for the old PM-10 standard. Ms. Arthur responded that the region will not be subject to the new coarse particulate standard until nonattainment designations are made, at the earliest, in 2013. Ms. Knight inquired about regulating agricultural and rock and gravel under the existing PM-10 standard. Wienke Tax, Environmental Protection Agency, replied that the State can regulate things that are not federally regulated. She mentioned that comments are requested by April 17, 2006 and there will be a public hearing in San Francisco on March 7th, 8th, or 9th. She added that the Clean Air Act Scientific Advisory Committee will have a conference call with Administrator Johnson on February 3, 2006. Ms. Knight requested that the phone number for the conference call be provided to the Committee.

Mr. Bowers asked if the new standards will apply only in nonurban areas. Ms. Arthur responded that the proposed standards were initially written to separate urban and rural areas. The latest proposal is based on the siting of the monitor in the highest population density areas. Ms. Knight asked if the new coarse particulate standard does not apply to areas with a population less than 100,000. Mr. Bowers inquired about the new coarse standard in an area with a population of 100,000 or more. Ms. Arthur stated that presumably rural areas would not have areas of high population density or traffic.

Amanda McGennis, Associated General Contractors, asked if MAG will be commenting on the new particulate standards. Ms. Bauer replied that MAG is still reviewing the proposed standards. Ms. Knight stated that the City of Phoenix will be submitting comments. Mr. Hyde mentioned that ADEQ commented on the first proposal in July 2005. He added that ADEQ will comment again. Mr. Hyde encouraged all interested parties to comment on the new particulate standards.

Mr. Person inquired about the high-density traffic on paved roads. Ms. Arthur replied that vehicle exhaust emissions are approximately two percent of the PM-10 emissions inventory. She stated that

the emissions from paved roads are primarily reentrainment. Mr. Bowers asked how much of the inventory is mining. Ms. Arthur responded that point sources account for approximately one percent of the regional emissions inventory.

Ms. Knight discussed the sources at the West 43rd Avenue and Durango monitors. She indicated that industrial sources are big contributors in the Salt River Area, but small in the rest of the region. Mr. Tveit commented that there is no data yet for the new coarse particulate standard. Ms. Arthur mentioned that the nonattainment designation date is far into the future in order to allow time to set-up monitors that measure coarse particulates and have them running for three consecutive years (in 2009-2011). Jeannette Fish, Maricopa County Farm Bureau, commented that Agricultural Best Management Practices (BMPs) are under State Law. She added that agriculture is disappearing in the region.

6. Update on Agricultural Best Management Practices

Theresa Rigney, Arizona Department of Environmental Quality, provided an update on the Agricultural Best Management Practices. She reviewed the legislation and how agricultural BMPs came into effect. Ms. Rigney discussed the requirements of the Agricultural PM-10 General Permit. Farmers must select three different BMPs from three categories: tillage and harvest, non-cropland, and cropland. Ms. Rigney provided examples for each category and mentioned what a farmer must do. She discussed compliance and indicated that there is one inspector assigned to the Maricopa Agricultural BMP Program. In addition, ADEQ provides funding to the Department of Agriculture for the BMP Compliance Assistance Program.

Ms. Rigney stated that ADEQ responds to all complaints within five days. She added that an ADEQ meteorologist prepares a high wind forecast for the Department of Agriculture and Maricopa County Farm Bureau so that farming activities can be planned. Ms. Rigney discussed the number of complaints and BMP plans received since the program began. She also provided a summary of the BMP General Permit.

Ms. Knight requested a contact number. Ms. Rigney replied (602) 771-2286. Ms. Bauer asked if any of the 106 complaints received required ADEQ to revoke a permit. Ms. Rigney responded no. She added that ADEQ is receiving a lot of cooperation and the issues have been worked out. Ms. Knight asked if 106 is the cumulative number of complaints received in the last four years, with approximately 50 in 2005. Ms. Rigney responded that is correct. She indicated that ADEQ has worked closely with those around the Higley monitor.

Ms. Knight asked if ADEQ has been working closely with the farmer near the Durango monitor. Ms. Rigney replied that during the last three months, the inspector has been in the field helping to identify sources and find ways to reduce the dust. Mr. Bowers asked if there has been an increase in infractions in the last few months. Ms. Crumbaker replied that there have been more complaints, but may be due to the publicity of the issue. She indicated that, in terms of compliance, there are now more inspectors in the field.

Michael Powell, City of Avondale, commented on EPA proposing a new standard while holding some regions such as Maricopa County to the old standard. He mentioned that data should be

collected for both the old and new particulate standards. Mr. Powell asked why some areas are required to stay under the current PM-10 standard when the new coarse particulate standard is more strict.

Mr. Bouchie inquired if the region would attain the new coarse particulate standard since it only includes particles smaller than 10 micrometers in diameter but larger than PM-2.5. Ms. Crumbaker responded that for the exceedances at the West 43rd Avenue and Durango monitors the concentrations were mostly PM-10. The PM-2.5 values at the Durango monitor were about 20 micrograms. Mr. Bouchie asked about the other monitors. Ms. Crumbaker replied that the West Phoenix monitor has higher levels of PM-2.5 than the Durango monitor. Historically, the peak PM-2.5 at the West Phoenix monitor is approximately 35-40 micrograms. Mr. Bouchie commented that the City of Mesa has a dust ordinance and does dust inspections. He added Mesa has seen more compliance, possibly do to the awareness.

7. Update on PM-10 Certified Street Sweeper Projects for FY 2006 CMAQ Funding

Dean Giles, Maricopa Association of Governments, provided an update on the PM-10 Certified Street Sweeper Projects for FY 2006 CMAQ funding. On October 6, 2005 the Committee had recommended a prioritized list of proposed PM-10 Certified Street Sweeper Projects for FY 2006 CMAQ funding and that the prioritized list be retained for any additional FY 2006 CMAQ funds that may become available due to year-end closeout, including any redistributed obligation authority, or additional funding received by this region. On October 26, 2005, the MAG Regional Council took approval action. Mr. Giles indicated that the Committee had requested notification of the results of the recommendation. He added that there were no changes to the Committee recommendation.

Mr. Powell asked which projects were funded. Mr. Giles responded that the first six projects were funded. Mr. Powell inquired about the difference in cost-effectiveness. Mr. Giles replied that member agencies provide MAG with individual applications with their requests. He added that the vehicle miles traveled usually affects the wide range in cost-effectiveness. Ms. Knight asked if more points are given if a busier street is swept. Mr. Giles responded that the number of miles swept also affects the cost-effectiveness. Mr. Powell commented that it would seem each street sweeper would sweep the same number of miles if the number of hours worked was consistent. Mr. Giles responded that sweeping schedules may vary by jurisdiction.

Ms. Knight recognized public comment from Mr. Crowley who indicated that street sweepers should include a misting system that would help capture particulates that are close to the road. He stated that the street sweeper should redirect the water spray so that it is not just hitting the road, but instead sending a moisture plume in front of the sweeper. Ms. Knight thanked Mr. Crowley for his comments.

8. Call for Future Agenda Items

Ms. Knight announced that the next meeting of the Committee is tentatively scheduled for February 23, 2006. With no further comments, the meeting was adjourned.