

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

Thursday, January 11, 2007
MAG Office
Phoenix, Arizona

MEMBERS PRESENT

Stephen Cleveland, City of Goodyear, Chairman
Jess Segovia for Michael Powell, Avondale
*Lucky Roberts, Buckeye
#Jim Weiss, Chandler
Jamie McCullough, El Mirage
Stephanie Prybyl for Tami Ryall, Gilbert
Doug Kukino, Glendale
#Greg Edwards for Scott Bouchie, Mesa
Gaye Knight, Phoenix
Larry Person, Scottsdale
#Antonio DeLaCruz, Surprise
Oddvar Tveit, Tempe
*Walter Bouchard, Citizen Representative
*Corey Woods, American Lung Association of Arizona
Barbara Sprungl, Salt River Project
*Brian O'Donnell, Southwest Gas Corporation
*Jim Mikula, Arizona Public Service Company
#Gina Grey, Western States Petroleum Association
Randi Alcott, Valley Metro
*Dave Berry, Arizona Motor Transport Association
Jeannette Fish, Maricopa County Farm Bureau
Russell Bowers, Arizona Rock Products Association
*Michelle Rill, Greater Phoenix Chamber of Commerce

Amanda McGennis, Associated General
Contractors
Spencer Kamps for Connie Wilhelm-Garcia,
Homebuilders Association of Central Arizona
*Stephen J. Andros, American Institute of
Architects - Central Arizona
*Mannie Carpenter, Valley Forward
*Patrick Clay, University of Arizona - Cooperative
Extension
Beverly Chenausky, Arizona Department of
Transportation
Peter Hyde, Arizona Department of Environmental
Quality
Wienke Tax, Environmental Protection Agency
Jo Crumbaker, Maricopa County Air Quality
Department
*Duane Yantorno, Arizona Department of Weights
and Measures
*Ed Stillings, Federal Highway Administration
*Judi Nelson, Arizona State University
Angela Cruz for B. Bobby Ramirez, Salt River
Pima-Maricopa Indian Community
*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
Taejoo Shin, Maricopa Association of Governments
Ieesuck Jung, Maricopa Association of Governments
Paul Ward, Maricopa Association of Governments
Kelly Taft, Maricopa Association of Governments
Jason Stephens, Maricopa Association of Governments
Carlos Juardo, Maricopa Association of Governments
Craig Chenery, Maricopa Association of Governments
Diane Arnst, Arizona Department of Environmental
Quality
Steve Peplau, Arizona Department of Environmental
Quality
David Lillie, Arizona Department of Environmental
Quality
Dena Konopka, Maricopa County Air Quality
Department
Bob Kard, Maricopa County Air Quality Department
Johanna Kuspert, Maricopa County Air Quality
Department

Holly Ward, Maricopa County Air Quality
Department
Ruth Garcia, Town of Buckeye
Karen O'Regan, City of Phoenix
Tom Remes, City of Phoenix
Joe Gibbs, City of Phoenix
Brent Stoddard, City of Glendale
Robert St. John, City of Glendale
Michelle Lehman, City of Surprise
Randall Overmyer, City of Surprise
Barbara Sylvester, Brown and Caldwell
Alisa Schroder, Meritage Homes
Ben Dowler, Engle Homes
Merry Ellen Boom, Converse Consultants
Cameron Flower, Kitchell Environmental Services
Shane Kiesow, City of Apache Junction
Scott Di Biase, Pinal County
Bob Baxter, T & B Systems
#Bob Dulla, Sierra Research
#Colleen McKaughan, Environmental Protection
Agency
#Doris Lo, Environmental Protection Agency

1. Call to Order

A meeting of the MAG Air Quality Technical Advisory Committee was conducted on January 11, 2007. Stephen Cleveland, City of Goodyear, Chair, called the meeting to order at approximately 1:40 p.m. Greg Edwards, City of Mesa; Jim Weiss, City of Chandler; Antonio DeLaCruz, City of Surprise; Gina Grey, Western States Petroleum Association; Doris Lo, Environmental Protection Agency; Colleen McKaughan, Environmental Protection Agency; and Bob Dulla, Sierra Research, attended the meeting via telephone conference call.

2. Call to the Audience

Mr. Cleveland 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. Mr. Cleveland noted that no public comment cards had been received.

3. Approval of the December 7, 2006 Meeting Minutes

The Committee reviewed the minutes from the December 7, 2006 meeting. Gaye Knight, City of Phoenix, moved and Amanda McGennis, Associated General Contractors, seconded and the motion to approve the December 7, 2006 meeting minutes carried with Larry Person, City of Scottsdale; Wienke Tax, Environmental Protection Agency; and Jess Segovia, City of Avondale, abstaining.

4. Detailed List of Phoenix Paving Unpaved Road Projects Proposed for FY 2008 CMAQ Funding

Lindy Bauer, Maricopa Association of Governments, stated that on September 28, 2006 the Committee reviewed Congestion Mitigation and Air Quality Improvement (CMAQ) projects and the proposed unpaved road projects submitted for FY 2008 and FY 2009. She mentioned that for FY 2008, the City of Phoenix submitted a project to pave three miles of unpaved roads. A detailed list for paving 2.08 miles of unpaved roads has now been provided. Ms. Bauer added that several of these projects are located in close proximity to the monitors with high PM-10 concentrations in the Salt River Area. She discussed the PM-10 problem in the region and stated that there were 27 days in 2006 where the 24-hour PM-10 standard was exceeded. The hope is to be clean in 2007, 2008, and 2009.

Ms. Knight stated that the City of Phoenix submitted a request for funding to pave three miles of unpaved roads. When the request was made, Phoenix had undertaken a process of looking at all City rights-of-way to determine if any are being used as a roadway. She stated that a few years ago the City of Phoenix paved approximately 70 miles of rights-of-way using City funding. Ms. Knight mentioned that when the request for funding was submitted, the right-of-way analysis had not been completed. In the last few months, the City has been looking at the rights-of-way near the monitors. Ms. Knight stated that the City is focusing efforts around the monitors. She stated that the ranking of proposed PM-10 paving unpaved road projects does not account for proximity to the monitors, but the Committee has been interested in that approach.

Ms. Knight stated that since the City of Phoenix was able to find projects in the Salt River Area, it is being brought back to the Committee for consideration. Currently, the City of Phoenix project is

ranked third for FY 2008 funding, which means no funding would be received. Ms. Knight indicated that the City has invested approximately \$18 million over the last six years on dust control projects. She stated that the City of Phoenix is asking to be ranked first on the list to received FY 2008 funding for PM-10 paving unpaved road projects. Ms. Knight referred to pictures of roadways included in the agenda packet and indicated that they would be paved if FY 2008 funding is received. She made a motion that the City of Phoenix request to pave three miles of unpaved roads be ranked first for FY 2008 CMAQ funding for proposed PM-10 paving unpaved road projects and requested that the MAG Transportation Review Committee (TRC) support the proposed PM-10 paving unpaved road projects in FY 2008 and find funding for all of the projects. Mr. Person seconded the motion.

Randi Alcott, Valley Metro, inquired about the source of additional funding for the remaining projects. Ms. Knight replied that the Committee has had previous discussions about making paving unpaved road projects a high priority. She added that the TRC could make recommendations as to the source of funding.

Beverly Chenausky, Arizona Department of Transportation, requested that the motion be separated into two parts. Ms. Knight and Mr. Person agreed to amend the motion. Mr. Cleveland stated that the first motion would move the Phoenix project from being ranked third to first. He stated that there are four projects and that moving Phoenix to first would allow the Phoenix and the Litchfield Park projects to be fully funded with some remaining funds for the Surprise project.

Russell Bowers, Arizona Rock Products Association, asked how Surprise feels about changing the ranking. Antonio DeLaCruz, City of Surprise, responded that Surprise is against the change and feels the issue should have been mentioned earlier. He commented on having the companies that front the rights-of-way fund the paving projects.

Mr. Segovia commented on ranking the projects based on emission reductions. He mentioned the emission reductions that could be accomplished with the funding available and stated that the Surprise project should be the highest priority. Ms. Bauer responded that all of the projects submitted are good projects since dirt roads are causing a problem. She stated that the West 43rd Avenue and Durango monitors in the Salt River Area are continuing to have exceedances of the 24-hour PM-10 standard. One of the objectives is to stop violations at the monitors. Therefore, the City of Phoenix is trying to find projects that will help to reduce the concentrations at the monitors. Ms. Bauer stated that for street sweepers, jurisdictions indicate in their requests whether the sweeping will occur near a monitor. She suggested that in the future, jurisdictions submitting CMAQ projects indicate if it will be near a monitor. Ms. Bauer stated that the City of Phoenix has been working diligently in the Salt River Area.

Mr. Person asked if the emissions were recalculated after the additional detail had been provided. Ms. Bauer replied that the actual emission reductions for the Phoenix project were generically based upon the information provided in the application. She added that since that time, Phoenix has targeted unpaved roads around the monitors. Ms. Bauer stated that due to the schedule, the impacts were not recalculated. She mentioned that there is a problem at the monitors in the Salt River Area and paving these unpaved roads would help.

Ms. Chenausky asked when Phoenix would plan to pave the roads. Ms. Knight responded that the funding is for FY 2008 and paving would begin within that year. Ms. McGennis inquired if the

shoulders are included. Ms. Knight replied that is correct. Ms. McGennis commented on all projects receiving funding and keeping Phoenix ranked first.

Mr. Cleveland asked if an effort has been made to have the four jurisdictions with projects meet to share in the quality or standard of construction where the amount of money can be maximized and achieve the majority of efforts for each project. Ms. Knight replied that the City of Phoenix would be willing to have that discussion. She mentioned the costs per mile for the projects and discussed the possibility of cost savings in the Surprise project. Ms. Knight stated that all of the projects are important; however, the exceedances at the monitors need to be addressed.

Mr. DeLaCruz inquired about the impact on FY 2009 proposed PM-10 paving unpaved road projects. He asked if projects not funded in FY 2008 would be carried forward to FY 2009. Ms. Bauer responded that the TRC builds the MAG Transportation Improvement Program. Mr. Cleveland stated that the Committee could make a recommendation to the TRC that the projects be carried forward. He mentioned that the emission reductions from the FY 2008 projects would need to be compared to the FY 2009 projects.

Ms. McGennis commented that if the Phoenix project will help with the PM-10 problem in the Salt River Area, then it should be ranked first. She discussed working with the other communities that are requesting CMAQ funding.

Mr. Bowers asked if there is an estimated functional effect at the monitors. Ms. Knight referred to the MAG PM-10 Source Attribution and Deposition Study and indicated that there are a lot of sources in the Salt River Area. She added that doing everything we can will be helpful. Ms. Knight stated that some of the unpaved roads listed in the Phoenix paving unpaved roads project are close to the monitors. She mentioned that the projects ranked low since the average daily traffic counts on these roads are low; however, there is a lot of truck traffic. Ms. Knight stated that the model does not account for the dragout onto adjacent paved roads. She added that paving is one of the most effective measures in the Salt River Area.

Mr. Bowers asked if there are more than three miles that need to be paved. Ms. Knight responded that a few years ago the City of Phoenix paved 60 to 70 miles of unpaved roads. She stated that there are not a lot of unpaved roads owned by the City of Phoenix remaining in the Salt River Area. Ms. Knight added that there are private and Maricopa County unpaved roads in the area. Mr. Bowers commented that legislation is being proposed and he will discuss it under the next agenda item.

Peter Hyde, Arizona Department of Environmental Quality, indicated that he supports the motion. He commented on the need to reallocate CMAQ funding away from ITS and bicycle/pedestrian projects and toward PM-10 reduction projects.

Jeannette Fish, Maricopa County Farm Bureau, commented on things that cannot be controlled along the Salt River. She stated that paving two miles of unpaved roads in the Salt River Area can make a difference. She expressed support for the motion.

Spencer Kamps, Homebuilders Association of Central Arizona, stated that he supports the motion. He also mentioned that he concurs with earlier comments by Mr. Hyde regarding the fact that there is little funding for paving projects. Mr. Kamps indicated support for efforts to secure more funding for paving projects. He asked why the paving unpaved roads control measure is listed as a low impact for attainment at the monitors. Ms. Bauer replied that the control measure for paving or

stabilizing existing dirt roads and alleys has a high impact for the five percent reduction in emissions. Cathy Arthur, Maricopa Association of Governments, stated that the thought originally was that there would be low impact on the monitors for this control measure. However, after hearing the next agenda item, the impact may change.

Ms. McGennis commented that originally there were no dedicated roads. However, now that specific roads are identified, the impact may change. Mr. Cleveland requested that MAG staff and the jurisdictions requesting FY 2008 CMAQ funding for paving unpaved roads meet to discuss criteria/standards used for paving thickness, curb and gutter, widened shoulders, etc. He stated that discussions should occur to determine if the \$2 million available for FY 2008 can reach further and result in a better use of the money.

Mr. Kamps asked if a message could be sent to the TRC saying more money should be allocated to paving unpaved road efforts in light of the PM-10 problem. Mr. Cleveland indicated that would be a separate motion.

Ms. Alcott asked for clarification between the second and possible third motions. Mr. Cleveland responded that the second motion will be restated before a third motion is made. He called for a vote on the motion that the City of Phoenix request to pave three miles of unpaved roads be ranked first for FY 2008 CMAQ funding for proposed PM-10 paving unpaved road projects. The motion passed with Mr. DeLaCruz voting no and Ms. Chenausky and Ms. Tax abstaining.

Ms. Knight stated that the second motion is the result of previous discussion. She mentioned that she would be willing to withdraw the second motion in respect of time. Ms. Tax stated that it is worth reaffirming to the TRC that the amount of funds that go toward PM-10 projects should be maximized. Mr. Cleveland asked that Mr. Kamps and Mr. Hyde work together to formulate ideas for sources to discuss at a future meeting. He asked for a vote on the motion to request that the TRC support the proposed PM-10 paving unpaved road projects in FY 2008 and find funding for all of the projects.

Ms. Alcott expressed concern for other projects that are already funded. Ms. Knight responded that the motion is for future funding. The motion passed with Mr. Segovia voting no.

5. PM-10 Source Attribution and Deposition Study

Bob Baxter, T & B Systems, provided an overview of the PM-10 Source Attribution and Deposition Study. He discussed background information for the study including the conclusions from the Salt River PM-10 State Implementation Plan and the evaluations of the Salt River PM-10 violations recorded in winter 2005. Mr. Baxter indicated that the peak values were recorded in the morning hours and coincided with high traffic periods. He mentioned that insights needed included the following: determine principal cause of modeling shortfall, determine if local sources are poorly characterized, determine significance of external sources/transport under stagnant conditions, and assess local source significance for the West 43rd Avenue and Durango Complex monitors.

Mr. Baxter mentioned the key questions to be addressed in the revised scope of work for the study and discussed the approach. The approach includes assessing existing meteorological and PM data, selecting monitoring tools, and establishing a sampling plan. Mr. Baxter stated that the sampling plan included the following: define routes for mobile sampling, determine location of meteorological data collection, select locations to investigate dispersion of roadway sources, conduct sampling in

two phases, coordinate with local agencies for related data, and perform daily review of collected data to identify insights, opportunities and problems.

Mr. Baxter provided details on the following monitoring tools: particle lidar, mobile monitoring, DustTrak optical PM-10, DustTrak optical PM-2.5, MiniVol filter based, particle size analyzer, fixed site sampling, Sodar, and SCAMPER. He mentioned that the particle lidar identified particles and wind fields transporting the particles. He stated that the mobile monitoring van was equipped so that data could be collected while in motion. In addition, a camera was mounted on the front of the vehicle so that visuals could be tied back to the particulate and meteorological data being collected. Mr. Baxter mentioned that all samples were being collected and recorded in two second intervals. He also discussed a second vehicle that was outfitted with a slightly reduced amount of equipment. Mr. Baxter stated that both vehicles included global positioning systems so that the location of the vehicles were fully documented.

Mr. Baxter indicated that a fixed site for measuring PM-10 and meteorology was added near 35th Avenue between the West 43rd Avenue and Durango monitors along the Salt River Basin. He stated that the Sodar antenna determines wind and mixing properties of the atmosphere up to 200 meters. Mr. Baxter stated that the study was coordinated with the SCAMPER paved road PM-10 data collection activities so that the data sets could be melded for a better understanding of the problem.

Mr. Baxter mentioned that the application of the monitoring tools included the following: mapping the distribution of particulate matter and identify regions of interest, characterizing the diurnal variations in PM levels, characterizing the size distribution of PM, and characterizing the meteorology during stagnation events. He provided an example mobile van map from November 15, 2006. Mr. Cleveland asked which color represents the highest concentration. Mr. Baxter replied that black is the lowest and red represents the highest concentrations. Ms. McGennis inquired about the values. Mr. Baxter responded that the values are instantaneous.

Mr. Baxter presented the conceptual model of the problem. He discussed winter versus summer, traffic schedule during morning stagnant conditions, drainage aloft through the Salt River Basin, a wide variety of significant local sources, and carryover from prior days (stagnation). Mr. Baxter provided an example of meteorological data indicating the apparent depth of the surface layer which acts as a lid in the morning. He stated that within 100 vertical feet there is a complete reversal of wind direction.

Mr. Baxter discussed field observations which occurred in two phases and included weekday and weekend sampling. He mentioned the observed exceedances at the West 43rd Avenue and Durango Complex monitors were based on preliminary data. Mr. Baxter discussed the detailed sampling that occurred on 17 days. He stated that the data is currently being validated and prepared for analysis. Mr. Baxter provided pictures and video clips of PM-10 source examples.

Mr. Bowers inquired about the direction in the picture for trackout. Mr. Baxter replied that the picture is taken from the south side of the road looking toward the northwest. Mr. Bowers asked if the concentration was measured at the location in the picture. Mr. Baxter responded that measurements of PM concentrations were not taken at that location. He provided a video clip of trackout. Mr. Bowers inquired about water. Mr. Baxter replied that some of the vehicles leaving the facility in the video clip appeared to be wet; however, there was trackout that would dry and become reentrained. Other vehicles were not wet. Ms. McGennis commented on the possibility of

the truck driving partially on the unpaved shoulder. Mr. Baxter responded that he observed the trackout and vehicles driving over the trackout.

Mr. Bowers commented on the compressed air of a vehicle that size. He inquired about the location of the facility exit, an exaggerated cloud by the nearest pole, and wheel washers at the facility. Mr. Baxter replied that the facility exit is further back and that trucks were pulling out in both directions. He stated that some of the trucks that were exiting the facility appeared to be wet.

Mr. Baxter provided video clips of dragout and unpaved shoulders along Miami Street. Ms. Knight mentioned that Miami Street is on the City of Phoenix list to pave. Ms. McGennis asked if the trucks are pulling out of a paved entrance. Mr. Baxter responded that it is all unpaved. He provided a video clip of unpaved roads and dragout where a truck pulled out in front of his vehicle. Mr. Bowers commented on the direction of the sun in the video clips. Mr. Baxter replied that the angle of the sun makes a big difference and can be deceiving in terms of PM concentrations. He mentioned the benefits of real-time monitors that record continuously.

Mr. Baxter provided a video clip of open burning adjacent to the West 43rd Avenue monitor. He showed the impact of the open burning on the PM-10 concentrations at the monitor on that day. Mr. Baxter presented video clips of an agricultural site on a High Pollution Advisory Day and pictures from the following day. He also provided pictures and clips of unpaved lots. Mr. Baxter presented the vehicle activity on unpaved lots and discussed the impact of a truck yard on the Durango Complex monitor. Mr. Kamps asked if the truck yard was paved. Ms. Arthur replied that the truck yard was likely gravel or poorly maintained asphalt.

Mr. Baxter stated that intensive monitoring on 19th Avenue usually resulted in high PM-10 concentrations. However, on a day when a van was positioned on 19th Avenue for a number of hours, it was clear the dust control operations were significantly different. The area was clean. Mr. Baxter stated that on days when their presence was unknown there were higher PM-10 concentrations.

Bob Dulla, Sierra Research, presented the control measures to be investigated. He stated that the study has determined that the PM-10 concentrations in the Salt River Area are a local control problem. Mr. Dulla mentioned that based on the field study, there are a variety of sources that need control. He discussed categories of control that were identified which are independent of the 32 measures previously mentioned. There were five categories identified: establish continuous monitoring requirements for construction projects and permitted facilities larger than 50 acres, Maricopa County purchase and operate mobile monitoring system to measure site specific values and issue notices of violation, cessation of activities during stagnant conditions, modify Maricopa County Rules 310 and 310.01, and expanded enforcement.

Ms. McGennis commented that the suggested measures are only being applied to the currently regulated sources. Mr. Dulla responded that agriculture is being addressed separately. He added that the sources are largely all regulated; however, the emissions from the sources are not being controlled.

Mr. Kamps mentioned that many of the sources in the presentation are unregulated such as dragout and vortices. He added that agriculture is an issue as well. Mr. Kamps referred to the truck yard where emissions cross the property line. He asked if the recommendation for the property line monitors would apply to private facilities. Mr. Dulla replied that is correct. He added that the key

is enforcement and structuring for effectiveness. Mr. Dulla indicated that the City of Phoenix and Maricopa County are pursuing the paving of unpaved shoulders. He stated that there is a problem in the Salt River Area where paved shoulders are covered with dirt due to trackout.

Mr. Kamps commented on open burning. Mr. Dulla responded that open burning is an enforcement issue since it is already a controlled activity. Ms. McGennis commented on vacant lots. Mr. Dulla replied that enforcement of the 20 percent opacity requirement would have an impact on the observations.

Mr. Bowers commented that there was a focus on regulated sources in the presentation which does not release the sources from responsibility. He asked how to direct sufficient resources to the Salt River Area and not be focused on the monitors so that it can be accepted by the Environmental Protection Agency. Mr. Bowers commented on regulatory regimes based on emission factors. He mentioned legislation being proposed and stated that it needs to be able to be expanded across the Maricopa County PM-10 Nonattainment Area as necessary. Mr. Bowers requested that the presentation be given at an Arizona Rock Products Association environmental meeting. Ms. Arthur responded that additional presentations could be provided within the budget of the contract. She suggested various sources could meet to hear the presentation.

Mr. Hyde commented on possible legal difficulties with developing a graduated set of zones with zones closer to the monitors having more stringent regulation and enforcement. He discussed the possibility of municipalities placing more enforcement near the monitors. Mr. Hyde added that the regulations would likely have to be the same. Mr. Bowers commented on creating a zone with tax abatement incentives for dust and mitigation activity. Tax abatement incentives could be focused on any area with dust generation above a certain level. Mr. Cleveland clarified that as PM-10 concentrations reach a certain level, specific actions would be triggered. Mr. Bowers replied that is correct. Mr. Hyde commented on municipalities developing a unified enforcement program that would place more stringent and frequent enforcement at the places where it is needed most.

Jo Crumbaker, Maricopa County Air Quality Department, commented on the vacant lot situation. She stated that Maricopa County is working so that the same set of requirements apply to everyone. However, priorities are being established for which lots will be done first. Ms. Crumbaker mentioned that the requirements in the Salt River PM-10 State Implementation Plan have been completed. She commented on a series of factors regarding the structure of an enforcement program. Ms. Crumbaker discussed tax incentives as proposed by Mr. Bowers. Mr. Bowers stated that he was not suggesting tax incentives for greater enforcement. He commented on giving incentives to keep the dust down.

Ms. McGennis stated that she spoke with the enforcement supervisor in Clark County (Las Vegas, Nevada). She expressed frustration on the preliminary draft comprehensive list of measures and how many are directed toward industry. Ms. McGennis mentioned that according to the Clark County enforcement supervisor, enhancing the vacant lot and stabilization program was the control measure that provided Clark County with the most benefit. She added that the program was a struggle with stakeholders, but was needed to come into compliance.

Ms. Knight complemented T & B Systems, Sierra Research, and MAG on the study. She stated that the study focused on the Salt River Area. Ms. Knight commented on the concept of targeted enforcement. She mentioned that the Higley and Buckeye monitors are violating and that different sources would likely be the problem in those areas. Ms. Arthur mentioned the modeling being

conducted and stated that the sources at the Higley monitor are different and are being addressed. She added that the Buckeye monitor is outside the Maricopa County PM-10 Nonattainment Area and will not be addressed in the modeling.

Ms. Arthur referred to comments made by Ms. McGennis regarding Clark County. She stated that the PM-10 violations in Clark County are wind driven so the solutions may be different. Ms. Arthur referred to comments by Mr. Bowers regarding emissions versus concentrations. She mentioned that there may be some potential in looking at emission densities. Ms. Arthur stated that the Salt River Area has far more emissions than any other area. She added that the consultants for the study had mentioned that the monitors are located in the areas with the highest concentrations. Ms. Arthur thanked the Arizona Department of Environmental Quality for helping with the study.

Ms. Crumbaker mentioned that the monitor was located in the Salt River bottom because that is where the grid squares with the emissions of highest density were located. She added that PM-10 is a directly emitted pollutant and under the sampling objective in the monitoring regulations there has to be a site in the area of highest concentrations.

Ms. Fish asked how the vortices in the presentation that whipped up and then quickly settled would travel far enough to impact the monitors. Mr. Baxter replied that the large particles settle very quickly; however, the smaller particles take longer to settle. He added that as the plume moves further from the road, the peak will be the smaller particles.

Mr. Cleveland discussed the balance of the agenda. He suggested meeting again before the February 1, 2007 meeting. Mr. Cleveland indicated that MAG staff will notify the Committee of the next meeting date.

Ms. Fish asked if all-terrain vehicles (ATVs) were observed traveling in the Salt River bottom. She also asked if the lot in the pictures looking southwest of the West 43rd Avenue monitor is a Maricopa County lot. Ms. Crumbaker responded that the monitor is located on property owned by the Maricopa County Department of Transportation. She added that the lot in the pictures is a small industrial yard with a number of private entities. Mr. Baxter stated that he did witness an ATV once near the West 43rd Avenue monitor. He mentioned that the ATV was driving full speed down a paved shoulder covered in trackout. Mr. Baxter noted that no ATVs were observed in the river bottom. He stated that a visible dust plume typically has PM-10 concentrations from 700 to 800 micrograms per cubic meter.

Ms. Knight commented that the City of Phoenix spent approximately \$400,000 cleaning the Salt River bed. She stated that the boundaries are continuously monitored and it has been very effective. Ms. Crumbaker mentioned that once enforcement is set up, the ATV riders move further out. She stated that further out there are standard statutory provisions that are not as strong on an enforcement basis as the cities. Ms. Fish commented on Maricopa County not being able to do what the cities can in terms of enforcement. Mr. Cleveland commented on the State of Arizona giving the counties more authority to manage these problems.

Mr. Cleveland stated that the next meeting of the Committee has been scheduled for Friday, January 19, 2007 at 10:00 a.m. He mentioned that agenda items six, seven, and eight will be forwarded to the next meeting. Ms. Bauer added that Maricopa County has a particulate public education campaign that will be unveiled soon. She asked if the County would be able to present the campaign at the next meeting. Ms. Bauer mentioned the importance of the campaign.

Mr. Kamps commented on all the information and expressed concern about the recommendations made by the consultants. He stated that the 2005 PM-10 Emissions Inventory has not been fully vetted. Mr. Kamps mentioned getting the Five Percent Plan for PM-10 done right the first time. He expressed concern about rushing to get control measures. Mr. Kamps indicated that the Committee will be looking at the control measures at the next meeting and the 2005 PM-10 Emissions Inventory has not been reviewed.

Ms. Bauer mentioned that a lot of information was provided to the Committee in the presentation. She indicated that Maricopa County is currently revising the 2005 PM-10 Emissions Inventory and MAG may need to make revisions in the projected 2007, 2008, and 2009 PM-10 Emissions Inventories based on the changes made by the County. Ms. Bauer expressed the importance of getting all the questions answered. She stated that additional meetings may be added.

Ms. Crumbaker stated that the Draft 2005 PM-10 Emissions Inventory is scheduled to be posted to the Maricopa County website on January 23, 2007. She added that the first workshop will be held January 30, 2007. Mr. Cleveland asked that MAG staff make sure that there is an orderly process and no rushing to finality.

6. Preliminary Draft Comprehensive List of Measures to Reduce PM-10 Particulate Matter

This agenda item was postponed until the January 19, 2007 meeting.

7. Air Quality Modeling Approach for the Five Percent Plan for PM-10

This agenda item was postponed until the January 19, 2007 meeting.

8. Air Quality Modeling Approach for the Eight-Hour Ozone Plan for the Maricopa Nonattainment Area

This agenda item was postponed until the January 19, 2007 meeting.

9. Call for Future Agenda Items

Mr. Cleveland announced that the next meeting of the Committee is tentatively scheduled for January 19, 2007 at 10:00 a.m. With no further comments, the meeting was adjourned.