

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

Friday, January 19, 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  
Lisa Taraborelli 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  
Mark Hayduk for Jim Mikula, Arizona Public Service  
Company  
#Gina Grey, Western States Petroleum Association  
Betsy Turner for 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  
Kai Umeda for 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  
#Christella Armijo 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  
Julie Hoffman, Maricopa Association of Governments  
Taejoo Shin, Maricopa Association of Governments  
Ieesuck Jung, Maricopa Association of Governments  
Ranjith Dandanayakula, Maricopa Association of  
Governments  
Nagesh Krishnarajanagar, Maricopa Association of  
Governments  
Diane Arnst, Arizona Department of Environmental  
Quality  
David Lillie, Arizona Department of Environmental  
Quality  
Johanna Kuspert, Maricopa County Air Quality  
Department

Robert St. John, City of Glendale  
Barbara Sylvester, Brown and Caldwell  
Alisa Schroder, Meritage Homes  
Merry Ellen Boom, Converse Consultants  
Cameron Flower, Kitchell Environmental Services  
Shane Kiesow, City of Apache Junction  
Scott Di Biase, Pinal County  
Andrea Martin, Arizona Department of Agriculture  
Raul Torres, Arizona Department of Transportation  
Kelly McMullen, Maricopa County Department of  
Transportation  
Steve Trussell, Arizona Rock Products Association  
#Colleen McKaughan, Environmental Protection  
Agency  
#Vic Dugan, Exxon Mobil

1. Call to Order

A meeting of the MAG Air Quality Technical Advisory Committee was conducted on January 19, 2007. Doug Kukino, City of Glendale, Acting Chair, called the meeting to order at approximately 10:10 a.m. Greg Edwards, City of Mesa; Antonio DeLaCruz, City of Surprise; Jamie McCullough, City of El Mirage; Christella Armijo, Salt River Pima-Maricopa Indian Community; Gina Grey, Western States Petroleum Association; Colleen McKaughan, Environmental Protection Agency; and Vic Dugan, Exxon Mobil, attended the meeting via telephone conference call.

2. Call to the Audience

Stephen Cleveland, City of Goodyear, Chair, 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 January 11, 2007 Meeting Minutes

Lindy Bauer, Maricopa Association of Governments, stated that since the January 11, 2007 Committee meeting occurred last week on Thursday and the mailout for this meeting occurred the next day, the meeting minutes were not available to be mailed out as part of the agenda packet. The minutes have been provided at each place. Gaye Knight, City of Phoenix, requested that action on the January 11, 2007 meeting minutes be postponed. Mr. Cleveland stated that action will be deferred until the February 1, 2007 meeting.

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

Ms. Bauer presented the Preliminary Draft Comprehensive List of Measures to Reduce PM-10 Particulate Matter. She referred to the PM-10 Source Attribution and Deposition Study presentation from the January 11, 2007 Committee meeting and indicated that the consultants (T & B Systems and Sierra Research) inadvertently misspoke on agriculture. The consultants indicated that recommendations would not be given on measures for agriculture. Ms. Bauer stated that the consultants are currently preparing recommendations to help reduce agricultural emissions. The recommendations will be provided to the Governor's Agricultural Best Management Practices (BMPs) Committee for their consideration.

Ms. Bauer discussed Executive Order 2007-03, Improving Air Quality. She indicated that it is a statement by the Governor that air quality is very important for the health of the citizenry. Executive Order 2007-03 describes the particulate and ozone pollution situation in the region and provides key recommendations. Ms. Bauer stated that one requirement in Executive Order 2007-03 is that the Arizona Department of Environmental Quality (ADEQ) develop an Air Quality Improvement Action Plan with recommendations for the Governor by March 31, 2007. The ADEQ will be asked to discuss the recommendations with the Committee once the information is available.

Ms. Bauer discussed the requirements for state agencies in Executive Order 2007-03. For example, requirements will be developed by ADEQ for state funded transportation projects. These projects are already required in statute to prepare air quality impact reports. The difference is ADEQ will now prepare some requirements for these reports. Ms. Bauer stated that the reports will then be filed

with the ADEQ director for review and approval. She indicated that the Committee will be updated as Executive Order 2007-03 continues to unfold.

Ms. Knight inquired about the timing for the requirements in Executive Order 2007-03. Diane Arnst, Arizona Department of Environmental Quality, responded that a number of people have been assigned to the various elements of Executive Order 2007-03. She indicated that ADEQ is in the beginning stages and information will be provided to the Committee once it is available.

Ms. Bauer referred to the Preliminary Draft Comprehensive List of Measures to Reduce PM-10 Particulate Matter. She indicated that based on the information provided by the consultants on the PM-10 Source Attribution and Deposition Study and discussion at the last Committee meeting, the impact of the measures in the unpaved roads category was changed from low to medium for attainment at the monitors. She indicated that the consultants are now describing the preliminary draft measures and the recommendations from the consultants on the PM-10 Study for the February 1, 2007 meeting. Ms. Bauer stated that the measures will also be discussed at the February 15, 2007 meeting. A recommendation for a suggested list of measures from the MAG Air Quality Technical Advisory Committee is scheduled for March 1, 2007. Currently, the Maricopa County Air Quality Department is revising the Draft 2005 PM-10 Emissions Inventory. The document will be posted to the County website January 23, 2007 and a workshop will be held on January 30, 2007. Jo Crumbaker, Maricopa County Air Quality Department, clarified that the Draft 2005 PM-10 Emissions Inventory will be posted at the close of business on January 23, 2007.

Brian O'Donnell, Southwest Gas Corporation, inquired about how the preliminary draft measures and Executive Order 2007-03 are tied together. Ms. Bauer responded that the Governor's Air Quality Task Force and this Committee have worked compatibly in the past. Mr. Cleveland commented that all efforts be are part of the solution and that credit is given.

Gina Grey, Western States Petroleum Association, asked if preliminary draft measures with low impact on five percent reduction in emissions, modeling attainment demonstration, and attainment at the monitors would be removed from the list. Ms. Bauer responded that some measures have a low impact in one category and a high impact in another. Mr. Cleveland asked if Ms. Grey is referring to a specific measure. Ms. Grey mentioned preliminary draft measure number 19, update the statutes to require ultra-low sulfur diesel fuels for nonroad equipment. She commented that it is appropriately listed as low impact. Ms. Bauer replied that it is premature to remove any measures from the list. She indicated that even the low impact measures may be needed. Ms. Bauer stated that the consultants will be providing the estimated impacts of the measures on emissions.

Mannie Carpenter, Valley Forward, commented that it is important to keep the measures with low impacts on the list to show what has been considered. Colleen McKaughan, Environmental Protection Agency, mentioned that the 2005 PM-10 Emissions Inventory is not completed yet and is a crucial piece in deciding which control measures will be the most effective. She stated that it would be good to keep all the measures on the list at this time.

Ms. Bauer mentioned that the Committee has had an opportunity to review the preliminary draft measures and hear from the consultants. She stated that comments and suggestions are welcomed. Mr. Cleveland discussed control measure number one, public education and outreach (e.g., Clark County) with assistance from local governments. Dave Berry, Arizona Motor Transport Association, asked if the control measure would encompass the current particulate public education campaign. Ms. Crumbaker responded that is correct. Mr. Berry commented on the importance of public

education and outreach in Clark County and mentioned looking at possible sources of funds for this measure to expand the particulate public education campaign in Maricopa County.

Russell Bowers, Arizona Rock Products Association, inquired about the control measure having a low impact on attainment at the monitors. Ms. Bauer replied that it is difficult to quantify the impact of the measure at the monitors. She added that it is in support of strengthening compliance with the fugitive dust control rules.

Larry Person, City of Scottsdale, commented that all of the measures under the fugitive dust control rules category for five percent reduction in emissions and modeling attainment demonstration indicate increasing Rule 310 effectiveness. He asked if the consultants will state the efficiency included in the Serious Area Particulate Plan for PM-10 and provide options for increasing Rule 310 effectiveness. Ms. Bauer responded that Maricopa County has been conducting a rule effectiveness study on the fugitive dust control rules and the results are not yet available. She mentioned that the consultants will be providing the estimated impacts of the measures on emissions. Mr. Person inquired about the incremental gains on the measures that are currently being implemented. Ms. Bauer replied that the consultants will give the estimated impact on emissions above the base. Mr. Person asked if the consultants will provide options. Ms. Crumbaker responded that there will likely be some estimates; however, based on past experience, there will be a great deal of uncertainty since it deals with human behavior. She added that Maricopa County will work with the MAG consultants and provide estimates to the best of their ability.

Mr. Cleveland commented on getting information from Clark County on their experience. Cathy Arthur, Maricopa Association of Governments, stated that the consultants speak with Clark County regularly in order to quantify these measures. She indicated that when the consultants discuss the measures at the February 1, 2007 meeting, there will be a good indication of what Clark County feels was the effectiveness of these measures.

Jeannette Fish, Maricopa County Farm Bureau, referred to control measure number five, dedicated coordinator for unpaved roads and vacant lots (e.g., Clark County), and inquired about the meaning of a dedicated coordinator. Ms. Bauer responded that in Clark County, the person was a county enforcement agent that was dedicated to keeping emissions down on unpaved roads and vacant lots. Mr. Cleveland asked if a different title should be used. Ms. Knight stated that changing the title to dedicated enforcement coordinator may make it more clear.

Lisa Taraborelli, Town of Gilbert, inquired about the source of funding for the measures. Ms. Bauer replied that the source of funding is not known at this time. The consultants are currently describing the measures. Mr. Cleveland stated that historically when these measures were previously adopted, local, county, and state funds were used. He indicated that the measures will be given to the jurisdictions for consideration and each jurisdiction will then determine commitments.

Ms. Taraborelli referred to control measure number four, dust managers required at construction sites of 50 acres and greater (e.g., Clark County), and asked if the dust managers would be provided by the construction industry. Ms. Bauer replied that in Clark County, it is a county requirement and the dust managers are provided by the construction industry at the sites. Amanda McGennis, Associated General Contractors, stated that they have taken the position at this time that a dust manager does not have to be a dedicated full-time person on the site.

Mr. Berry commented on the potential implementing entities for the measures and mentioned that businesses will face the same challenges as government in trying to find funding. He stated that it is part of the process and the end is always reached. Mr. Cleveland asked for clarification on the potential implementing entities. Ms. Bauer responded that there is variety in the column for potential implementing entity and referred to the control measure requiring dust managers at construction sites of 50 acres and greater. For this measure, Maricopa County would develop the requirement and the private sector would comply.

Mr. Cleveland commented on businesses conducting self-enforcement. Mr. Bowers stated that the effectiveness of the fugitive dust control rules have to be quantifiable, which is a weakness to date. Mr. Bowers mentioned the PM-10 exceedances over the past two years. He indicated that all measures have an effect that needs to be quantified. Ms. Bauer stated that the measures in a plan need to be implemented and enforced. She mentioned that there appears to be enforcement and compliance problems based on the PM-10 Source Attribution and Deposition Study presentation at the January 11, 2007 meeting. Ms. Bauer indicated that Clark County has a good compliance rate and that much was learned from the Clark County Dust Control Program Workshop.

Mr. Cleveland discussed preliminary draft measure number six, strengthen trackout provisions. Ms. McGennis stated that she will continue to advocate for the length for rapid cleanup of trackout to remain at 50 feet cumulative from all exits, which is in the current rule. Spencer Kamps, Homebuilders Association of Central Arizona, stated that reducing the length to 25 cumulative feet is an unreasonable threshold, especially since a trackout device is required. Mr. Kamps commented that trackout is not controlled fairly on everyone. Mr. Cleveland asked if the consultants should consider all parties being universally responsible for this provision. Mr. Kamps indicated he would be happy with that; however, enforcement may be an issue. Mr. Cleveland stated that the purpose is to put all the information on the table and for MAG staff to take the comments and help the consultants do the best job possible.

Ms. Crumbaker stated that she is not opposed to all parties being responsible for the provision to clean up trackout greater than a certain threshold; however, there are resource issues. She mentioned that this would require the cities to join with Maricopa County in applying the provision in areas beyond where it is currently applied. Ms. Knight commented that she does not believe it is possible for Maricopa County to adopt rules for the cities to enforce. She added that County rules need to be consistent throughout the County and more resources should be secured if necessary. Ms. Knight indicated that having the cities adopt ordinances since Maricopa County is unable to hire more staff is not the solution. Ms. Crumbaker stated that the measure is related to city planning and zoning decisions and there are resource issues.

Ms. Knight indicated that she concurred with Mr. Kamps that the provision to reduce trackout length that requires rapid cleanup to 25 cumulative feet is an extreme proposal. She suggested amending the provision to just say increase the stringency of trackout requirements and work out the details later. Ms. Bauer stated that 25 feet cumulative from all exits is listed just as an example.

Ms. McGennis commented that a traffic control permit is required to stop traffic to clean up trackout. She stated that the permit can take two to three days yet trackout needs to be cleaned up immediately. Ms. McGennis discussed requirements for complying with the rules.

Mr. Cleveland discussed preliminary draft measure number seven, increase fines for dust control violations and continue to publish the list of violators. Mr. Bowers commented that Maricopa

County has reported an increase in fines; however, there have been more PM-10 exceedances. Ms. Bauer responded that Maricopa County has indicated that in some instances businesses treat the fines as a cost of doing business. Ms. Crumbaker stated that she would characterize that as anecdotal from some of the people involved in settlement negotiations. She mentioned that many of the cases within the last year were backlogged to the period when there was a boom in construction. Ms. Crumbaker added that there are many factors in the noncompliance issues.

Mr. Kamps commented that any statements made that the homebuilding industry looks at fines as a cost of doing business are not correct. He stated that the fines are now increasing. Mr. Kamps referred to the backlog issue and mentioned that the reason many notices of violation have been enforced from 2005 and 2006 is because the Maricopa County attorney who handled the cases felt they were not defensible in a court of law. The Maricopa County Air Quality Department took enforcement once they received the cases. Mr. Kamps referred to accusations from the County due to hiring former inspectors and environmental quality managers. He stated that increasing fines is a failed strategy and he would oppose the measure strongly.

Mr. Cleveland discussed preliminary draft measure number eight, establish a certification program for Dust Free Development to serve as an industry standard, and number nine, better defined tarping requirements in Rule 310 to include enclosure of the bed. Corey Woods, American Lung Association of Arizona, referred back to measure number seven and inquired about alternatives to increasing fines. Mr. Kamps mentioned the cost of dust control efforts in the homebuilding industry. He stated that the region is still not in attainment with increased notices of violation and fines. Mr. Kamps stated that there are a number of contributors that are unregulated or lack enforcement. Ms. Fish commented that if the measure for increasing fines is left in, that any fines be for actual violations, not paperwork violations.

Ms. McGennis stated that Clark County became more effective when working with the people as the problems were occurring versus citing off-site and sending a letter a week later. She added that it was proven in Clark County that increasing fines does not fix the problem.

Mr. Kukino asked if there are chronic violators where increasing fines would be appropriate. Ms. Crumbaker replied that there is a small group in every industry that are chronically in noncompliance. She stated that another challenge is training employees to devote attention to get consistent application of the controls. Mr. Kamps stated that based on County policy, fines increase for repeat violators. Mr. Kukino commented on finding ways to get better compliance. Mr. Kamps responded that increasing fines and penalties to make industry aware of Rule 310 has already happened and will provide no benefit. Mr. Person mentioned that municipalities also build and are subject to the same rules. He stated that contractors respond differently to shutting down the site, education, and increased fines. He asked that all options be left on the table and stated that increased fines may get at some of the chronic violators.

Mr. Cleveland discussed preliminary control measure number ten, implement Rule 316. He asked if the word implement is accurate. Ms. Crumbaker replied that some revisions to the rule have been stayed and negotiations are taking place. Mr. Bowers commented that four of the methods have been stayed with the rest in effect. He suggested changing the language to say fully implement Rule 316.

Mr. Cleveland discussed preliminary control measure number eleven, require private companies to use PM-10 certified street sweepers or water filtration system sweepers on paved areas including

parking lots (e.g., Clark County). Mr. Bowers inquired about how rapidly a sufficient number of street sweepers could be secured to take care of all the needs.

Mr. Cleveland discussed preliminary control measure number twelve, shifting hours of operation during stagnant conditions in November through February. Mr. Bowers stated that a meeting was recently held where variations to work schedules was discussed. He commented on street improvement projects that must be completed during the day or night and discussed rock delivery. Mr. Bowers mentioned that certain discussions cannot occur due to antitrust implications.

Peter Hyde, Arizona Department of Environmental Quality, commented on the great potential of the measure in the Salt River Area. He stated that it is up to industry to be able to set prime emission producing activities back approximately three hours during the winter inversion period, which could be conducted on an event or routine basis. Mr. Hyde encouraged industry to consider the measure. Mr. Cleveland requested that a dialogue occur between ADEQ and industry.

Mr. Bowers commented on his industry providing a major solution by shifting work hours; however, they are only a small percentage in the Draft 2005 PM-10 Emissions Inventory. He indicated that he will work with ADEQ and stated that the government sector which buys the rock may want to be involved in the discussion. Mr. Hyde stated that it has not been thought through as to what emission categories would be amenable to this measure. He mentioned that as an illustration, the rock product facilities in the Salt River Area have an effect on the PM-10 monitors. Mr. Hyde indicated that as a model, it would make sense to begin discussions with Arizona Rock Products Association since the parts being delivered determine the work schedules for other emission producing activities. Mr. Bowers commented on the impact on industry and the ability to compete in the market.

Mr. Berry asked what three hours should be avoided. Mr. Hyde responded 5:00 a.m. to 8:00 a.m. Mr. Berry commented on the contributors in the Salt River Area and mentioned the inversion. He asked if the shift in hours would be only during stagnant conditions. Mr. Hyde replied that it could be done on an event or routine basis; however, the benefit would occur under stagnant conditions. Mr. Berry discussed the challenges of shifting hours.

Mr. Kamps commented on the mechanics issue with shifting hours of operation and the economic impact. He indicated that the measure controls the dust more efficiently on the sources already controlled so the unregulated sources can continue to emit during peak hours. He stated that there will not be attainment at the monitors until a comprehensive control list that deals with all sources is adopted. Mr. Cleveland asked MAG staff to identify the unregulated parties that should be included in the greater picture so everyone has a greater appreciation. He commented on government considering their schedules of employment during certain periods and encouraged creativity.

Mr. Cleveland discussed preliminary control measures for nonroad activities. Mr. Kamps referred to measure number 15, discourage use of leaf blowers on high pollution advisory days, and suggested banning leaf blowers or at a minimum banning gas powered leaf blowers.

Mr. Bowers inquired about the regulation on all-terrain vehicles (ATVs) on all types of property. He mentioned legislation that would allow for the impoundment and confiscation of ATVs for repeat violators in the Maricopa County PM-10 Nonattainment Area.

Mr. Cleveland discussed preliminary control measures for paving roads. He referred to measure number 22, pave or overlay with rubberized asphalt and inquired about PM-10 reductions. Ms.

McGennis suggested that the measure not specify rubberized asphalt. Mr. Cleveland mentioned an analysis that concluded rubberized asphalt increases elasticity and results in reduced degradation of the pavement. Mr. Berry inquired about what is being paved or overlaid.

Beverly Chenausky, Arizona Department of Transportation, referred to the Arizona State University (ASU) Urban Heat Island Study which looks at tire wear entrainment. She indicated that it is a small portion and the consultants will be preparing a cost/benefit analysis. Ms. Chenausky added that ASU is looking at reentrained road dust on different paving structures; however, data is not available at this time. Mr. Berry commented on better fuel economy on concrete roads. Ms. Chenausky indicated that the issue was discussed in the Governor's Climate Change Advisory Group for reducing greenhouse gas emissions. She commented on work by jurisdictions that is not clearly looked at in the benefits, such as night construction. Mr. Berry inquired about what is being paved or overlaid. Mr. Cleveland requested that MAG staff clarify the measure.

Ms. McGennis commented on removing the word rubberized. She stated that there is more that can be done using an overall paving strategy. Ms. Knight indicated that for a city, the measure is to use rubberized asphalt over a paved road and determine if there is a benefit over regular asphalt. Mr. Person added that the measure would not require rubberized asphalt everywhere. The point is to get any emission reduction credit for using rubberized asphalt.

Mr. Bowers referred to measure number 21, retrofit onroad diesel engines, and asked if the measure is an attempt to get credit for continued work in phasing out pre-1988 engines and switching to low sulfur diesel. Ms. Bauer responded that is correct. Mr. Berry commented on the measure referring to diesel particulate filters. Mr. Cleveland suggested determining the benefit for retrofit nonroad diesels with diesel particulate filters.

Mr. Cleveland discussed the preliminary control measure for unpaved parking lots. Ms. Fish asked if the measure is already included in Rule 310. Ms. Knight replied that Phoenix requires paving for unpaved parking lots and the County requires gravel. Ms. Crumbaker added that the County is not specific to the surface. Ms. Fish asked if stabilize would include gravel. Mr. Kamps asked about the requirements of Rule 310. Ms. Crumbaker responded that this is more of an issue with Rule 310.01 and discussed the requirements. Mr. Kamps inquired about enforcement. Ms. Crumbaker replied that the County is currently enforcing vacant lots, and parking lots when a complaint is received. Mr. Kamps inquired about those who fail to respond. Ms. Crumbaker responded that the process is to send out a letter to contact Maricopa County and indicate what will be done about the identified problem. She stated that the point of a failed response has not occurred. Other challenges are trespass related. Mr. Kamps recommended that the measure be strengthened to allow for enforcement action against people with unpaved parking lots who fail to stabilize.

Ms. Bauer asked if Maricopa County can take enforcement action on unpaved parking lots. Ms. Crumbaker replied that it is the same enforcement action that would occur on a vacant lot. She discussed resource issues. Mr. Kamps commented on unpaved parking lots and vacant lots being a problem at the monitors. He discussed the leniency for unpaved parking lots and vacant lots and the need for a strong enforcement program.

Mr. Bowers discussed having different enforcement during stagnant conditions in November through February. He commented on the County sending letters allowing 60 days to respond. Mr. Bowers inquired about more immediate responses so issues are resolved in the critical time frame. Mr. Cleveland asked MAG staff to look at the issue.

Mr. Cleveland discussed preliminary control measures for unpaved roads. Mr. Bowers asked if lot split access points must be stabilized. He added that may be an area to enforce or increase. Ms. Knight asked for clarification on measure number 26, prohibit new dirt roads including those associated with lot splits. Mr. Cleveland requested that Ms. Knight work with Ms. Crumbaker on the wording of the measure.

Mr. Cleveland discussed the preliminary control measure for unpaved shoulders. Ms. Chenausky stated that the measure is included in other plans and inquired about the improvements. Ms. Knight discussed commitments in prior plans. She stated that it is helpful to have the measure listed in a new plan so the cities can indicate what has been and will be done. Ms. Chenausky asked if it will be included in the baseline. Ms. Knight replied that shoulders being paved this year would not be included in the baseline.

Mr. Cleveland discussed preliminary control measures for unpaved access points and vacant lots. Ms. Crumbaker commented on funding for stabilization in measure 32, vacant lots stabilized by County if owners do not respond, liens put on property if necessary (e.g., Clark County). Mr. Cleveland suggested that the lien go with the land and not expire as state law currently has in place.

Mr. Hyde presented four new control measures: just-in-time grading, park and ride lots being built earlier, schedule improvements on parallel streets to retain alternative route options along major north/south and east/west corridors, and coordinate public transit services closely with Pinal County. He stated that just-in-time grading has worked well in Bullhead City. The idea is that once a parcel of land above a certain size is cleared, stabilization or work on the parcel is required within a certain number of days.

Ms. Crumbaker commented that over the holidays, PM-2.5 was extremely high due to residential wood burning. She mentioned closing loopholes such as outdoor fireplaces and pits and ambiance fireplaces in the hospitality industry. Ms. Crumbaker indicated that the fine for open burning is \$25, which does not provide much deterrence. There may be more measures that can be considered for open burning.

Mr. Cleveland stated that the intent of the Committee is to look holistically and not singling out particular parties. All the parties contributing to the PM-10 problem need to be involved in the process. Mr. Kamps asked if the Preliminary Draft Comprehensive List of Measures to Reduce PM-10 Particulate Matter are the only measures being evaluated. Ms. Bauer responded that the recommendations from the consultants will be included in the list of measures to be considered by the Committee.

Mr. Bower referred to the PM-10 Source Attribution and Deposition Study presentation given at the last meeting. He indicated that dust cannot be measured by using light. Mr. Bowers added that opacity gauging is subjective. He mentioned that the presentation showed video clips with backlit dust and dust in the street lights at night. Ms. Knight stated that dust plumes do look overly dramatic; however, the study included collecting PM-10 concentrations as the mobile vehicle drove through a dust plume. Mr. Bowers said that the method expressed in the presentation was visual.

Ms. Bauer stated that the consultants will have a report describing the preliminary draft measures for the February 1, 2007 meeting, and the measures will also be discussed at the February 15, 2007 meeting. Ms. Arthur mentioned that the control measures will be evaluated using the models to be described in the next agenda item. The control measures that will be committed to in June will be

tested by the modeling processes in order to show attainment. She indicated that modeling is one piece of a plan. The Five Percent Plan for PM-10 requires attainment at the monitors, modeling attainment demonstration, and five percent reduction per year in emissions.

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

Ms. Arthur presented the air quality modeling approach for the Five Percent Plan for PM-10. She provided a map of the Maricopa County PM-10 Nonattainment Area and discussed the PM-10 monitoring data. Ms. Arthur mentioned the requirements for the Five Percent Plan for PM-10 and provided the preliminary 2007 PM-10 emissions without windblown dust. She indicated that the PM-10 modeling approach has been coordinated with the MAG Air Quality Planning Team and EPA. Ms. Arthur discussed the AERMOD Dispersion Model, which will be used in the Salt River Area. She stated that the model will simulate concentrations at lower wind speeds. Ms. Arthur also discussed the Proportional Rollback Model that will be used to model a high wind event at the Higley monitor. She added that Sierra Research and T & B Systems are assisting with PM-10 modeling and assumptions. Ms. Arthur stated that the hope is to demonstrate attainment by 2009. She provided a schedule for the Five Percent Plan for PM-10.

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

Ms. Arthur presented the air quality modeling approach for the Eight-Hour Ozone Plan for the Maricopa Nonattainment Area. She indicated that the region has been classified as a Basic Nonattainment Area under Subpart 1 of the Clean Air Act; however, a federal appeals court has vacated the EPA Final Rule to Implement the 8-Hour National Air Quality Standard - Phase 1. Ms. Arthur stated that MAG is proceeding under the assumption that the plan is required. She provided the eight-hour ozone nonattainment area classifications nationwide. Ms. Arthur mentioned that there have been discussions with Clark County regarding eight-hour ozone modeling since Las Vegas, Nevada is also a Basic Nonattainment Area.

Ms. Arthur provided a map of the Maricopa Eight-Hour Ozone Nonattainment Area and discussed the eight-hour ozone monitoring data. She noted that there have been no violations of the eight-hour ozone standard in the last two years. Ms. Arthur discussed the attainment demonstration for eight-hour ozone. She presented the 2006 regional volatile organic compound (VOC) and nitrogen oxide (NOx) emissions with committed control measures and 2015 VOC and NOx emission reductions from the One-Hour Ozone Maintenance Plan. Ms. Arthur indicated that region should be able to show attainment with no new control measures.

Ms. Arthur provided details on the eight-hour ozone modeling. She discussed the MM5 meteorological model and CAMx photochemical dispersion model. Ms. Arthur added that the CMAQ model may also be applied to validate CAMx results. She mentioned that three worst case ozone episodes are being modeled. Ms. Arthur provided the committed measures in the One-Hour Ozone Maintenance Plan that will be modeled. She discussed the status of eight-hour ozone modeling and indicated that attainment is expected in 2008. Ms. Arthur added that the modeling incorporates the MAG Biogenics Study results and assistance is being provided by ENVIRON. She stated that there will be weight of evidence documentation to support the modeling. Ms. Arthur provided the MAG Air Quality Modeling Chain and nested CAMx and MM5 modeling domains.

Ms. Arthur discussed the NOx exemption. The region had a NOx waiver under the one-hour ozone standard, which went away when the standard was revoked. She indicated that modeling must prove that a NOx exemption is warranted for the eight-hour ozone standard. Based on preliminary modeling, decreases in NOx in 2008, in general, increase ozone in the urbanized area.

Mr. O'Donnell commented that a NOx exemption should be given to all stationary sources, not just power plants. Ms. Crumbaker replied that the NOx exemption is tied to when reasonable available control technology (RACT) is required in a nonattainment area. For NOx, control technique guidance documents were not done; therefore, RACT would be for only major sources. She stated that the source category for a rule would be primarily power plants. Ms. Crumbaker mentioned rules on dirty engines and cautioned that the brown cloud and haze in the region are NOx related. Mr. O'Donnell commented that if a NOx exemption is necessary, all sources should be included. Ms. Arthur mentioned consistency with the Clean Air Act.

Ms. Arthur provided the results of the first test for a NOx exemption, which involved reducing anthropogenic VOC by 40 percent and determining the impact on ozone. In this case, ozone decreased throughout the modeling area. Ms. Arthur provided the results of the second test for a NOx exemption, reducing anthropogenic NOx by 40 percent. She noted the difference between the two tests. In this case, ozone is increasing in the urbanized area. The third test is reducing both anthropogenic VOC and NOx by 40 percent. She noted that the results were similar to reducing just NOx. Ms. Arthur discussed how decreases in NOx emissions increase ozone. She stated that nitrogen oxides can either promote or inhibit ozone formation and high NOx emissions, relative to VOCs, can strongly inhibit ozone formation. Ms. Arthur presented the ozone isopleth plot (EKMA diagram) and the schedule for the Eight-Hour Ozone Plan.

Mr. Hyde commented that if the modeling shows attainment will be reached with the existing measures in 2008, that the Committee consider the applicability of a NOx waiver. He commented on visibility and not wanting more NOx emissions. Mr. Hyde indicated that there is more than just ozone and discussed the PM-2.5 concentrations over the holidays that were in part nitrates.

Ms. Arnst commented that it was her understanding that the one-hour ozone standard was attained because of reformulated gasoline. She expressed caution about the modeling versus what is shown at the monitors. Ms. Arthur replied that MAG modeling for the one-hour ozone standard demonstrated attainment in 1996. She added that the region actually attained the standard at the monitors in 1997. Ms. Arthur mentioned that the models being used now are better than the those used by MAG in the early 1990s. She stated that there has been a lot of communication with the consultants and EPA on the modeling.

#### 7. Call for Future Agenda Items

Mr. Cleveland announced that the next meeting of the Committee is tentatively scheduled for February 1, 2007. With no further comments, the meeting was adjourned.