

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

Thursday, October 28, 2010
MAG Office
Phoenix, Arizona

MEMBERS ATTENDING

Michelle Wilson for Doug Kukino, Glendale, Chairman	Steve Trussell for Russell Bowers, Arizona Rock Products Association
Larry Person, Scottsdale, Vice Chair	Amy Bratt, Greater Phoenix Chamber of Commerce
Sue McDermott, Avondale	Amanda McGennis, Associated General Contractors
#Elizabeth Biggins-Ramer, Buckeye	Spencer Kamps, Homebuilders Association of Central Arizona
*Jim Weiss, Chandler	*Mannie Carpenter, Valley Forward
#Jamie McCullough, El Mirage	*Erin Taylor, University of Arizona Cooperative Extension
Kurt Sharp, Gilbert	Beverly Chenausky, Arizona Department of Transportation
Cato Esquivel, Goodyear	Leonard Montenegro for Diane Arnst, Arizona Department of Environmental Quality
#Scott Bouchie, Mesa	*Environmental Protection Agency
William Mattingly, City of Peoria	Bob Downing for Jo Crumbaker, Maricopa County Air Quality Department
Karen Peters for Phil McNeely, Phoenix	#Michele Mellott for Duane Yantorno, Arizona Department of Weights and Measures
#Antonio DeLaCruz, Surprise	*Ed Stillings, Federal Highway Administration
Oddvar Tveit, Tempe	*Judi Nelson, Arizona State University
Grant Anderson for Mark Hannah, Youngtown	Christopher Horan, Salt River Pima-Maricopa Indian Community
Ramona Simpson, Queen Creek	
*American Lung Association of Arizona	
Grant Smedley, Salt River Project	
Brian O'Donnell, Southwest Gas Corporation	
Mark Hajduk, Arizona Public Service Company	
#Gina Grey, Western States Petroleum Association	
*Valley Metro/RPTA	
*Dave Berry, Arizona Motor Transport Association	
Jeannette Fish, Maricopa County Farm Bureau	

*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	John Wayne Gonzales, City of Phoenix
Dean Giles, Maricopa Association of Governments	Heather Hodgman, City of Apache Junction
Julie Hoffman, Maricopa Association of Governments	Scott DiBiase, Pinal County
Feng Liu, Maricopa Association of Governments	Dan Catlin, Fort McDowell
Taejoo Shin, Maricopa Association of Governments	Matt Tsark, Strand Associates, Inc.
Randy Sedlacek, Maricopa Association of Governments	Jeff Gray, R & R Partners
Matt Poppen, Maricopa Association of Governments	Kayelen Rolfe, State of Arizona
Ranjith Dandanayakula, Maricopa Association of Governments	Joonwon Joo, Arizona Department of Transportation
Adam Xia, Maricopa Association of Governments	Mitch Wagner, Maricopa County Department of Transportation
Cathy Arthur, Maricopa Association of Governments	
Frank Schinzel, Maricopa County Air Quality	

1. Call to Order

A meeting of the MAG Air Quality Technical Advisory Committee was conducted on October 28, 2010. Larry Person, City of Scottsdale, Vice Chair, called the meeting to order at approximately 1:30 p.m. Antonio DeLaCruz, City of Surprise; Jamie McCullough, City of El Mirage; Elizabeth Biggins-Ramer, Town of Buckeye; Gina Grey, Western States Petroleum Association; Scott Bouchie, City of Mesa; and Michele Mellott, Arizona Department of Weights and Measures, attended the meeting via telephone conference call.

2. Call to the Audience

Mr. Person 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 tables adjacent to the doorways 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. He noted that no public comment cards had been received.

3. Approval of the September 23, 2010 Meeting Minutes

The Committee reviewed the minutes from the September 23, 2010 meeting. Amanda McGennis, Associated General Contractors, moved and William Mattingly, City of Peoria, seconded and the motion to approve the September 23, 2010 meeting minutes carried unanimously.

4. Update on the EPA Proposed Partial Approval and Disapproval of the MAG 2007 Five Percent Plan for PM-10

Lindy Bauer, MAG, provided an update on the Environmental Protection Agency (EPA) proposed partial approval and disapproval of the MAG 2007 Five Percent Plan for PM-10. Ms. Bauer stated that MAG and the Arizona Department of Environmental Quality (ADEQ) requested a 60-day extension of the comment period for the proposed action on the Five Percent Plan. Comments were originally due by October 12, 2010. She added that EPA did grant an extension of the comment period to October 20, 2010. Ms. Bauer indicated that MAG, Maricopa County, and ADEQ submitted individual comments and joint letters which were included in the Committee agenda packets. In addition, a letter was signed by the members of the MAG Regional Council and submitted to EPA to make them aware of the consequences of the proposed action, in particular, the conformity freeze. Ms. Bauer thanked Pinal County, Arizona Rock Products Association, and the Associated General Contractors for submitting comments. She noted that comments have also been submitted by others including the Greater Phoenix Chamber and the Arizona Chamber. Ms. Bauer indicated that MAG will be accessing these letters from the docket once they are posted. She mentioned that EPA has not yet included the letters or comments into the docket. Ms. Bauer added that MAG also submitted extensive comments on the notice and pointed out the information that was incorrect.

Ms. Bauer stated that the highlight of October include two video conferences with EPA. She added that the first conference was conducted on October 1, 2010 which included the local air agencies that worked to develop the Plan. Ms. Bauer indicated that the purpose of this conference was to talk to EPA about the issues with the EPA Exceptional Events Rule and to provide some recommendations on how to fix the rule. She noted that the agencies on the video conference included the EPA Office at Research Triangle Park, Office of Air Quality Planning and Standards; EPA Region IX; and the EPA Office of General Counsel. Ms. Bauer commented that the video conference provided an opportunity to present recommendations for fixing the rule. She added that during the call, EPA acknowledged that there are problems with the rule that have to be fixed. Ms. Bauer stated that EPA

discussed the possibility of a policy memorandum in the short term. EPA also discussed potential long term solutions for fixing the rule; however, this solution will take some time. Ms. Bauer mentioned that an attorney with the EPA Office of General Counsel indicated that when EPA fixes the rule, it does not necessarily mean that EPA will go back and change their mind on the 2008 exceptional events and nonconcurrency. She stated that if the rule was flawed, EPA should go back retroactively and fix the problem with the high wind exceptional events. Ms. Bauer added that MAG made it clear that they are ready and committed to work with EPA on fixing the technical approvability issues that EPA has identified with the Plan.

Ms. Bauer stated that on October 8, 2010, Congressman Mitchell held a video conference with EPA at the MAG office. She noted that this meeting included representatives from the offices of Congressman Flake and Congressman Pastor in addition to the local agencies that worked to develop the Plan. Janet McCabe, Deputy EPA Administrator, was also on the video conference along with Research Triangle Park and EPA Region IX. Mayor Schoaf, Chairman, MAG Regional Council, presided over the meeting. She mentioned that Mayor Schoaf took the opportunity to talk to EPA about the MAG track record for air quality. Ms. Bauer added that Mayor Schoaf commented that this region was one of the first regions in the country to implement an alternative fuels program. She indicated that this region has the most stringent vehicle emissions testing program in the country. In addition, MAG is currently working on a pilot project for electric vehicle recharging stations. Ms. Bauer stated that this region has met the air quality standard for carbon monoxide and is now a maintenance area. In addition, the region has met the one-hour ozone standard and is now a maintenance area. Ms. Bauer commented that Mayor Schoaf emphasized that the eight-hour ozone standard for the .080 parts per million standard has also been met by this region with no exceedances since 2004. The region is also an attainment area for PM-2.5. She added that Mayor Schoaf mentioned that the MAG Regional Council allocated \$23.2 million in CMAQ funds over the last 10 years to purchase PM-10 street sweepers and approximately \$28.4 million in CMAQ for unpaved roads. Mayor Schoaf also emphasized that the Plan is effective and working and that MAG is committed to work with EPA on the approvability issues. Mayor Schoaf also requested at the meeting that EPA delay final action on the Plan since they need time to review all of the scientific information for exceptional events.

Ms. Bauer stated that Mayor Smith, Chairman, MAG Transportation Policy Committee, emphasized to EPA at the meeting that a conformity freeze is unacceptable for this region. She added that due to the changing economic conditions, MAG needs to be fluid so that it can adjust to changing conditions. Ms. Bauer noted that the MAG Regional Council has had to make changes to the MAG Transportation Improvement Program (TIP) because of the downturn that was unanticipated. She noted that MAG frequently makes changes to the TIP. Ms. Bauer commented that EPA responded by indicating that they now have a better understanding why this region was so concerned about the conformity freeze. She added that MAG also mentioned that they were proud of the work that has been done for air quality which is a credit to the Air Quality Technical Advisory Committee. Ms. Bauer mentioned that Ms. McCabe stated that MAG should be proud. Ms. McCabe indicated that prior to her current position, she worked in Indiana, and at that time they used the MAG Plan as a model when debating the merits of the IM 240 Program. Ms. Bauer commented that she wanted to convey that compliment to this Committee since this is due to their hard work. She added that EPA indicated that they would work cooperatively with MAG to try to avoid or minimize the time in the conformity freeze.

Ms. Bauer stated that an exceedance of the PM-10 standard occurred on October 15, 2010 at the Greenwood monitor. She noted that this was the first exceedance in 2010. Ms. Bauer added that the

exceedance occurred on a day with thunderstorm activity. She indicated that a map of the air quality monitors was mailed to the Committee and an additional copy has been set at each place. Ms. Bauer asked all the MAG member agencies along with the private sector to be ever vigilant when they have projects that are near those monitors. She mentioned that it is nearing the time of year where there are stagnant conditions with minimal wind and an inversion holds the pollution near the ground. Ms. Bauer added that this region needs to have clean data at the monitors. She noted that if the PM-10 exceedances do not stop, it will cause big problems for this region.

Ms. Bauer stated that EPA has started answering some of the questions that were submitted. She noted that the answers from EPA were included in the agenda packet. Ms. Bauer added that EPA does want some changes to the 2008 Periodic Emissions Inventory which means it is not ready to be used. EPA has indicated that the five percent reductions start from the year in which the Plan is submitted. Ms. Bauer mentioned that MAG will present the Committee with a new schedule for completion of the Plan when additional information is available. She indicated that MAG has additional questions for EPA and EPA did not fully answer some of the questions. Ms. Bauer added that as soon as the information is available it will be conveyed to the Committee.

Ms. Bauer stated that EPA has indicated that it is common sense to analyze any additional new Best Available Control Measures (BACM) that are not in the Plan. She added that MAG has asked Sierra Research to update the BACM analysis. Ms. Bauer mentioned that this region already has an approved BACM analysis in the Serious Area Plan. She commented that Sierra Research will be taking that information along with the measures that are currently in place and will be analyzing other areas to see what additional measures are out there. Ms. Bauer stated that a big list of measures is not expected since the Plan already has extensive measures in place. She added that if the outstanding measures do not make sense for this region, justification could be provided as to why the measures should not be done locally.

Ms. Bauer mentioned that we need to keep in mind the economic downturn. She commented that the MAG transportation staff produced information on construction jobs. Ms. Bauer noted that over the last three years, 100,000 construction jobs have been lost. Currently the level of construction employment is at the mid 1995 levels. She reminded the Committee about being clean at the monitors. The hope is to have three years of clean data when the Plan is submitted. Ms. Bauer indicated that keeping clean at the monitors will help minimize how many measures will need to be added to the Plan. She noted that good common sense needs to be used when going through and revising this Plan keeping in mind the economy of this region as well as improving the air quality.

Ms. McGennis inquired if the inventory that is not ready for use is the 2008 Periodic Emission Inventory. Ms. Bauer responded yes. Ms. McGennis stated that the Five Percent Plan for PM-10 was submitted December 31, 2007. She added that Ms. Bauer stated that the five percent reductions start the year the Plan was submitted and inquired if this meant 2008. Ms. Bauer responded that was under the old Plan. She added that EPA is assuming a revision would be submitted in 2011, then the five percent reductions would start in 2011. Ms. Bauer mentioned that MAG has questions for EPA on the modeling and on the base that would be used to take those five percent reductions. Ms. McGennis stated that the map on the monitor locations has been helpful. She added that the Maricopa County Air Quality Department may start alerting people on the locations of the monitors when they receive their dust permits. Ms. McGennis indicated that this would give people an idea of monitor locations when going out for a project. She requested that those with public works projects consider the monitors and make the bidders aware of the monitors in the surrounding area. Ms. Bauer stated that

it was an excellent suggestion. She added that the MAG Regional Council was also provided the map at their October 27, 2010 meeting.

Grant Anderson, Town of Youngtown, asked if Ms. Bauer could clarify the fact that the conformity freeze is not tied to the violations at the monitors. Ms. Bauer responded that the conformity freeze is not tied to the violations at the monitors. The conformity freeze would be tied to the disapproval of the Plan if EPA goes forward with disapproval. Ms. Bauer noted that when EPA went through their technical approvability issues with the Plan in the September 9, 2010 notice, EPA first attacked the 2005 Periodic Emissions Inventory, the foundation of the Plan. She added that the inventory is the basis from which MAG developed the modeling projections including the Motor Vehicle Emissions Budget used for conformity. Ms. Bauer indicated that EPA proposed to disapprove all of those pieces of the Plan.

Mr. Anderson stated that this was more of a revelation that he originally thought since there has been continuous talk about monitor locations and suggestions to do better in those areas. He inquired what will prevent EPA from stating that because the Plan did not meet their criteria, no matter what is done at the monitors there will still be a conformity freeze. Mr. Anderson asked how the region can get out of a conformity freeze. He inquired if this could be done by being clean at the monitors or by changing the Plan to meet the requirements. Ms. Bauer responded that first and foremost the region needs to be clean at the monitors. She added that EPA disagrees with the four high wind exceptional events and therefore the region does not have its first year of clean data needed to be in attainment which lead to the disapproval of the Plan. Ms. Bauer indicated that EPA also identified technical approvability issues with the Plan. She mentioned that the first piece criticized by EPA was the 2005 Periodic Emissions Inventory which produces the pie chart that shows all the different sources and contributions. Ms. Bauer noted that this piece is the foundation of the Plan. She commented that two things need to be done: 1) be clean at the monitors and 2) fix the approvability issues. Ms. Bauer added that an approveable Plan as well as being clean at the monitors is needed in order to stop the PM-10 problem.

Mark Hajduk, Arizona Public Service Company, stated that a Plan needs to be in place and submitted to EPA for approval. He added that it seems as if EPA will soon be making a decision on disapproving the Plan which would kick in the conformity issues and sanctions. Mr. Hajduk commented that he is assuming that the region will not be able to have a revised Plan in place by the time EPA makes a decision. He asked if the approach will be damage control and try getting an extension to minimize the time between the decision by EPA and having a new Plan in place. Mr. Hajduk inquired if the Committee will be on an accelerated track to try to come up with a Plan. Ms. Bauer indicated that EPA would sign the disapproval notice on January 28, 2011 and 30 days after the notice is signed the region would go into a conformity freeze. She added that the conformity freeze would be lifted by submitting a new Plan that meets the Clean Air Act requirements and EPA finds the Motor Vehicle Emissions Budget in the Plan adequate for conformity. Ms. Bauer noted that MAG would then need to run conformity with the budget.

Ms. Bauer discussed the sanctions. She stated that the first sanction would fall 18 months from the effective date of disapproval if the problem is still not fixed. The second sanction would fall six months later which is the loss of the federal highway funds. Ms. Bauer added that MAG needs to get the answers to the questions that were submitted to EPA. She noted that the region needs to find out how long it is going to take to fix the foundation piece which is the emissions inventory. Ms. Bauer commented that MAG will then provide a schedule to the Committee. She mentioned that the

Committee should not expect a long list of measures. Ms. Bauer mentioned that we have to be prudent and use common sense when developing a plan.

Grant Smedley, Salt River Project, inquired if it is clear what is meant by an approveable Plan under the Clean Air Act. He asked if the disputed exceptional events will prevent the region from having an approveable Plan. Mr. Smedley added that since the baseline emissions inventory will have to be adjusted, the region will not know how the Plan will do until it gets implemented. He asked if EPA has included any information in that regard. Ms. Bauer responded that an approveable plan must have an accurate comprehensive emissions inventory. She noted that the items needed for an approveable plan are listed in the Clean Air Act. Ms. Bauer stated that the region has never seen an emissions inventory attacked by EPA. She added that the Maintenance Plan for Carbon Monoxide, which was approved by EPA, is based on old inventories. EPA indicated that those were the most accurate inventories at that point in time. Ms. Bauer commented that this is new for both MAG and Maricopa County. She mentioned that the region needs to work with EPA and find out how long it will take to fix the 2008 emissions inventory so that EPA is satisfied to use it as a base for the Plan. Ms. Bauer indicated that modeling projections will then have to be developed. MAG will also analyze the existing measures that are in place and see how far those benefits can be extended. She noted that MAG will also take a look at the update to the Best Available Control Measure analysis and will share all of the information with this Committee.

Spencer Kamps, Homebuilders Association of Central Arizona, inquired about the concerns that EPA has expressed over the 2008 emissions inventory. Ms. Bauer responded that the Committee agenda packet includes the concerns that EPA has expressed. She stated that EPA has indicated that they would like MAG to provide documentation on the vacant land areas. Ms. Bauer added that MAG is prepared to provide that information, and in fact, the approach that MAG is using is more comprehensive and accurate than what Clark County used. She noted that the information is currently being developed. In addition, EPA has indicated that they would like to see the actual compliance rate used in the rule effectiveness calculation methodologies. Ms. Bauer mentioned that Maricopa County will be working on that issue. She added that EPA has also mentioned that they are looking at potential changes with the road dust emissions.

Mr. Hajduk commented that at the previous meeting, it was mentioned that Roger Ferland, Quarles and Brady, LLP, was hired to represent MAG. He inquired if MAG will be taking legal action on some of the issues that were mentioned. Ms. Bauer responded that she has to be careful with her response given the open meeting law. She stated that no lawsuit has been filed by MAG. Ms. Bauer noted that MAG's legal counsel has provided good advice along the way and it is reflected in the letters that are included within the agenda packet.

Mr. Anderson inquired about the sanctions that would be placed on Indian Communities. Ms. Bauer responded that the Indian Communities are governed by the Federal Government. Mr. Anderson asked about the process. Ms. Bauer responded that the Indian Communities have been very cooperative in working with MAG. She added that the Gila River Indian Community went through an official federal process to be authorized to develop air quality plans. Ms. Bauer indicated that under the Clean Air Act, Indian Communities can be treated like states. For example, the Gila River Indian Community has their own air quality plan in place and has shared their plan with this Committee. Ms. Bauer noted that they have been cooperative; however, they are under the authority of the Federal Government.

5. Status of Ongoing EPA Review of National Ambient Air Quality Standards for Particulate Matter

Matt Poppen, MAG, provided a presentation on the status of ongoing EPA review of National Ambient Air Quality Standards (NAAQS) for Particulate Matter. Mr. Poppen stated that the current particulate matter standards for PM-10 and PM-2.5 were adopted by EPA in October 2006. At that time EPA retained the 24-hour PM-10 standard at 150 micrograms per cubic meter (ug/m^3) and revoked the annual PM-10 standard which was $50 \text{ ug}/\text{m}^3$. He added that EPA also revised the 24-hour PM-2.5 standard from 65 to $35 \text{ ug}/\text{m}^3$ and retained the annual PM-2.5 standard at $15 \text{ ug}/\text{m}^3$. In addition, EPA also left the secondary standards set identical to the primary standards.

Mr. Poppen mentioned that EPA is required by the Clean Air Act to review each standard every five years for all pollutants that are part of the National Ambient Air Quality Standards. He commented that the current particulate matter standards are scheduled for a preliminary rulemaking in February 2011 and the final rulemaking would be October 2011. The latest EPA documents that are out for review with recommendations on the new particulate matter standards include the Policy Assessment for the Review of the PM NAAQS which came out in June 2010. Mr. Poppen added that the Clean Air Scientific Advisory Committee (CASAC), which has a strong role in advising these standards, also sent out the Review of Policy Assessment for the Review of the PM NAAQS in September 2010. He stated that he will be discussing these two documents.

Mr. Poppen presented a chart of the new NAAQS review process which was released in April 2009. He noted that EPA is currently in the Policy Assessment stage of the process. Mr. Poppen stated that the policy assessment integrates the risk exposure information and policy issues. He added that EPA will most likely be moving on to the internal review stage and getting ready to publish their proposed ideas on the standard.

Mr. Poppen discussed the current EPA recommendations on revising the Particulate Matter Standards. He stated that for primary PM-10, EPA has recommended to either retain or revise the current standard. Mr. Poppen added that EPA's comments in regard to retaining the standard stated that it depended on the evidence, whether it is necessary to revise the standard. He noted that EPA could not make that recommendation at the time. However, EPA stated that if the administrator felt that it was necessary to make a revision, EPA would recommend keeping the current indicator of PM-10 as well as the 24-hour averaging time. Mr. Poppen commented that EPA did recommend a new form. He added that the current form allows three exceedances over a period of three years, an average of one exceedance per year at a monitor in order to be in attainment. Mr. Poppen mentioned that the new form would be a three-year average at the 98th percentile. He indicated that the 98th percentile equates to the 8th highest reading in a year. Mr. Poppen stated that in order to attain the standard, the 8th highest reading over a three-year average would have to be below the standard. He commented that the new level would be between 85 and $65 \text{ ug}/\text{m}^3$ with the evidence supporting the upper bound level of $85 \text{ ug}/\text{m}^3$. Mr. Poppen added that EPA felt that $87 \text{ ug}/\text{m}^3$ was equivalent to the current standard in combination with the new form. He added that $87 \text{ ug}/\text{m}^3$ was a national average which would mean less protection in some areas and more protection in other areas.

Mr. Poppen stated that EPA recommended revising the primary PM-2.5 standard. He noted that Maricopa County is in attainment for this pollutant. Mr. Poppen added that EPA recommended to keep the indicator of PM-2.5 and both averaging times (annual and 24-hour standards). EPA has also recommended to keep the forms that are used to calculate the averaging time. Mr. Poppen mentioned that the forms include a three-year annual average and a three-year average for the 24-hour 98th

percentile. He stated that EPA recommended a new annual level of 13 to 11 $\mu\text{g}/\text{m}^3$ which has a current level of 15 $\mu\text{g}/\text{m}^3$. EPA also recommended a level of 35 to 30 $\mu\text{g}/\text{m}^3$ for the 24-hour level which is currently set to 35 $\mu\text{g}/\text{m}^3$.

Mr. Poppen stated that CASAC reviewed EPA's recommendations and policy assessment and have sent their recommendations to EPA Administrator Jackson. He added that CASAC has recommended that the primary PM-10 standard be revised. CASAC recommended to keep the PM-10 indicator; however, they recommended a future use of PM course (10-2.5 $\mu\text{g}/\text{m}^3$) and not take into account anything below PM-2.5. Mr. Poppen commented that there is currently not enough data to set a standard on that indicator. He mentioned that CASAC also recommended that there should be a national effort to deploy more of these course monitors so that more data can be gathered. Mr. Poppen indicated that CASAC recommended to keep the averaging time of 24-hour. He noted that CASAC agreed with the 98th percentile form. CASAC disagreed with EPA on the level and recommended a level of 75 to 65 $\mu\text{g}/\text{m}^3$. Mr. Poppen added that CASAC disagreed with EPA that the science supports the 85 micrograms per cubic meter. He mentioned that for the primary PM-2.5 standards, CASAC agreed with EPA. Mr. Poppen noted that the only difference was that CASAC was unsure about the combination of the annual standard and the 24-hour standard that should be put in place to provide the best protection for the public.

Mr. Poppen discussed the impact of a revised primary PM-10 standard. He stated that based on the PM-10 nonattainment area monitors with complete data for 2007-2009, there would be eight monitors that exceed at the 85 or 75 $\mu\text{g}/\text{m}^3$ level. Mr. Poppen added that there would be ten monitors that exceed the 65 $\mu\text{g}/\text{m}^3$ level. He noted that the aforementioned statistics are conservative since they do not account for the exclusion of exceptional events.

Mr. Poppen presented a graph of the 2007-2009 three-year average 98th percentile PM-10 values. He stated that the graph shows the eight monitors that exceed the 85 $\mu\text{g}/\text{m}^3$ level. Mr. Poppen added that the monitors include Durango, Bethune School, West 43rd, Higley, South Phoenix, Greenwood, Central Phoenix, and the West Phoenix monitors. He indicated that the number listed in the bar is the 98th percentile reading. He commented that at the level of 65 $\mu\text{g}/\text{m}^3$, two additional monitors exceed the standard, Dysart and West Chandler.

Mr. Poppen stated that another way to look at the impact as opposed to the 98th percentile value is to look at the number of days that a monitor would exceed the standard. He added that in most cases with a continuous PM-10 monitor, the 98th percentile equates to the eighth highest reading in a year. In order to attain the standard, the monitor cannot exceed more than seven times a year, on a 3-year average, the level EPA sets. Mr. Poppen presented a table of the five highest exceeding monitors which show the number of times they exceed on an average using 2007-2009 data. He noted that the West 43rd Avenue monitor exceeds the 85 $\mu\text{g}/\text{m}^3$ level 60 times per year; the 75 $\mu\text{g}/\text{m}^3$ level 86 times per year; and the 65 $\mu\text{g}/\text{m}^3$ level 122 times per year. Mr. Poppen added that those numbers would need to be down to seven in order to attain the new standard.

Mr. Poppen stated that PM-10 control measures are working and PM-10 is trending downward, which can be seen under the new form proposed by EPA. He discussed the statistics for the West 43rd Avenue monitor. Mr. Poppen added that if the level is 85 $\mu\text{g}/\text{m}^3$, in 2007 it was in the 70th percentile; in 2008 it was in the 87th percentile; in 2009 the level was in the 92nd percentile; and in 2010 it almost met the 98th percentile based on data through October 12, 2010. Mr. Poppen presented a table of the West 43rd Avenue monitor which is the highest exceeding monitor. He indicated that the monitor exceeded the 85 $\mu\text{g}/\text{m}^3$ level in 2007 on 106 days, 46 days in 2008, 27 days in 2009, and 6 days in

2010 (through October 12, 2010). Mr. Poppen noted that the numbers in the brackets show the projected year end total for 2010. He stated that the numbers are higher because of the stagnant and inversion season the region will soon be entering. Mr. Poppen added that while 2010 has been a great year in terms of not having PM-10 exceedances of the current standard, the region would still not meet the new EPA standards being proposed.

Mr. Poppen stated that exceptional events will increase in frequency and importance under the new standard. He presented a table that shows the six days in 2010 that the West 43rd Avenue monitor exceeded the 85 ug/m³ level. Mr. Poppen added that three of the days had high winds which include April 29, 2010, May 2, 2010, and October 2, 2010. He indicated that these three days would be good candidates for exceptional events under the new standard. Mr. Poppen commented that these days are not currently flagged as exceptional events since they are under the current standard of 150 micrograms per cubic meter. He noted the importance of the Exceptional Events Rule if the new standard goes forward.

Mr. Poppen commented on the impacts of the proposed primary PM-2.5 standards. He stated that Maricopa County currently attains the standard for PM-2.5. Mr. Poppen noted that the region would continue to attain the 24-hour PM-2.5 standard if lowered to a level of 30 ug/m³ as suggested by EPA. Mr. Poppen discussed the table on the slide and added that the table shows the 24-hour averages. He indicated that the three-year averages are below 30 ug/m³. Mr. Poppen mentioned that if EPA chooses to lower the annual standard to the lowest value of 11 ug/m³, the South Phoenix monitor would currently exceed that standard based on 2007-2009 data. He noted that EPA does allow an overall averaging of all the PM-2.5 monitors; however, there are some caveats and spatial averaging may not apply in our case.

Mr. Poppen stated that the current secondary standards are the same as the primary standards; however, this would change under the new recommendations. He added that EPA is recommending a new secondary standard for protection against PM related visibility impairment which would include conditions such as haze and smog. The new standard would include a new indicator called light extinction. Mr. Poppen noted that the standard proposes measurement of light extinction by using speciated PM-2.5 mass and relative humidity. He stated that EPA developed Candidate Protection Levels for visibility protection. Mr. Poppen added that the levels could be set at the 20 to 30 deciview range or equivalently between 64 to 191 inverse megameters (Mm⁻¹). Mr. Poppen mentioned that those protection levels would be in combination with a PM-2.5 mass indicator. He noted that it is a complex standard. Mr. Poppen added that the research included in the EPA staff recommendations show that the Phoenix area currently has low light extinction levels as compared to other urban areas.

Mr. Poppen discussed an EPA table which shows the 90th percentile maximum daily one-hour light extinction design values. He stated that the easiest way to interpret this table is by the PM-2.5 mass level values that are along the top of the table and can be set anywhere from 10 to 60 ug/m³. Mr. Poppen added that a level between 60 and 40 ug/m³ does not provide much protection for visibility. He noted that a lot of cities exceed the highest candidate protection level which is 191 Mm⁻¹ when mass is set at 60 or 40 ug/m³. Mr. Poppen indicated that when the mass level is at 10, 20, or 30 ug/m³, visibility increases and the candidate protection levels are met by more cities. He mentioned that Phoenix already meets many of the visibility levels under the current controls for PM-2.5. Mr. Poppen commented that Phoenix is in better shape than many of the other urban areas studied. He stated that Phoenix only shows visibility improvements beyond current conditions when the PM-2.5 mass is set at the 10 ug/m³ level. Mr. Poppen added that if EPA decides to implement the standard, Phoenix will

be in good shape to meet whichever standard is decided by EPA since visibility is associated more with PM-2.5 than PM-10. He noted that the nitrates and sulfates which primarily diminish visibility are a small fraction of the PM problem in our region.

Mr. Poppen provided a summary of the presentation. He stated that a revised PM-10 standard at any level between 85 to 65 ug/m³ is more stringent than the current standard in the Maricopa PM-10 nonattainment area. Mr. Poppen added that eight monitors would exceed a revised PM-10 standard at the 85 ug/m³ level and ten monitors would exceed at the 65 ug/m³ level. He mentioned that exceptional events will be extremely important given the new form of the PM-10 standard and how frequently the monitors record readings above the proposed levels. Mr. Poppen commented that PM course will become more important as a replacement indicator for PM-10 in the future. He stated that Maricopa County will likely attain a revised 24-hour PM-2.5 standard and may have issues with an annual standard if is set at the lowest level of 11 ug/m³. Mr. Poppen added that a new secondary standard designed to limit light extinction may be adopted and the Phoenix area will be in good shape to meet that possible standard.

Beverly Chenausky, Arizona Department of Transportation, inquired about a recommendation that high winds would not count as a violation but the value would have to be used to determine the average for three years and be in attainment. She noted that the elevated readings would be used in the design value. Ms. Chenausky stated that it might have been a recommendation from one of the scientists, but she was not sure if it was mentioned in the documents. Mr. Poppen responded that he did not initially see that recommendation in the documents. He added that regions would want those values associated with high winds removed since it would lower their ability to keep readings that are over the EPA limit from reaching the 8th highest value on an annual average.

6. Call for Future Agenda Items

Mr. Person announced that the next meeting of the Committee has been tentatively scheduled for Tuesday, November 30, 2010 at 1:30 p.m. With no further comments, the meeting was adjourned at 2:23 p.m.