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January 19, 2006

TO: Members of the MAG Air Quality Technical Advisory Committee

FROM: Stephen S. Cleveland, Goodyear City Manager, Chairman

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Thursday, January 26, 2006 - 1:30 p.m.  
MAG Office, Suite 200 - Saguaro Room  
302 North 1<sup>st</sup> Avenue, Phoenix

Please park in the garage under the Compass Bank Building. Bring your ticket to the meeting; parking will be validated. For those using transit, the Regional Public Transportation Authority will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the garage.

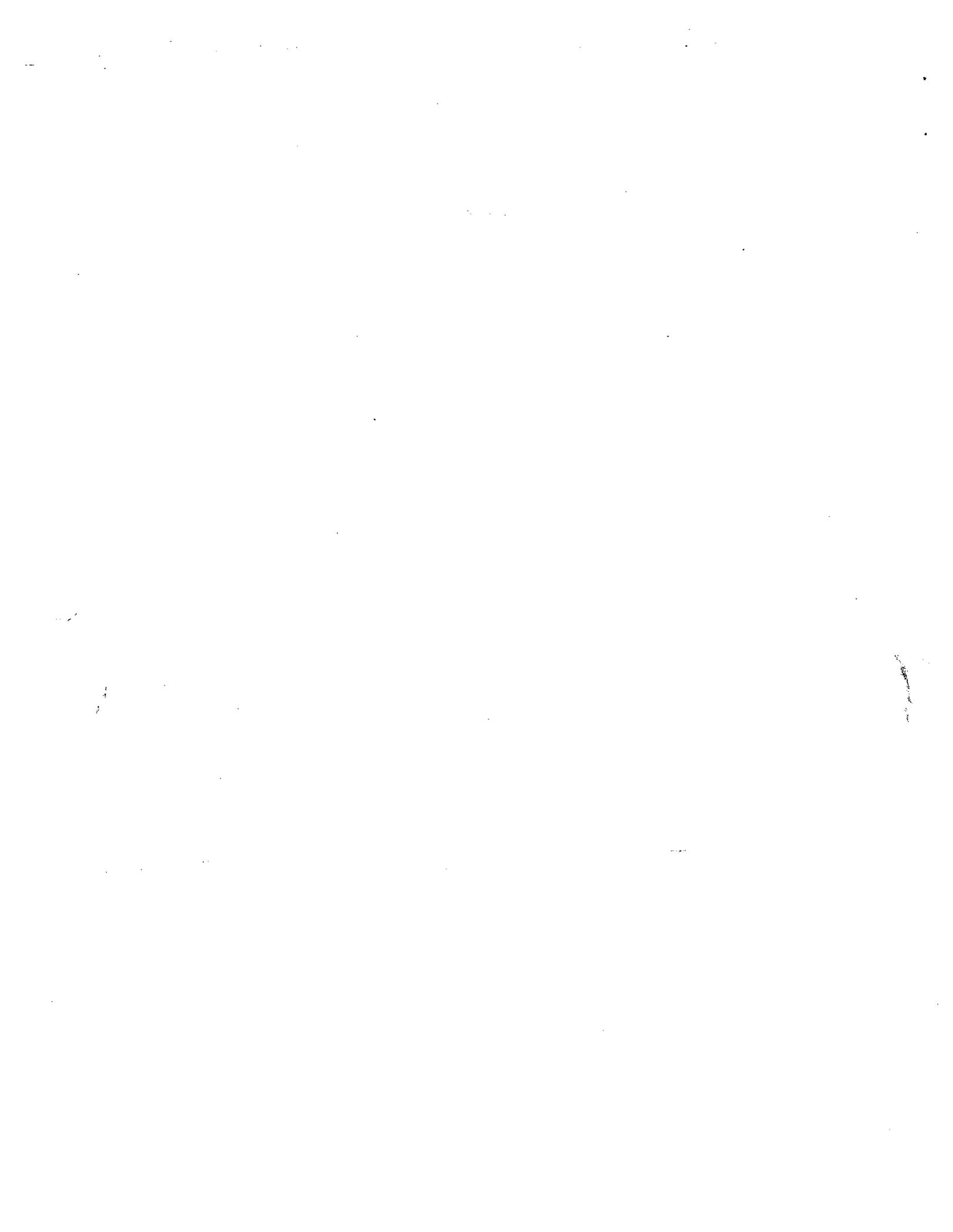
Pursuant to Title II of the Americans with Disabilities Act (ADA), MAG does not discriminate on the basis of disability in admissions to or participation in its public meetings. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Ann Wimmer at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

Members of the MAG Air Quality Technical Advisory Committee may attend in person, via videoconference or by telephone conference call. Those attending by videoconference must notify the MAG site three business days prior to the meeting. Those attending by telephone conference call are requested to call (602) 261-7510 between 1:25 p.m. and 1:30 p.m. on the date of the meeting. After the prompt, please enter the meeting ID number 27822 (on your telephone key pad) followed by the pound key. If you have a problem or require assistance, dial 0 after calling the number above.

Please be advised that under procedures approved by the MAG Regional Council, all MAG committees need to have a quorum to conduct the meeting. A quorum is a simple majority of the membership. If you are unable to attend the meeting, please make arrangements for a proxy from your entity to represent you.

A Voluntary Association of Local Governments in Maricopa County

City of Apache Junction ▲ City of Avondale ▲ Town of Buckeye ▲ Town of Carefree ▲ Town of Cave Creek ▲ City of Chandler ▲ City of El Mirage ▲ Fort McDowell Yavapai Nation ▲ Town of Fountain Hills ▲ Town of Gila Bend  
Gila River Indian Community ▲ Town of Gilbert ▲ City of Glendale ▲ City of Goodyear ▲ Town of Guadalupe ▲ City of Litchfield Park ▲ Maricopa County ▲ City of Mesa ▲ Town of Paradise Valley ▲ City of Peoria ▲ City of Phoenix  
Town of Queen Creek ▲ Salt River Pima-Maricopa Indian Community ▲ City of Scottsdale ▲ City of Surprise ▲ City of Tempe ▲ City of Tolleson ▲ Town of Wickenburg ▲ Town of Youngtown ▲ Arizona Department of Transportation



## TENTATIVE AGENDA

### COMMITTEE ACTION REQUESTED

1. Call to Order

2. Call to the Audience

An opportunity will be provided to members of the public to address the Air Quality Technical Advisory Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. Members of the public will be requested not to exceed a three minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the Air Quality Technical Committee requests an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity at the time the item is heard.

3. Approval of the October 6, 2005 Meeting Minutes

4. Particulate Pollution Update

In recent weeks, this region has experienced high readings at two of the PM-10 monitor sites. Although these readings will need to be checked by Maricopa County air quality personnel, it appears that MAG will need to initiate the preparation of a Five Percent Plan for submission to EPA by December 31, 2007. It is important that the region attain the 24-hour PM-10 standard as quickly as possible. Every monitor in the nonattainment area must be clean in 2006, 2007 and 2008 in order for the region to attain the standard by 2008. A report will be provided on current efforts to meet the standard.

In this regard, at the December 14, 2005 MAG Regional Council meeting, staff was requested to forward the City of Peoria

2. For information.

3. Review and approve the October 6, 2005 meeting minutes.

4. For information and discussion.

ordinance that assists in dust control. This ordinance has been forwarded to the MAG member agencies and a presentation will be made on the key elements of the ordinance. Please refer to the enclosed material.

5. New Particulate Standards Proposed by EPA

On December 20, 2005, the Environmental Protection Agency proposed two new 24-hour standards for particulate pollution: a stricter fine particulate standard and a new coarse particulate standard. EPA is also proposing to revoke the existing 24-hour PM-10 standard, except in areas that have violating monitors and a population of 100,000 or more. In these areas, such as Maricopa County, the current 24-hour PM-10 standard will remain in place until EPA has completed nonattainment designations for the new coarse standard in July 2013. The EPA has indicated that there may be legal challenges of the new coarse particulate standard. Please refer to the enclosed material.

6. Update on Agricultural Best Management Practices

The Revised MAG 1999 Serious Area Particulate Plan for PM-10 included Agricultural Best Management Practices as one of the required contingency measures. The Arizona Department of Environmental Quality has the authority to enforce these requirements. A representative from the Department will discuss compliance and enforcement efforts for the Agricultural Best Management Practices.

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

On October 6, 2005, the MAG Air Quality Technical Advisory Committee recommended a prioritized list of proposed PM-10 Certified Street Sweeper Projects for FY 2006 CMAQ funding and that the prioritized list be retained for any additional FY

5. For information and discussion.

6. For information and discussion.

7. For information and discussion.

2006 CMAQ funds that may become available due to year-end closeout, including any redistributed obligation authority, or additional funding received by this region.

The MAG Management Committee endorsed the recommendation on October 12 and the MAG Regional Council took approval action on October 26, 2005. No changes were made to the AQTAC recommendation. Please refer to the enclosed material.

8. Call for Future Agenda Items

The next meeting of the Committee has been tentatively scheduled for **Thursday, February 23, 2006 at 1:30 p.m.** The Chairman will invite the Committee members to suggest future agenda items.

8. For information and discussion.



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

Thursday, October 6, 2005  
MAG Office  
Phoenix, Arizona

MEMBERS PRESENT

Stephen Cleveland, City of Goodyear, Chairman  
\*Avondale: Michael Powell  
Buckeye: Cathy Charney for Carroll Reynolds  
#Chandler: Jim Weiss  
\*El Mirage: Lucky Roberts  
Gilbert: Greg Svelund for Tami Ryall  
Glendale: Doug Kukino  
Mesa: Scott Bouchie  
Phoenix: Joe Gibbs for Gaye Knight  
Scottsdale: Larry Person  
\*Surprise: Jim Nichols  
Tempe: Oddvar Tveit  
\*Citizen Representative: Walter Bouchard  
\*American Lung Association of Arizona: Bill Pfeifer  
Salt River Project: Sunil Varma  
Southwest Gas Corporation: Brian O'Donnell  
\*Arizona Public Service Company: Jim Mikula  
\*Western States Petroleum Association: Gina Grey  
Valley Metro: Betsy Turner for Randi Alcott  
\*Arizona Motor Transport Association: Dave Berry  
\*Maricopa County Farm Bureau: Jeannette Fish  
\*Arizona Rock Products Association: Rusty Bowers  
\*Greater Phoenix Chamber of Commerce: Michelle Rill

\*Associated General Contractors: Amanda McGennis  
\*Homebuilders Association of Central Arizona:  
Connie Wilhelm-Garcia  
\*American Institute of Architects - Central Arizona:  
Stephen J. Andros  
\*Valley Forward: Peter Allard  
\*University of Arizona - Cooperative Extension:  
Patrick Clay  
Arizona Department of Transportation: Beverly  
Chenausky  
Arizona Department of Environmental Quality: Peter  
Hyde  
\*Environmental Protection Agency: Wienke Tax  
Maricopa County Air Quality Department:  
Jo Crumbaker  
\*Arizona Department of Weights and Measures:  
Duane Yantorno  
Federal Highway Administration: Ed Stillings  
Arizona State University: Hank Dabibi for Judi  
Nelson  
Salt River Pima-Maricopa Indian Community:  
Allison Bree Desmond for B. Bobby Ramirez

\*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  
Ranjith Dandanayakula, Maricopa Association of  
Governments  
Ann Wimmer, Maricopa Association of Governments

Eric Anderson, Maricopa Association of Governments  
Diane Arnst, Arizona Department of Environmental  
Quality  
Kathleen Sommer, Arizona Department of  
Transportation  
Jermaine Hannon, Federal Highway Administration  
Cathy Chaberski, City of Glendale  
Tami Stowe, House of Representatives

1. Call to Order

A meeting of the MAG Air Quality Technical Advisory Committee was conducted on October 6, 2005. Stephen Cleveland, City of Goodyear, Chairman, began discussion of the agenda items at approximately 1:40 p.m. since a quorum was not present. Jim Weiss, City of Chandler, 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.

7. Update on Critical Issues with the Maricopa County Air Programs

Lindy Bauer, Maricopa Association of Governments, provided an update on the critical issues with the Maricopa County Air Quality Department Programs. She indicated that she would provide an overview and then a detailed update on the two critical air quality issues. Ms. Bauer noted the accomplishments of the Maricopa County Air Quality Department since its creation November 17, 2004. A summary of the accomplishments was provided to the Committee.

Ms. Bauer then addressed critical issue #1, the EPA Notice of Deficiency for the Maricopa County Title V Air Permit Program for Industry. She stated that by the August 18, 2005 deadline, the County submitted a formal response to EPA on its corrective action to fix all deficiencies. She mentioned that EPA reported that significant progress has been made and the threat of sanctions, including the loss of federal highway funds, is no longer looming. It appears that this issue may now be set aside.

Ms. Bauer addressed critical issue #2, the enforcement of the Maricopa County Dust Control Rules. She stated that in June 2004, EPA requested that Maricopa County hire 25-30 dust inspectors to enforce the Fugitive Dust Control Rules. Ms. Bauer advised that failure to enforce dust rules could jeopardize attainment and lead to a requirement for a five percent reduction in emissions per year.

Ms. Bauer noted that this is a critical time period for PM-10. She stated that the region needs clean data for 2004, 2005, and 2006 to attain the PM-10 standards. A five percent plan would be due December 31, 2007 if the PM-10 standards are not met. Ms. Bauer mentioned that in 2004, one monitor exceeded the 24-hour standard and two exceeded the annual standard. In 2005, two monitors have exceeded the 24-hour standard; however, these are under investigation to see if they are due to natural or exceptional events. Ms. Bauer explained that there is still a chance that the region could attain the PM-10 standards since the numbers are averaged, but the numbers still need to come down at the monitors.

Ms. Bauer discussed the dust control efforts being made by the Air Quality Department. She indicated that the County has converted temporary positions to permanent, advertised for vacant

positions, compiled a list of qualified candidates, cross-trained other positions to conduct dust control inspections, conducted training courses for the regulated community, and entered into enforcement settlements. Ms. Bauer mentioned that out of 40 total positions, 30 have been filled. The Maricopa County Board of Supervisors authorized the funding for the additional ten inspectors on September 30, 2005. The County will soon be posting these positions and begin the hiring process. Ms. Bauer added that the County is also conducting a market study on the salaries for the entire Air Quality Department, including the Dust Control Program. The study will be completed by November 30, 2005.

4. Evaluation of Proposed CMAQ Projects for FY 2011 for the FY 2007-2011 MAG TIP

Dean Giles, Maricopa Association of Governments, presented the evaluation of proposed Congestion Mitigation and Air Quality Improvement (CMAQ) projects submitted for fiscal year 2011 for the FY 2007-2011 MAG Transportation Improvement Program (TIP). Mr. Giles indicated that the projects were due to MAG by September 2, 2005. He added that the evaluation was a major undertaking and that the schedule is typically driven by the Transportation Programming Process. The materials were mailed out with the agenda six days in advance of the meeting.

Mr. Giles stated that the evaluation is one piece of the information that may be used by the modal committees for prioritizing projects. He emphasized that there is still opportunity to comment on the evaluation. Mr. Giles distributed a tentative schedule for the proposed FY 2006 PM-10 Certified Street Sweepers Projects, FY 2007 Paving Unpaved Road Projects, and FY 2011 CMAQ Projects. In addition, he noted that interagency consultation was being conducted on the estimated emission reductions, as well as the CMAQ Methodologies, and comments are requested by October 18, 2005.

Mr. Giles indicated that the results of the project evaluation were provided to the Committee in order of cost-effectiveness by modal category based on the plan allocations provided in the Regional Transportation Plan (RTP). At the request of the Committee, the project evaluation was also provided using nonweighted emission reductions. He stated that the Methodologies for Evaluating Congestion Mitigation and Air Quality Improvement Projects, August 15, 2005, were used to estimate the emission reduction benefits of the proposed CMAQ projects.

Cathy Arthur, Maricopa Association of Governments, said that Wienke Tax, Environmental Protection Agency, was unable to attend the meeting so she had e-mailed her comments to MAG. Since the comments were received that morning, there had not been time to respond in writing. Ms. Arthur indicated that she would respond verbally to Ms. Tax's questions, copies of which were provided at each person's place.

**CMAQ Projects for the FY 2007-2011 MAG TIP**

(1) "Are there FTA or other funds available for the light rail project? I notice the request from Valley Metro is for over \$18M from a total CMAQ pot of \$20M."

Ms. Arthur responded that the Regional Transportation Plan estimates that \$20M in CMAQ will apply to air quality, bicycle, pedestrian and Intelligent Transportation Systems (ITS) projects. In addition, there are other sources of funds for light rail such as local taxes and other federal funding.

She indicated that the RTP estimates that an additional \$18M in CMAQ will be available for light rail transit in FY 2011.

Ms. Arthur explained that the five tables provided in the packet represent five modal allocations of CMAQ funds contained in the RTP (i.e., air quality, bike/pedestrian, light rail, ITS, HOV lanes). Ms. Arthur indicated that the exact magnitude of total CMAQ funds available is unknown at this time because new federal transportation legislation (SAFETEA-LU) was signed on August 10, 2005.

(2) "I find the cost effectiveness of many of the bicycle and pedestrian projects, the ITS projects, and the HOV lane project distressing (especially when they are over \$100,000/metric ton of pollution reduced). It seems to me these projects ought to be funded out of monies that do not involve CMAQ criteria, unless perhaps their Congestion Mitigation (CMS) scores are particularly high."

Ms. Arthur responded that it is tempting to draw a "bright-line" of \$10,000 or \$100,000 per metric ton, but it is important to keep in mind that the cost effectiveness scores have risen by 100-200% based on the latest CMAQ methodologies. For example, ITS projects have no PM-10 benefit and if you remove the priority and seasonal weights on volatile organic compounds and nitrogen oxides, the cost effectiveness will be one-quarter of the values shown in the tables. It is important to look at the relative cost effectiveness within each RTP modal allocation.

(3) "What do the CMS scores indicate? What does MAG or do the modal committees consider a good CMS score?"

Ms. Arthur responded that the CMS score is primarily based on average daily traffic volumes and volume to capacity ratios in the present and future. She said that the CMS scores are normalized to a scale of 1-100 and two-thirds of the scores are between 50 and 60. A good score would be one over 60.

#### **Proposed PM-10 Paving Unpaved Roads Projects (2007 CMAQ)**

(4) "I don't understand the large cost discrepancy between the three projects. Cave Creek can pave 10 miles of unpaved roads for \$500,000 (\$250,000 worth of CMAQ funds) while Chandler estimates it will cost \$650,000 (\$325,000 of CMAQ funds) to pave 0.5 miles of unpaved roads?"

Ms. Arthur responded that street paving involves differing engineering requirements and materials that create a large range in road-paving cost estimates. For example, double chip seal material is far less expensive than concrete. She indicated that the unpaved road segment in Chandler is also located in an urbanized area which could create additional costs for pre-engineering, moving utilities, etc. She said the MAG rule-of-thumb for road paving projects is \$500,000 per mile. It is important to keep in mind that these are federally-funded projects and therefore, must meet federal road paving standards.

#### **Proposed PM-10 Certified Street Sweeper Projects for 2006 CMAQ Funding**

(5) "The street sweeping projects are particularly cost-effective. I would like to see as many of these funded as possible. I hope the purchases would occur early in calendar 2006 so that the Phoenix area could benefit from this control measure for most of calendar 2006."

Ms. Arthur responded that the \$960,000 in CMAQ funding for PM-10 certified street sweepers in the FY 2006 TIP will fund 5 sweepers. These sweepers may be purchased anytime after Regional Council approval on October 26, 2005. Although there is no guarantee that year-end funds will be available in mid-2006, in past years all remaining unfunded sweeper requests have been funded with year-end close-out funds.

(6) "How do you treat late submittals?"

Ms. Arthur indicated that two street sweeper requests submitted by ADOT after the deadline (in this case, September 15, 2005) are asterisked and footnoted in the List of Proposed PM-10 Certified Street Sweeper Projects for CMAQ Funding. We do not assign a late penalty in the formula. Asterisking and footnoting the projects in the table highlights the projects that were not submitted on time.

### **General Comment**

(7) "As a final note, it would have been nice to have had more time to review the detailed information you sent out. My package was postmarked Friday September 30, so I didn't get to start reviewing the information until Monday morning."

Ms. Arthur explained that MAG staff had made a concerted effort to mail the materials by Thursday September 29. However, the large number and multiple types of projects made it difficult to meet this deadline. She explained that the transportation model run for the HOV lane project did not complete computer processing until Thursday morning.

Ms. Arthur also noted that this was not the last opportunity to make comments on the CMAQ methodologies, the CMAQ scores, and the ranking of projects. The consultation process will continue until October 18, 2005. In addition, there will be a large number of MAG meetings between now and December to discuss the CMAQ projects and your input is welcomed at any of those meetings. Mr. Cleveland stated that action on agenda item four would be held until a quorum is present.

### **5. Evaluation of Proposed PM-10 Paving Unpaved Road Projects for FY 2007 CMAQ Funding**

Mr. Giles presented the evaluation of proposed PM-10 Paving Unpaved Road Projects for emission reductions and corresponding cost-effectiveness for FY 2007 Congestion Mitigation and Air Quality Improvement funding. He stated that the deadline for submitting projects was September 15, 2005 and three projects requesting \$8.1 million in federal funds were received. Beginning in FY 2007, the FY 2006-2010 MAG Transportation Improvement Program identifies \$1.35 million in CMAQ funding for Paving Unpaved Road Projects.

Mr. Giles stated that the proposed projects were evaluated using the Methodologies for Evaluating Congestion Mitigation and Air Quality Improvement Projects, August 15, 2005. He added that there are still several opportunities to comment on the evaluation. Mr. Giles indicated that the projects were provided to the Committee in order of cost-effectiveness. Mr. Cleveland asked if this agenda item relates to use of FY 2007 funds whereas agenda item four is adding projects to FY 2011. Mr. Giles responded that is correct.

Peter Hyde, Arizona Department of Environmental Quality, commented on the disconnect between the \$1.35 million in CMAQ funding available and the \$8.1 million requested. Mr. Giles replied that if the projects are forwarded, it is possible that additional funding may become available during the year-end closeout process.

Mr. Cleveland inquired about funding the Cave Creek and Chandler projects for the amounts requested and allocate the balance to the Fort McDowell Yavapai Nation project and give it first priority on any funds that may become available during the closeout process. Mr. Giles responded that it is not known how much funding would be available through the FY 2006 closeout process for PM-10 Paving Unpaved Road Projects. Ms. Arthur added that the Fort McDowell Yavapai Nation project could also be funded incrementally.

Ed Stillings, Federal Highway Administration, commented that a previous Fort McDowell Yavapai Nation project was deferred because questions were raised on how to proceed since the Arizona Department of Transportation cannot contract with the Nation. Therefore, this current project may not be feasible. Mr. Weiss asked to raise the priority of the Chandler project due to the uncertainty with the Fort McDowell Yavapai Nation project. Mr. Cleveland stated that action on agenda item five would be held until a quorum is present.

6. Evaluation of Proposed PM-10 Certified Street Sweeper Projects for FY 2006 CMAQ Funding

Mr. Giles presented the evaluation of the proposed PM-10 Certified Street Sweeper Projects for FY 2006 Congestion Mitigation and Air Quality Improvement funding. The FY 2006 Unified Planning Work Program and FY 2006-2010 MAG TIP contain \$960,000 in FY 2006 CMAQ funding for the purchase of PM-10 certified street sweepers. Mr. Giles stated that project requests were due by September 15, 2005 and fifteen projects requesting approximately \$2.48 million in federal funds were received. He added that a minimum local match of 5.7 percent is required. Mr. Giles indicated that the projects were evaluated using the Methodologies for Evaluating Congestion Mitigation and Air Quality Improvement Projects, August 15, 2005 and provided to the Committee ranked in order of cost-effectiveness.

Larry Person, City of Scottsdale, asked if the shaded projects are those close to PM-10 monitors. Mr. Giles responded that is correct. Mr. Person, inquired about why the Phoenix #1 sweeper project ranked so high when the sweeper would be replacing an older certified street sweeper as opposed to a conventional, noncertified street sweeper. Ms. Arthur replied that the certified street sweeper model that is being replaced is less efficient than the new model. She discussed the number of days it takes for the road to return to equilibrium after being swept with a certified street sweeper (eight days) versus a less efficient certified sweeper (four days).

Mr. Person asked why replacement sweepers are being ranked above expansion sweepers. Ms. Arthur responded that based on the methodologies, a replacement sweeper typically reduces more emissions than an expansion sweeper.

Mr. Cleveland inquired about the variance in the overall cost of the street sweepers. Ms. Arthur replied that MAG has a list of sweeper features that are not eligible for CMAQ funding, because they do not contribute to PM-10 reductions. She added that if a project request is received that includes

items that are not eligible, the jurisdiction is notified of the equipment and amount of the request eligible for CMAQ funding. However, there is still a wide variance in the overall cost of street sweepers. Ms. Arthur discussed the costs of specific street sweeper models and what makes some more expensive than others.

Oddvar Tveit, City of Tempe, stated that the table provided to the Committee that lists the street sweeper projects indicates whether the jurisdictions have committed resources for their projects. He commented that all information included in the table should be relevant to the action of the Committee. Mr. Cleveland added that the question on the project request form that relates to the commitment of local resources for additional staff may need to be reworded for clarification purposes. For replacement sweeper projects, it is not clear whether additional staff resources are being committed above the existing staff base.

Mr. Cleveland inquired about how sweepers projects that were submitted after the deadline have been handled in the past. Mr. Giles replied that projects submitted after the deadline are denoted in the table. Mr. Cleveland asked for discussion on the rank order of the street sweeper projects. Mr. Person requested that there be a column in the table that indicates if a street sweeper is replacing an older, less efficient, certified street sweeper rather than put this information in a footnote. He expressed concern about funding PM-10 certified street sweepers to replace older models instead of funding sweepers that replace conventional street sweepers.

Mr. Person commented that, in a way to reuse the technology, the City of Phoenix could send their older PM-10 certified street sweeper to a jurisdiction that does not have one. Joe Gibbs, City of Phoenix, stated that discussions should start on the option of sending older certified sweepers to jurisdictions that need one. Scott Bouchie, City of Mesa, commented on the maintenance schedules of older street sweepers. He also stated that some jurisdictions are getting to the point where they need new PM-10 certified street sweepers in order to keep the sweeper schedules where they are now.

Mr. Hyde inquired about the daily emission reductions of the street sweeper projects. Ms. Arthur responded that the daily emission reductions vary due to three factors: number of lane miles swept, number of days between sweeping cycles, and average daily traffic. Mr. Hyde asked if MAG discusses with the jurisdictions where their projects will rank. Ms. Arthur replied that MAG will contact the jurisdiction to get clarification if the information provided on the application does not look reasonable.

Mr. Cleveland indicated that a quorum was now present and called the meeting to order. Doug Kukino, City of Glendale, moved to recommend the list of PM-10 Certified Street Sweeper Projects in rank order for FY 2006 CMAQ funding. Mr. Person seconded, and the motion carried unanimously.

Mr. Cleveland asked for a motion to retain the prioritized list for any additional FY 2006 CMAQ funds that may become available due to year-end closeout, including any redistributed obligation authority, or additional funding received by this region. Mr. Tveit moved and Mr. Kukino seconded, and the motion carried unanimously.

Mr. Person commented that with the \$960,000 available, five street sweeper projects could be funded, with approximately \$115,000 remaining. He made a motion to move up the Surprise #1 sweeper project in the prioritized list to receive available funding since this sweeper will be reducing PM-10 emissions near a PM-10 monitor. The motion was seconded by Mr. Hyde.

Mr. Gibbs commented that the City of Surprise should be notified that the Surprise #1 street sweeper project may be funded for the full amount requested during the year-end closeout process. Mr. Cleveland stated that the City of Surprise would have the option to wait and see if the project would be funded through closeout or proceed with the funds available at this time.

Mr. Kukino made a motion to recommend the PM-10 Certified Street Sweeper Projects for FY 2006 CMAQ funding in the following order: Gilbert #1, Gilbert #2, Gilbert #3, Phoenix #1, Arizona Department of Transportation #1, and Surprise #1 to the extent funding is available. Mr. Person seconded and the motion carried unanimously.

4. Evaluation of Proposed CMAQ Projects for FY 2011 for the FY 2007-2011 MAG TIP (Continued)

Mr. Cleveland asked for a motion to forward the Air Quality Projects in rank order to the MAG Transportation Review Committee (TRC). Brian O'Donnell, Southwest Gas Corporation, moved and Mr. Gibbs seconded, and the motion carried unanimously.

Mr. Cleveland asked for a motion to forward the evaluation of proposed CMAQ projects for FY 2011 for the FY 2007-2011 MAG Transportation Improvement Program to the MAG TRC and modal committees for use in prioritizing projects. Mr. Bouchie moved and Mr. Gibbs seconded, and the motion carried unanimously.

3. Approval of the September 1, 2005 Meeting Minutes

The Committee reviewed the minutes from the September 1, 2005 meeting. Mr. Bouchie moved and Mr. O'Donnell seconded, and the motion to approve the September 1, 2005 meeting minutes carried unanimously.

5. Evaluation of Proposed PM-10 Paving Unpaved Road Projects for FY 2007 CMAQ Funding (Continued)

Mr. Weiss made a motion to recommend the Proposed PM-10 Paving Unpaved Road Projects for FY 2007 CMAQ funding to be forwarded to the MAG TRC in the following order: Cave Creek, Chandler, and Fort McDowell Yavapai Nation. Mr. Person seconded and the motion carried unanimously.

Mr. O'Donnell inquired about the procedures with regards to attendance of Committee members. He suggested looking at past attendance and having the option of nonvoting members in an effort to have a quorum for those who want to attend the meetings. Ms. Bauer indicated that MAG staff will take a look at past attendance and contact those entities who have not been attending regularly to determine if they still want to be on the Committee. Mr. Cleveland thanked Mr. O'Donnell for his comments and emphasized the importance of a quorum.

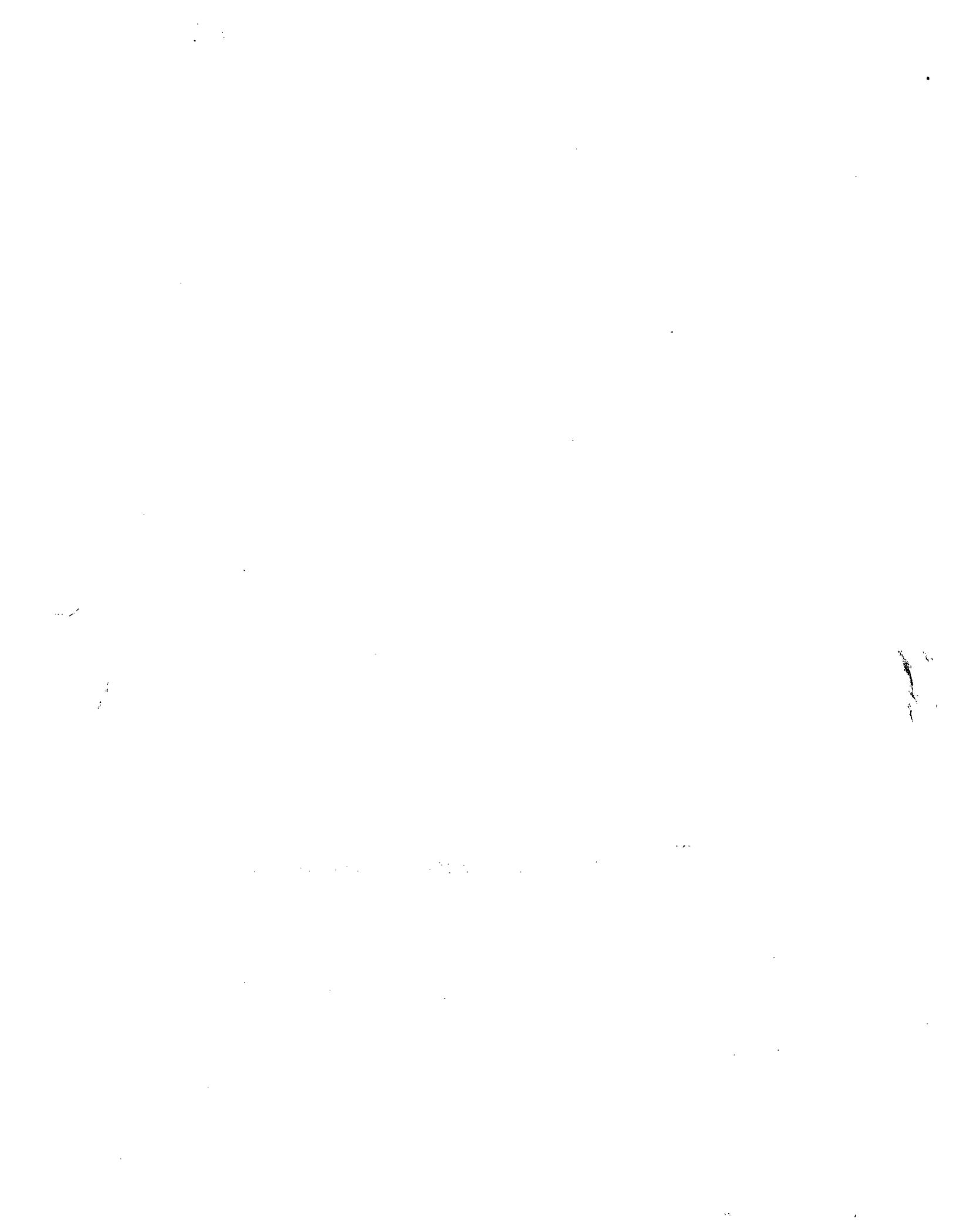
8. Call for Future Agenda Items

Mr. Cleveland announced that the next meeting of the Committee has been tentatively scheduled for Thursday, November 3, 2005. Diane Arnst, Arizona Department of Environmental Quality, mentioned the Transportation Conformity State Implementation Plan as a possible future agenda item.

Mr. Cleveland inquired about the policy for mailing out agendas prior to the meetings. Ms. Bauer replied that the MAG policy is to mail out agendas one week in advance of the meeting. However, MAG will mail out agendas earlier if possible.

Mr. Hyde commented on the five categories of CMAQ projects submitted for FY 2011 for the FY 2007-2011 MAG TIP. He inquired about how the plan allocations for each category are determined. He suggested this topic for a future agenda item. Ms. Bauer responded that the plan allocations are from the adopted Regional Transportation Plan. She added that the MAG Transportation Policy Committee polled the citizens, who wanted a multi-modal plan. Mr. Cleveland suggested that MAG staff discuss the plan allocations for future years at the next meeting.

Ms. Arthur asked the Committee if Attachment B for agenda item four, which provides the nonweighted emission reductions for the proposed CMAQ projects for FY 2011 ranked by cost-effectiveness by modal category, was beneficial in reviewing the project evaluation. The Committee indicated that it was not particularly useful and that it is not necessary to develop Attachment B in the future. With no further comments, the meeting was adjourned.

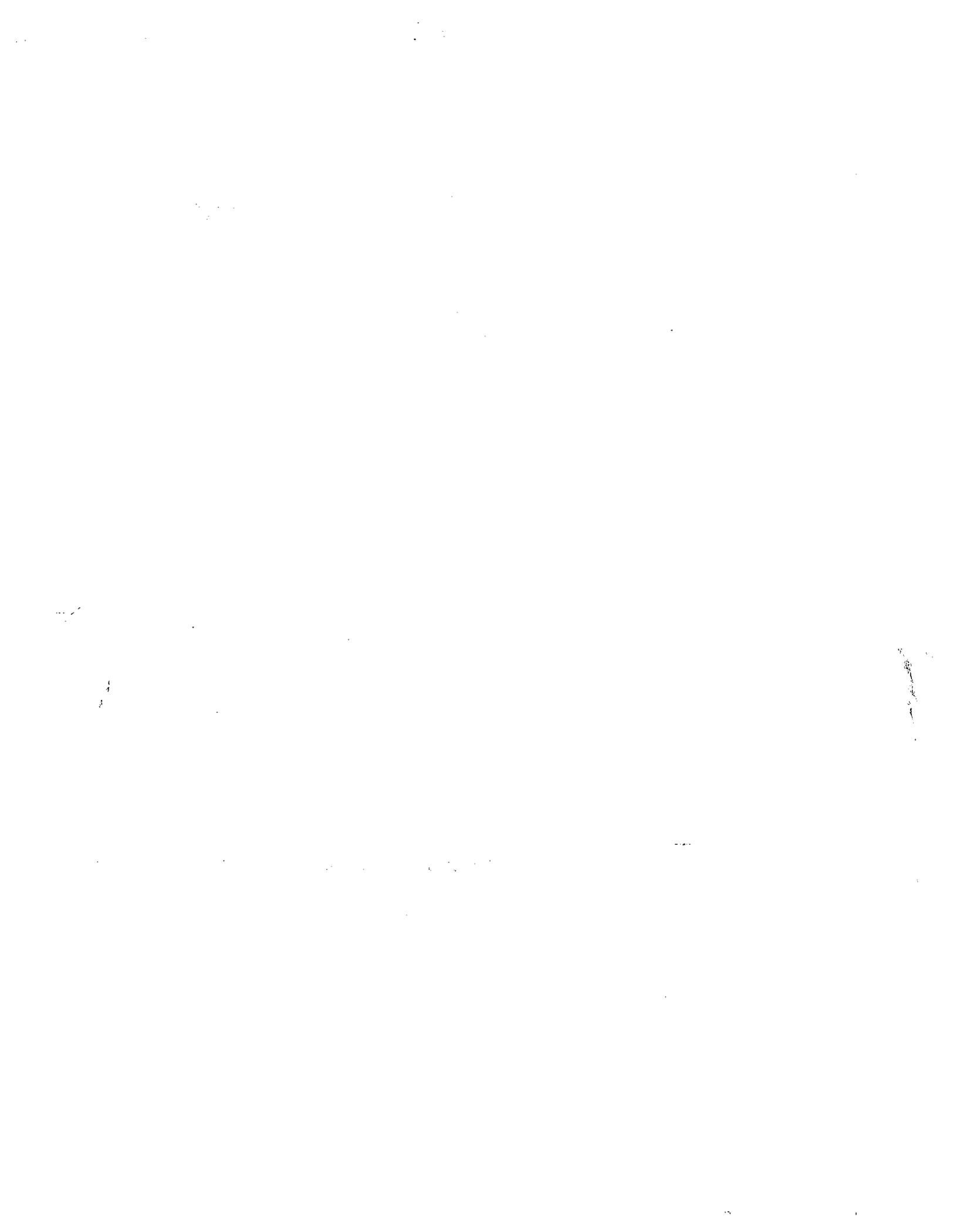


**2005 EXCEEDANCES OF THE 24-HOUR PM-10 STANDARD\***

Site	ug/m <sup>3</sup>	Date
West 43 <sup>rd</sup> Avenue	172	April 4, 2005
	166	November 1, 2005
	163	November 2, 2005
	166	November 10, 2005
	173	November 22, 2005
	176	November 23, 2005
	195	December 2, 2005
	233	December 12, 2005
	167	December 13, 2005
	174	December 14, 2005
	200	December 21, 2005
	168	December 22, 2005
	157	December 23, 2005
Durango	164	November 3, 2005
	156	November 17, 2005
	190	November 22, 2005
	165	November 23, 2005
	159	December 1, 2005
	165	December 2, 2005
	206	December 12, 2005
	166	December 13, 2005
	181	December 14, 2005
	156	December 15, 2005
	200	December 21, 2005
	179	December 22, 2005
	158	December 23, 2005
Buckeye	158	June 21, 2005
	170	November 18, 2005
Greenwood**	172	December 12, 2005
West Phoenix**	155	December 12, 2005

\* Based on preliminary data.

\*\* Monitor follows a one-in-six day sample schedule.



# **MARICOPA ASSOCIATION OF GOVERNMENTS**

## **INFORMATION SUMMARY... for your review**

**DATE:**

January 17, 2006

**SUBJECT:**

Particulate Pollution Update

**SUMMARY:**

In November and December 2005, this region experienced high readings at two of the PM-10 monitor sites. Although these readings will need to be checked by Maricopa County air quality personnel, it appears that MAG will need to initiate the preparation of a Five Percent Plan for submission to EPA by December 31, 2007. The Plan must show a reduction in PM-10 emissions of five percent per year until the standard is attained. It is important that the region attain the 24-hour PM-10 standard as quickly as possible. Every monitor in the nonattainment area must be clean in 2006, 2007 and 2008 in order for the region to attain by 2008.

At the December MAG Regional Council meeting, Maricopa County Supervisor Don Stapley requested assistance from the MAG member agencies in reporting dust control violations to Maricopa County for enforcement. Specifically, Supervisor Stapley requested that MAG member agencies: (1) allow building inspectors to be cross-trained by the County to be able to observe dust control violations and report them to the Air Quality Department, (2) impose more stringent requirements on unpaved parking lots, (3) replace outdated sweeping equipment with PM-10 efficient sweepers, and (4) support legislation to prohibit open burning of trash on high pollution days.

During the discussion, interest was expressed in the approach used by the City of Peoria for dust control. Peoria requires that a copy of the Maricopa County Rule 310 permit be submitted and incorporated into the grading and drainage permits issued by the city. Local inspectors are then able to monitor the contractor's compliance with the earthmoving permit and dust control plan. MAG staff has forwarded the applicable Peoria City Code, included in the attachment, to the MAG member agencies.

On December 21, 2005, EPA proposed two new 24-hour standards for particulate pollution: a stricter fine particulate standard and a new coarse particulate standard. EPA is proposing to revoke the existing 24-hour PM-10 standard, except in areas that have violating monitors and a population of 100,000 or more. In these areas, such as Maricopa County, the current 24-hour PM-10 standard will remain in place until EPA has completed nonattainment designations for the new coarse standard in July 2013. The EPA has indicated that there may be legal challenges of the new coarse particulate standard. In the case of eight-hour ozone, the implementation of the new federal standards was delayed by seven years due to litigation.

**PUBLIC INPUT:**

At many MAG committee meetings, a citizen has expressed concern for the effects of PM-10 on residents of the region. Another citizen commented that the PM-10 problem is hard to get around in a desert and that everyone is a part of the solution and can help with this problem by encouraging trip reduction.

**PROS & CONS:**

PROS: Public health is protected when the federal particulate standards are attained and maintained.

CONS: Showing five percent per year reductions in particulate emissions will be a major challenge for a rapidly growing region.

**TECHNICAL & POLICY IMPLICATIONS:**

TECHNICAL: The Five Percent Plan will require a major PM-10 modeling and plan development effort on the part of MAG.

POLICY: New control measures may be required to reduce particulate emissions by five percent per year and lower PM-10 readings at the monitors.

**ACTION NEEDED:**

Information and discussion.

**PRIOR COMMITTEE ACTIONS:**

Management Committee: This item was on the agenda of the January 11, 2006 MAG Management Committee meeting for information and discussion.

**MEMBERS ATTENDING**

Dana Tranberg for Ed Beasley, Glendale, Chair	Darryl Crossman, Litchfield Park
Jan Dolan, Scottsdale, Vice Chair	Christopher Brady, Mesa
* George Hoffman, Apache Junction	* Tom Martinsen, Paradise Valley
Charlie McClendon, Avondale	Terry Ellis, Peoria
Carroll Reynolds, Buckeye	Frank Fairbanks, Phoenix
* Jon Pearson, Carefree	# Cynthia Seelhammer, Queen Creek
* Usama Abujbarah, Cave Creek	* Bryan Meyers, Salt River
Patrice Kraus for Mark Pentz, Chandler	Pima-Maricopa Indian Community
B.J. Cornwall, El Mirage	Jim Rumpeltes, Surprise
Alfonso Rodriguez for Orlando Moreno, Fort McDowell Yavapai Nation	Amber Wakeman, for Will Manley, Tempe
Tim Pickering, Fountain Hills	* Reyes Medrano, Tolleson
* Lynn Farmer, Gila Bend	* Shane Dille, Wickenburg
Urban Giff, Gila River Indian Community	Mark Fooks, Youngtown
George Pettit, Gilbert	Dale Buskirk for Victor Mendez, ADOT
Stephen Cleveland, Goodyear	David Smith, Maricopa County
Mark Johnson, Guadalupe	David Boggs, Valley Metro/RPTA

\* Those members neither present nor represented by proxy.

# Participated by telephone conference call.

+ Participated by videoconference call.

**CONTACT PERSON:**

Cathy Arthur or Lindy Bauer, MAG, (602) 254-6300.

CHAPTER 20 - PLANNING AND DEVELOPMENT

Sec 20-255. Grading and drainage regulations; permits required and exceptions.

(a) Drainage. No person shall obtain a building permit, required by the Building Code of the City of Peoria, for work in or over any natural water course, drainage way, canyon, ravine, arroyo or other potential flood hazard are without first having obtained a grading permit from the City. Where a 404/401 permit is required from the Corps of Engineers, a copy of the application/findings as a result of the application, and a letter of approval shall be submitted to the City Engineer for review, prior to the issuance of a grading permit.

(b) Flood hazard area. No person shall obtain a building permit, required by the Building Code of the City of Peoria, in an area of special flood hazard without first obtaining a grading permit from the City.

(c) Mining, quarrying, excavating, processing, stockpiling of rock, sand, gravel, aggregate, or clay where established and provided by law.

(d) Filling, excavating, stockpiling and storing. No person shall do any grading without first obtained a grading permit from the City except for the following:

- (1) A fill less than one foot (1') in depth and placed on natural terrain with a slope flatter than five horizontal to one vertical and which does not exceed 100 cubic yards on any one site and does not obstruct a drainage course.
- (2) An excavation of one thousand (1,000) cubic yards or less or eight feet (8') or less below finished grade for basements and footings of a building, retaining wall, or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation nor exempt any excavation having an unsupported height greater than five feet (5') after the completion of such structure.
- (3) Excavation or deposition of earth materials within a property which is dedicated or used, or to be used for cemetery purposes not obstructing a water course except where such grading is within one hundred feet (100') of the property line or intended to support structures.
- (4) Grading in an isolated, self-contained area if the Engineering Director or his designee finds that no apparent danger to private or public property can now or thereafter result from the grading operations.
- (5) Grading in public right-of-way and easements done under a permit issued by the City Engineer.
- (6) Grading by a public utility company in private easements which do not obstruct a natural water course.

## CHAPTER 20 - PLANNING AND DEVELOPMENT

(e) Notwithstanding Section 20-255(d) (2), no person shall commence or conduct any clearing, grubbing, and/or grading of land which is designated as hillside under the Zoning Ordinance of the City of Peoria, or which land has specific zoning or development stipulations attached to it which prohibits or controls grading, clearing or grubbing on said land, or which land is in a zoning district which prohibits or controls clearing, grubbing and/or grading of said land, without first having obtained a permit from the City.

(f) Notwithstanding the provisions of (d) above, the NPDES program may require a Storm Water Pollution Prevention Plan and impose additional requirements and prohibitions.

(g) Notwithstanding the provisions of (d) above, a copy of the Maricopa County Rule 310 permit shall be submitted and incorporated into the grading and drainage permit issued by the city.

(h) Wall Permits. For any property located north of Deer Valley Road, the Building Official shall require the issuance of a Wall Permit prior to the approval of any minor land division, site plan, subdivision plat, or individual plot plan. A Wall Permit shall require any fence or wall to be constructed in compliance with the drainage requirements contained in this Chapter and shall include such conditions as may be reasonably necessary to protect the life, limb, health, welfare, and property of others from damage of any kind. Upon a property owner's submittal of a written request to waive the requirement for a Wall Permit, the Engineering Director shall review the property owner's justification for such a waiver. The Engineering Director may waive in writing the Wall Permit requirement if in the opinion of the Director the fence or wall will have no drainage impacts

(Ord. No. 98-95, enacted, 8/26/98)

(Ord. No. 01-173, 11/6/01, Amended) SUPP 2001-4

(Ord. No. 02-41, 6/7/02, Amended) SUPP 2002-2

**FACT SHEET**  
**PROPOSAL TO REVISE THE NATIONAL AMBIENT AIR QUALITY STANDARDS**  
**FOR PARTICULATE MATTER**

**ACTION**

- To further improve public health across the country, the EPA Administrator signed on December 20, 2005 signed proposed revisions to its national air quality standards for fine particle pollution and for some coarse particles. Particle pollution also is known as particulate matter, or PM.
- The proposed revisions address two categories of particulate matter: *fine particles* (PM<sub>2.5</sub>), which are 2.5 micrometers in diameter and smaller; and *inhalable coarse particles* (PM<sub>10-2.5</sub>), which are smaller than 10 micrometers in diameter but larger than PM<sub>2.5</sub>. EPA has had national air quality standards for fine particles since 1997 and for coarse particles 10 micrometers and smaller (PM<sub>10</sub>) since 1987.
- EPA is proposing revisions and taking comment a range of standards concerning both PM<sub>2.5</sub> and PM<sub>2.5-10</sub>. The proposal includes lowering the level of the 24-hour fine particle standard from the current level of 65 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to 35  $\mu\text{g}/\text{m}^3$ , retaining the level of the annual fine standard at 15  $\mu\text{g}/\text{m}^3$ , and setting a new 24-hour standard for inhalable coarse particles at 70  $\mu\text{g}/\text{m}^3$ . The Agency also requests comment on other various other standards for fine and inhalable coarse PM including other levels for the fine particle standards, retaining the current annual and 24-hour standards for fine particulate matter and retaining the current or alternative PM<sub>10</sub> 24-hour standard.
- Many scientific studies have found an association between exposure to particulate matter and a series of significant health problems, including: aggravated asthma; chronic bronchitis; reduced lung function; irregular heartbeat; heart attack; and premature death in people with heart or lung disease. Particulate matter is also the main cause of visibility impairment in the nation's cities and national parks.
- For each category of particulate matter, the proposal includes two types of standards: primary standards, to protect public health; and secondary standards, to protect the public welfare such as crops, vegetation, wildlife, buildings and national monuments and visibility.
- In a separate but related action, EPA has proposed amendments to its national air quality monitoring requirements, including those for monitoring particulate matter. The changes will help EPA, states and local air quality agencies improve their measurement of air quality and will allow air quality regulators to take advantage of improvements in monitoring technology. The proposed changes include a design for a PM<sub>10-2.5</sub> monitoring network.
- EPA must issue final standards by September 27, 2006. EPA has done an extensive review of thousands of scientific studies on the risks of fine and coarse particulate matter before making a final decision, the Agency will assess new peer-reviewed studies about particulate matter and health, including studies received during the public comment period.

- EPA will take public comment for 90 days following publication of the proposal in the Federal Register. The Agency also will hold three public hearings on this proposal in Chicago, Philadelphia and San Francisco. The dates and locations will be announced in a separate Federal Register notice.

## THE PROPOSED STANDARDS

### Fine particles

- EPA currently has two primary standards for fine particles: an annual standard, designed to protect against effects caused by short-term exposure (days or weeks) and longer-term exposure (seasons to years); and a 24-hour standard, designed to provide additional protection on days with high peak PM<sub>2.5</sub> concentrations.

#### PM<sub>2.5</sub> Primary (Health-Related) 24-hour standard

- EPA is proposing revisions and taking comment a range of options. The proposal includes strengthening the 24-hour fine particle standard from the current level of 65 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to 35  $\mu\text{g}/\text{m}^3$ . EPA is basing this proposal on an assessment of a significantly expanded body of scientific information. The assessment concluded that the standard should be strengthened to better protect the public from short-term fine particle exposures.
- EPA also is soliciting public comment on alternative levels for the 24-hour standard, between the range of 35 and 30  $\mu\text{g}/\text{m}^3$ . In addition, the Agency will take comment on: retaining the current level of the standard (of 65  $\mu\text{g}/\text{m}^3$ ), on levels as high as 65  $\mu\text{g}/\text{m}^3$  and as low as 25  $\mu\text{g}/\text{m}^3$ ; and on alternative approaches for selecting the level of the standard.

#### PM<sub>2.5</sub> Primary (Health-Related) Annual Standard

- EPA is proposing to retain this standard at 15  $\mu\text{g}/\text{m}^3$  based on its assessment of several expanded, re-analyzed and new studies that have increased the Agency's confidence in associations between long-term PM<sub>2.5</sub> exposure and serious health effects.
- EPA is considering and is seeking broad public comment on the range of 15  $\mu\text{g}/\text{m}^3$  down to 13  $\mu\text{g}/\text{m}^3$  which is the lower end of the range CASAC recommended. EPA also is soliciting public comment on an alternative level for the annual standard of 12  $\mu\text{g}/\text{m}^3$ .

#### PM<sub>2.5</sub> Secondary Standards

- The proposal would set the secondary standards for both the annual and 24-hour standards at levels identical to the primary standards.
- EPA also is taking comment on whether to set a separate PM<sub>2.5</sub> standard, designed to address visibility (principally in urban areas), on potential levels for that standard within a range of 20 to 30  $\mu\text{g}/\text{m}^3$ , and on averaging times for the standard within a range of four to eight daylight hours.

### Coarse particles

- EPA's current standards for coarse particles (PM<sub>10</sub>) were set in 1987. These standards – a 24-hour standard of 150 µg/m<sup>3</sup>, and an annual standard of 50 µg/m<sup>3</sup> -- apply to particles 10 micrometers in diameter and smaller.
- The proposed revisions would change the definition of the standard so that it covers only particles between 10 and 2.5 micrometers in diameter (PM<sub>10-2.5</sub>), also known as “inhalable coarse particles” in response to a 1999 U.S. Court of Appeals for the D.C. Circuit decision directing EPA to ensure that regulations for coarse particles did not duplicate regulation of fine particles.
- The proposed new PM<sub>10-2.5</sub> standard would be a 24-hour standard set at 70 µg/m<sup>3</sup>. EPA is not proposing an annual standard for PM<sub>10-2.5</sub>. Current scientific evidence does not show significant public health risks associated with long-term exposure to coarse particles.
  - EPA would further define PM<sub>10-2.5</sub> to include only those coarse particles that come from sources such as high-density traffic on paved roads, industrial sources and construction activities – the kinds of coarse particles typically found in urban areas. Scientific studies indicate that PM<sub>10-2.5</sub> health effects are associated with these kinds of coarse particles found in urban areas.
  - The proposed standard would not cover situations where the coarse particles in the air come from sources such as windblown dust and soils, agricultural sources and mining sources. Evidence to date does not support a national air quality standard for these kinds of situations.
- Under the proposal, the secondary 24-hour standard for PM<sub>10-2.5</sub> would be identical to the primary standard.

### *Status of current PM-10 standards*

- EPA is proposing to revoke the current 24-hour PM<sub>10</sub> standards, except in areas that have 1) violating monitors; and 2) a population of 100,000 or more. These standards would remain in place in these areas until the Agency has completed attainment and nonattainment designations for PM<sub>10-2.5</sub>.
  - EPA is taking comment on whether the 24-hour PM<sub>10</sub> standards should be retained in smaller areas (population less than 100,000) that are dominated by one or more large industrial sources.
- Current scientific evidence does not show significant public health risks associated with long-term exposure to coarse particles. In light of this lack of evidence, the Agency is proposing to immediately revoke the current annual PM<sub>10</sub> standards in all areas.
- EPA is also taking comment on whether it should: 1) retain the current PM<sub>10</sub> standard in place of the proposed PM<sub>10-2.5</sub> standard or 2) not establish a coarse fraction PM standard at

this time pending the development of a coarse fraction monitoring network and further research on the health effects of coarse particles.

## **DETERMINING COMPLIANCE: THE FORM OF THE STANDARDS**

- When EPA sets air quality standards, it also must specify the air quality statistics that the Agency will use to determine whether an area is meeting the standards. For each standard, these statistics are known as the "form of the standard." EPA is proposing the following forms:

### ***Fine particles - 24-hour standard***

- An area would meet the 24-hour standard if the 98<sup>th</sup> percentile of 24-hour PM<sub>2.5</sub> concentrations in a year, averaged over three years, is less than or equal to the level of the standard EPA sets in its final rule (35µg/m<sup>3</sup> under this proposal). This is the same form as the current 24-hour standard.

### ***Fine particles – annual standard***

- An area would be in compliance with the annual PM<sub>2.5</sub> standard when the three-year average of the annual average PM<sub>2.5</sub> concentration is less than or equal to 15 µg/m<sup>3</sup> (or whatever level of standard EPA sets in its final rule). This is the same form as the current annual standard.
- Current fine particle standards allow some areas to average measurements from multiple community-oriented monitors to determine compliance with the annual standard. The proposed revisions also would limit the conditions under which this averaging could take place. EPA also is seeking public comment on no longer allowing averaging measurements from multiple community monitors.

### ***Inhalable coarse particles***

- An area would meet the coarse particle standard if the 98<sup>th</sup> percentile of 24-hour PM<sub>10-2.5</sub> concentrations in a year, averaged over three years, is less than or equal to the level set in the final rule (70µg/m<sup>3</sup> in this proposal). This form will provide a more stable target for air pollution control programs by reducing the impact of unusual weather conditions, such as high wind events.

## **PARTICULATE MATTER AND PUBLIC HEALTH**

Thousands of new studies on particulate matter have been published and peer-reviewed since EPA last reviewed the standards in 1997, and before the "cutoff date" for inclusion of new studies. (The cutoff date occurred when consideration of a new standard began in 2002). In addition, several studies used in the 1997 review have been extended and the data has been reanalyzed.

The majority of the studies assessed for the current review were published prior to 2003. EPA will review more recent studies that could be significant before the rule is finalized.

***Effects associated with short-term exposure to high enough levels of fine PM<sub>2.5</sub> include:***

- Premature death in people with heart and lung disease
- Non-fatal heart attacks
- Increased hospital admissions, emergency room visits and doctor's visits for respiratory diseases
- Increased hospital admission and ER visits for cardiovascular diseases
- Increased respiratory symptoms such as coughing, wheezing and shortness of breath
- Lung function changes, especially in children and people with lung diseases such as asthma
- Changes in heart rate variability
- Arrhythmia (irregular heartbeat)
- Changes in subtle indicators of cardiovascular health, including levels of C-reactive protein and fibrinogen

***Health effects associated with long-term exposure to high enough levels of fine PM include:***

- Premature death in people with heart and lung diseases, including death from lung cancer
- Reduced lung function
- Development of chronic respiratory disease in children

***Health effects associated with short-term exposure to high enough levels of coarse PM include:***

- Increased hospital admissions for respiratory symptoms
- Decreased lung function
- Hospital admissions for heart disease
- Possibly premature death

***Health effects associated with long-term exposure to high enough levels of coarse PM include:***

Most available studies find no adverse health effects of long-term exposure to coarse PM.

## **TIMELINE FOR IMPLEMENTING THE STANDARDS**

Two implementation schedules (one for PM<sub>2.5</sub> and another for PM<sub>10-2.5</sub>) would apply if EPA finalizes the proposed revisions in September 2006:

***Fine particles (PM<sub>2.5</sub>)***

- States would make recommendations by Nov. 2007 for areas to be designated attainment and nonattainment.
- EPA would make final designations by November 2009; those designations would become effective in April 2010.

- State Implementation Plans, outlining how states will reduce pollution to meet the standards, would be due three years after designations, in April 2013.
- States would have to meet the standards by April 2015.
- In some cases, a state could receive additional time to meet the standard (up to April 2020).

***Inhalable coarse particles (PM<sub>10-2.5</sub>)***

- EPA would not designate attainment and nonattainment areas until it has three consecutive years of monitoring data showing PM<sub>10-2.5</sub> levels. The Agency anticipates that data will be available in 2012 (2009-2011 data).
- States would make recommendations in July 2012 for areas to be designated attainment and nonattainment.
- EPA would make final designations in May 2013; those designations would become effective in July 2013.
- State Implementation Plans would be due three years after designations, in July 2016.
- States would have to meet the standards by July 2018.
- In some cases, a state could receive additional time to meet the standard (up to July 2023).

**BACKGROUND ON THE STANDARDS REVIEW**

- The Clean Air Act directs EPA to set National Ambient Air Quality Standards for pollutants that the Agency has listed as "criteria pollutants," based on their likelihood of causing adverse effects to public health and welfare. EPA sets national air quality standards for six common air pollutants: ground-level ozone (smog), carbon monoxide, lead, nitrogen dioxide, sulfur dioxide, and particulate matter.
- For each of these six pollutants, EPA has set health-based or "primary" standards to protect public health, and welfare-based or "secondary" standards to protect the public welfare from harm to crops, vegetation, wildlife, buildings and national monuments, and visibility.
- The Clean Air Act requires EPA to review the health and welfare-based standards once every five years to determine whether revisions to the standards are necessary to provide the appropriate levels of protection.
- EPA last revised the particulate matter standards in 1997. Under terms of a consent decree, EPA agreed to propose whether to revise the particulate matter standards by December 20, 2005; and committed to finalizing any revisions to the standards by September 27, 2006.
- The review of a standard begins with an assessment of science. EPA's National Center for Environmental Assessment undertakes an extensive scientific and technical assessment process during the standard review for any pollutant. The first step in the process is the preparation of the Agency's "Air Quality Criteria Document," an extensive assessment of scientific data pertaining to the health and environmental effects associated with the pollutant under review.

- EPA's Office of Air Quality Planning and Standards then prepares a document (known as a "staff paper") that interprets the most relevant information in the "criteria document" and identifies: 1) factors EPA staff believes should be considered in the standard review; 2) uncertainties in the scientific data; and 3) ranges of alternative standards the staff believes should be considered. The "staff paper" is compiled by technical staff to assess the policy implications of the science. It represents the views of the staff and, in final form, is ultimately used as the basis for staff recommendations to the EPA Administrator.
- Drafts of both the "criteria document" and the "staff paper," which are based on thousands of peer-reviewed scientific studies, receive extensive review by representatives of the scientific community, industry, public interest groups and the public, as well as the Clean Air Scientific Advisory Committee (CASAC) -- a congressionally mandated group of independent scientific and technical experts.
- As part of its mandate, CASAC also makes recommendations to EPA on the adequacy of the existing standards and revisions it believes would be appropriate. Based on the scientific assessments and taking into account the recommendations of CASAC and public comments, the EPA Administrator must judge whether it is appropriate to propose revisions to the standards.
- EPA undertakes an extensive public review and comment process, considering and analyzing issues raised in public comments before announcing a final decision. As with every proposed and final rule, all other relevant federal agencies are given the opportunity to participate in the process.
- In setting the standards, the EPA Administrator must set the primary standards at levels "requisite to protect the public health with an adequate margin of safety" and establish secondary standards that "protect public welfare," which the Clean Air Act defines as including environmental effects such as visibility impairment, damage to crops and ecosystems, deterioration of manmade materials, among others. The Clean Air Act bars the Administrator from considering costs when setting the standards. The U.S. Supreme Court upheld this requirement in a 2001 decision.

#### **FOR MORE INFORMATION**

- Interested parties can download the notice from EPA's web site on the Internet at: <http://epa.gov/particles/actions.html>
- Today's proposed action and other background information are also available either electronically at [www.regulations.gov](http://www.regulations.gov), the federal government's docket management system, or in hard copy at EPA West, U.S. EPA (6102T), 1301 Constitution Avenue, NW, Washington, DC 20460. (Docket ID No. OAR-2001-0017). The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket and Information Center is (202) 566-1742.

- **HOW TO COMMENT:** Comments will be accepted for 90 days beginning when this proposal is published in the Federal Register. All comments should be identified by Docket ID No. OAR-2001-0017 and submitted by one of the following methods:
  - Federal e-rulemaking portal;
  - [www.regulations.gov](http://www.regulations.gov);
  - E-mail ([a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov));
  - Facsimile (202) 566-1741;
  - Mail (Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode: 6102T, 1200 Pennsylvania Avenue, NW, Washington, DC 20460); or
  - Hand delivery (Air and Radiation Docket and Information Center, Environmental Protection Agency, Room B102, 1301 Constitution Avenue, NW, Washington, DC).



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### Stronger Standards for Particles Proposed

Contact: John Millett, 202-564-4355 / [millett.john@epa.gov](mailto:millett.john@epa.gov)

(Washington, D.C.-12/21/05) To further improve public health across the country, EPA is proposing revisions to its national air quality standards for fine particle pollution (also called fine particulate matter) and from some coarse particles.

"Our nation's air is the cleanest it has been in over a generation and today's proposal begins our next step in the steady march toward cleaner air and healthier lives by addressing particle pollution," said EPA Administrator Stephen L. Johnson. "Armed with the Bush Administration's innovative clean air policies and the best available science we will continue to improve air quality and public health."

Particulate matter is a complex mixture of extremely small particles and liquid droplets. Particulate matter can be directly emitted, as in smoke from a fire, or it can form in the atmosphere from reactions of gases such as sulfur dioxide.

EPA is basing its proposal on an extensive review of thousands of scientific studies on the risks associated with exposure to particle pollution. The agency will also conduct an assessment of significant new studies before this rule is finalized.

The proposed revisions will address two categories of particulate matter: fine particles which are particles 2.5 micrometers in diameter and smaller; and "inhalable coarse" particles, which are particles between 2.5 and 10 micrometers (PM10-2.5).

Numerous studies have associated fine particulate matter with a variety of respiratory and cardiovascular problems, ranging from aggravated asthma, to irregular heartbeats, heart attacks, and early death in people with heart or lung disease. EPA has had national air quality standards for fine particles since 1997 and for coarse particles 10 micrometers and smaller (PM10) since 1987. Particle pollution can also contribute to visibility impairment.

The proposed revisions include the significant strengthening -- by nearly 50 percent -- of EPA's standards to protect the public from short-term exposure to high levels of fine particles. For fine particles, EPA is also taking comment on a range of annual and 24-hour standards, including strengthening these standards as well as retaining the standards at their present levels.

In addition, EPA is proposing a standard for reducing inhalable coarse particles, or PM10-2.5. For these particles, EPA is proposing a 24-hour standard of 70 micrograms per cubic meter. The standard would apply to airborne mixes of coarse particles that come from sources such as high-density traffic on paved roads and industry. The proposed standard would not apply to mixes of coarse particles that do not pose much risk to public health, such as windblown dust and soils and agricultural and mining sources.

Reducing fine particles is a central element of the administration's comprehensive national clean air strategy. The Bush Administration has proposed Clear Skies legislation and issued a number of rules that will make significant strides toward reducing particles regionally and nationally -- the Clean Air Interstate Rule to reduce emissions from power plants in the eastern United States; the Clean Diesel Program to reduce emissions from highway, nonroad and stationary diesel engines across the country; and the Clean Air Visibility Rule to reduce emissions near national parks.

In a separate but related action, EPA is proposing amendments to its national air quality monitoring requirements, including those for monitoring particle pollution. The changes will help EPA, states and local air quality agencies in their efforts to improve public health protection and inform the public about air quality in their communities, and they will allow air quality regulators to take advantage of improvements in monitoring technology.

EPA is seeking comments on a number of alternative levels for the PM standards, including retaining the current standards. The agency will take public comment for 90 days following publication of the proposal in the Federal Register and will hold three public hearings.

The Clean Air Act requires EPA to periodically review air quality standards to ensure they provide adequate health and environmental protection and to update those standards if necessary. EPA last updated the particle standards in 1997. This proposed rule covers only the air quality standards for particle pollution. It does not address all of the issues involved in implementing a new standard, such as designating what areas are or are not attaining any new standard, and determining the best and most cost-effective implementation strategies. EPA and the states will address those in later actions.

For additional information on today's action, visit EPA's Web site at: <http://www.epa.gov/air/particles/actions.html> For information on particle pollution, visit: <http://www.epa.gov/air/particles>

Release date:12/21/2005

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# Prioritized List of Proposed PM-10 Certified Street Sweeper Projects for FY 2006 CMAQ Funding Approved by MAG Regional Council October 26, 2005

Agenda Item #7

Agency	Federal Cost	Local Cost	Total Cost	Daily Emission Reduction (Kilograms/day)	Cost-Effectiveness (CMAQ dollar cost per annual metric ton reduced)	The requested certified street sweeper will:			Have local resources been committed for additional staff or equipment to support the requested certified street sweeper?		Please indicate in what geographical area(s) the requested certified street sweeper will operate	Number of certified street sweepers your agency has already purchased.	Does the requested sweeper satisfy a commitment by your agency in the SIP?
						Replace	Expand	Increase Frequency	Yes	No			
						Supplemental Information							
Gilbert (#1)	\$161,964	\$9,790	\$171,754	930	\$68	✓			✓	No	Area adjoining Elliot Rd. - McQueen Rd. to Lindsay Rd.	6	No
Gilbert (#2)	\$161,964	\$9,790	\$171,754	821	\$77	✓			✓	No	Area adjoining Val Vista Dr. - Baseline Rd. to Warner Rd.	6	No
Gilbert (#3)	\$161,964	\$9,790	\$171,754	820	\$77	✓			✓	No	Area adjoining Gilbert Rd. - Baseline Rd. to Warner Rd.	6	No
Phoenix (#1) *	\$191,797	\$11,593	\$203,390	954	\$78	** ✓			✓	Yes	Southwest Service Area: Indian School Rd. to Dobbins; Seventh St. to the western city limits.	36	Yes
ADOT (#1) *	\$168,383	\$10,178	\$178,561	776	\$85	✓			✓	Yes	North Valley and East Valley Freeways.	2	Yes
Surprise (#1)*** +	\$113,928	\$7,980	\$140,000	222	\$232		✓		✓	Yes	Bell Road area.	4	Yes
<b>Subtotal</b>	<b>\$960,000</b>												
ADOT (#2) *	\$168,383	\$10,178	\$178,561	776	\$85	✓			✓	Yes	North Valley and East Valley Freeways.	2	Yes
Phoenix (#2)	\$191,797	\$11,593	\$203,390	759	\$99	** ✓			✓	Yes	North Service Area: Thunderbird Rd. north to city limits; western city limits to eastern city limits.	36	Yes
Tempe	\$160,665	\$9,711	\$170,376	89	\$704		✓		✓	Yes	North city limits to Baseline Rd. and East city limits to West city limits.	8	Yes
Goodyear	\$205,000	\$12,391	\$217,391	90	\$889		✓		✓	No	Citywide arterial and industrial area sweeping program.	4	No
Tolleson	\$163,154	\$9,862	\$173,016	25	\$2,596	✓			✓	Yes	107 <sup>th</sup> Ave. to 75 <sup>th</sup> Ave. and Buckeye Rd. to McDowell Rd.	1	Yes
Surprise (#2)	\$132,020	\$7,980	\$140,000	13	\$4,064		✓		✓	Yes	Sun City Grand area.	4	Yes
Queen Creek	\$160,051	\$9,674	\$169,725	10	\$6,370		✓		✓	Yes	Town limits.	2	Yes
Cave Creek	\$160,768	\$10,250	\$171,008	6	\$9,865		✓		✓	No	Central area of Town.	0	No
Chandler	\$164,464	\$9,941	\$174,405	5	\$12,009		✓		✓	Yes	General area of Germann Rd. to Hunt Hwy. and Dobson Rd. to Val Vista Dr.	8	Yes
<b>Total</b>	<b>\$2,484,384</b>												

(Includes remaining \$18,092 for Surprise #1 project.)

\* Submitted after the deadline.

\*\* Replaces older, less efficient, certified sweepers.

\*\*\* For Surprise #1 sweeper project, initial funding of \$113,928 is available in FY 2006 CMAQ. The remaining \$18,092 of the \$132,020 requested for the project may become available due to year-end closeout, including any redistributed obligation authority, or additional funding received by this region.

+ Proposed sweeper projects for Phoenix #1, ADOT #1, and Surprise #1. Indicate sweeping within 1/2 mile of PM-10 monitor.

