MARICOPA ASSOCIATION of GOVERNMENTS

302 North 1st Avenue, Suite 300 ▲ Phoenix, Arizona 85003
Phone (602) 254-6300 ▲ FAX (602) 254-6490
E-mail: mag@azmag.gov ▲ Web site: www.azmag.gov

April 21, 2011

TO: Members of the MAG Air Quality Technical Advisory Committee

FROM: Doug Kukino, Glendale, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Thursday, April 28, 2011 - 1:30 p.m.
MAG Office, Suite 200 - Saguaro Room
302 North 1st Avenue, Phoenix

A meeting of the MAG Air Quality Technical Advisory Committee has been scheduled for the time and place noted above. Members of the Air Quality Technical Advisory Committee may attend the meeting either in person, by videoconference or by telephone conference call. Those attending by videoconference must notify the MAG site three business days prior to the meeting. If you have any questions regarding the meeting, please contact Chair Kukino or Lindy Bauer at 602-254-6300.

Please park in the garage underneath the building, bring your ticket, and parking will be validated. For those using transit, Valley Metro/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.

In 1996, the Regional Council approved a simple majority quorum for all MAG advisory committees. If the MAG Air Quality Technical Advisory Committee does not meet the quorum requirement, members who arrived at the meeting will be instructed a legal meeting cannot occur and subsequently be dismissed. Your attendance at the meeting is strongly encouraged. If you are unable to attend the meeting, please make arrangements for a proxy from your entity to represent you.

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 Jason Stephens at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

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 Advisory 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.

   2. For information.

3. Approval of the March 24, 2011 Meeting Minutes

   3. Review and approve the March 24, 2011 meeting minutes.

4. Update on the MAG Five Percent Plan for PM-10

   It is anticipated that a new Five Percent Plan for PM-10 would need to be submitted to the Environmental Protection Agency in January 2012. On April 1, 2011, Maricopa County provided the Revised 2008 Annual PM-10 Emissions Inventory that would be used as the basis for the new plan. In addition, the Arizona Legislature passed H.B. 2208 on April 20, 2011 that includes provisions to address early implementation of measures to reduce PM-10 on days that are forecasted by the Arizona Department of Environmental Quality to be high risk for exceeding the standard. Please refer to the enclosed material.

   4. For information and discussion.

5. Update on Activities to Prevent PM-10 Exceedances

The Maricopa Association of Governments is taking a proactive leadership approach in cooperation with the air agencies, business and industry to prevent PM-10 exceedances at the monitors and throughout the region. The Environmental Protection Agency has indicated informally that 2009 may be a clean year. There were no violations of the PM-10 standard in 2010. The next nine months are critical. If three years of clean data can be obtained prior to the submission of a new Five Percent Plan, it may be possible for EPA to issue an attainment finding under the EPA Clean Data Policy and a Five Percent Plan for PM-10 would not be needed.

A network of individuals from the MAG member agencies has been established in a regionwide effort to prevent PM-10 exceedances. The City of Phoenix has established a Dust Reduction Task Force to develop and implement an integrated and comprehensive strategy to reduce particulate pollution and improve air quality. A Rapid Response Action Plan Template has been prepared to assist member agencies in this effort. On April 21, 2011, MAG conducted a workshop to discuss these items and provide assistance. An update will be provided. Please refer to the enclosed material.

5. For information and discussion.

6. 2009 Implementation Status of Committed Measures in the MAG 2007 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area

In accordance with the Clean Air Act, the MAG 2007 Five Percent Plan for PM-10 was submitted to the Environmental Protection Agency (EPA) in December 2007. The plan included a broad range of commitments to implement measures from the State, Maricopa County, and twenty-three local governments

6. For information, discussion, and recommendation to forward the 2009 Implementation Status of Committed Measures in the MAG 2007 Five Percent Plan for PM-10 in the Maricopa County Nonattainment Area to the Governor's Office, Arizona Legislature, Arizona Department of Environmental Quality and Environmental Protection Agency.

in the PM-10 nonattainment area. In January 2011, the plan was voluntarily withdrawn to address technical approvability issues identified by EPA and include new information. While the plan was withdrawn, the measures in the plan continue to be implemented to reduce PM-10.

On May 23, 2007, the MAG Regional Council approved that each year, MAG would issue a report on the status of the implementation of the committed measures for this region by the cities, towns, Maricopa County and the State. The report would then be made available to the Governor's Office, Arizona Legislature, Arizona Department of Environmental Quality and the Environmental Protection Agency.

A report has been prepared that provides the implementation status of the committed measures for 2009. The report also incorporates the results from 2008 in order to more accurately reflect the level of implementation of the committed measures in the region. In general, the combined implementation results for 2008 and 2009 meet or exceed the commitments made to implement a majority of the measures in the MAG 2007 Five Percent Plan for PM-10. Please refer to the enclosed information.

7. <u>MAG Workshop on Truck Travel Modeling and Vehicle Weights</u>

On May 18, 2011, MAG will conduct a Workshop on Truck Travel Modeling and Vehicle Weights at 1:30 p.m. at the MAG Office. At the workshop, the MAG consultants will be providing an overview of the new MAG Truck Model and the approach used to estimate dust generated by trucks on paved roads.

7. For information and discussion.

8.	Call for Future Agenda Items The next meeting of the Committee has been tentatively scheduled for **Tuesday, May 24, 2011** 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, March 24, 2011
MAG Office
Phoenix, Arizona

MEMBERS ATTENDING

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

*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
Dean Giles, Maricopa Association of Governments
Julie Hoffman, Maricopa Association of Governments
Taejoo Shin, Maricopa Association of Governments
Matt Poppen, Maricopa Association of Governments
Cathy Arthur, Maricopa Association of Governments
Adam Xia, Maricopa Association of Governments
Feng Liu, Maricopa Association of Governments
Ranjith Dandanayakula, Maricopa Association of Governments
Frank Schinzel, Maricopa County Air Quality
Matt Busby, City of Apache Junction
Mitch Wagner, Maricopa County Department of Transportation
Will Barnow, Maricopa County
Matt Tsark, Strand Associates, Inc.
Joonwon Joo, Arizona Department of Transportation
Joe Gibbs, City of Phoenix
Michelle Wilson, City of Glendale
Margaret Perez, City of Surprise

1. Call to Order

A meeting of the MAG Air Quality Technical Advisory Committee was conducted on March 24, 2011. Doug Kukino, City of Glendale, Chair, called the meeting to order at approximately 1:30 p.m. Greg Edwards, City of Mesa; Mannie Carpenter, Valley Forward; Gina Grey, Western States Petroleum Association; and Matt Busby, City of Apache Junction, attended the meeting via telephone conference call.

2. Call to the Audience

Mr. Kukino 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 February 24, 2011 Meeting Minutes

The Committee reviewed the minutes from the February 24, 2011 meeting. Oddvar Tveit, City of Tempe, moved and William Mattingly, City of Peoria, seconded, and the motion to approve the February 24, 2011 meeting minutes carried unanimously.

4. CMAQ Annual Report

Dean Giles, MAG, presented the 2010 Congestion Mitigation and Air Quality Improvement (CMAQ) Funds Annual Report. He stated that the CMAQ federal guidance requires that states prepare an annual report on how CMAQ has been used and which projects have been obligated in the prior federal fiscal year including the expected air quality benefits. Mr. Giles added that MAG, in cooperation with the Arizona Department of Transportation, has completed the report for the federal fiscal year ending September 30, 2010. He noted that the report includes 37 projects, which were previously before the Committee when they were submitted for possible inclusion in the MAG Transportation Improvement Program. Mr. Giles stated that the data for calculating the estimated air quality benefits was provided by the MAG member agencies. He added that the report includes a description of each project, the CMAQ cost, and the estimated air quality benefits for volatile organic compounds, carbon monoxide, nitrogen oxides, and PM-10. Mr. Giles indicated that the air quality benefits for PM-2.5 are not reported since the MAG region is in attainment for that pollutant.

Diane Arnst, Arizona Department of Environmental Quality, requested that the report be provided in a larger font in the future. She indicated that it was difficult to read. Mr. Giles replied that MAG uploads the data to a federal system, which produces the report that has been provided to the Committee. He added that it is a canned report style. Ms. Arnst requested that MAG look into providing the report with a larger font in the future. Mr. Giles responded that MAG will check with the Federal Highway Administration to determine if the report could be provided in a larger font size.

5. Clark County Natural Events Action Plan for High Wind Events

Matt Poppen, MAG, provided an overview of the Clark County Natural Events Action Plan. He stated that the action plan was originally developed in response to the Environmental Protection Agency's former Natural Events Policy. Mr. Poppen noted that this policy existed before the current Exceptional Events Rule that has been discussed at previous meetings. The former policy included requirements

that are listed as the purpose for the Clark County Natural Events Action Plan. He noted that many of these requirements are now in the current Exceptional Events Rule under mitigation. Therefore, the action plan developed by Clark County still works well for the current Exceptional Events Rule.

Mr. Poppen discussed the purpose of the Natural Events Action Plan. He stated that the plan addressed four important objectives: provide education and outreach programs to the public, business, and industrial communities that focus on actions that reduce the generation of, and exposure to, PM-10 during events; provide a high-wind notification system for the public and regulated community, both before and during the event; identify appropriate high-wind controls (Best Available Control Measures) and ensure that PM-10 control measures are implemented during high-wind events; and provide evidence for justification of an exceptional event determination should an exceedance of the standard occur.

Mr. Poppen mentioned additional details on the public outreach and education objective. He stated that the action plan seeks to inform the public when air quality in the area is unhealthy, explain what the public can expect when high-winds occur, actions they can take to minimize exposure, and inform the public of steps that are taken to control dust emissions during high winds. Mr. Poppen added that Clark County also conducts outreach to the public in addition to its educational goals. Clark County focused outreach during the high-wind season at community and school events, held meetings with local government, environmental and health professionals, and provided air quality reporting training for local weather news media.

Mr. Poppen presented some of the publications and presentations produced as part of the public outreach and education efforts. He noted that additional information on these can be found in Appendix C of the action plan. Mr. Poppen added that Clark County formed a Medical Advisory Committee comprised of local physicians. The committee provides medical advice to Clark County during high-wind events, responses to media inquiries, and presentations to community groups.

Mr. Poppen discussed the Clark County Public Notification Program. He indicated that notifications are required when a dust event is imminent, currently taking place, or has reached hazardous levels. Mr. Poppen stated that the notification has two levels: advisory and alert. An advisory is issued for a wind event with sustained winds of 25 mph or more, or frequent gusts of 40 miles per hour or more (usually issued 12 to 24 hours prior to event). Mr. Poppen noted that these thresholds were set by Clark County based on what they see in their area. An alert is issued when meteorological and ambient monitoring data confirm an event is happening and PM-10 levels are elevated. He indicated that the notifications produced focus on minimizing public exposure during an event. Clark County sought to identify and notify the population most at risk to highest exposure. Notifications were distributed through the general media as well as school and health districts, parks and recreation, and local municipalities. The notifications generally contain suggested actions and precautions to be taken by the public and industry to minimize exposure and reduce outdoor activity.

Mr. Poppen mentioned the information contained in an advisory or alert notification. Typically they include: the forecasted weather; start and expiration date and time of event; health effects of high PM-10 concentrations; recommended actions to reduce exposure for sensitive and healthy populations; encourage residents to call dust complaint hotline when excessive blowing dust is observed; encourage residents to visit website to view near "real-time" monitoring data; and stationary sources and construction sites are directed by email or fax to inspect their sites, implement BACM controls and stabilize all disturbed soils on site.

Mr. Poppen presented an example of a general advisory that is distributed to the public by Clark County. He noted that the example is included in Appendix C of the action plan. Mr. Poppen also presented an example of the fax sent to the stationary sources and construction sites notifying them that an event is expected or occurring. It highlights that they need to have their BACM employed to stabilize dust and notify them that compliance officers will be inspecting in the area. In addition, an observed violation will receive a Notice of Violation.

Mr. Poppen showed a flow chart of how the notification process is initiated. He indicated that there are three people in the Clark County Department of Air Quality that have responsibility for issuing an advisory or alert: the local meteorologist, compliance supervisor/manager, and planning supervisor/manager. These three individuals then consult to determine if the conditions warrant an advisory or alert to be issued.

Mr. Poppen indicated that another main goal of the action plan is to ensure that PM-10 controls are implemented. He stated that the action plan includes a listing of all sources that Clark County had determined to be major sources of windblown dust during these events. They have also identified the appropriate BACM-level PM-10 controls for dust sources subject to windblown dust. Mr. Poppen mentioned that Clark County has done a good job at identifying their problem soils. Clark County was able to use a combination of soil moisture and other information to release a map so businesses and industry that are operating in the high risk area know ahead of time that they may have to use additional controls potentially not needed in areas with less susceptible soils.

Mr. Poppen stated that Clark County focused heavily on education of site supervisors, dust monitors, and water truck operators. He noted that there is a "Dust Monitor Class" where a site representative is required to attend and be certified in order to know what actions to take during a high wind event. Clark County also had many informal tailgate sessions where an inspector would go to a site to educate the business and industry on what could be done to prevent high PM-10 readings. Mr. Poppen indicated that the advisories are issued directly to the regulated community. They are instructed to verify BACM-level controls are in place and in use. In addition, they are notified of the presence of department field staff actively conducting inspections focused on sources of windblown dust.

Mr. Poppen indicated that during an event, Clark County has concentrated enforcement and compliance activities. He mentioned that compliance staff focus on areas known to be sources of windblown dust. These areas have been determined through historical patterns and complaint data. In addition, there is a focus on the areas around monitors with elevated readings during the event. Mr. Poppen indicated that Clark County has approximately 30 inspectors. He noted that nearly all the inspectors are employed during high wind events to focus heavily on preventing windblown dust. Mr. Poppen stated that violating sources are issued a Corrective Action Order which may lead to a Notice of Violation depending on the severity of the violation. He discussed abatement of a violating site. Rules allow Clark County to abate a site through use of a contracted water truck when a site owner/operator refuses or cannot abate the violation.

Mr. Poppen stated that the final purpose of the Clark County Natural Events Action Plan is exceptional events justification. Notifications, public outreach, and documentation of compliance activities after an advisory or alert has been issued can be used as evidence in an exceptional events determination, should an exceedance of the PM-10 standard occur. He stated that compliance staff document that BACM is in place and enforced through inspections and records review are conducted during the event. In addition, compliance staff use digital photography and video to document blowing dust,

wind damage, etc. The Clark County public information staff coordinate with the news media in producing media releases and stories surrounding the event.

Mr. Poppen provided the Committee with a recent example of the action plan in use. He indicated that he had an opportunity to speak with Rodney Langston, Principal Planner for Clark County, on actions taken during a possible event on March 16, 2011. He indicated that the field-based compliance supervisor noticed unusually dusty conditions in the morning. Concerned about the consequences of this dusty condition, the supervisor issued an advisory to the stationary sources and construction sites. As the day progressed, the planning supervisor observed increased wind speeds and monitor concentrations at one particular site. The compliance supervisor and planning supervisor discussed the local conditions and the decision was made to convince the meteorologist to issue a public advisory despite wind speeds being below normal trigger levels. He noted that this was a very proactive approach. Mr. Poppen stated that the field inspectors shifted focus to possible sources in the area around the affected monitor and tracked the monitor concentration levels through laptops. Subsequent investigation of the area determined that the probable source of the elevated concentrations was a dry lake bed upwind of the monitor. He noted that the PM-10 standard was not exceeded on this day.

Beverly Chenausky, Arizona Department of Transportation, referred to the concentrated enforcement and abatement. She noted that there does not seem to be anything unique that is not already being done in Tucson and Yuma. Mr. Chenausky asked if Mr. Langston was able to quantify the emissions or was it just used for exceptional events demonstration. She also inquired if it is the targeted abatement that makes the Clark County plan unique. Ms. Chenausky said that the education and outreach, forecasts, etc. are being done in Tucson and Yuma. She asked what Clark County is doing to make their program more successful. Mr. Poppen responded that these are not complicated measures and are similar to what is seen in other action plans. He added that what makes Clark County unique is its commitment to implement the action plan. The plan is used as a real tool to prevent exceedances as opposed to a reporting tool or a regulatory requirement. Mr. Poppen stated that their commitment has been very successful in preventing exceedances. He noted that the overall strategies are very similar to other programs. Mr. Poppen indicated that a similar plan does not exist for Maricopa County. Ms. Chenausky asked if Clark County quantifies or takes emissions credit in their plans for these measures. Mr. Poppen replied that to his knowledge it is not quantified specifically in their state implementation plan. It is a preventive measure.

Bob Downing, Maricopa County Air Quality Department, referred to Section 8 of the Clark County Natural Events Action Plan. He stated that this section, mentions a formal evaluation of the program every five years and annual budget review. Mr. Downing inquired if there is a quantitative or qualitative assessment for the past six years. Mr. Poppen responded that an evaluation was due in 2010 and it is noted on the Clark County website that a five year review is under way. However, he has not seen any reports on the effectiveness of the program in any publications.

6. Update on Activities to Prevent PM-10 Exceedances

Lindy Bauer, MAG, provided an update on activities to prevent PM-10 exceedances. She stated that at the last Committee meeting, there was discussion on the EPA Clean Data Policy. Under the EPA Clean Data Policy, EPA can relieve a region of some of the requirements in the Clean Air Act if there is clean data at the monitors. For PM-10, three years of clean data are needed. Ms. Bauer mentioned that EPA has indicated informally that 2009 may be a clean year and 2010 was a clean year. If the region stays clean in 2011, potentially, EPA could issue an attainment finding. As discussed at the last

meeting, the data would need to be quality assured by the Maricopa County Air Quality Department. Ms. Bauer stated that with a finding of attainment, Clean Air Act requirements would be suspended for reasonable further progress, attainment demonstration, and contingency measures as long as the area remains in attainment. She added that a redesignation request to attainment status and maintenance plan could then be pursued.

Ms. Bauer noted that the agenda packet includes a one-page handout from Colleen McKaughan, EPA, with more detail on the Clean Data Policy. According to EPA, the Clean Air Act requirements suspended by the Clean Data Policy include: no attainment demonstration and no additional BACM control measures; no reasonable further progress demonstration; no contingency measures; and no longer a five percent requirement for additional reductions under Section 189(d).

Ms. Bauer stated that based upon the recommendations of the Committee, the elected officials at MAG agreed that leadership from MAG is critical in order to prevent PM-10 exceedances. She indicated that MAG has embarked on a proactive leadership approach in cooperation with the air agencies, business and industry to prevent PM-10 exceedances at the monitors and throughout the region. She noted that this is a parallel effort as work is done to prepare a new five percent plan. Ms. Bauer indicated that we are still in 2011 and the region does have a finding of failure to submit since the Five Percent Plan for PM-10 was withdrawn.

Ms. Bauer discussed the prevention of PM-10 exceedances. She stated that ADEQ could notify the cities and towns when high winds or stagnant conditions are forecasted with three to five day lead time (high risk for dust). Cities and towns could: designate a contact person(s); have customized Rapid Response Action Plans; review local dust control ordinances in advance; watch real time monitor readings; check city/town operations that are dust-generating to ensure that dust control measures are in place; distribute monitor maps to the city departments, contractors that do work for the city, and contractors that come in for permits; check areas that are most likely to produce dust emissions; and notify appropriate business and industry associations if help is needed with other sources. Ms. Bauer noted that this list has been modified from the last meeting based on suggestions received.

Ms. Bauer provided a real life example of why a network of individuals to prevent exceedances is so important. On Monday, March 14, 2011, we learned of a situation that happened over the weekend. She noted that a PM-10 exceedance occurred on Saturday, March 12, 2011 at the South Phoenix monitor. She stated that once Maricopa County learned of the issue, a conference call was held that Monday with MAG, ADEQ, and the City of Phoenix. Ms. Bauer indicated that the City of Phoenix staff had already been down to the site and stated that someone had disturbed a vacant lot near the monitor. Ms. Bauer mentioned that following the conference call, she and MAG Executive Director Dennis Smith went down to the site. She stated that Mr. Smith visited with a woman across the street from the lot who indicated that there was a great deal of activity on the lot Saturday night. She mentioned that there were off-road vehicles, motorcycles, go-carts, and all-terrain vehicles doing donuts on the vacant lot. Ms. Bauer indicated that the result was very high PM-10 concentrations. A one-hour reading that evening was over 2,000 micrograms per cubic meter. The following hour was 800 micrograms per cubic meter. She noted that those two hours were enough to cause a PM-10 exceedance.

Ms. Bauer presented pictures taken of the vacant lot on Monday, March 14, 2011. She pointed out that donuts had been done on the property and the dirt tracked out on the paved road. Ms. Bauer provided a picture of the South Phoenix monitor in relation to the vacant lot, which is across the street. She

indicated that the City of Phoenix responded very rapidly upon learning of the issue. Ms. Bauer noted that the next day, the City of Phoenix went to the site, spoke with the lot owner, put up a fence around the property, and stabilized the lot. She indicated that this is rapid work on the part of a big city to correct a situation and work successfully with a private lot owner. Ms. Bauer added that this is an example of rapid response; however, we hope to have the rapid response before the problems happen. She presented pictures of the fence being installed around the property.

Ms. Bauer discussed the PM-10 exceedance prevention activities underway. She stated that at the suggestion of this Committee, on March 7, 2011, MAG held a workshop with local governments, Maricopa County, and ADEQ on preventing PM-10 exceedances. Ms. Bauer indicated that the City of Phoenix has since created a Dust Reduction Task Force on March 16, 2011. On March 21, 2011, the MAG Regional Council Executive Committee approved $90,000 for Maricopa County upgrades to provide "near real time" monitor data to prevent exceedances. Therefore, the cities and anyone else can monitor the data and work to prevent a PM-10 problem before it happens. The MAG Regional Council Executive Committee also approved funding for a PM-10 prevention video. Ms. Bauer stated that it would be an air quality video "Do Your Part". The video would feature facilities such as a clean sand and gravel operation, a clean construction operation, local government activities, as well as agriculture. She mentioned that there would be various dust control activities that are being applied and are good examples. In addition, the video would include what citizens can do to do their part.

Ms. Bauer discussed additional PM-10 exceedance prevention activities underway. She stated that Maricopa County departments are mobilizing to prevent dust. In addition, MAG is developing a template for a Rapid Response Action Plan as requested at the March 7, 2011 workshop. The Arizona Department of Environmental Quality is refining the Maricopa County Dust Control Action Forecast. She added that business and industry associations are also notifying their members when high winds are forecasted.

Ms. Bauer indicated that MAG will keep the Committee informed of the PM-10 exceedance prevention activities taking place. She discussed the importance of preventing exceedances. Ms. Bauer stated that the region is maxed out on measures. She indicated that the way out is to have no more PM-10 violations. Ms. Bauer added that MAG is asking its members with no PM-10 monitors within their jurisdiction to check dust-generating sources when high risk days are forecasted to ensure they are being controlled.

Mr. Kukino invited Frank Schinzel, Government Liaison for the Maricopa County Air Quality Department, to speak about a potential workshop. Mr. Schinzel indicated that Maricopa County is recommending another workshop with the cities and towns as soon as possible. He noted that there will be a template for action plans provided by MAG; however, there needs to be a consistent approach to implementing the action plans. In addition, consistency is needed with data collection. Mr. Schinzel referred to the City of Phoenix letter regarding the creation of a Dust Reduction Task Force. He called the Committee's attention to the various departments that would be involved with the effort. Mr. Schinzel indicated that many cities would have several departments working on this issue and consistency across them is needed.

Mr. Schinzel discussed coordination and collaboration within the cities and towns as well as with all the agencies. He stated that there needs to be a system where a source is not getting several different departments contacting them about same issue. Mr. Schinzel indicated that another workshop is recommended to address these items.

Mr. Schinzel complimented the City of Phoenix on the creation of a Dust Reduction Task Force. He indicated that Maricopa County has several departments under one constellation and consistency is also needed within the County.

Dave Berry, Arizona Motor Transport Association, commented that he is happy to see the progress being made. Mr. Berry asked who has the authority to stop individuals making donuts in the dirt. Mr. Schinzel replied that depends on the city. He added that the Maricopa County Air Quality Department does not have the authority. Mr. Schinzel stated that the County has the authority to write a violation to the person if they come over to the inspector; however, they cannot stop them. Mr. Berry asked if the violation would go to the person operating the vehicle or the property owner. Mr. Schinzel responded that the County has authority to issue a violation to both the vehicle operator and property owner; however, the individuals typically just leave.

Mr. Schinzel stated that all the cities have ordinances related to off-highway vehicle use such as doing donuts in the dirt. For example, if the Phoenix Police Department would have spotted that activity, they could write a citation for being on an unimproved lot. Mr. Berry asked if the Phoenix Police Department could get the activity to stop. Mr. Schinzel replied yes. Mr. Berry discussed the importance of stopping the activity or applying water to prevent dust in the air. Mr. Schinzel stated that the approach of Maricopa County would be similar to that of Clark County. He indicated that they would not be able to do enforcement at that time. The initial contact would be to ask the individuals to stop the activity. Mr. Schinzel indicated that the County inspector could say they can cite the person or contact the city police department who has more authority. He added that hopefully the person would then leave.

Mr. Schinzel indicated that the County does have the authority to go on a vacant lot under Rule 310.01 and apply water or a dust palliative. He added that Maricopa County does have a contract for that. Mr. Schinzel noted that they cannot go on a construction site. He is unsure if this can be done by Clark County.

Mr. Kukino stated that Mr. Berry raised a good question. He added that the cities need to go back and speak with their police departments about what could or should be done in these circumstances. Mr. Kukino said the first question is if there is any trespassing occurring. He discussed working with the police departments about any illegal activity. Mr. Kukino mentioned raising the awareness. He encouraged cities to speak to their police departments and come back and share information on what can and should be done.

Mr. Berry indicated that he has observed vacant lots being used as parking for an event overflow. He stated that the amount of dust kicked up is extraordinary. Mr. Berry inquired about the authority to stop it. He mentioned that the owner of the property may not even know their lot is being used for parking. Mr. Schinzel stated that many of the cities have a process before they will issue an event permit. Some cities require a dust control permit, or a permit from Maricopa County if there will be any earthmoving activity, before issuing the event permit. He stated that one event slipped through the cracks last Friday where the event people did not know of the requirements, but they are working on that issue. Mr. Schinzel indicated that the County does not have the authority to stop parking on vacant lots; however, if the area is outside a municipality, the Maricopa County Sheriff's Office can be called for assistance. Typically in a municipality, the County inspector would contact the local law enforcement agency.

Mr. Berry indicated that changes to state law are being looked at in dealing with these issues. He inquired if Maricopa County needed more statutory authority. Mr. Schinzel replied that Rule 310.01 could probably be beefed up; however, it is not short-term. He indicated that it is something that could be discussed and may possibly need to be done.

7. Status Report on the New Five Percent Plan for PM-10

Ms. Bauer provided a status report on the new Five Percent Plan for PM-10. She indicated that the focus is on making revisions to the Maricopa County 2008 PM-10 Periodic Emissions Inventory. Ms. Bauer stated that Maricopa County has completed the rule effectiveness information. She noted that the inventory should be completed by the end of March. Ms. Bauer added that on Monday, March 21, 2011, MAG received draft legislation and fact sheet from ADEQ. She noted that these materials are at each place. Ms. Bauer indicated that this legislation is geared to prevent PM-10 exceedances as well. She indicated that the focus again is on prevention.

Ms. Bauer discussed the provisions of the draft legislation. She stated that the first part of the legislation would require ADEQ to disseminate air quality forecast information to the permitted sources so they would know in advance when there are high risk conditions for dust. The second part of the legislation would be to develop a dust action general permit. Ms. Bauer indicated that the legislation would include authority for the ADEQ director or control officer (Maricopa County) to require a dust action general permit for regulated but unpermitted sources if the source was not taking reasonable precautions to control dust. In addition, the bill would require monitoring, record-keeping, and reporting. She noted that EPA had those issues with the Agricultural Best Management Practices Program, which is why it is included here. Ms. Bauer reiterated that the concept is on prevention of PM-10 exceedances. She added that the MAG members are currently reviewing the bill to see if they have any comments. Ms. Bauer stated that the concept and focus of the bill is to prevent PM-10 exceedances before they happen.

8. Supplemental Revision for the Eight-Hour Ozone Maintenance Plan

Ms. Bauer provided an overview of the supplemental revision for the Eight-Hour Ozone Maintenance Plan. She indicated that EPA sent a letter to MAG on March 14, 2011 requesting additional modeling for the maintenance plan, which was submitted to EPA in 2009. Ms. Bauer stated that the maintenance plan shows that the region will continue to maintain the eight-hour ozone standard of .08 parts per million through 2025. She added the EPA has asked for a supplemental revision to include interim modeling analyses for the years 2016 and 2021 to demonstrate that the eight-hour ozone standard will be maintained throughout the ten year maintenance period. Ms. Bauer indicated that MAG is currently working on this request from EPA.

Ms. Bauer indicated that MAG will also need to address in the supplemental revision the repeal of the Local Transportation Assistance Fund Program by the Arizona Legislature in 2010. She mentioned that the preliminary air quality modeling shows that there is no significant impact; however, it needs to be done for this maintenance plan in order to comply with the letter from EPA. Ms. Bauer noted that the modeling is underway.

9. Call for Future Agenda Items

Mr. Kukino announced that the next meeting of the Committee has been tentatively scheduled for Thursday, April 28, 2011 at 1:30 p.m. With no further comments, the meeting was adjourned at 2:25 p.m.

2008 Annual PM_{10} Emissions in the PM_{10} Nonattainment Area

Comparison of original inventory (published June 2010) vs. March 2011 revisions (highlighted)

SOURCE CATEGORY	Original (June 2010) Tons/yr	% of total	Revised (March 2011) Tons/yr	% of total	% change
STATIONARY POINT SOURCES:	**149.84**	**0.2%**	**149.84**	**0.3%**	**n/a**
AREA SOURCES:					
–Industrial Processes:					
Chemical manufacturing	186.94		186.94		
Commercial cooking	993.04		993.04		
Grain handling/processing	16.73		16.73		
Secondary metal production	60.56		60.56		
Non-metallic mineral processes	190.45		187.73		–1.4%
Mining and quarrying	184.25		156.60		–15.0%
Wood product manufacturing	216.69		216.69		
Rubber/plastic product mfg.	140.57		140.57		
Fabricated metal products mfg.	51.35		51.35		
Electrical equipment mfg.	13.94		13.94		
State-permitted portable sources	59.00		59.00		
Industrial paved/unpaved road travel	511.29		472.36		–7.6%
Engine testing	0.18		0.18		
Crematories	0.93		0.93		
Accidental releases	0.01		0.01		
Landfills	60.25		60.25		
On-site incineration	0.06		0.06		
Other industrial waste disposal	32.78		32.78		
Other industrial processes	136.00		136.00		
–Subtotal, Industrial Processes:	**2,855.04**	**3.9%**	**2,785.74**	**5.8%**	**–2.4%**
–Fuel Combustion:					
Industrial natural gas	30.70		30.70		
Industrial fuel oil	457.60		457.60		
Commercial/institutional natural gas	66.20		66.20		
Commercial/institutional fuel oil	223.00		223.00		
Residential natural gas	61.73		61.73		
Residential wood	461.41		461.41		
Residential fuel oil	0.01		0.01		
–Subtotal, Fuel Combustion:	**1,300.65**	**1.8%**	**1,300.65**	**2.7%**	**n/a**
–Fires:					
Open burning	27.67		27.67		
Wildfires	423.56		423.56		
Prescribed fires	0.21		0.21		
Structure fires	15.10		15.10		
Vehicle fires	30.16		30.16		
–Subtotal, Fires:	**496.71**	**0.7%**	**496.71**	**1.0%**	**n/a**
–Agricultural Activities:					
Tilling	834.20		834.20		
Harvesting	54.14		54.14		
Travel on unpaved farm roads	731.03		731.03		
Cotton ginning	4.86		4.86		
Livestock	260.95		260.95		
–Subtotal, Agricultural Activities:	**1,885.19**	**2.6%**	**1,885.19**	**3.9%**	**n/a**

2008 Annual PM_{10} Emissions in the PM_{10} Nonattainment Area (continued)

SOURCE CATEGORY	Original (June 2010) Tons/yr	% of total	Revised (March 2011) Tons/yr	% of total	% change
–Construction:					
Residential (single- and multi-family)	2,245.39		1,692.38		–24.6%
Commercial	5,380.95		4,057.29		–24.6%
Road construction	2,724.87		2,051.78		–24.7%
All other (trenching, site prep., etc.)	215.70		162.41		–24.7%
–Subtotal, Construction:	**10,566.91**	**14.4%**	**7,963.87**	**16.5%**	**–24.6%**
–Miscellaneous Area Sources:					
Travel on unpaved parking lots	2,365.07		2,365.07		
Offroad recreational vehicles fugitive dust	2,014.17		2,014.17		
Leaf blowers fugitive dust	894.98		894.98		
Windblown dust (by land use type):	**18,468.36**	**25.2%**	**4,814.80**	**10.0%**	**–73.9%**
–Agricultural	1,083.26		354.24		–67.3%
–Commercial Construction –Residential Construction –Transportation Construction	2,664.48		391.00		–85.3%
–Vacant	9,522.43		1,852.19		–80.5%
–Open Areas	3,762.38		2,036.54		–45.9%
–Sand & Gravel, Mining, Landfills, Test Tracks	1,435.81		180.84		–87.4%
–Subtotal, Miscellaneous Area Sources:	**23,742.58**	**32.3%**	**10,089.02**	**21.0%**	**–57.5%**
TOTAL, ALL AREA SOURCES:	**40,847.07**	**55.6%**	**24,521.17**	**50.9%**	**–40.0%**
NONROAD MOBILE SOURCES:					
Agricultural equipment	15.13		15.13		
Airport ground support equipment and APUs	26.99		26.99		
Commercial equipment	117.66		117.66		
Construction and mining equipment	1,249.88		1,249.88		
Industrial equipment	101.42		101.42		
Commercial & residential lawn/garden	183.02		183.02		
Logging equipment	0.00		0.00		
Pleasure craft	7.02		7.02		
Railway maintenance equipment	1.13		1.13		
Recreational equipment	7.68		7.68		
Aircraft	183.80		183.80		
Locomotives	34.16		34.16		
TOTAL, NONROAD MOBILE:	**1,927.89**	**2.6%**	**1,927.89**	**4.0%**	**n/a**
ONROAD MOBILE SOURCES:					
Exhaust / tire wear / brake wear	1,529.54		3,144.17		+105.6%
Paved road fugitive dust	17,245.10		6,694.22		–61.2%
Unpaved road fugitive dust	11,710.70		11,710.70		
TOTAL, ONROAD MOBILE:	**30,485.34**	**41.5%**	**21,549.09**	**44.8%**	**–29.3%**
GRAND TOTAL, ALL CATEGORIES:	**73,410.1**	**100%**	**48,148.0**	**100%**	**–34.4%**

Key to highlighting of individual source categories:

Source category revised applying updated rule effectiveness (RE) calculations.

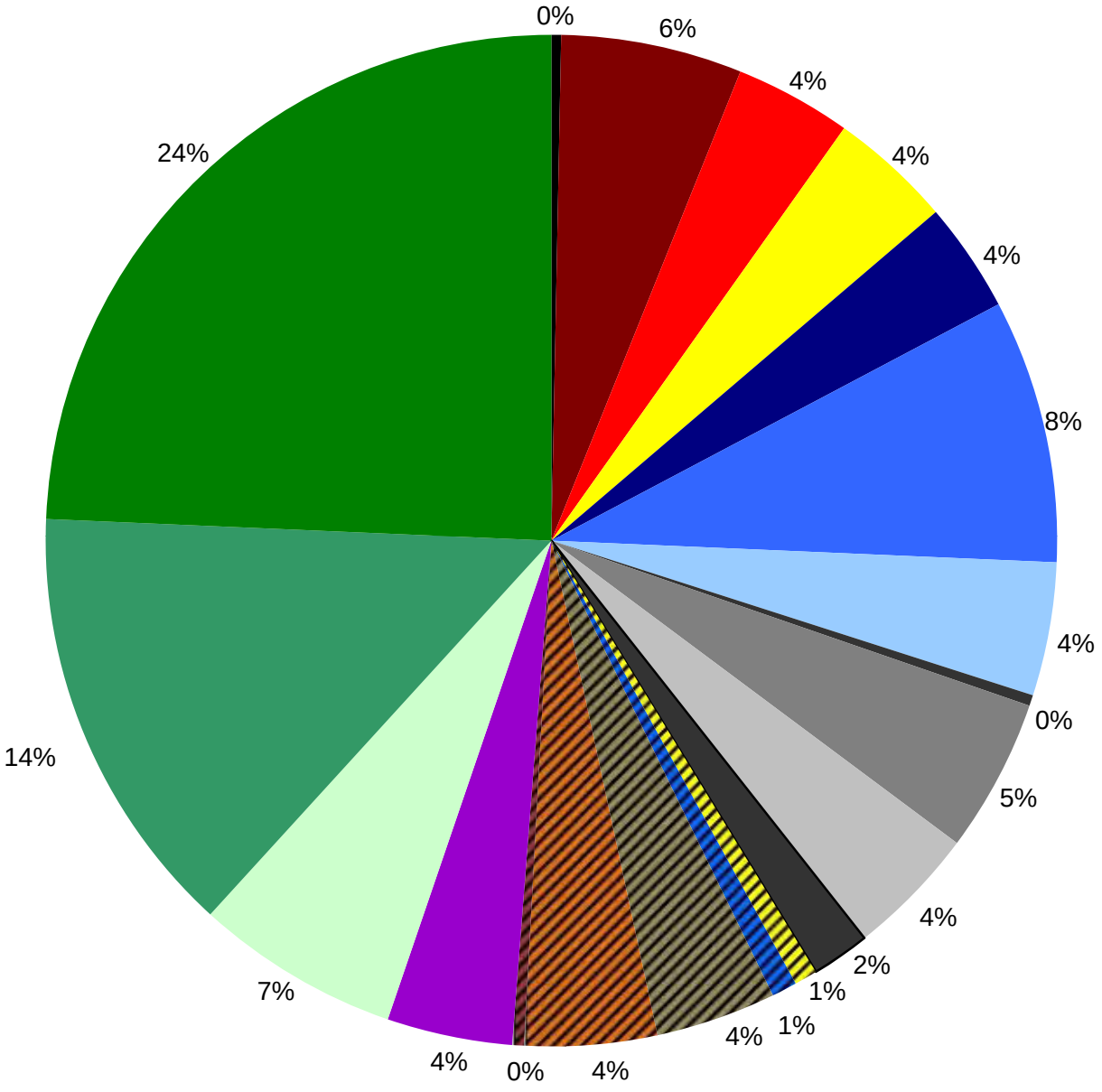
Source category revised using improved windblown dust methodology.

Source category revised using new MOVES2010a model (vs. MOBILE6.2 previously).

Source category revised using new EPA AP-42 emission factor published January 2011.

REVISED 2008 PM_{10} Emissions Inventory (March 2011)

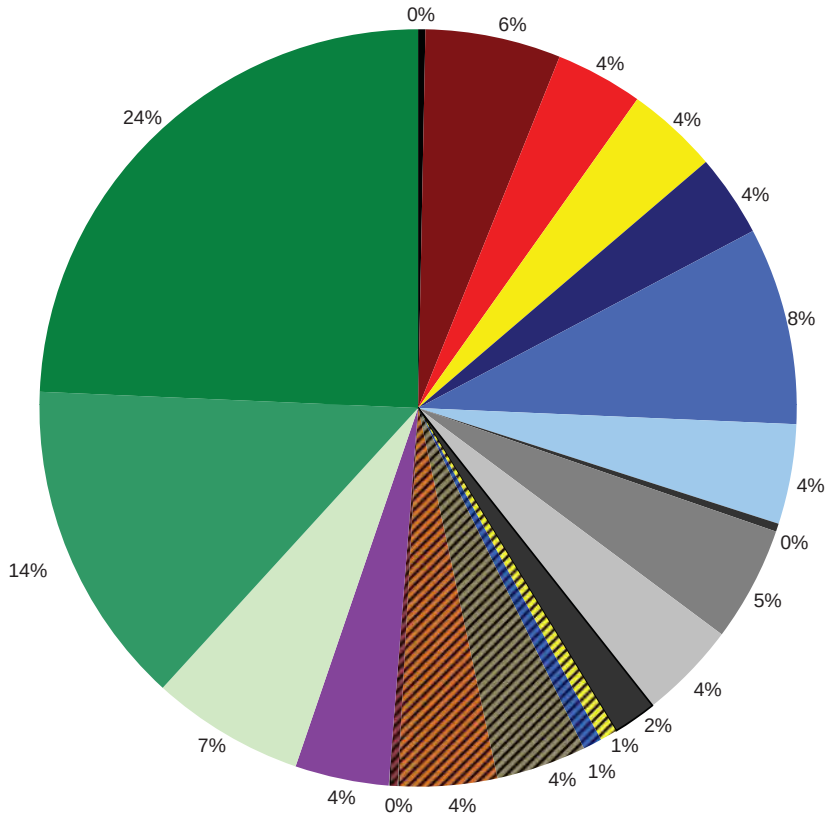
PM_{10} NAA Total = 48,148 tons/yr



Source Categories	%
Major stationary point sources	(<0.5%)
All other industrial processes	(6%)
Fuel combustion and fires	(4%)
Agriculture	(4%)
Construction, residential	(4%)
Construction, commercial	(8%)
Construction, road	(4%)
Other earthmvg: trenching, weed control	(<0.5%)
Travel on unpaved parking lots	(5%)
Offroad rec. vehicles fugitive dust	(4%)
Leaf blowers fugitive dust	(2%)
Windblown: agricultural land	(1%)
Windblown: developing land	(1%)
Windblown: vacant land	(4%)
Windblown: open areas	(4%)
Windblown: S&G, landfills, test tracks	(<0.5%)
Nonroad mobile sources	(4%)
Exhaust/tire wear/brake wear	(7%)
Paved road fugitive dust, including trackout	(14%)
Unpaved road fugitive dust	(24%)

REVISED 2008 PM_{10} Emissions Inventory (March 2011)

PM_{10} NAA Total = 48,148 tons/yr



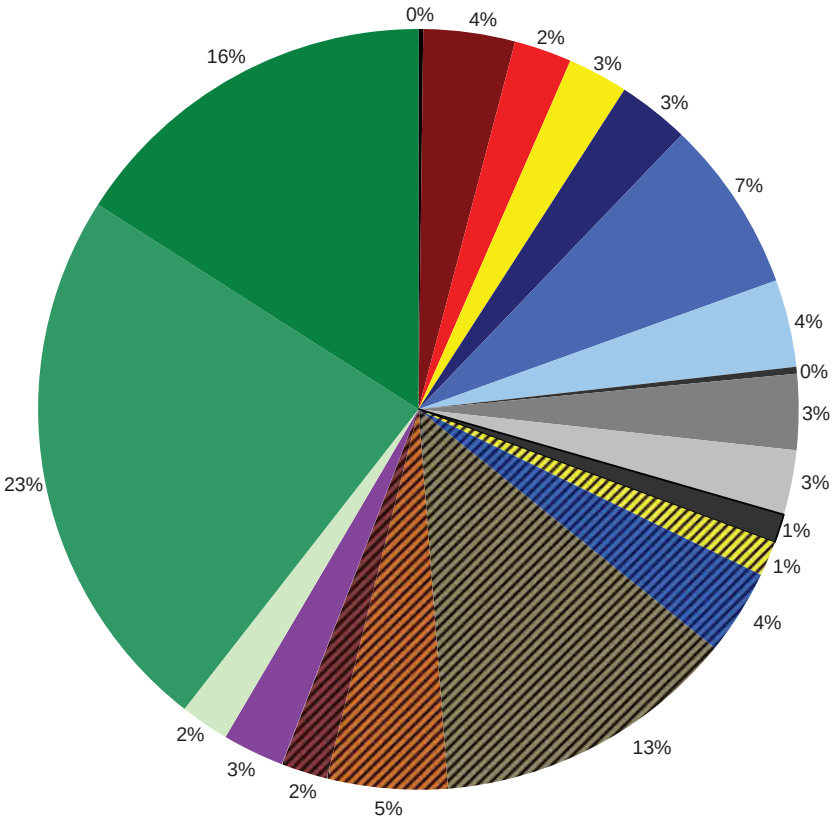
Source Categories	%
Major stationary point sources	(<0.5%)
All other industrial processes	(6%)
Fuel combustion and fires	(4%)
Agriculture	(4%)
Construction, residential	(4%)
Construction, commercial	(8%)
Construction, road	(4%)
Other earthmvg: trenching, weed control	(<0.5%)
Travel on unpaved parking lots	(5%)
Offroad rec. vehicles fugitive dust	(4%)
Leaf blowers fugitive dust	(2%)
Windblown: agricultural land	(1%)
Windblown: developing land	(1%)
Windblown: vacant land	(4%)
Windblown: open areas	(4%)
Windblown: S&G, landfills, test tracks	(<0.5%)
Nonroad mobile sources	(4%)
Exhaust/tire wear/brake wear	(7%)
Paved road fugitive dust, including trackout	(14%)
Unpaved road fugitive dust	(24%)

Emissions Inventory Unit, MCAQD

March 2011

2008 PM_{10} Emissions Inventory (original published June 2010)

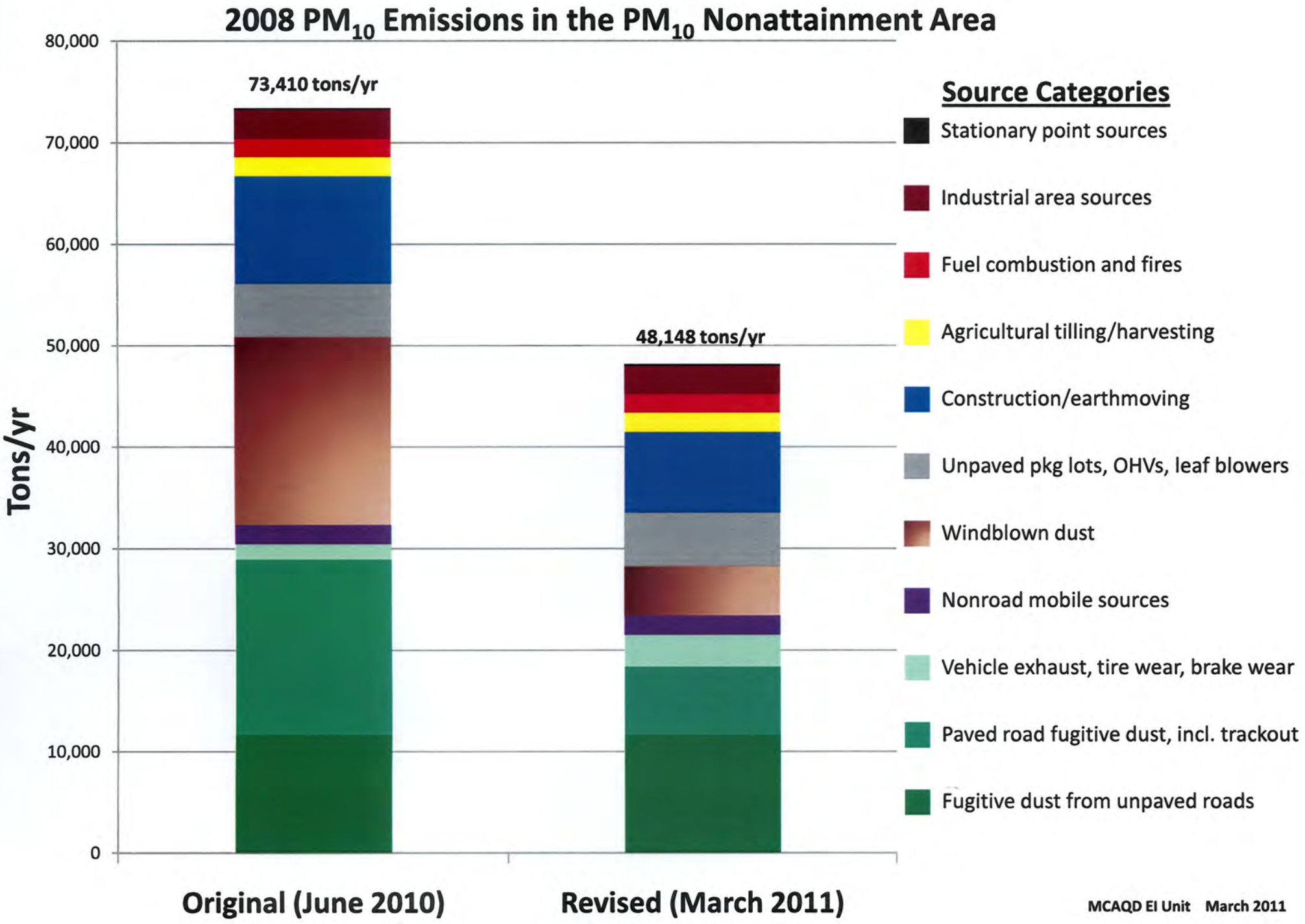
PM_{10} NAA Total = 73,410 tons/yr



Source Categories	%
Major stationary point sources	(<0.5%)
All other industrial processes	(4%)
Fuel combustion and fires	(2%)
Agriculture	(3%)
Construction, residential	(3%)
Construction, commercial	(7%)
Construction, road	(4%)
Other earthmvg: trenching, weed control	(<0.5%)
Travel on unpaved parking lots	(3%)
Offroad rec. vehicles fugitive dust	(3%)
Leaf blowers fugitive dust	(1%)
Windblown: agricultural land	(1%)
Windblown: developing land	(4%)
Windblown: vacant land	(13%)
Windblown: open areas	(5%)
Windblown: S&G, landfills, test tracks	(2%)
Nonroad mobile sources	(3%)
Exhaust/tire wear/brake wear	(2%)
Paved road fugitive dust, including trackout	(23%)
Unpaved road fugitive dust	(16%)

Emissions Inventory Unit, MCAQD

June 30, 2010


2008 PM10 Emissions in the PM10 Nonattainment Area
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Tons/yr
73,410 tons/yr
48,148 tons/yr
Source Categories
Stationary point sources
Industrial area sources
Fuel combustion and fires
Agricultural tilling/harvesting
Construction/earthmoving
Unpaved pkg lots, OHVs, leaf blowers
Windblown dust
Nonroad mobile sources
Vehicle exhaust, tire wear, brake wear
Paved road fugitive dust, incl. trackout
Fugitive dust from unpaved roads
Original (June 2010)
Revised (March 2011)
MCAQD EI Unit March 2011

Agenda Item #4

Assigned to NRT

AS PASSED BY THE SENATE

ARIZONA STATE SENATE
Fiftieth Legislature, First Regular Session

AMENDED
FACT SHEET FOR H.B. 2208

~~technical correction; air pollution; orders~~
(NOW: agricultural best management practices; rules)

Purpose

Authorizes the Arizona Department of Environmental Quality to issue a general permit that outlines best management practices designed to control dust in Maricopa County on days that are forecasted by the department to be high risk for dust generation. Modifies the statutory authority of the Agricultural Best Management Practices Committee to include additional requirements in rules to control dust in areas of PM-10 nonattainment, and exempts those rules from rulemaking requirements.

Background

The Phoenix metropolitan area has not met the federal Clean Air Act standards for PM-10 emissions since the Act was revised in 1990. There are different levels of nonattainment based on the extent to which the Environmental Protection Agency's (EPA) National Ambient Air Quality Standards are exceeded. On May 10, 1996, the EPA classified the Maricopa area as a serious PM-10 nonattainment area and that designation remains currently. PM-10 emissions refer to particulate matter in the air (e.g. dust) measuring less than ten micrometers.

In 2007, the Maricopa Association of Governments submitted the "MAG 2007 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area" to the EPA. That plan was withdrawn in January 2011 after the EPA indicated its intention to partially disapprove the plan (Federal Register, Vol. 75, No. 174, September 9, 2010). Regulated industries, state agencies, local governments and other stakeholders are currently working to devise a new plan to address PM-10 emissions for submittal to the EPA by January 2012.

Agricultural Best Management Practices Committee

The regulation of dust extends to agricultural operations. Dairy, beef feedlot and poultry and swine activities (i.e. animal agriculture) and commercial farming operations within the regulated areas of the Maricopa County PM-10 nonattainment area and the portion of Maricopa County in Area A are required to implement best management practices (BMPs) into their operations. Animal agriculture and commercial farming activities in these areas are regulated by the 15-member Agricultural Best Management Practices Committee (Committee). The Committee is responsible for adopting an *agricultural general permit*, which outlines BMPs intended to reduce PM-10 emissions.

The Committee adopts by rule a list of BMPs that may vary according to regional or geographical conditions or cropping patterns. Producers are required to implement at least two BMPs from the following applicable categories: a) tillage and harvest; b) non-cropland; c) cropland; and d) beef feedlot, dairy, swine, and poultry operations, including practices relating to unpaved access connections, unpaved roads or feed lanes and animal waste handling and transporting (A.R.S. § 49-457). For example, a BMP for tillage and harvesting would be to apply water to soil before performing planting operations.

Other Dust Regulation in Maricopa County

The Clean Air Act authorizes states to assume primary responsibility for regulating sources of air pollutants and for other regulatory programs developed by the EPA. The Arizona Department of Environmental Quality (ADEQ) assumes this primacy over Clean Air Act regulations and has further delegated air quality authority to Maricopa, Pinal and Pima counties. The Maricopa County Air Quality Department currently establishes limits for PM-10 emissions that are derived from any property, operation or activity that may be a dust source. These traditional sources (e.g. construction sites, nonmetallic mineral processing plants, operations that cause dirt to be tracked onto paved surfaces) must be permitted by the county under its Rule 310 and have an approved dust control plan in place. A dust control permit is required on all job sites that will disturb more than 1/10 acre (4356 sq. ft.) of soil. A dust control plan is a written plan describing all control measures to prevent or minimize the generation, emission, entrainment suspension and/or airborne transport of fugitive dust (Maricopa County, Rule 310 *Fugitive Dust From Dust-Generating Operations* Section 208). Dust control plans are enforced by control officers in Maricopa County.

Non-traditional sources (e.g. open areas, vacant lots, unpaved parking lots and unpaved roadways) are not regulated by Rule 310. However, Rule 310.01 addresses those non-traditional, unpermitted sources, which are responsible for certain stabilization standards and requirements relating to dust control (e.g. gravel, vegetation). Maricopa County also manages the residential woodburning and open burn programs, which are designed to restrict fireplace use and burning activities on high pollution days.

There is no anticipated fiscal impact to the state General Fund associated with this legislation.

Provisions

Agricultural Best Management Practices Committee

1. As temporary law, exempts the rules adopted by the Agricultural Best Management Practices Committee from rulemaking requirements in order for the Committee to revise its rules on BMPs for commercial farming and animal agriculture activities in regulated PM-10 nonattainment areas.

2. Requires at least one BMP that is adopted in Committee rules to be used in areas designated as *moderate* PM-10 nonattainment.

3. Modifies the definition of *agricultural general permit* to include an additional category of BMPs relating to significant earthmoving activities for commercial farming.

4. Requires the Committee rules on dust control to include record keeping and reporting requirements.

5. Specifies the exempt rules will have an immediate effective date.

6. Requires the Committee to file a notice of exempt rulemaking with the Secretary of State for publication in the Arizona Administrative Register and the Arizona Administrative Code.

Dust Action General Permit

7. For the PM-10 nonattainment area in Maricopa County only, requires the ADEQ Director (Director) to issue a five-year Dust Action General Permit (general permit) for regulated activities that specifies BMPs to reduce dust on or before a day that is forecasted to be high risk for dust generation (e.g. high wind events). The general permit will be developed through a public comment and hearing process.

8. Exempts entities that have a dust control permit issued by Maricopa County from the requirement of obtaining a general permit. Those entities, however, must implement the control measures listed in the county's permit related to wind as soon as practicable before and during a high-risk day.

9. Allows the Director to require a general permit for other dust generating operations but only if the Director finds that the generating entity has not implemented applicable BMPs on high-risk days.

10. Prescribes content criteria of the general permit, including the criteria for which Director will determine if a permittee or entity has failed to comply with BMPs.

11. Clarifies that either the Director or the county control officer will enforce failures to implement dust control measures, depending on who issues the permit. Similarly, specifies that a regulated entity cannot be penalized by both the Director and control officer for the same violation.

12. Excludes the following from the definition of *regulated activities* for purposes of a general permit:
    a) normal farm practices, including those currently regulated by an agricultural BMP general permit;
    b) emergency activities conducted by a utility or governmental agency to preserve public safety;
    c) initial landscaping activities that do not require the use of mechanized equipment; and
    d) certain rooftop operations.

13. Allows the Director or a county control officer to consider voluntary BMPs that are implemented on moderate risk days as a mitigating factor in any action taken against an entity for failing to implement required dust control measures.
14. Allows the Director to reexamine, evaluate and modify the general permit through the public comment and hearing process. Modifications of the general permit must be submitted to the EPA as a revision to the Statewide Implementation Plan, or SIP.

15. Clarifies that BMPs adopted under the general permit do not affect any applicable requirement currently in the SIP.

16. Defines the following terms: *applicable implementation plan, best management practices, control officer, disturbed surface area, dust-generating operation, fugitive dust* and *regulated activity.*

Five-Day Forecasts

17. Requires ADEQ to develop and disseminate five-day dust forecasts for the PM-10 nonattainment area of

Maricopa County. The forecast must be issued by noon each day, posted on the department's website and distributed electronically.

18. Requires ADEQ to consider specified meteorological conditions and existing and historical air pollution concentrations in the county when developing the forecasts.

Legislative Findings and Intent

19. Contains legislative findings. Among the findings, states that there is need to further reduce or prevent PM-10 emissions in Maricopa County, especially during high wind days. Provides information on air quality monitors located in the county.

20. Contains a legislative intent clause that specifies the dust general permit and ADEQ forecast provisions aim to reduce or prevent PM-10 emissions from dust-generating sources by requiring the application of existing dust control measures and establishing BMPs for those entities that do not currently have a dust control plan (i.e. unpermitted by the county). The intent language also provides for the Director's delegation of general permit authority to the county.

21. Becomes effective on the general effective date.

Amendments Adopted by Committee

- Modifies provisions relating to the Agricultural BMP Committee in the following manner:
  a) Adds the requirement that commercial farmers use at least one BMP in moderate PM-10 nonattainment areas.
  b) Requires Committee rules to prescribe record keeping and reporting requirements.
  c) Adds the category of BMPs relating to commercial farming's earthmoving activities.
  d) Modifies the exempt rule provisions to specify that the Committee must file a notice of exempt rulemaking with the Secretary of State. Requires publication of the exempt rules in the Arizona Administrative Code.

Amendments Adopted by Committee of the Whole

1. Adds the provisions relating to the Dust Action General Permit and five-day forecasts by ADEQ.
2. Adds legislative findings and intent language.

House Action				Senate Action			
ENV	2/17/11	DPA/SE	5-0-0-2	NRT	3/14/11	DPA	5-0-1-0
3rd Read	3/1/11		53-4-3-0-0	3rd Read	4/19/11		30-0-0-0

Prepared by Senate Research
April 19, 2011
TD/ly

Agenda Item #4

Senate Engrossed House Bill

State of Arizona
House of Representatives
Fiftieth Legislature
First Regular Session
2011

HOUSE BILL 2208

AN ACT

AMENDING SECTIONS 49-424 AND 49-457, ARIZONA REVISED STATUTES; AMENDING TITLE 49, CHAPTER 3, ARTICLE 2, ARIZONA REVISED STATUTES, BY ADDING SECTION 49-457.05; RELATING TO AGRICULTURAL BEST MANAGEMENT PRACTICES.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

Section 1. Section 49-424, Arizona Revised Statutes, is amended to read:

49-424. Duties of department

The department shall:

1. Determine whether the meteorology of the state is such that airsheds can be reasonably identified and air pollution, therefore, can be controlled by establishing air pollution control districts within well defined geographical areas.

2. Make continuing determinations of the quantity and nature of emissions of air contaminants, topography, wind and temperature conditions, possible chemical reactions in the atmosphere, the character of development of the various areas of the state, the economic effect of remedial measures on the various areas of the state, the availability, use~~,~~ and economic feasibility of air-cleaning devices, the effect on human health and danger to property from air contaminants, the effect on industrial operations of remedial measures~~,~~ and other matters necessary to arrive at a better understanding of air pollution and its control. In a county with a population in excess of one million two hundred thousand persons according to the most recent United States decennial census, the department shall locate a monitoring system in at least two remote geographic sites.

3. ~~By July 1, 1997,~~ Establish substantive policy statements for identifying air quality exceptional events that take into consideration this state's unique geological, geographical and climatological conditions and any other unusual circumstances. These substantive policy statements shall be developed with the planning agency certified pursuant to section 49-406, subsection A and the county air pollution control department or district.

4. Determine the standards for the quality of the ambient air and the limits of air contaminants necessary to protect the public health, and to secure the comfortable enjoyment of life and property by the citizens of the state or in any defined geographical area of the state where the concentration of air pollution sources, the health of the population, or the nature of the economy or nature of land and its uses so require, and develop and transmit to the county boards of supervisors minimum state standards for air pollution control.

5. Conduct investigations, inspections and tests to carry out the duties of this section under the procedures established by this article.

6. Hold hearings relating to any aspect of or matter within the duties of this section, and in connection therewith, compel the attendance of witnesses and the production of records under the procedures established by section 49-432.

7. Prepare and develop a comprehensive plan or plans for the abatement and control of air pollution in this state.

8. Encourage voluntary cooperation by advising and consulting with persons or affected groups or other states to achieve the purposes of this

chapter, including voluntary testing of actual or suspected sources of air pollution.

9. Encourage political subdivisions of the state to handle air pollution problems within their respective jurisdictions, and provide as it deems necessary technical and consultative assistance therefor.

10. Compile and publish from time to time reports, data~~,~~ and statistics with respect to those matters studied and investigated by the department.

11. DEVELOP AND DISSEMINATE AIR QUALITY DUST FORECASTS FOR THE MARICOPA COUNTY PM-10 NONATTAINMENT AREA. EACH FORECAST SHALL IDENTIFY A LOW, MODERATE OR HIGH RISK OF DUST GENERATION FOR THE NEXT FIVE CONSECUTIVE DAYS AND SHALL BE ISSUED BY NOON ON EACH DAY THE FORECAST IS GENERATED. AT A MINIMUM, THE FORECASTS SHALL BE POSTED ON THE DEPARTMENT'S WEBSITE AND DISTRIBUTED ELECTRONICALLY. WHEN DEVELOPING THESE FORECASTS, THE DEPARTMENT SHALL CONSIDER ALL OF THE FOLLOWING:

(a) PROJECTED METEOROLOGICAL CONDITIONS FOR THE MARICOPA COUNTY AREA, INCLUDING ALL OF THE FOLLOWING:

(i) WIND SPEED AND DIRECTION.

(ii) STAGNATION.

(iii) RECENT PRECIPITATION.

(iv) POTENTIAL FOR PRECIPITATION.

(b) EXISTING CONCENTRATIONS OF AIR POLLUTION AT THE TIME OF THE FORECAST.

(c) HISTORIC AIR POLLUTION CONCENTRATIONS THAT HAVE BEEN OBSERVED DURING METEOROLOGICAL CONDITIONS SIMILAR TO THOSE THAT ARE PREDICTED TO OCCUR IN THE FORECAST.

Sec. 2. Section 49-457, Arizona Revised Statutes, is amended to read:

49-457. Agricultural best management practices committee; members; powers; permits; enforcement; preemption; definitions

A. A best management practices committee for regulated agricultural activities is established.

B. The committee shall consist of:

1. The director of environmental quality or the director's designee.

2. The director of the Arizona department of agriculture or the director's designee.

3. The dean of the college of agriculture of the university of Arizona or the dean's designee.

4. The state director of the United States natural resources conservation service or the director's designee.

5. One person actively engaged in the production of citrus.

6. One person actively engaged in the production of vegetables.

7. One person actively engaged in the production of cotton.

8. One person actively engaged in the production of alfalfa.

9. One person actively engaged in the production of grain.

10. One soil taxonomist from the university of Arizona college of agriculture.

11. One person actively engaged in the operation of a beef cattle feed lot.

12. One person actively engaged in the operation of a dairy.

13. One person actively engaged in the operation of a poultry facility.

14. One person actively engaged in the operation of a swine facility.

15. One person who is employed by a county air quality department or agency.

C. The governor shall appoint the members designated pursuant to subsection B, paragraphs 5 through 15 of this section for a term of six years. Members may be reappointed. Members are not entitled to compensation for their services but are entitled to receive reimbursement of expenses pursuant to title 38, chapter 4, article 2.

D. The committee shall elect a chairman from the appointed members to serve a two year term.

E. The committee shall meet at the call of the chairman or at the request of a majority of the appointed members.

F. The department of environmental quality, the Arizona department of agriculture and the college of agriculture of the university of Arizona shall cooperate with and provide technical assistance and any necessary information to the committee. The department of environmental quality shall provide the necessary staff support and meeting facilities for the committee.

G. A person who commences a regulated agricultural activity after December 31, 2000 shall comply with the general permit within eighteen months of commencing the activity.

H. The committee shall adopt, by rule, an agricultural general permit specifying best management practices, INCLUDING RECORD KEEPING AND REPORTING REQUIREMENTS, for regulated agricultural activities to reduce PM-10 particulate emissions. A person who is subject to an agricultural general permit pursuant to this section is not subject to a permit issued pursuant to section 49-426 except as provided in subsection K of this section. The committee shall adopt by rule a list of best management practices, at least ONE OF WHICH SHALL BE USED IN AREAS DESIGNATED AS MODERATE NONATTAINMENT FOR PM-10 PARTICULATE MATTER AND AT LEAST two of which shall be used IN AREAS DESIGNATED AS SERIOUS NONATTAINMENT FOR PM-10 PARTICULATE MATTER, to demonstrate compliance with applicable provisions of the general permit. Best management practices may vary within the regulated area, according to regional or geographical conditions or cropping patterns.

I. If the director determines that a person who is engaged in a regulated activity is not in compliance with the general permit, and that person has not previously been subject to a compliance order issued pursuant to this section, the director may serve on the person by certified mail an order requiring compliance with the general permit and notifying the person of the opportunity for a hearing pursuant to title 41, chapter 6, article 10.

The order shall state with reasonable particularity the nature of the noncompliance and shall specify that the person has a period that the director determines is reasonable, but is not less than sixty days, to submit a plan to the supervisors of the natural resource conservation district in which the person engages in the regulated activity that specifies the best management practices from among those adopted in rule pursuant to subsection H of this section that the person will use to comply with the general permit.

J. If the director determines that a person who is engaged in a regulated activity is not in compliance with the general permit, and that person has previously submitted a plan pursuant to subsection I of this section, the director may serve on the person by certified mail an order requiring compliance with the general permit and notifying the person of the opportunity for a hearing pursuant to title 41, chapter 6, article 10. The order shall state with reasonable particularity the nature of the noncompliance and shall specify that the person has a period that the director determines is reasonable, but is not less than sixty days, to submit a plan to the department that specifies the best management practices from among those adopted in rule pursuant to subsection H of this section that the person will use to comply with the general permit.

K. If a person fails to comply with the plan submitted pursuant to subsection J of this section, the director may revoke the agricultural general permit for that person and require that the person obtain an individual permit pursuant to section 49-426. A revocation becomes effective after the director has provided the person with notice and an opportunity for a hearing pursuant to title 41, chapter 6, article 10.

L. The committee may periodically reexamine, evaluate and modify best management practices. Any approved modifications shall be submitted to the United States environmental protection agency as a revision to the applicable implementation plan.

M. The committee shall develop and commence an education program. The education program shall be conducted by the director or the director's designee or designees.

N. A best management practice adopted pursuant to this section does not affect any applicable requirements in an applicable implementation plan or any other applicable requirements of the clean air act, including section 110(l) of the act (42 United States Code section 7410(l)).

O. The regulation of PM-10 particulate emissions produced by regulated agricultural activities is a matter of statewide concern. Accordingly, this section preempts further regulation of regulated agricultural activities by a county, city, town or other political subdivision of this state.

P. For the purposes of this section, unless the context otherwise requires:

1. "Agricultural general permit" means best management practices that:

(a) Reduce PM-10 particulate emissions from tillage practices and from harvesting on a commercial farm.

(b) Reduce PM-10 particulate emissions from those areas of a commercial farm that are not normally in crop production.

(c) Reduce PM-10 particulate emissions from those areas of a commercial farm that are normally in crop production including prior to plant emergence and when the land is not in crop production.

(d) REDUCES PM-10 PARTICULATE EMISSIONS FROM THOSE AREAS OF A COMMERCIAL FARM UNDERGOING SIGNIFICANT AGRICULTURAL EARTHMOVING ACTIVITIES.

~~(d)~~ (e) Reduce PM-10 particulate emissions from the activities of a dairy, a beef cattle feed lot, a poultry facility or a swine facility, including practices relating to the following:

(i) Unpaved access connections.

(ii) Unpaved roads or feed lanes.

(iii) Animal waste handling and transporting.

(iv) Arenas, corrals and pens.

~~(e)~~ (f) Only in those regulated areas that are established after June 1, 2009, as prescribed in paragraph 6, subdivision (c) of this subsection, reduce PM-10 particulate emissions from the activities of an irrigation district governed by title 48, chapter 19 and affecting those lands and facilities that are under the jurisdiction and control of the district, including practices relating to the following:

(i) Unpaved operation and maintenance roads.

(ii) Canals.

(iii) Unpaved utility access roads.

2. "Applicable implementation plan" means that term as defined in 42 United States Code section 7601(q).

3. "Best management practices" means techniques that are verified by scientific research and that on a case by case basis are practical, economically feasible and effective in reducing PM-10 particulate emissions from a regulated agricultural activity.

4. "Maricopa PM-10 particulate nonattainment area" means the Phoenix planning area as set forth in 40 Code of Federal Regulations section 81.303.

5. "Regulated agricultural activities" means:

(a) Commercial farming practices that may produce PM-10 particulate emissions within the regulated area, including activities of a dairy, a beef cattle feed lot, a poultry facility and a swine facility.

(b) Only in those regulated areas that are established after June 1, 2009, as prescribed in paragraph 6, subdivision (c) of this subsection, activities of an irrigation district that is governed by title 48, chapter 19.

6. "Regulated area" means any of the following:

(a) The Maricopa PM-10 particulate nonattainment area.

(b) Any portion of area A that is located in a county with a population of two million or more persons.

(c) Any other PM-10 particulate nonattainment area established in this state on or after June 1, 2009.

Sec. 3. Title 49, chapter 3, article 2, Arizona Revised Statutes, is amended by adding section 49-457.05, to read:

49-457.05. Dust action general permit; best management practices; applicability; definitions

A. THIS SECTION APPLIES IN A COUNTY WITH A POPULATION OF TWO MILLION OR MORE PERSONS OR ANY PORTION OF A COUNTY WITHIN AN AREA DESIGNATED BY THE ENVIRONMENTAL PROTECTION AGENCY AS A SERIOUS PM-10 NONATTAINMENT AREA OR A MAINTENANCE AREA THAT WAS DESIGNATED AS A SERIOUS PM-10 NONATTAINMENT AREA.

B. THE DIRECTOR SHALL ISSUE A DUST ACTION GENERAL PERMIT FOR REGULATED ACTIVITIES, WHICH SHALL SPECIFY THE BEST MANAGEMENT PRACTICES NECESSARY TO REDUCE OR TO PREVENT PM-10 PARTICULATE EMISSIONS AS SOON AS PRACTICABLE BEFORE AND DURING A DAY THAT IS FORECAST TO BE AT HIGH RISK OF DUST GENERATION UNDER A FORECAST ISSUED BY THE DEPARTMENT PURSUANT TO SECTION 49-424.

C. A PERSON THAT HAS A PERMIT ISSUED BY THE DIRECTOR OR A CONTROL OFFICER FOR THE CONTROL OF FUGITIVE DUST FROM DUST-GENERATING OPERATIONS IS NOT REQUIRED TO OBTAIN A DUST ACTION GENERAL PERMIT UNDER SUBSECTION D OF THIS SECTION, EXCEPT THAT THE PERSON SHALL IMPLEMENT THE CONTROL MEASURES REQUIRED IN THE PERMIT ISSUED BY THE DIRECTOR OR CONTROL OFFICER, INCLUDING THOSE MEASURES RELATED TO WIND, TO REDUCE OR TO PREVENT PM-10 PARTICULATE EMISSIONS AS SOON AS PRACTICABLE BEFORE AND DURING A DAY THAT IS FORECAST TO BE AT HIGH RISK OF DUST GENERATION UNDER A FORECAST ISSUED BY THE DEPARTMENT PURSUANT TO SECTION 49-424. FAILURE TO IMPLEMENT A CONTROL MEASURE UNDER THIS SUBSECTION SHALL ONLY BE ENFORCED BY THE DIRECTOR OR CONTROL OFFICER THAT ISSUED THE PERMIT. THE DIRECTOR OR CONTROL OFFICER SHALL NOT RECOVER PENALTIES FOR VIOLATIONS OF BOTH THIS SUBSECTION AND THE PERMIT BASED ON THE SAME ACT OR OMISSION.

D. A DUST ACTION GENERAL PERMIT MAY BE REQUIRED FOR ANY PERSON THAT OWNS OR CONDUCTS A DUST-GENERATING OPERATION THAT IS FOUND BY THE DIRECTOR TO HAVE FAILED TO CHOOSE AND IMPLEMENT AN APPLICABLE BEST MANAGEMENT PRACTICE LISTED IN THE DUST ACTION GENERAL PERMIT AS SOON AS PRACTICABLE BEFORE AND DURING A DAY THAT IS FORECAST TO BE AT HIGH RISK OF DUST GENERATION.

E. THE DUST ACTION GENERAL PERMIT SHALL:

1. CONFORM TO THE REQUIREMENTS OF SECTION 49-426, SUBSECTION H, PARAGRAPHS 2 THROUGH 6.

2. SPECIFY CATEGORIES AND LISTS OF BEST MANAGEMENT PRACTICES THAT MAY VARY ACCORDING TO REGIONAL, SITE-SPECIFIC OR ACTIVITY-SPECIFIC CONDITIONS.

3. INCLUDE THE APPROPRIATE MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS TO ENSURE THE ENFORCEABILITY OF THE PROVISIONS.

4. SPECIFY THE PROCESS BY WHICH THE DIRECTOR WILL DETERMINE THAT A PERSON HAS FAILED TO CHOOSE AND IMPLEMENT AN APPLICABLE BEST MANAGEMENT PRACTICE AND IS THEREFORE SUBJECT TO A PERMIT PRESCRIBED BY SUBSECTION D OF THIS SECTION. THE PROCESS SHALL INCLUDE A MEANS OF PROVIDING NOTICE TO THE PERSON OF THE PERSON'S FAILURE AND A MEANS BY WHICH THE PERSON MAY CHALLENGE THE DETERMINATION.

5. EXPIRE AFTER A PERIOD OF FIVE YEARS, AND MAY BE RENEWED AS PRESCRIBED BY THIS SECTION.

F. THE DIRECTOR MAY PERIODICALLY REEXAMINE, EVALUATE AND MODIFY THE DUST ACTION GENERAL PERMIT AS PRESCRIBED IN SECTION 49-426, SUBSECTION H, PARAGRAPHS 2 THROUGH 6. AFTER APPROVAL BY THE DIRECTOR, ANY MODIFICATIONS TO THE DUST ACTION GENERAL PERMIT SHALL BE PROVIDED TO THE CONTROL OFFICER AND SHALL BE SUBMITTED TO THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY AS A REVISION TO THE APPLICABLE IMPLEMENTATION PLAN.

G. A BEST MANAGEMENT PRACTICE ADOPTED PURSUANT TO THIS SECTION DOES NOT AFFECT ANY APPLICABLE REQUIREMENT IN AN APPLICABLE IMPLEMENTATION PLAN OR ANY OTHER APPLICABLE REQUIREMENTS OF THE CLEAN AIR ACT, INCLUDING SECTION 110(l) OF THE ACT (42 UNITED STATES CODE SECTION 7410(l)).

H. VOLUNTARY BEST MANAGEMENT PRACTICES THAT ARE IMPLEMENTED DURING A DAY THAT IS FORECAST BY THE DEPARTMENT PURSUANT TO SECTION 49-424 TO BE AT MODERATE RISK FOR DUST GENERATION SHALL BE CONSIDERED BY THE DIRECTOR OR CONTROL OFFICER AS A MITIGATING FACTOR IN ANY ACTION TAKEN AGAINST THAT PERSON FOR FAILING TO IMPLEMENT A DUST CONTROL MEASURE FOR THAT DAY AS REQUIRED BY THIS CHAPTER, A RULE OR ORDINANCE ADOPTED PURSUANT TO THIS CHAPTER OR A PERMIT ISSUED PURSUANT TO THIS CHAPTER.

I. FOR THE PURPOSES OF THIS SECTION:

1. "APPLICABLE IMPLEMENTATION PLAN" MEANS THAT TERM AS DEFINED IN 42 UNITED STATES CODE SECTION 7602(q).

2. "BEST MANAGEMENT PRACTICES" MEANS TECHNIQUES THAT ARE VERIFIED BY SCIENTIFIC RESEARCH AND THAT ON A CASE-BY-CASE BASIS ARE PRACTICAL, ECONOMICALLY FEASIBLE AND EFFECTIVE IN REDUCING PM-10 PARTICULATE EMISSIONS FROM A REGULATED ACTIVITY.

3. "CONTROL OFFICER" HAS THE SAME MEANING PRESCRIBED IN SECTION 49-471.

4. "DISTURBED SURFACE AREA" MEANS A PORTION OF THE EARTH'S SURFACE OR MATERIAL THAT IS PLACED ON THE EARTH'S SURFACE THAT HAS BEEN PHYSICALLY MOVED, UNCOVERED, DESTABILIZED OR OTHERWISE MODIFIED FROM ITS UNDISTURBED NATIVE CONDITION IF THE POTENTIAL FOR THE EMISSION OF FUGITIVE DUST IS INCREASED BY THE MOVEMENT, DESTABILIZATION OR MODIFICATION.

5. "DUST-GENERATING OPERATION" MEANS DISTURBED SURFACE AREAS, INCLUDING THOSE OF OPEN AREAS OR VACANT LOTS THAT ARE NOT DEFINED AS AGRICULTURAL LAND AND ARE NOT USED FOR AGRICULTURAL PURPOSES ACCORDING TO SECTIONS 42-12151 AND 42-12152, OR ANY OTHER AREA OR ACTIVITY CAPABLE OF GENERATING FUGITIVE DUST, INCLUDING THE FOLLOWING:

(a) LAND CLEARING, MAINTENANCE AND LAND CLEAN-UP USING MECHANIZED EQUIPMENT.

(b) EARTHMOVING.

(c) WEED ABATEMENT BY DISCING OR BLADING.

(d) EXCAVATING.

(e) CONSTRUCTION.

(f) DEMOLITION.

(g) BULK MATERIAL HANDLING, INCLUDING HAULING, TRANSPORTING, STACKING, LOADING AND UNLOADING OPERATIONS.

(h) STORAGE OR TRANSPORTING OPERATIONS, INCLUDING STORAGE PILES.

(i) OPERATION OF OUTDOOR EQUIPMENT.

(j) OPERATION OF MOTORIZED MACHINERY.

(k) ESTABLISHING OR USING STAGING AREAS, PARKING AREAS, MATERIAL STORAGE AREAS OR ACCESS ROUTES.

(l) ESTABLISHING OR USING UNPAVED HAUL OR ACCESS ROADS.

(m) INSTALLING INITIAL LANDSCAPES USING MECHANIZED EQUIPMENT.

6. "FUGITIVE DUST" MEANS PARTICULATE MATTER THAT COULD NOT REASONABLY PASS THROUGH A STACK, CHIMNEY, VENT OR OTHER FUNCTIONALLY EQUIVALENT OPENING, THAT CAN BE ENTRAINED IN THE AMBIENT AIR AND THAT IS CAUSED BY HUMAN OR NATURAL ACTIVITIES, INCLUDING THE MOVEMENT OF SOIL, VEHICLES, EQUIPMENT, BLASTING AND WIND. FUGITIVE DUST DOES NOT INCLUDE PARTICULATE MATTER EMITTED DIRECTLY FROM THE EXHAUST OF MOTOR VEHICLES AND OTHER INTERNAL COMBUSTION ENGINES, FROM PORTABLE BRAZING, SOLDERING OR WELDING EQUIPMENT OR FROM PILE DRIVERS.

7. "REGULATED ACTIVITY" MEANS ALL DUST-GENERATING OPERATIONS EXCEPT FOR THE FOLLOWING:

(a) NORMAL FARM CULTURAL PRACTICES AS PRESCRIBED IN SECTION 49-504, PARAGRAPH 4 OR SECTION 49-457.

(b) EMERGENCY ACTIVITIES THAT MAY DISTURB THE SOIL AND THAT ARE CONDUCTED BY ANY UTILITY OR GOVERNMENT AGENCY IN ORDER TO PREVENT PUBLIC INJURY OR TO RESTORE CRITICAL UTILITIES TO A FUNCTIONAL STATUS.

(c) ESTABLISHMENT OF INITIAL LANDSCAPES WITHOUT THE USE OF MECHANIZED EQUIPMENT, CONDUCTING LANDSCAPE MAINTENANCE WITHOUT THE USE OF MECHANIZED EQUIPMENT AND PLAYING ON OR MAINTAINING A FIELD USED FOR NONMOTORIZED SPORTS, EXCEPT THAT THESE ACTIVITIES SHALL NOT INCLUDE GRADING OR TRENCHING PERFORMED TO ESTABLISH INITIAL LANDSCAPES OR TO REDESIGN EXISTING LANDSCAPES.

(d) ROOFTOP OPERATIONS FOR CUTTING, DRILLING, GRINDING OR CORING ROOFING TILE IF THAT ACTIVITY IS OCCURRING ON A PITCHED ROOF.

Sec. 4. Agricultural best management practices committee; exempt rule making; publication

Notwithstanding title 41, chapter 6, article 3, Arizona Revised Statutes, the best management practices committee for regulated agricultural activities established under section 49-457, Arizona Revised Statutes, may adopt revisions to the rules required by section 49-457, Arizona Revised Statutes, as exempt rules with an immediate effective date in compliance with section 41-1032, Arizona Revised Statutes. The rules shall have an immediate effective date. Exempt rules are exempt from the provisions in title 41, chapter 6, article 3, Arizona Revised Statutes, except that the committee shall file a notice of exempt rulemaking with the secretary of state who shall publish the rules in the Arizona administrative register and the Arizona administrative code.

Sec. 5. Legislative findings; intent

A. The legislature finds the following:

1. Previous particulate matter ten microns in size and smaller (PM-10) air quality plans for the Maricopa county area, including the Maricopa association of governments 2007 five per cent plan for PM-10 for the Maricopa county nonattainment area, relied heavily on reductions in particulate matter emissions from improving the effectiveness of existing rules for construction and other sources.

2. As a direct result of the air quality plans that have been submitted between 1990 and 2009, the annual average concentration of PM-10 within the Phoenix area has declined approximately twenty-five per cent, even while the population in the Phoenix area nearly doubled during that same time period.

3. The air quality monitor near 43rd Avenue and Broadway Road, in Phoenix, Arizona, is considered to be a location where the maximum concentrations of PM-10 are expected to occur.

4. If a monitor records more than three exceedances of the national air quality standard for PM-10 over the course of a three year period, and none of those exceedances are excused under EPA's exceptional events rule, the area represented by the monitor is considered to be in nonattainment for the PM-10 standard.

5. In 2009, there were seven exceedances of the national air quality standard for PM-10 at the monitor near 43rd Avenue and Broadway Road, in Phoenix, Arizona. All seven of these events were related to meteorological conditions. Meteorological conditions that may lead to a risk of dust generation include wind speed and direction, stagnation, recent precipitation and potential for precipitation.

6. In 2010, although there was one exceedance of the national air quality standard for PM-10 at another monitor in Maricopa county, there were zero exceedances of that standard at the monitor near 43rd Avenue and Broadway Road, in Phoenix Arizona.

7. To date in 2011, there has been one exceedance of the national air quality standard for PM-10 recorded by a separate monitor in Maricopa county, but there have been zero exceedances of that standard at the monitor near 43rd Avenue and Broadway Road, in Phoenix, Arizona.

8. To satisfy EPA's requirement to achieve attainment with the national air quality standard for PM-10 in the Maricopa county area, it is necessary to further reduce or to prevent PM-10 particulate emissions, especially during those days at high risk of dust generation.

B. The legislature declares that the intent of this act is as follows:

1. Require the reduction or prevention of PM-10 particulate emissions from both permitted and unpermitted sources of PM-10 particulate emissions.

2. Require the department of environmental quality to predict days that are at high risk of dust generation and provide that information to any source that could potentially emit PM-10 particulate emissions.

3. Require the establishment of best management practices for those sources that are not already subject to dust prevention requirements during high wind events. When establishing the best management practices, those control measures that apply to dust-generating operations in county ordinances or permits issued by the control officer shall be considered.

4. Require application of the existing control measures required in county permits and the applicable best management practices adopted pursuant to this act to reduce or to prevent dust emissions as soon as practicable before and during a day that the department of environmental quality predicts to be at high risk of dust generation.

5. Require the department of environmental quality, the Maricopa county air quality department and other governmental entities to develop and implement a communications plan to educate unpermitted sources regarding their new obligations.

6. Require the director of the department of environment quality to delegate the authority under section 49-457.05, subsection D, Arizona Revised Statutes, as added by this act, to the appropriate control officer.

RAPID RESPONSE ACTION PLAN TEMPLATE AND TOOL KIT

This template has been prepared to help identify key steps necessary in the formation of a Rapid Response Action Plan intended to prevent PM-10 exceedances at monitoring sites and throughout the region. The template is primarily designed to assist cities and towns and may also be helpful to other jurisdictions.

Get prepared in advance. Here are some steps to take to raise awareness and get resources in place prior to responding to a Arizona Department of Environmental Quality (ADEQ) Maricopa County High Risk Dust Forecast notification or elevated monitor concentrations:

1. Identify appropriate departments and personnel responsible for receiving the notifications and watching real time monitor readings from the Maricopa County Air Quality Department monitor network.

2. Check your internal operations that are dust-generating to ensure that dust control measures are in place.

3. Distribute monitor and "hotspot" area maps to the departments, contractors that do work for your jurisdiction, and contractors that come in for permits.

4. Develop an internal outreach strategy to increase awareness of notifications and dust emissions within each of your relevant departments.

5. Determine the authority, expertise and resources each of your departments can employ to reduce dust emissions from sources under their control. Develop protocols to ensure communication between departments as well as department-specific field protocols to be implemented in response to ADEQ notifications.

6. Know your dust control ordinances and code regulations. Talk with your legal counsel to identify and confirm the existing authorities you possess. The following provisions are currently required of cities and towns in Area A:
    - A.R.S. Section 9-500.04.5 – Ban leaf blower debris in public roadways.
    - A.R.S. Section 9-500.04.6 – Adopt codes requiring dustproof paving or stabilization at parking, maneuvering, ingress and egress areas at developments other than residential buildings with four or fewer units.
    - A.R.S. Section 9-500.04.7 – Adopt codes requiring paving or stabilization of parking, maneuvering, ingress and egress areas 3,000 square feet or larger at residential buildings with four or fewer units.
    - A.R.S. Section 9-500.04.8 – Adopt codes restricting vehicle parking and use on unpaved or unstabilized lots.
    - A.R.S. Section 9-500.27 – Adopt an ordinance that prohibits the operation of any vehicle, including an off-highway vehicle, an all-terrain vehicle or an off-road recreational motor vehicle, on an unpaved surface that is not a public or private road, street or lawful easement and that is closed by the landowner by rule or regulation of a federal agency, this state, a county or a municipality or by proper posting if the land is private land. This section does not apply to the operation of vehicles used in the normal course of business or the normal course of government operations. It does not prohibit or preempt the enforcement of any similar ordinance that is adopted by a city or town in Area A before March 31, 2008 for purposes of dust abatement.

7. Identify areas under your control that are most likely to produce dust emissions throughout your jurisdiction. The MAG Tool Kit contains (1) land use maps within a four-mile radius around PM-10 monitors, as during high wind events sources as far away as four miles can contribute to the dust concentrations at the monitor; (2) a description and picture of the monitor(s) located in your jurisdiction; and (3) a brochure describing the types of areas likely to produce windblown dust.[1]

8. Know who to contact when dust emissions are noted from sources not under your control. The following associations can be partnered with for help with industrial, business and agricultural sources:

    - Arizona Chapter, Associated General Contractors
      602-252-3926
    - Arizona Rock Products Association
      602-271-0346
    - Home Builders Association of Central Arizona
      602-274-6545
    - Maricopa County Farm Bureau
      602-437-1330

9. Utilize your communications and public relations departments to increase awareness of dust emissions and actions the public can take to reduce dust emissions.

Implement your action plan. Utilize the resources you have assembled to respond to a predicted high risk dust forecast notification or elevated monitor concentrations. The following are some suggested tips to help implement your action plan:

1. The day before a forecasted high risk event, inspect internal dust-generating operations and trouble-shoot any issues at known hotspot areas under your control.

2. Make sure personnel receiving the ADEQ notifications and elevated monitor readings can quickly notify departments and field personnel responsible for responding to these events.

3. During an event, verify all internal dust-generating operations are implementing appropriate control measures and deploy field personnel to known hotspots and areas under your control that are susceptible to dust emissions.

4. Utilize the Maricopa County Air Quality Department's website to frequently check on monitor concentrations during the event. Current web address for monitoring data: http://agwww.maricopa.gov/AirMonitoring/SitePollutionMap.aspx

5. Mobilize your department personnel to quickly respond to and address/abate observed dust emissions from sources under your control. Notify appropriate associations of dust emissions from sources not under your control.

6. After an event, conduct a "lessons learned" session to evaluate the effectiveness of your response plan in identifying and controlling sources of dust emissions.

---

[1] For entities that operate in multiple jurisdictions, copies of all monitor maps and descriptions are included.

Identifying Locations and Conditions that Produce Windblown Dust

Listed below are specific locations and conditions that have the greatest potential of producing windblown dust. Focusing efforts on controlling and monitoring these areas will have the greatest impact in reducing windblown dust emissions.

- **Bare, unvegetated surfaces.** Open areas with little or no natural cover from rocks and vegetation are primary sources of windblown dust. Widely separated vegetation has more potential for dust emissions than more continuous vegetation.

- **Smooth surfaces.** Smooth areas lack the sheltering effect of rocks and vegetation and thus are subject to the full energy of surface winds.

- **Long fetch.** The longer the stretch of open land parallel to the wind (washes, river beds, desert "streets"), the greater the potential for windblown dust.

- **Disturbed soils.** Soils disturbed by mechanical activities (vehicles, motorcycles, ATVs, industrial and construction equipment) emit at rates far higher than undisturbed soils under the same wind speeds.

Bare, smooth and disturbed surface

- **Thick deposits of soils.** Most soils emit the majority of windblown dust during the initial minutes of a high-wind event. Areas that have a large supply or reservoir (loose soils without a crust, heavily disturbed areas) can continue to emit for as long as high winds persist.

- **Soil composition.** Any dry, desert soil has the potential to emit windblown dust. However, the texture of a soil may affect it's ability to produce windblown dust according to these general principles: Sandy soils tend to emit because these soils are less likely to produce crusts. Soils high in silt and clay content can emit heavily if their natural crust has been disturbed.

- **Soil moisture.** As soils dry out, their ability to aggregate and form crusts is hampered.

- **Topography that converges winds.** Areas that can funnel winds like riverbeds, washes and other low-lying areas.

Adapted from: *A Qualitative Geophysical Explanation for "Hot Spot" Dust Emitting Regions*, Dale A. Gillette, Contributions to Atmospheric Physics, February 1999

DRAFT

2009 IMPLEMENTATION STATUS OF COMMITTED MEASURES IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10 FOR THE MARICOPA COUNTY NONATTAINMENT AREA

APRIL 2011

2009 IMPLEMENTATION STATUS OF COMMITTED MEASURES IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10 FOR THE MARICOPA COUNTY NONATTAINMENT AREA

The MAG 2007 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area was submitted to the Environmental Protection Agency (EPA) in December 2007. In order to reduce PM-10, a broad range of commitments to implement measures were received from the State, Maricopa County, and the twenty-three local governments in the PM-10 nonattainment area. The plan included fifty-three committed control measures which began implementation in 2008. The Maricopa Association of Governments (MAG) is tracking the implementation status of the measures in the plan.

In January 2010, MAG issued a report summarizing the implementation status of the committed measures for calendar year 2008. The following 2009 implementation status report also incorporates the results from 2008 in order to more accurately reflect the level of implementation of the committed measures in the region. Implementation of the committed measures in the Five Percent Plan were being phased in over a three-year period (2008, 2009, 2010).

Tracking forms were prepared to assist the implementing entities in reporting the progress made to implement the measures for calendar year 2009. The 2009 tracking forms were sent to MAG member agencies on March 11, 2010. All completed 2009 tracking forms were received by July 23, 2010. MAG has summarized the combined 2008 and 2009 status of the implementation of the committed measures. In general, the combined implementation results for 2008 and 2009 meet or exceed the commitments made to implement a majority of the measures in the MAG Five Percent Plan for PM-10. Table 1 summarizes the measures that exceeded their commitments. Table 2 lists the implementation status of all of the committed measures in the Five Percent Plan for PM-10.

Figure 1 illustrates the PM-10 emission reductions in 2010 for the committed control measures that were quantified for numeric credit to meet the five percent per year target and demonstrate attainment. Figure 2 provides the PM-10 emission reductions in 2010 for the committed contingency measures that were quantified for numeric credit. In some cases, the emission reductions represent the impact of multiple, reinforcing measures.

BACKGROUND INFORMATION

In accordance with the Clean Air Act, the MAG 2007 Five Percent Plan for PM-10 was submitted to the Environmental Protection Agency by December 31, 2007. The plan was required to reduce PM-10 emissions by five percent per year until the standard is met. In order to attain the standard by December 31, 2010, the region needed three years of clean data at the monitors (2008, 2009, 2010). It is important to attain the PM-10 standard as quickly as possible or additional years of five percent reductions may need to be added to the plan. The Executive Summary for the MAG 2007 Five Percent Plan for PM-10 is attached.

On May 23, 2007, the MAG Regional Council approved additional items for the Suggested List of Measures to Reduce PM-10. One of the items was that each year, MAG would issue a report on the status of the implementation of the committed measures for this region by the cities, towns, Maricopa County and the State. The report would be made available to the Governor's Office, Legislature, Arizona Department of Environmental Quality and the Environmental Protection Agency. This report provides the combined implementation status of committed measures for calendar years 2008 and 2009.

The forms for tracking the implementation of committed measures were developed with input from the implementing entities. On April 1, 2010, MAG conducted a workshop to discuss the tracking of the measures for calendar year 2009.

Monitored exceedances of the 24-hour PM-10 standard have declined since 2006, as shown in Figure 3. There can be no more than three daily exceedances at any PM-10 monitor over a three year period in order for the standard to be met. The measures described in this tracking report will be important in reducing PM-10 emissions to enable the region to meet the standard. MAG will continue to monitor the implementation status of the measures, as well as PM-10 concentrations.

TABLE 1
MEASURES THAT EXCEEDED 2008 AND 2009 COMMITMENTS
IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10

COMMITTED MEASURE	COMMITMENT	ACTUAL	EXCEEDED COMMITMENT
26. Pave or stabilize existing public dirt roads and alleys.			
• Pave public dirt roads.	27.20 miles	32.38 miles	5.18 miles
• Stabilize public dirt roads.	29.49 miles	40.76 miles	11.27 miles
• Pave dirt alleys.	63.44 miles	71.77 miles	8.33 miles
• Stabilize dirt alleys.	116.35 miles	273.97 miles	157.62 miles
27. Limit speeds to 15 miles per hour on high traffic dirt roads.			
• Post 15 mph speed limit signs.	28.06 miles	56.91 miles	28.85 miles
28. Pave or stabilize unpaved shoulders.			
• Pave unpaved shoulders.	71.00 curb miles	271.31 curb miles	200.31 curb miles
• Stabilize unpaved shoulders.	185.75 curb miles	403.98 curb miles	218.23 curb miles
53. Repave or overlay paved roads with rubberized asphalt.			
• Repave highway with rubberized asphalt.	5.21 miles	12.50 miles	7.29 miles
45. Prohibit use of leaf blowers on unstabilized surfaces.	Maricopa County	Maricopa County 1 local government	1 local government

TABLE 2
2008 AND 2009 IMPLEMENTATION STATUS OF COMMITTED MEASURES
IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
Fugitive Dust Control Rules		
1. **Public education and outreach with assistance from local governments**. Quantified for numeric credit as a contingency measure.	590 Articles (internal and public media, newsletters, etc.) were published. 291 Media / Events (specific air events, booths on air quality at other events, media, etc.) were held. Over 137,000 visits to the Maricopa County Air Quality Department (MCAQD) website; over 24,000 visits to the Air Quality news page; 30,045 total page views on www.CleanAirMakeMore.com. In addition to publishing articles and conducting events, Maricopa County and 15 local governments performed other types of public education and outreach activities.	County, State, local governments
2. **Extensive Dust Control Training Program**. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Dust Control training program required by Senate Bill (SB) 1552. (A.R.S. § 49-474.05 A. & B.) In March 2008, Maricopa County adopted Rule 310, Rule 280, and Rule 316 revisions in regard to dust control training. In 2008, Maricopa County hired 2 dust control compliance and 2 administrative support personnel to coordinate and conduct the training program. In 2009, two inspectors and two administrative staff worked part time to coordinate and conduct the Rule 310 and Rule 316 Dust Control Training programs. 13,231 individuals completed County-certified dust control training classes. This includes training conducted by certified trainers in local government. One local government has provided all applicable workers with dust control training. In one jurisdiction, 63 staff received training and certificates for the Maricopa County Basic Dust Control Rule 310 and 1 staff member received the Comprehensive Dust Control Rule 310 training and certificate. In one federal agency, 2 staff members completed training to become certified dust control coordinators.	County, private sector

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
3. Dust Managers required at construction sites of 50 acres and greater. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Dust managers required by SB 1552. (A.R.S. § 49-474.05 A. & E.) In March 2008, Maricopa County adopted Rule 310 and Rule 316 revisions in regard to dust managers.	County
4. Dedicated enforcement coordinator for unpaved roads, unpaved parking, and vacant lots.	Maricopa County assigned a supervisor to oversee the vacant lot program.	County
5. Establish a certification program for Dust Free Developments to serve as an industry standard. Quantified for numeric credit as a contingency measure.	SB 1552 required ADEQ to establish a certification program. (A.R.S. § 49-457.02 A.) This measure was not implemented because ADEQ delayed the certification program indefinitely due to budgetary constraints. Maricopa County will support ADEQ's efforts (when ADEQ's budgetary constraints are lifted) to develop a program to certify and publicize companies that routinely demonstrate exceptional efforts to reduce airborne dust. As the regulatory authority, Maricopa County will provide verifications of eligible companies as necessary to implement this program and as requested by ADEQ.	State, County
6. Better defined tarping requirements in Rule 310 to include enclosure of the bed.	In March 2008, Maricopa County adopted Rule 310 and Rule 310.01 revisions in regard to tarping. Maricopa County changed the requirements regarding loading haul trucks (i.e., load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of the cargo container area).	County

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
7. Conduct mobile monitoring to measure PM-10 and issue NOVs.	In December 2008, Maricopa County filled 1 chemical engineering position for the mobile monitoring program. In February 2009, the mobile monitoring van was delivered to Maricopa County. Two deployments in 2009: (1) Fisher Sand and Gravel on 28th Street, and (2) Gas separating plant near Olive Avenue and El Mirage Road.	County
8. Conduct nighttime and weekend consistent inspections. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Although Maricopa County conducted nighttime and weekend inspections during 2008, the program was not fully implemented, as the department was focused on hiring and training additional staff. Nighttime and weekend inspections conducted in 2008 included complaint inspections and targeted inspections of specific industries that operate at night and on weekends. In 2009, Maricopa County initiated a pilot program to enhance the existing nighttime and weekend inspection program. The pilot program extended weekday inspection hours to include 4:00 to 6:00 a.m. and 5:00 to 8:00 p.m. and weekends from 6:00 a.m. to 2:30 p.m.. Following the pilot program, the County initiated a cross-training program for all inspectors to better utilize their abilities to deal with all circumstances and source types they may encounter. In January 2010, Maricopa County continued the enhanced nighttime and weekend inspection program.	County
9. Increase consistent inspection frequency for permitted sources. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	In March 2008, Maricopa County adopted Rule 280 revisions in regard to inspection frequency. In 2008, Maricopa County hired 55 staff: 32 inspectors, 13 administrative and permit technicians, 6 inspector supervisors, and 4 administrative supervisors for the Dust Control Compliance Program. Some staff reductions/reassignments occurred in 2009 due to the economic downturn and reduced workload. As of December 31, 2009, the MCAQD had 55 staff in the Dust Control Section (44 inspectors, 4 administrative, 6 supervisors, 1 manager).	County

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
9. Increase consistent inspection frequency for permitted sources - CONTINUED.	In October 2009, the MCAQD began implementation of a universal inspector program. From October 2009 through December 2010, the Applied Science Division (includes Dust Control Section and Stationary Source Section inspectors) implemented the Universal Inspector training program. All inspectors will be cross trained to conduct inspections on all source types. Therefore, MCAQD will no longer have staff dedicated to inspect only one specific source type such as dust or non-title V sources. By the end of 2009, 8 inspectors had been through the initial cross training. Maricopa County issued 7,160 permits for dust control sources (Rule 310). Maricopa County conducted 28,363 inspections of dust control permitted sources (Rule 310). In 2008, Maricopa County hired 5 inspectors for nonmetallic mineral processing facilities (Rule 316). These 5 inspector positions are included in the 32 inspector positions mentioned above. As of December 31, 2009, 37 of the total 44 inspectors in the Dust Control Section have been initially trained in conducting Rule 316 inspections. Maricopa County issued 247 permits for nonmetallic processing facilities (Rule 316). Maricopa County conducted 1,784 inspections of nonmetallic mineral processing facilities (Rule 316).	
10. Increase number of proactive consistent inspections in areas of highest PM-10 emissions densities. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Maricopa County conducted monitor surveillance on 13 days.	County

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
11. Notify violators more rapidly to promote immediate compliance.	Maricopa County Air Quality Department (MCAQD) continued the standard practice of dust compliance inspectors who observe potential violations making reasonable efforts to inform a person on-site or call the permit holder so that measures can be taken to prevent, reduce, or mitigate dust generation before a violation occurs.	County
12. Provide timely notification regarding high pollution days.	Maricopa County sent 2,037,301 text alerts and email messages to subscribers for high pollution advisories (HPAs) and health watches. Maricopa County posted news articles, related to particulate matter HPAs and health watches, on its website. Maricopa County website visits in 2008: 20,727 unique visitors; average pages visited = 3.24; average time spent = 2.22 minutes. Maricopa County website visits in 2009: 22,597 unique visitors; average pages visited = 2.22; average time spent = 1.18 minutes. In 2009, Maricopa County distributed 16 news releases regarding HPAs and health watches.	County
13. Develop a program for subcontractors.	Subcontractor program required by SB 1552. (A.R.S. § 49-474.06 A.) In March 2008, Maricopa County adopted Rule 200 and Rule 280 revisions in regard to the subcontractor registration program. In 2008, Maricopa County hired 4 permit technicians to administer the subcontractor registration program. These positions are included in the 55 positions noted in Committed Measure #9. In 2009, the subcontractor registration program was administered part time by two Permit Technician staff working in the Permitting Division of the Air Quality Department. Maricopa County registered 5,781 subcontractors.	County

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
14. Reduce dragout and trackout emissions from nonpermitted sources. Quantified for numeric credit as a contingency measure.	In March 2008, Maricopa County adopted Rule 310.01 revisions in regard to dragout and trackout. Maricopa County added the requirement to install a trackout control device to sections covering unpaved parking lots and off-site hauling of bulk materials by livestock operations. Also, in Rule 310.01, Maricopa County added the definitions of "trackout/carryout" and "trackout control device".	County
15. Cover loads/haul trucks in Apache Junction. Quantified for numeric credit as a contingency measure.	In early 2008, the City of Apache Junction adopted an ordinance to cover loads/haul trucks.	City of Apache Junction
16. Require dust coordinators at earthmoving sites of 5-50 acres. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Dust coordinator required by SB 1552. (A.R.S. § 49-474.05 A. & E.) In March 2008, Maricopa County adopted Rule 310 and Rule 316 revisions in regard to dust coordinators.	County
36. Require barriers in addition to Rule 310 stabilization requirements for construction where all activity has ceased, except for sites in compliance with storm water permits. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	In March 2008, Maricopa County adopted Rule 310 revisions in regard to barriers. Maricopa County revised long-term stabilization control measures to reduce the period of inactivity to 30 days and added the requirement for barriers, if water is chosen as the control option.	County

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
37. Reduce the tolerance of trackout to 25 feet before immediate cleanup is required for construction sites be placed in Maricopa County Rule 310. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	In March 2008, Maricopa County adopted Rule 310 revisions in regard to the trackout requirements by reducing the toleration of trackout to 25 feet before cleanup is required.	County
38. No visible emissions across the property line be placed in Maricopa County Rule 310 and 310.01, and in local ordinances for nonpermitted sources appropriate. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	In March 2008, Maricopa County adopted Rule 310 and Rule 310.01 revisions in regard to visible emissions. One local government adopted an ordinance that restricts visible emissions from crossing property lines.	County, local governments
49. Allow Peace Officer enforcement of load covering.	SB 1552 amended existing state law to require that for the purpose of highway safety or air pollution prevention, a person shall not drive or move a vehicle on a highway unless the vehicle is constructed or loaded in a manner to prevent any of its load from dropping, sifting, leaking or otherwise escaping from the vehicle. (A.R.S. § 28-1098 A. - C.)	State

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
Industry		
17. Fully implement Rule 316. Quantified for numeric credit as a contingency measure.	The Rule 316 litigation was settled on June 20, 2007. As a result, the June 8, 2005, version of Rule 316 was in place as of the settlement date. Maricopa County is enforcing the provision of Rule 316 for nonmetallic mineral processing sources of PM-10. In 2009, 37 of the 44 Dust Control Section inspectors had been fully trained to inspect Rule 316 sites.	County
39. Modeling cumulative impacts - The measure would need further definition by Maricopa County and the Arizona Department of Environmental Quality and be subject to input to ensure that unintended consequences for temporary uses are not created.	A draft Cumulative Modeling Policy was developed by the Maricopa County Air Quality Department and the Arizona Department of Environmental Quality in calendar year 2009. The draft policy was distributed for public review in February 2010. It is important to note that no emission reduction credit was quantified for this measure in the Five Percent Plan.	State, County

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
Nonroad Activities		
18. Ban or discourage use of leaf blowers on high pollution advisory days.	Program to ban or discourage leaf blowers required by SB 1552. (A.R.S. § 9-500.04 A.5.(a). and A.R.S. § 11-877 A.1.) Maricopa County and 22 local governments have implemented programs that restrict or prohibit the use of leaf blowers on high pollution advisory days.	County, local governments
19. Reduce off-road vehicle use in areas with high off-road vehicle activity impoundment or confiscation of vehicles for repeat violations. Quantified for numeric credit as a contingency measure.	Ordinance to prohibit off-road vehicle use required by SB 1552. (A.R.S. § 9-500.27 A.- E. and A.R.S. § 49-457.03) In February 2008, Maricopa County adopted the P-28 Off-Road Vehicle Use in Unincorporated Areas of Maricopa County Ordinance. This ordinance was developed to address dust concerns raised by vehicle use and trespass on private and public property. It is intended to complement Maricopa County Rule 310.01, which focuses on property owners' responsibility to maintain soil stabilization. In 2009, the Maricopa County Ordinance P-28 underwent revisions to its penalty structure in order to provide more flexibility in adjudicating cases. Revisions to the Ordinance P-28 were adopted in January 2011. While the ordinance was undergoing revisions, the County developed a common knowledge base on frequent complaint areas and their access points, enforcement history, ongoing outreach efforts by police departments, Justice Court procedures, and database needs. In addition to responding to complainants' concerns, MCAQD has organized a group of inspectors to gather this type of information and begin making direct contacts in the field. MCAQD plans to identify heavy use areas and research parcel ownership, and then contact property owners for installation of control measures, "no trespass" signs, and obtain authority to cite trespassers without land owner's presence. This is currently being done in conjunction with our existing vacant lot inspection program.	County, State, local governments, private sector

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
19. Reduce off-road vehicle use in areas with high off-road vehicle activity impoundment or confiscation of vehicles for repeat violations - CONTINUED.	In 2009, MCAQD initiated efforts to develop a partnership with law enforcement agencies, not only to address the inspectors' limited authority on these contacts, but also to provide a consistent enforcement message to the public. Law enforcement agencies (Phoenix Police Department, Peoria Police Department, Maricopa County Flood Control District, and Maricopa County Sheriff's Office) have begun using this ordinance to initiate field contacts. MCAQD inspectors distribute off-road vehicle fact sheets in the field informally when contacts are made. County inspectors have also attended at least one off-road vehicle enthusiast event, partnering with Arizona State Trust Land staff to field questions from the public. County inspectors attended the AZGFD Expo in March 2009 and distributed off-road vehicle fact sheets. MCAQD indicated that high-use areas are generally located outside of city limits or on State Trust property; local police departments and Maricopa County Sheriff's Office (MCSO) have begun responding to some of these areas, supported by available funds from the Off-Highway Vehicle (OHV) Decal program (registration fees). MCAQD also indicated that funds from the OHV Decal program were being used by: (1) Maricopa Flood Control District to hire a deputy to enforce Maricopa County's P-28 Off-Road Vehicle Use in Unincorporated Areas of Maricopa County Ordinance, and (2) Arizona Game and Fish Department to hire two staff and train two more staff for enforcement of the P-28 ordinance. 23 local governments have new or existing ordinances to prevent or discourage off-road vehicle use and restrict access to areas with high off-road vehicle use. ADEQ distributed 3,900 hard copies of "Nature Rules" map to OHV dealers and posted materials on the Arizona State Parks website (received 11,660 downloads/visits), Arizona State Land Department's website (received 6,251 visits), ADEQ's website (received 5,430 downloads/visits), and the Arizona Game and Fish Department website.	

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
19. Reduce off-road vehicle use in areas with high off-road vehicle activity impoundment or confiscation of vehicles for repeat violations - CONTINUED.	Maricopa County, 17 local governments, and ADEQ, have conducted public education and outreach to discourage off-road vehicle use in the PM-10 nonattainment area. The Tonto National Forest included a segment on dust control education in its OHV training program. 9 jurisdictions with high off-road activity have restricted vehicle use by installing signs and/or physical barriers. One local government: (1) Stabilized 57 acres with hydroseed and (2) Posted “No Trespassing” signs, installed berms, and/or stabilized 137 acres of vacant area, including two washes, with hydroseed. Two local governments fenced 16.25 acres to prevent vehicle access. In 2008, Arizona State Parks installed one kiosk and two access gates; replaced 1 mile of fencing; provided outreach at 77 official events; and provided 3,100 public information contacts. In 2008, Arizona Game and Fish Department issued 27 citations for violations of the OHV law. In 2008, the Arizona State Land Department (ASLD) spent $159,203 to implement the following control measures: installation of 1,037 linear feet of concrete barriers; installation of 7,352 linear feet of chain link fence; purchase of 300 “No Trespassing” signs; purchase and installation of two 10-foot gates; posting of 38 “Area Closed by Commissioners Orders” signs; posting of 2 “Closed for Soil Stabilization" signs; posting of 14 “No Trespassing” signs; and increased the presence of law enforcement. In 2009, ASLD posted 53 “No Trespassing” signs and 30 area closure signs. ASLD also installed 3,770 linear feet of chain link fence around closed areas. In 2009, the U.S. Forest Service installed three gates to limit unauthorized OHV access in the Tonto National Forest.	

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
20. Provide incentives to retrofit nonroad diesel engines and encourage early replacements with advanced technologies.	In 2007, the Arizona Legislature adopted Senate Bill 1552 which included a voluntary diesel equipment retrofit program. (A.R.S. § 49-474.07 A. - D.) According to A.R.S. § 49-474.07 A., a County with a population of more than four hundred thousand persons shall operate and administer a voluntary diesel emissions retrofit program in the county for the purpose of reducing particulate emissions from diesel equipment. The program shall provide for real and quantifiable emissions reductions based on actual emissions reductions by an amount greater than that already required by applicable law, rule, permit or order and computed based on the percentage emissions reductions from the testing of the diesel retrofit equipment prescribed in Subsection C as applied to the rated emissions of the engine and using the standard operating hours of the equipment. Maricopa County Air Quality Department (MCAQD) has indicated that A.R.S. § 49-474.07 did not establish a fund to provide incentives to retrofit nonroad engines, but rather established provisions applicable to permitted stationary source diesel powered equipment. Under the provisions of ARS 49-474.07, the permittee may retain one-half of the particulate emissions reductions from retrofit of diesel equipment operated at the permitted site for purposes of receiving a permit modification or a new permit provision that allows for extended hours of operation for the permitted equipment. The provisions of ARS § 49-747.07 are undergoing legal review and analysis during the current statewide new source review rulemaking, and if implemented, will require revision of MCAQD's stationary source permitting program and applicable rules. However, this review and analysis has no bearing on the Five Percent Plan or on Committed Measure #20. It is important to note that no emission reduction credit was quantified for this measure in the Five Percent Plan.	State

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
21. Ban leaf blowers from blowing debris into streets. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Ordinance required by SB 1552. (A.R.S. § 9-500.04 A.5.(b)., A.R.S. § 11-877 A.2., and A.R.S. § 49-457.01 B.) In February 2008, Maricopa County adopted the P-25 Leaf Blower Restriction Ordinance to ban leaf blowers from blowing debris into streets in Maricopa County. In 2009, 17 of the 44 MCAQD's Dust Control Section Inspectors were trained to enforce the leaf blower ordinance. In addition, 23 local governments have new or existing ordinances to ban leaf blowers from blowing debris into streets.	County, local governments
22. Implement a leaf blower outreach program. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Leaf blower outreach program required by SB 1552. (A.R.S. § 49-457.01 D., E. and F.) ADEQ produced and distributed 8,000 hard copies of leaf blower fact sheets to six retail leaf blower outlets. In addition, retailers and equipment rental businesses throughout Area A were provided with electronic copies of ADEQ's 'Pointers on Operating a Leaf Blower' with the expectation they would print and distribute the handout at points of sale and rental. ADEQ distributed warning signs for posting on HPA days to leaf blower rental outlets. ADEQ authored an article about the unsafe use of leaf blowers that was published in the Arizona Landscape Contractors Association's (ALCA) Influence magazine. A public-awareness advertisement was published in the ALCA Influence and Southwest Horticulture magazines.	State, private sector

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
22. Implement a leaf blower outreach program - CONTINUED.	ADEQ's leaf blower outreach materials, which were posted on the agency's website (www.azdeq.gov/environ/air/prevent/index.html), received a total of 14,980 visits. ADEQ adapted and posted a leaf blower training manual, provided by the Outdoor Power Equipment Institute, on ADEQ's website. Those materials received 2,884 downloads/visits. A number of cities and towns also conduct leaf blower outreach as part of the efforts reported in Committed Measure #1.	
23. Ban ATV use on high pollution days. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	All terrain vehicle (ATV) ban on high pollution days required by SB 1552. (A.R.S. § 49-457.03) ADEQ distributed High Pollution Advisory (HPA) forecasts to subscribers and to the U.S. Forest Service, U.S. Bureau of Land Management, Arizona State Land Department, Arizona Game and Fish Department, Arizona State Parks Department, and the Maricopa County Air Quality Department. ADEQ also posted HPA forecasts and warnings on the agency's website and works with television broadcast stations to communicate HPA notices to the public. On February 27, 2009, Fox Motorsports filmed a half-hour program focused on off-highway vehicle (OHV) use and the 5% Plan requirements on High Pollution Advisory Days. Representatives of ADEQ, MCAQD, Arizona Game and Fish, Arizona State Lands, U.S. Bureau of Land Management and the Arizona Rock Products Association were filmed near the Hassayampa River for this program. Broadcast date has not yet been scheduled. ADEQ: “Law enforcement officers who are authorized under Title 28 will enforce this requirement. On Federal Lands, the Federal agency with jurisdiction enforces it”. In 2009, the police departments of Peoria and Phoenix issued a total of 132 warnings and 35 citations for violations of the OHV ban on PM-10 HPA days.	State

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
45. Prohibit use of leaf blowers on unstabilized surfaces. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Ordinance required by SB 1552. (A.R.S. § 11-877 A.3. and A.R.S. § 49-457.01 C.) In February 2008, Maricopa County adopted Ordinance P-25 to prohibit use of leaf blowers on unstabilized surfaces. In 2009, 17 of 44 MCAQD's Dust Control Section inspectors were trained to enforce the leaf blower ordinance. In addition, a local government, although not required, adopted this ordinance.	County
46. Outreach to off-road vehicle purchasers.	The Arizona State Parks Department has convened a Dealer Pilot Program Committee to develop printed dust abatement educational materials for off-road vehicle renters/purchasers. ADEQ participates in these committee meetings.	State
Paved Roads		
24. Sweep street with PM-10 certified street sweepers. Quantified for numeric credit as a contingency measure.	SB 1552 requires that new or renewed contracts for street sweeping on city streets must be conducted with PM-10 certified street sweepers. (A.R.S. § 9-500.04 A.9. and A.R.S. § 49-474.01 A.8.) The three local governments, that issue street sweeping contracts, require that their contractors use PM-10 certified street sweepers. Effective February 20, 2010, ADOT's contract for sweeping State Highways requires use of PM-10 certified street sweepers. Maricopa County uses its PM-10 certified street sweeping contract to routinely sweep 700 miles (1,400 curb miles) of streets. Local governments purchased 19 PM-10 certified street sweepers with CMAQ funds and 4 PM-10 certified street sweepers with other funds.	State, County, local governments

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
52. Coordinate public transit services with Pinal County.	ADOT has coordinated public transit services with Pinal County. See the following websites for information regarding this coordination: (1) Arizona Rural Transit Needs Study Final Report - May 2008 (http://www.azdot.gov/mpd/Community_Grant_Services/PDF/Rural_Transit_Needs_Study_Final_Report_May_2008.pdf) (2) Maricopa 5311 information (http://www.azdot.gov/MPD/Community_Grant_Services/Maricopa.asp) Total coordinated public transit funding from all sources in 2009 for the following entities in Pinal County: • Coolidge - $506,578 • Maricopa - $788,405 Total coordinated public transit funding from all sources in 2009 for the following areas outside of the PM-10 nonattainment area within Maricopa County: • Salt River Pima-Maricopa Indian Community - $380,361 • RPTA Wickenburg Rte - $315,645	State
53. Repave or overlay paved roads with rubberized asphalt. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	ADOT repaved 12.5 miles of State Highways with rubberized asphalt pavement (7.29 miles more than the commitment).	State

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
Unpaved Parking Lots		
25. Pave or stabilize existing unpaved parking lots. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Ordinance required by SB 1552. (A.R.S. § 9-500.04 A.6. & A.7. and A.R.S. § 49-474.01 A.5. & A.6.) Maricopa County revised parking lot provisions in Rule 310.01 (Fugitive Dust from Non-traditional Sources of Fugitive Dust) to synchronize with SB 1552 requirements. These rule revisions were adopted in March 2008. 23 local governments have new or existing ordinances to require paving or stabilizing existing unpaved parking lots. 254 Maricopa County and local government staff are enforcing ordinances to require paving or stabilizing existing unpaved parking lots. All staff in Maricopa County's Dust Control Section have been trained on inspecting unpaved parking lots. Currently, inspectors conduct monthly "Sweeps". A sweep is a one-day focused effort where all 44 Dust Control Section inspectors conduct inspections of vacant lots and unpaved parking lots in Maricopa County. In 2009, 16 sweeps were conducted yielding 536 unpaved parking lot inspections and 12,013 inspections of vacant lots. In 2008, 186 unpaved parking lot inspections and 5,005 vacant lot inspections were conducted. A total of 722 unpaved parking lot inspections and 17,018 vacant lot inspections were conducted during 2008 and 2009. Three local governments paved 13.57 acres of unpaved parking lots. One local government: • Stabilized 9.40 acres of unpaved parking lots with turf; and • Stabilized 10.65 acres of unpaved parking lots with a polymer stabilizer. One local government paved/stabilized eight existing town-owned unpaved parking lots with a total surface area of 7.81 acres.	County, local governments

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
Unpaved Roads, Alleys, and Shoulders		
26. Pave or stabilize existing public dirt roads and alleys. Quantified for numeric credit as a contingency measure.	Plan requirements for paving or stabilizing public dirt roads and alleys were amended by SB 1552. (A.R.S. § 9-500.04 A.3. and A.R.S. § 49-474.01 A.4.) In March 2008, Maricopa County adopted Rule 310.01 revisions in regard to unpaved roads and alleys. Maricopa County and 20 local governments have developed or updated plans to pave or stabilize targeted public dirt roads and alleys. Maricopa County and local governments have implemented this measure for: <u>Public Dirt Roads</u> By paving 32.38 miles of public dirt roads (5.18 miles more than the commitments) and stabilizing 40.76 miles of public dirt roads (11.27 miles more than the commitments), with a total of 73.14 miles of public dirt roads paved or stabilized (16.45 miles more than the commitments). <u>Dirt Alleys</u> By paving 71.77 miles of dirt alleys (8.33 miles more than the commitments) and stabilizing 273.97 miles of dirt alleys (157.62 miles more than the commitments) with a total of 345.74 miles of dirt alleys paved or stabilized (165.95 miles more than the commitments). One local government improved 9 intersections by paving turn lanes and/or shoulders.	County, local governments
27. Limit speeds to 15 miles per hour on high traffic dirt roads. Quantified for numeric credit as a contingency measure.	Maricopa County and 5 local governments have posted 56.91 miles of dirt roads and alleys with 15 mph (or less) speed limit signs (28.85 miles more than the commitments). Several jurisdictions report that all high traffic dirt roads have been paved.	County, local governments

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
28. Pave or stabilize unpaved shoulders. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Plan requirements to pave or stabilize unpaved shoulders were amended by SB 1552. (A.R.S. § 9-500.04 A.3. and A.R.S. § 49-474.01 A.4.) Maricopa County and 20 local governments have developed or updated plans to pave or stabilize unpaved shoulders on targeted arterials. ADOT, Maricopa County, and local governments implemented this measure by paving 271.31 curb miles of dirt shoulders (200.31 curb miles more than the commitments) and stabilizing 403.98 curb miles of dirt shoulders (218.23 curb miles more than the commitments). ADOT added 94.26 curb miles of curb and gutter (Note: These 94.26 curb miles are included in the paving of 271.31 curb miles of dirt shoulders.) One local government improved 9 intersections by paving turn lanes and/or shoulders.	County, State, local governments
43. MAG allocate $5 million in FY 2007 MAG federal funds matched on a 50/50 basis by MAG member agencies for paving dirt roads and shoulder projects and that these projects be immediately submitted to MAG for consideration at the July meetings of the MAG Management Committee and Regional Council for an amendment to the Transportation Improvement Program. These funds would be on a nonsupplanting basis for new projects. Quantified for numeric credit as a contingency measure.	$5 million is programmed in the FY 2007-2011 MAG Transportation Improvement Program to fund 9 projects that pave dirt roads and shoulders in the PM-10 nonattainment area.	MAG, local governments
51. Conduct an inventory of dirt roads, alleys and estimated traffic counts.	The City of El Mirage developed a preliminary inventory of unpaved roads in its jurisdiction. In addition, other local governments, although not required, developed preliminary inventories of their unpaved roads.	local government

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
Unpaved Surfaces		
29. Create a fund for paving and stabilizing in high pollution areas.	Eleven of Maricopa County's settlement agreements for air quality violations included supplemental environmental projects.	County
40. MAG member agencies reexamine existing ordinances to ensure that nonpermitted sources, such as unpaved parking, unpaved staging areas, unpaved roads, unpaved shoulders, vacant lots and open areas, receive priority attention.	One local government re-examined existing ordinances to ensure non-permitted sources received priority attention.	MAG member agencies
Vacant Lots		
30. Strengthen and increase enforcement of 310.01 for vacant lots. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Maricopa County hired a supervisor to oversee the vacant lot program. This staff position was also included in the data provided for Committed Measures #4 and #9. All 44 inspectors in MCAQD's Dust Control Section have been trained to inspect vacant lots. Currently, inspectors conduct monthly "Sweeps". A sweep is a one-day focused effort where all 44 Dust Control Section inspectors conduct inspections of vacant lots and unpaved parking lots throughout Maricopa County. Maricopa County conducted 17,018 vacant lot inspections.	County

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
31. Restrict vehicular use and parking on vacant lots. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Ordinance required by SB 1552. (A.R.S. § 9-500.04 A.8. and A.R.S. § 49-474.01 A.7.) In February 2008, Maricopa County adopted the P-27 Vehicle Parking and Use on Unstabilized Vacant Lots Ordinance. Currently, Ordinance P-27 is undergoing revisions to its penalty structure, which is intended to provide more flexibility in adjudicating cases. In addition, 23 local governments have new or existing ordinances to prohibit vehicle trespass on vacant land.	County, local governments
32. Enhanced enforcement of trespass ordinances and codes. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	In February 2008, Maricopa County adopted the P-28 Off-Road Vehicle Use in Unincorporated Areas of Maricopa County and the P-27 Vehicle Parking and Use on Unstabilized Vacant Lots ordinances. Currently, both ordinances are undergoing revisions to their penalty structure, which is intended to provide more flexibility in adjudicating cases. Maricopa County will combine the enforcement of the P-27 Vehicle Parking and Use Ordinance with the Vacant Lot Sweep Program. Currently, field staff continue outreach (distribution of fact sheets on parked vehicles) while the penalty structure of the ordinance is being updated. The details of the enforcement component are also being integrated into Maricopa County's "Accela" software, which will allow for a smoother transition of the program. In addition, 18 local governments report increased enforcement of vehicle trespass ordinances and codes for vacant lots.	County, local governments
33. Ability to assess liens on parcels to cover the costs of stabilizing them (Recover costs of stabilizing vacant lots). Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	SB 1552 requires rule revisions for stabilization of disturbed surfaces of vacant lots. (A.R.S. § 49-474.01 A.11.) Maricopa County adopted Rule 310.01 revisions in March 2008 to incorporate A.R.S. § 49-474.01 A.11. to allow the County to recover stabilization costs through the penalty process.	County

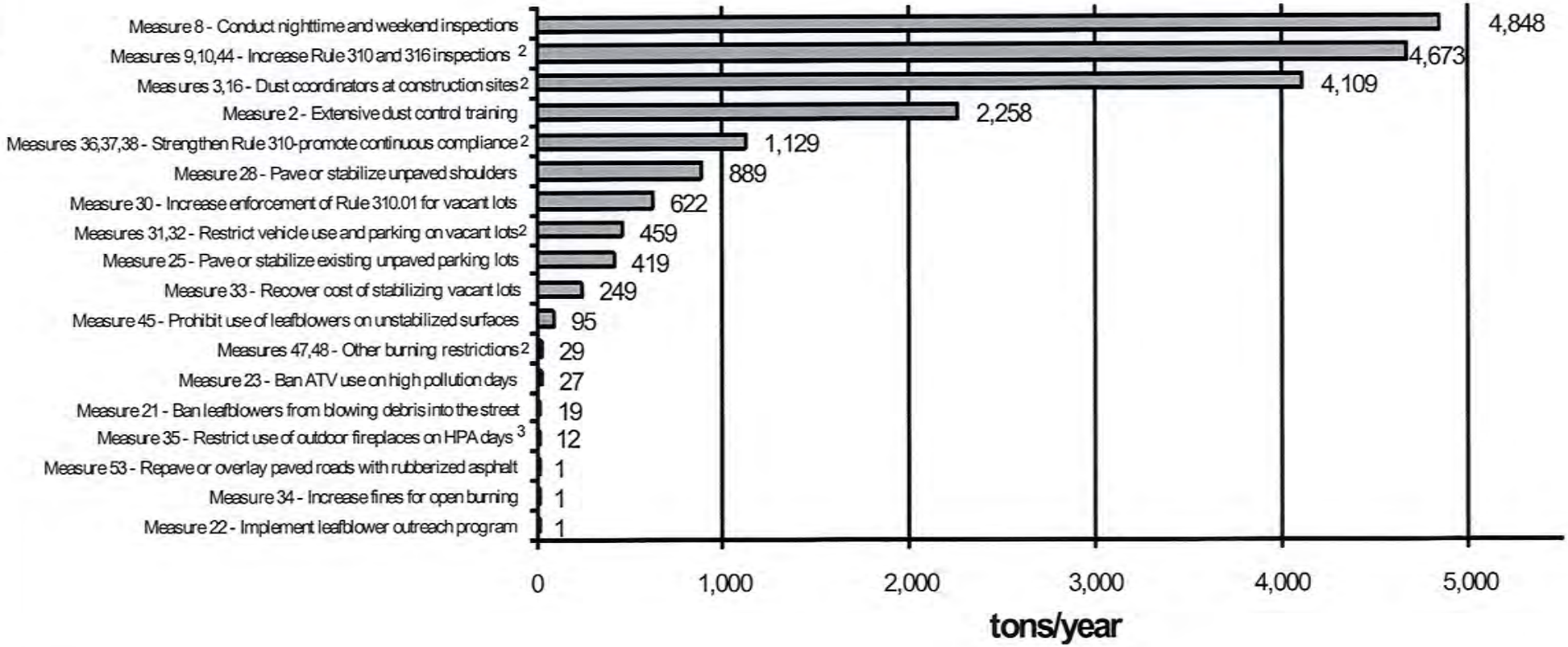
COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
Open Burning / Woodburning		
34. Increase fines for open burning. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	SB 1552 requires increasing the fines for unlawful open burning. (A.R.S. § 11-871 D.4. and A.R.S. § 49-501 G.) In March 2008, Maricopa County revised the P-26 Residential Woodburning Restriction Ordinance to increase the civil penalty to $250 for the fourth or any subsequent violation of the ordinance in accordance with Senate Bill 1552. Maricopa County responded to 365 illegal open burning complaints and 77 wrongful fireplace use complaints which resulted in 19 documented violations of Rule 314 (Open Outdoor Fires and Indoor Fireplaces at Commercial and Institutional Establishments) and 26 warnings for violations of Ordinance P-26 (Residential Woodburning Restriction Ordinance).	State, County
35. Restrict use of outdoor fireplaces and pits and ambience fireplaces in the hospitality industry. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	SB 1552 requires Maricopa County to prohibit use of wood-burning chimineas, outdoor fire pits, and similar outdoor fires on County No-Burn Days. (A.R.S. § 49-501 F.) In March 2008, Maricopa County adopted revisions to P-26 (Residential Woodburning Restriction Ordinance) and Rule 314 (Open Outdoor Fires and Indoor Fireplaces at Commercial and Institutional Establishments) to restrict use of outdoor fireplaces and pits and ambience fireplaces in the hospitality industry.	State, County

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
47. **Ban open burning during the ozone season.** Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Open burning ban from May 1 through September 30 each year required by SB 1552. (A.R.S. § 49-501 A.2.) In March 2008, Maricopa County implemented an open burning ban during the ozone season by adding these requirements to Rule 314 (Open Outdoor Fires and Indoor Fireplaces at Commercial and Institutional Establishments) and to P-26 (Residential Woodburning Restriction Ordinance).	County
48. Require residential woodburning ordinances to include no burn restrictions on high pollution advisory days. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Revision of County ordinance required by SB 1552. (A.R.S. § 11-871 B.) The "no burn restrictions on HPA days" was already a requirement in Maricopa County's Residential Woodburning Restriction ordinance (P-26 ordinance). Note: Maricopa County revisions to the Residential Woodburning Ordinance, adopted in March 2008, pertained to Committed Measure #35. See Committed Measure #34 for data on complaints received by the County in regard to open burning and wrongful fireplace use.	County

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
Agriculture		
41. Forward to the Governor's Agricultural Best Management Practices Committee that cessation of tilling be required on high wind days and that agricultural best management practices be required in existing Area A.	Agricultural Best Management Practices required in Area A by SB 1552. (A.R.S. § 49-457 H. & N.6. and A.R.S. § 49-542 Sec. 20.) On September 25, 2007, the Governor's Agricultural Best Management Practices (BMP) Committee revised its rule to double the number of BMPs that farmers must implement, added 5 BMP choices (including cessation of tilling on High Pollution Advisory Days), and expanded the area for BMPs. Arizona State Rules 18-2-610 and 611 were revised, effective November 14, 2007, to comply with Senate Bill (SB) 1552. The Legislature adopted a requirement in SB 1552 that expanded the regulated area for Agricultural BMPs to include the portion of Area A in Maricopa County and increased the number of required Agricultural BMPs from one to two from each category by December 31, 2007.	State
42. The Arizona State Legislature provide funding to the Arizona Department of Environmental Quality for four agriculture dust compliance officers for a total of five inspectors.	ADEQ indicated that expenditure authority for these four positions is no longer available to ADEQ.	State
50. Require two agricultural best management practices. Quantified for numeric credit as a contingency measure.	Required by SB 1552. (A.R.S. § 49-457 H. & N.6. and A.R.S. § 49-542 Sec. 20.) Arizona State Rules 18-2-610 and 611 were revised, effective November 14, 2007, to comply with Senate Bill (SB) 1552. The Legislature adopted a requirement in SB 1552 that expanded the regulated area for Agricultural BMPs to include the portion of Area A in Maricopa County and increased the number of required Agricultural BMPs from one to two from each category by December 31, 2007.	State

COMMITTED MEASURE IN THE MAG 2007 FIVE PERCENT PLAN FOR PM-10	2008 and 2009 IMPLEMENTATION STATUS	IMPLEMENTING ENTITY
All Sources		
44. Maricopa County should increase consistent enforcement in areas where PM-10 violations continue to occur, along with efforts throughout the region. When an area continually experiences higher PM-10 concentrations than other areas, increased enforcement in areas experiencing high monitor readings is needed to protect public health. Quantified for numeric credit to meet the five percent per year target and demonstrate attainment.	Maricopa County has increased consistent enforcement in areas where PM-10 violations continue to occur. In March 2008, Maricopa County revised Rule 280 (Fees) to cover increased staffing levels for the MCAQD as a result of Maricopa County's Five Percent Plan commitments. In 2009, the MCAQD Dust Control Section implemented the "Monitor Project". The focus of the Monitor Project was to concentrate inspectors' efforts within a 2-mile radius of several MCAQD monitoring stations (W. 43rd Ave., Durango, South Phoenix, Higley, Buckeye and Zuni Hills). Inspectors conducted inspections of all permitted sites within the 2-mile radius as well as monitored other dust generating activity. The frequency of inspections differed per monitoring station and varied from 3 inspections per week to one inspection per week.	County

Figure 1
Reductions in 2010 for Committed Control Measures in the Five Percent Plan for PM-10[1]

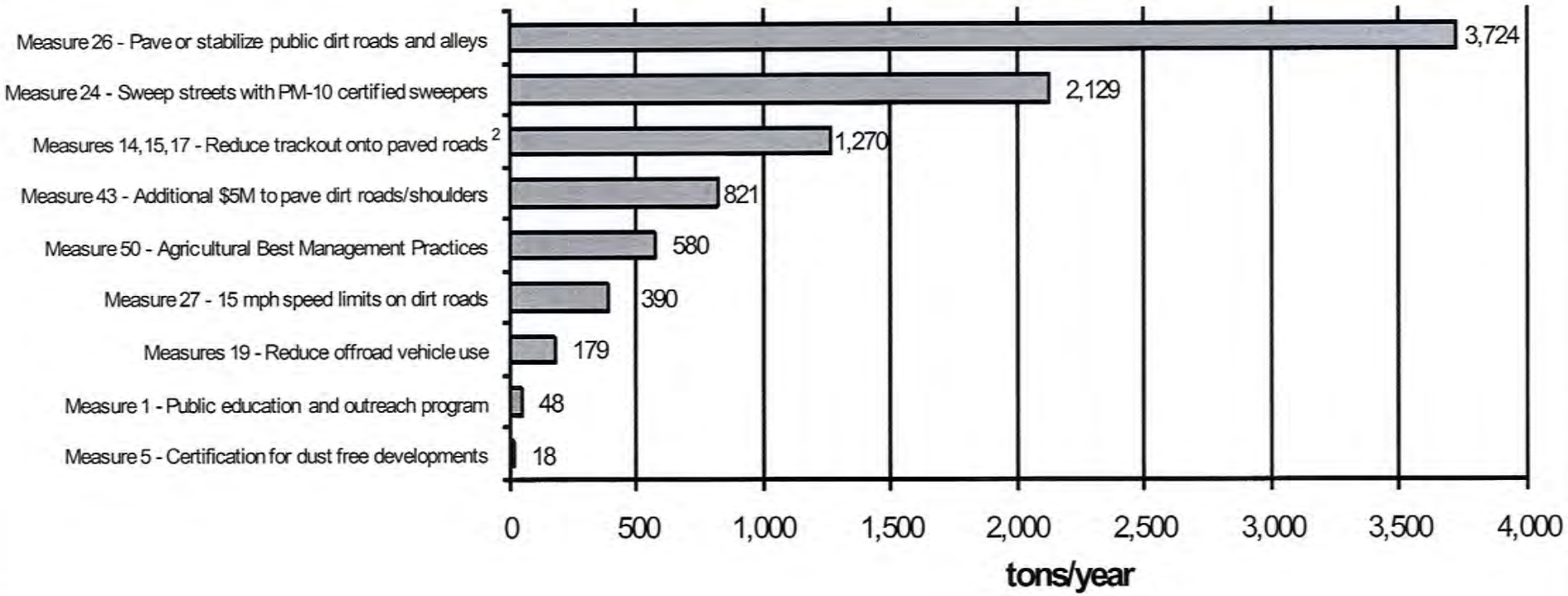


[1]Committed measures quantified for numeric credit to meet the five percent per year target and demonstrate attainment.

[2]In these cases, the emission reductions represent the combined impact of multiple, reinforcing measures.

[3]HPA days = high pollution advisory days

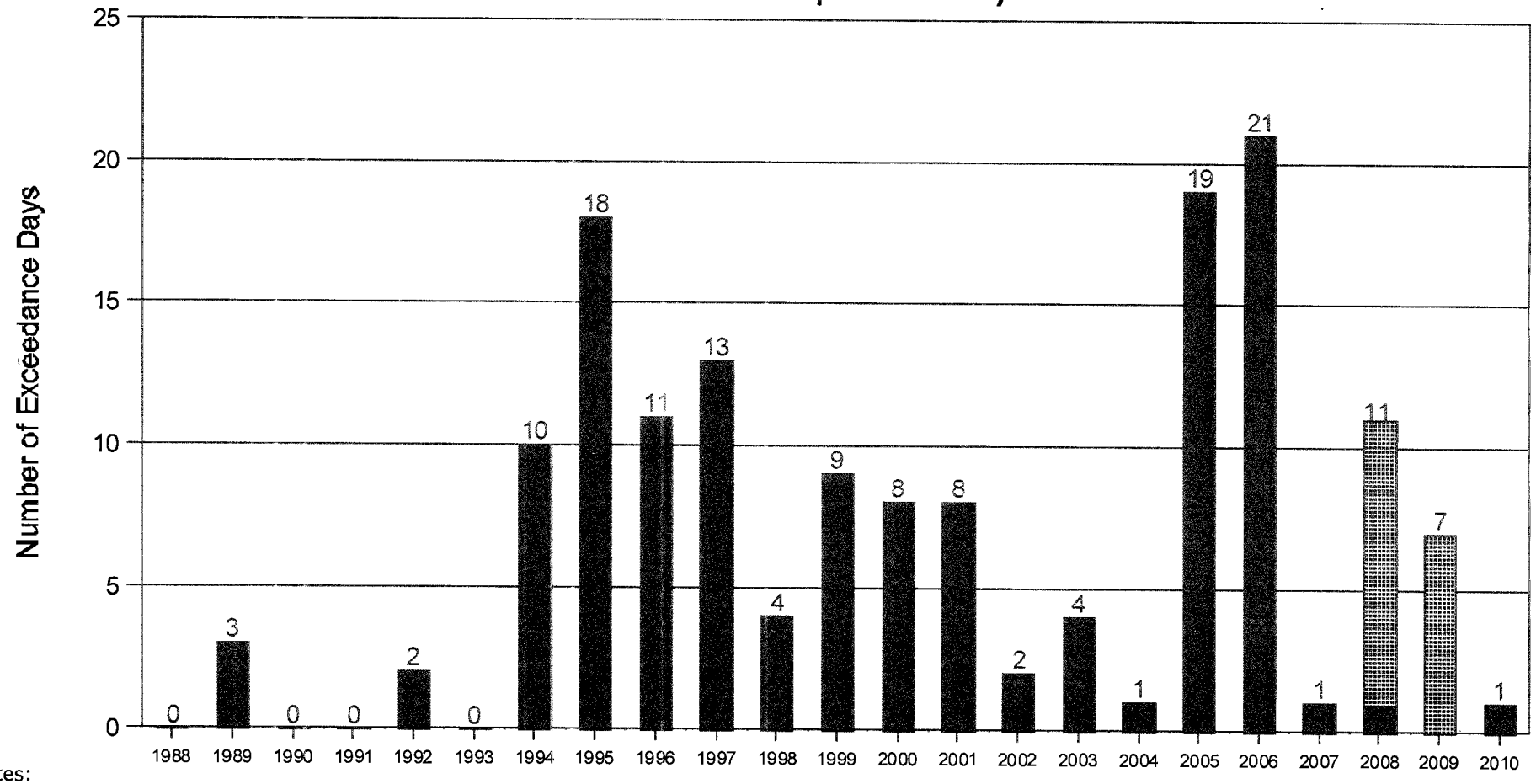
Figure 2
Reductions in 2010 for Contingency Measures in the Five Percent Plan for PM-10[1]



[1]Committed measures quantified for numeric credit as contingency measures.

[2]For "Reduce trackout onto paved roads," the emission reduction represents the combined impact of Measures 14,15 and 17.

Figure 3
PM-10 Monitoring Data
Days Exceeding the 24-Hour PM-10 Standard in Maricopa County



Notes:

1. The hatched areas represent exceedance days in 2008 and 2009 that ADEQ has indicated are exceptional/natural events, but have not been approved by EPA. ADEQ has documented 10 exceedance days in 2008 as exceptional/natural events; ADEQ has not yet documented the 7 exceedance days in 2009 as exceptional/natural events.
2. For 2010, ADEQ is currently evaluating the one exceedance day, at the Greenwood monitor, to determine if it was an exceptional/natural event.
3. Exceedance days that have been approved by EPA as exceptional/natural events have been removed from this chart.
4. Most of the exceedances before 2004 were recorded by filter-based monitors that measured PM-10 concentrations on every sixth day. Since 2004, the filter-based monitors that exceeded the PM-10 standard have been replaced with monitors that measure PM-10 concentrations every day.
5. The chart includes exceedance days at the Buckeye monitor which is outside the PM-10 nonattainment area.
6. The 2007 exceedance occurred at the Buckeye monitor and the 2008 exceedance, which was not flagged, occurred at the Durango Complex monitor.

ATTACHMENT

MAG 2007 FIVE PERCENT PLAN FOR PM-10 FOR THE MARICOPA COUNTY NONATTAINMENT AREA

EXECUTIVE SUMMARY

MAG 2007 FIVE PERCENT PLAN FOR PM-10 FOR THE MARICOPA COUNTY NONATTAINMENT AREA

EXECUTIVE SUMMARY

MAG 2007 FIVE PERCENT PLAN FOR PM-10
EXECUTIVE SUMMARY

Within the Maricopa County nonattainment area, the National Ambient Air Quality Standard has not yet been attained for PM-10 particulate pollution. The Maricopa Association of Governments was designated by the Governor of Arizona in 1978 and recertified by the Arizona Legislature in 1992 to serve as the Regional Air Quality Planning Agency to develop plans to address air pollution problems.

Based upon the 1990 Clean Air Act Amendments, the Maricopa County nonattainment area was initially classified as Moderate for PM-10 particulate pollution. However, on May 10, 1996, the nonattainment area was reclassified to Serious due to failure to attain the particulate standard by December 31, 1994. The Serious Area reclassification was effective on June 10, 1996.

The Revised MAG 1999 Serious Area Particulate Plan for PM-10 for the Maricopa County Nonattainment Area was submitted to the Environmental Protection Agency (EPA) in February 2000. On July 25, 2002, EPA published a notice of final approval for the plan. Collectively, the plan contained approximately seventy-seven committed control measures from the State and local governments. The plan demonstrated attainment of the PM-10 standard by December 31, 2006.

In order to be in attainment, the region needed three years of clean data at the monitors for 2004, 2005, and 2006. However, there were numerous exceedances of the 24-hour standard in 2005 and 2006. On June 6, 2007, EPA published a final notice with its findings that the Maricopa County nonattainment area had failed to attain the PM-10 standard by the federal deadline of December 31, 2006.

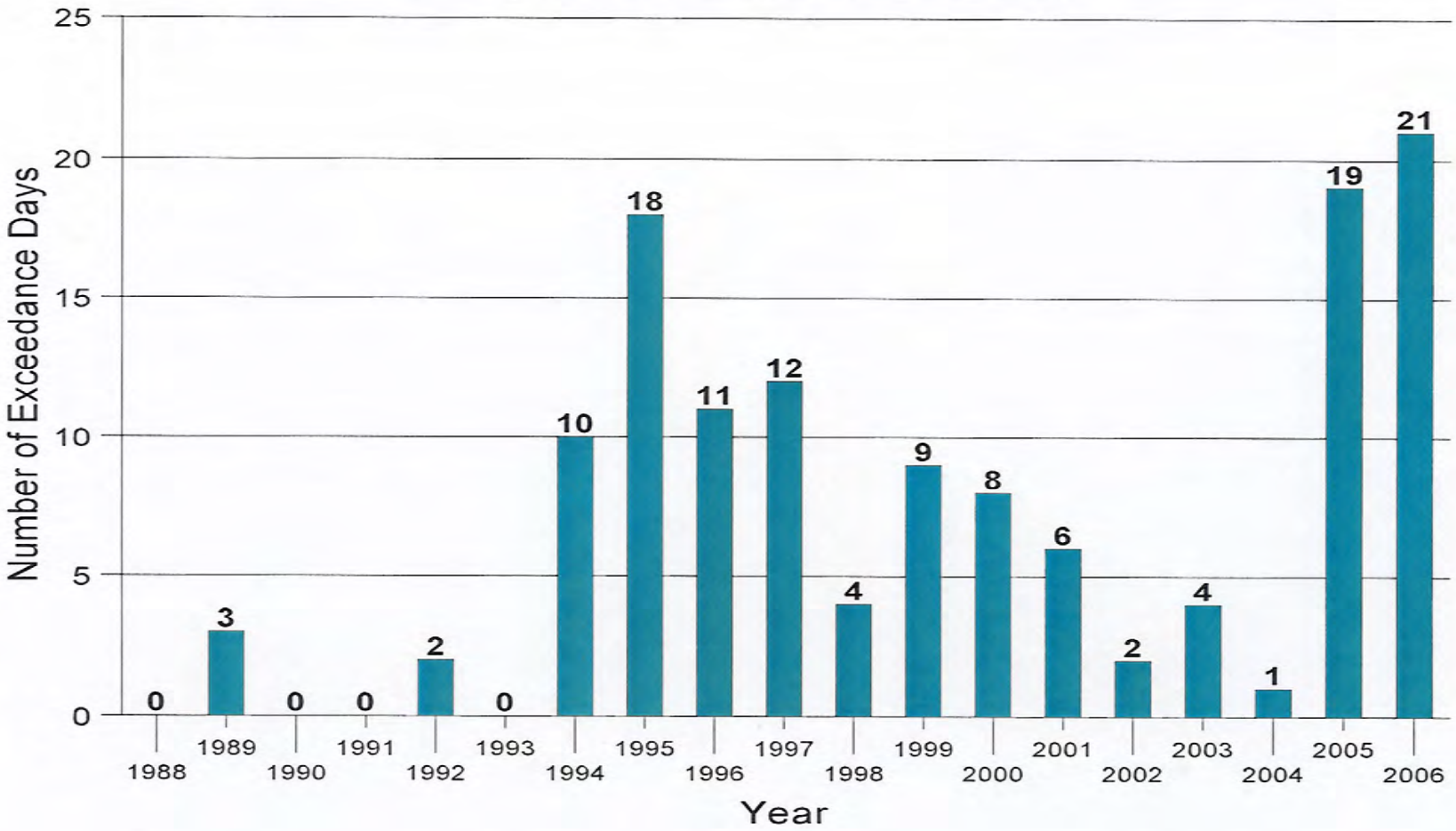
In accordance with Section 189 (d) of the Clean Air Act, the Five Percent Plan for PM-10 is due to the Environmental Protection Agency by December 31, 2007. The plan is required to reduce PM-10 emissions by at least five percent per year until the standard is attained as measured by the monitors. The Clean Air Act specifies that the plan must be based upon the most recent emissions inventory for the area and also include a modeling demonstration of attainment.

Particulate air pollution can occur throughout the year. The formation of PM-10 particulate pollution is dependent upon several factors. Among these factors are stagnant masses, severe temperature inversions in the winter, high winds in the summer, and fine, silty soils characteristic of desert locations. In the Maricopa County nonattainment area, particulate matter (PM-10) concentrations are elevated during various seasons of the year and under different weather conditions. The variability is due to the diverse composition of PM-10 and the sources contributing to this diversity.

The trend in PM-10 levels for the Maricopa County nonattainment area is presented in Figure ES-1. The 24-hour PM-10 standard is 150 micrograms per cubic meter. In 2004,

FIGURE ES-1

NUMBER OF 24-HOUR PM-10 EXCEEDANCE DAYS



Note: The Arizona Department of Environmental Quality began flagging natural and exceptional events in 2004. Exceedances that have been approved or are pending approval by EPA as natural or exceptional events have been removed from this chart.

Sources: 1988 - 1997 - Revised MAG 1999 Serious Area Particulate Plan for PM-10 for the Maricopa County Nonattainment Area, February 2000.
1998 - 2006 - EPA Air Quality System; Maricopa County Network Reviews; ADEQ Air Quality Reports.

there was one exceedance day of the 24-hour standard. However, in 2005 there were 19 exceedance days and in 2006 there were 21 exceedance days of the 24-hour standard. Figure ES-2 indicates the monitors where exceedances occurred. The violations of the standard at the Bethune Elementary School, Durango Complex, and West 43rd Avenue monitors caused the region to fail to attain the PM-10 standard by the December 31, 2006 attainment date.

A rigorous planning effort was conducted to prepare the MAG 2007 Five Percent Plan for PM-10. An extensive Preliminary Draft Comprehensive List of Measures was compiled for evaluation. The MAG Analysis of Particulate Control Measure Cost Effectiveness report provided an evaluation of forty-six control measures. For each measure, the following information was prepared: narrative description; suggested implementing entity; estimate of the cost of implementation; estimate of the PM-10 emission reduction potential; estimate of the cost effectiveness ($/ton of PM-10 reduced); and discussion of implementation issues and comments. In preparing the information for the analysis, measures from other PM-10 Serious Areas were reviewed and contacts were established. Relevant dust control literature reviews were performed to obtain data on measured emission reductions. Contacts were established with local agencies and businesses in Maricopa County to determine the cost of labor, equipment, materials, etc.

The MAG PM-10 Source Attribution and Deposition Study was another major study which provided information for the evaluation of control measures. The study was designed to identify the sources of emissions contributing to violations of the PM-10 standard at monitors in the nonattainment area during stagnant conditions and characterize the deposition of PM-10 particles emitted by these sources. The MAG consultants for the study were T&B Systems and Sierra Research. The key questions addressed in the study were:

1. Where are the specific source areas and/or sources in the Salt River region that contribute to the particulate matter (PM) loading at the Durango Complex and West 43rd monitoring sites?

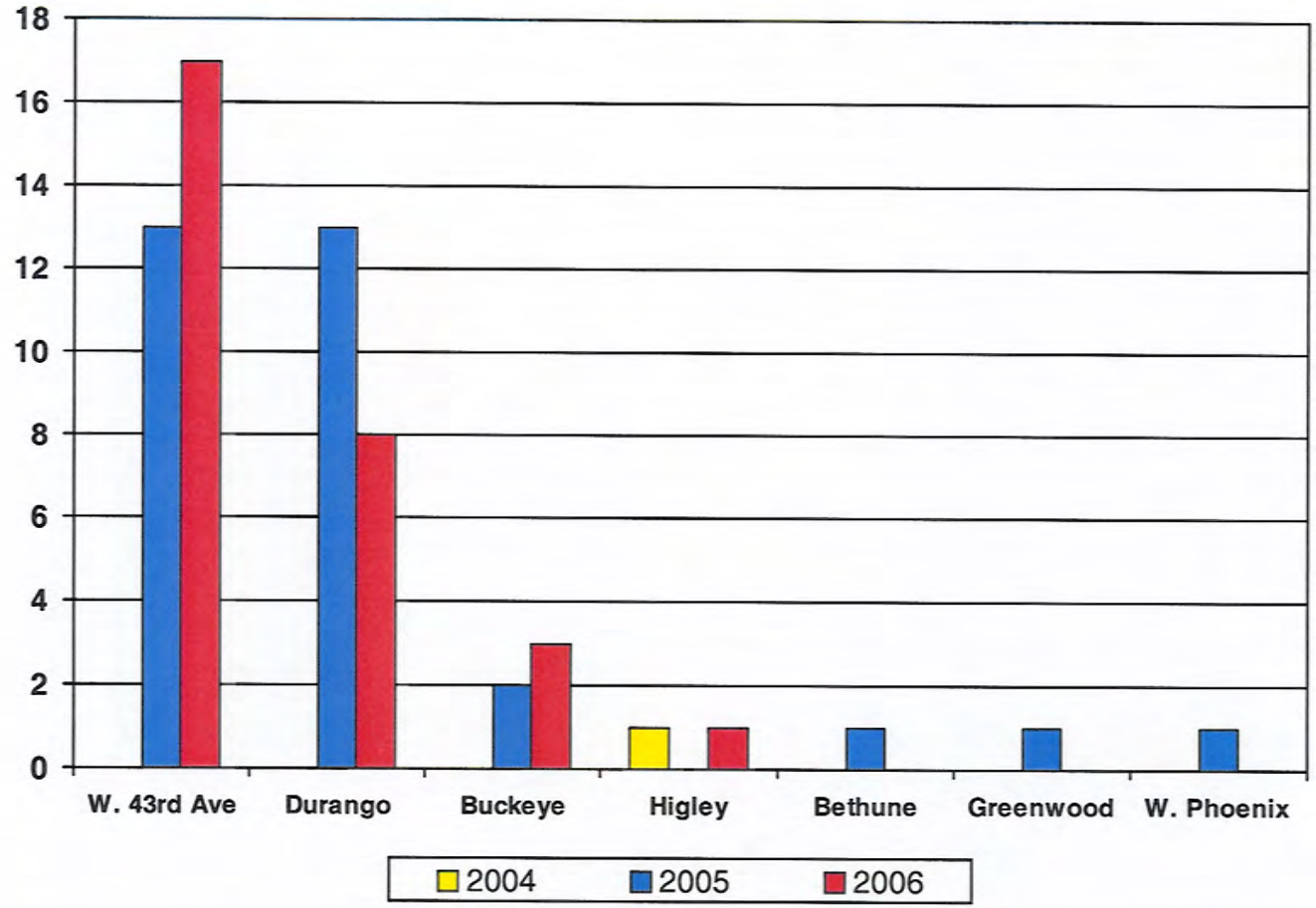
2. To obtain useful results from models such as AERMOD, can the regional particle size distribution be characterized on an area basis (i.e., is there an area of uniformity that can be generalized?)

3. What are the causes of heavy PM loading during the morning hours at the Durango and West 43rd monitors? Are the diurnal variations of PM-10 and peaks due to reentrainment of paved road dust, or due to other activities in the surrounding areas that are coincident with traffic peaks?

The approach used for the study involved assessing existing meteorological and PM data; selecting monitoring tools; establishing a sampling plan; defining routes for mobile sampling; determining locations of meteorological data collection; selecting locations to investigate dispersion of roadway sources; conducting sampling in two phases;

FIGURE ES-2

EXCEEDANCES OF THE 24-HOUR PM-10 STANDARD AT MONITORS IN MARICOPA COUNTY



Notes: 1. Exceedances are based on data from the EPA Air Quality System (AQS). Exceedances due to natural events have been removed from the AQS by EPA.

2. The exceedance at the Bethune, Greenwood, and W. Phoenix monitors occurred on 12/12/05.

coordinating with local agencies for related data; and performing daily review of collected data to identify insights, opportunities and problems. The monitoring tools for the study included: a particle lidar; mobile monitoring; DustTrak optical PM-10 monitors; DustTrak optical PM-2.5 monitors; an aerodynamic particle size analyzer; MiniVol filter based samplers; a sodar; and a SCAMPER vehicle. The SCAMPER (System for Continuous Aerosol Monitoring of Particulate Emissions from Roadways) vehicle was used to measure PM-10 from paved roads. From November 15, 2006 through December 14, 2006, extensive measurements were taken in the Salt River area using state-of-the-art technologies.

In general, the study identified a number of sources of PM-10 in the Salt River area. They included: trackout; dragout from unpaved or poorly maintained paved roads or parking lots; unpaved shoulders; unpaved roads; open burning; agriculture; and vehicle activity on unpaved parking areas and vacant lots. Preliminary results from the study were used in the evaluation of control measures and the final results were used in the modeling attainment demonstration.

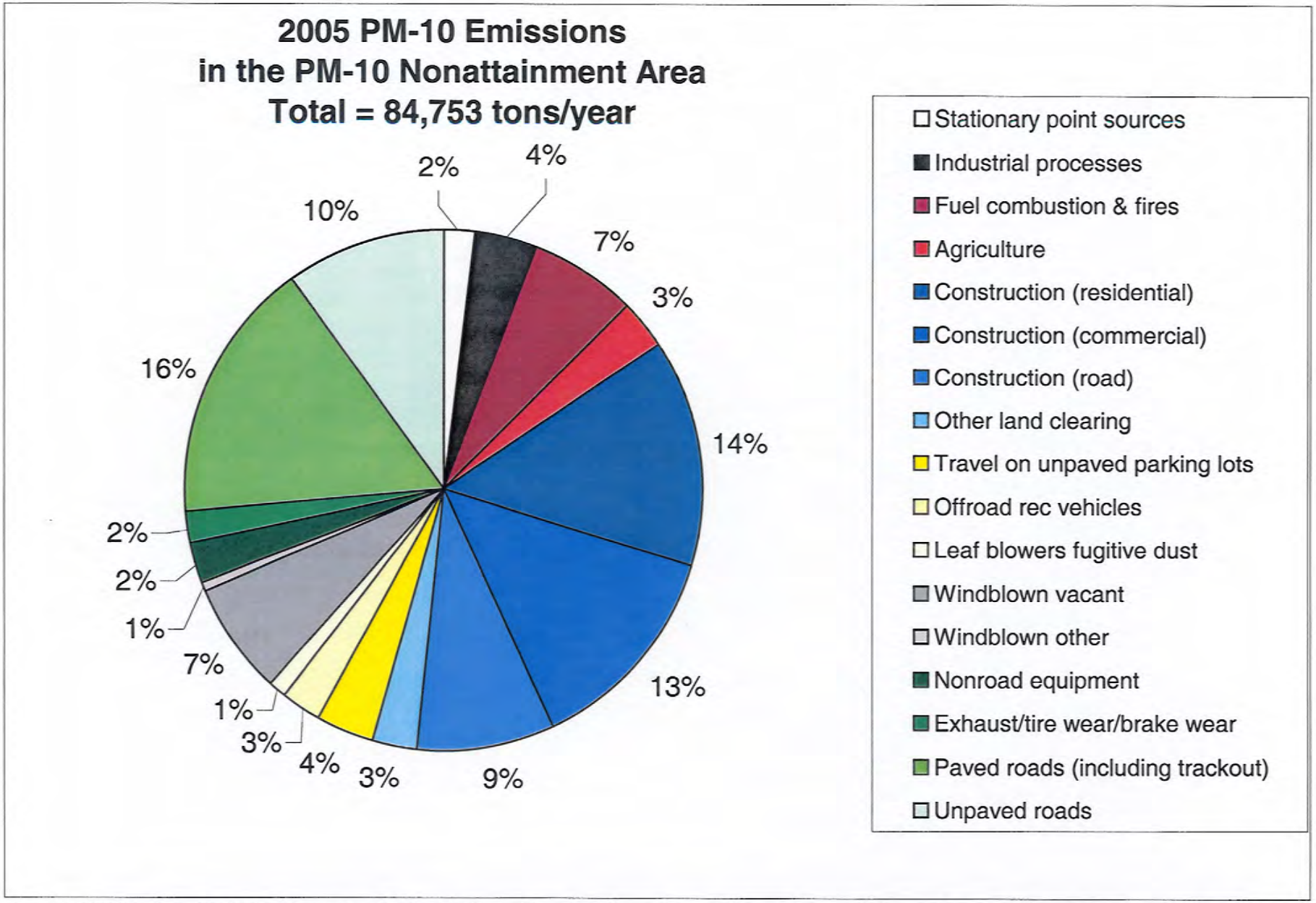
Based upon the Maricopa County Air Quality Department 2005 Periodic Emissions Inventory for PM-10 for the Maricopa County Nonattainment Area, the primary sources of PM-10 are: Paved Roads (including trackout) 16 percent; Construction (residential) 14 percent; Construction (commercial) 13 percent; Unpaved Roads 10 percent; Construction (road) 9 percent; Fuel Combustion and Fires (industrial natural gas and fuel oil, commericial/institutional natural gas and fuel oil, and residential natural gas, wood and fuel oil) 7 percent; and Windblown Vacant (vacant lots) 7 percent. The sources are depicted in Figure ES-3.

The emissions in the 2005 Periodic Emissions Inventory for PM-10 were projected to 2007, 2008, 2009, and 2010. The total controlled emissions of 97,436 tons in the 2007 projected inventory were used to calculate the five percent reduction target in emissions (see Figure ES-4). This number was multiplied by five percent to determine the PM-10 emissions reduction target of 4,872 tons per year. To meet this annual target, the 2008 emissions with committed control measures must be at least 4,872 tons less than the base case 2008 emissions; the controlled 2009 emissions must be at least 9,744 tons less than the 2009 base case emissions; and the controlled 2010 emissions must be at least 14,616 tons less than the 2010 base case emissions.

In order to reduce PM-10, a broad range of commitments to implement measures were received from the State, Maricopa County, and the twenty-three local governments in the PM-10 nonattainment area. Collectively, the MAG 2007 Five Percent Plan for PM-10 includes fifty-three committed measures.

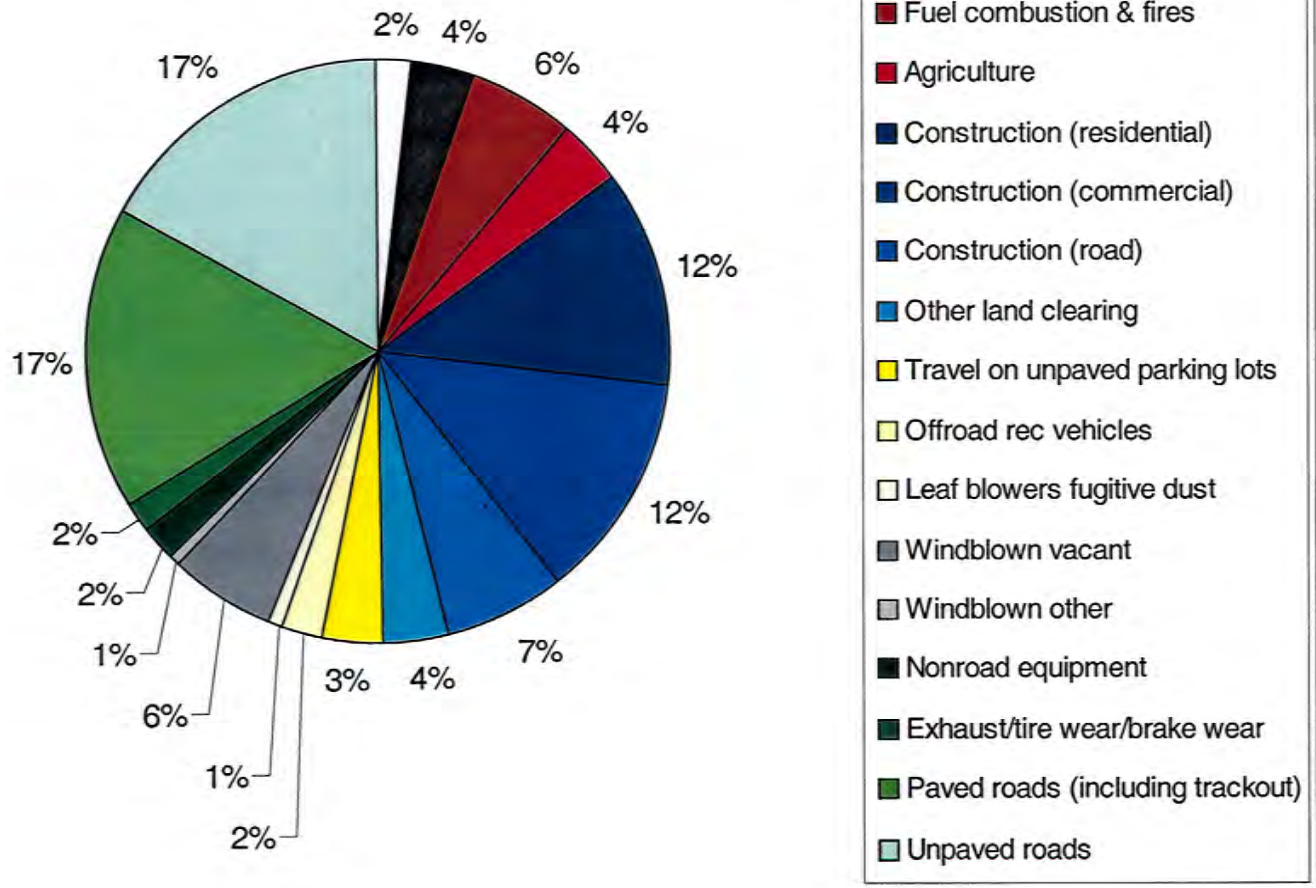
The key committed measures that were quantified as control measures include: Dust Managers/Coordinators at Earthmoving Sites; Increase Rule 310 and 316 Inspections; Extensive Dust Control Training; Conduct Nighttime and Weekend Inspections; Strengthen Rule 310 to Promote Continuous Compliance; Pave or Stabilize Dirt Shoulders; Pave or

FIGURE ES-3



Source: 2005 Periodic Emissions Inventory for the Maricopa County, Arizona Nonattainment Area. Maricopa County Air Quality Department. May 2007.

Figure ES-4
2007 PM-10 Emissions
with Committed Control Measures
Total = 97,436 tons/year



Source: Maricopa Association of Governments, 2007

Stabilize Unpaved Parking Lots; Restrict Vehicle Use on Vacant Lots; Strengthen Rule 310.01 for Vacant Lots; and Recover the Cost of Stabilizing Vacant Lots.

The committed control measures were quantified in order to model attainment and meet the five percent reduction targets. The PM-10 emissions reductions for the committed control measures are shown in Figure ES-5.

With the implementation of the committed control measures, the total PM-10 emissions in 2010 are 82,829 tons (See Figure ES-6), which represents a 19.3 percent reduction in the 2010 base case emissions. These reductions are necessary to model attainment of the PM-10 standard at all monitors as expeditiously as practicable, which is 2010. The total reductions due to the committed control measures also exceed the annual five percent reduction targets in 2008, 2009 and 2010, as indicated in Table ES-1.

In accordance with the Clean Air Act, the MAG 2007 Five Percent Plan for PM-10 also contains contingency measures. The contingency measures are committed measures in the adopted plan which achieve emissions reductions beyond those measures relied upon to model attainment of the standard and demonstrate progress toward attainment (i.e., five percent reductions, reasonable further progress, and milestones).

The key committed measures in the Five Percent Plan that were quantified as contingency measures are: Pave or Stabilize Dirt Roads and Alleys; Sweep with PM-10 Certified Street Sweepers; Reduce Trackout Onto Paved Roads; Additional Five Million Dollars in FY 2007 MAG Federal Funds for Paving Dirt Roads and Shoulders; Agricultural Best Management Practices; 15 Mile Per Hour Speed Limits on Dirt Roads; Reduce Offroad Vehicle Use; Certification for Dust Free Developments; and Public Education and Outreach Program.

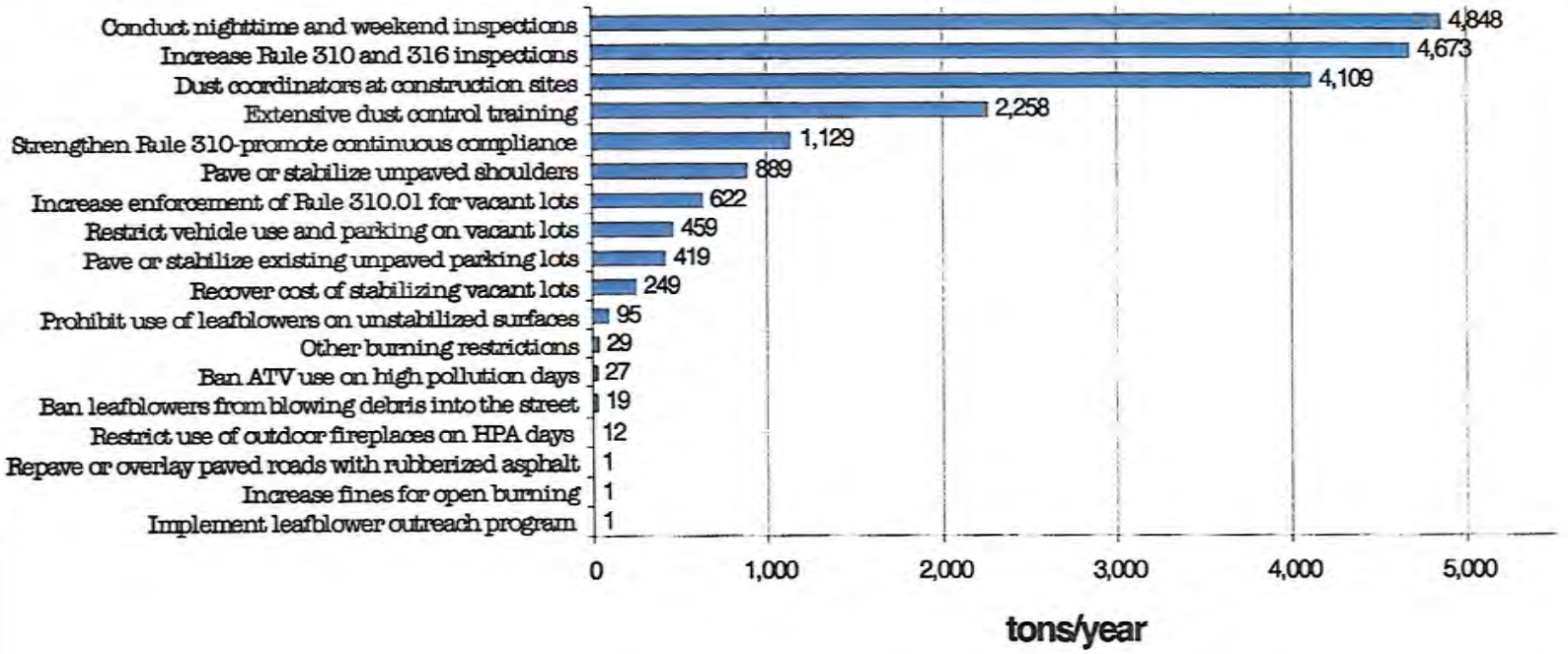
EPA guidance indicates that contingency measures should provide emissions reductions equivalent to one year of reasonable further progress. The reasonable further progress requirements for Serious PM-10 nonattainment areas are included in Section 189(c) of the Clean Air Act. For the Five Percent Plan, one year of reasonable further progress is equivalent to a reduction in PM-10 emissions of 4,869 tons.

Figure ES-7 shows the impacts of the individual contingency measures in 2010. Collectively, the contingency measures reduce PM-10 emissions by 5,223 tons in 2008, 7,213 tons in 2009, and 9,159 tons in 2010 versus the contingency target of 4,869 tons per year, as shown in Table ES-1.

The total 2010 PM-10 emissions with committed control measures and committed contingency measures are 73,670 tons (see Figure ES-8). Together, these measures reduce base case PM-10 emissions by 28.2 percent in 2010.

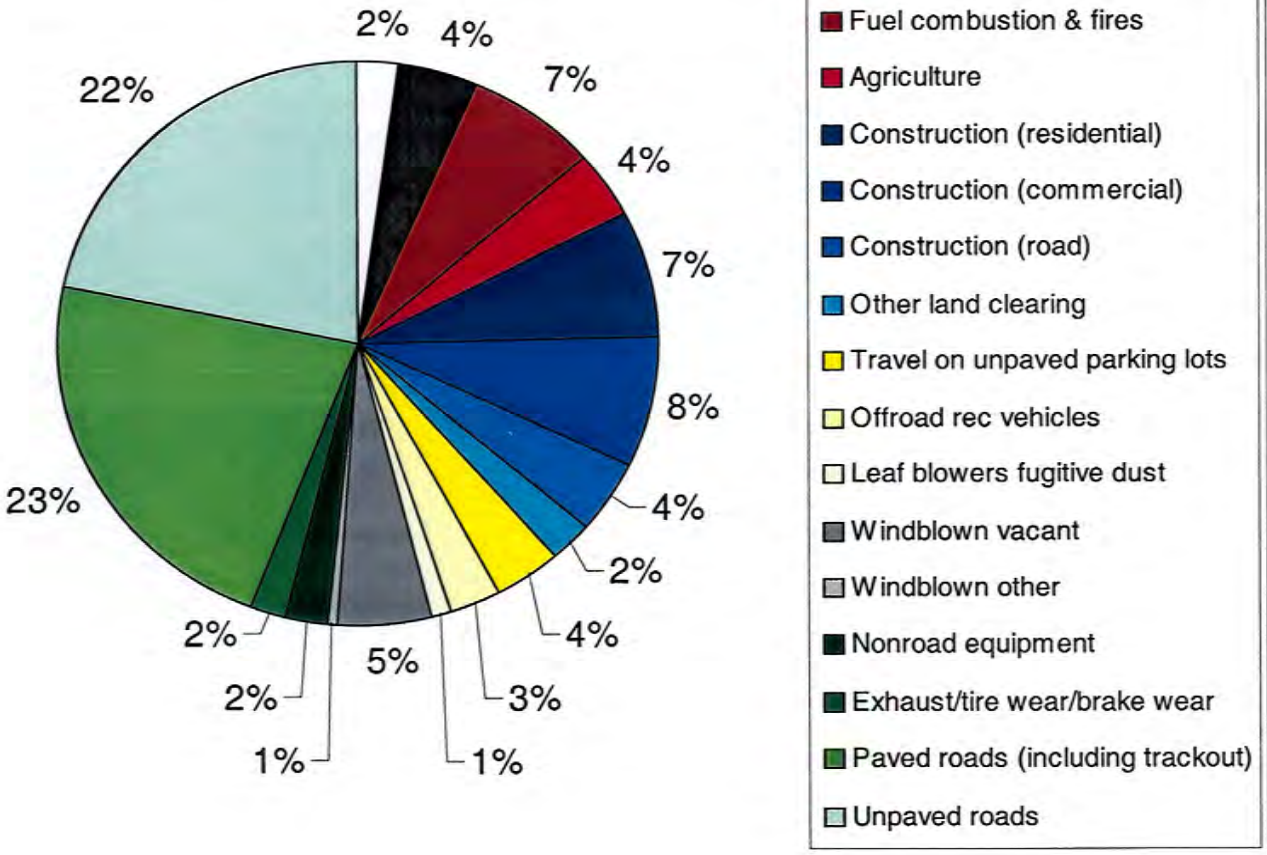
For conformity analyses, the onroad mobile source emissions budget includes reentrained dust from travel on paved roads; vehicular exhaust, tire wear, and brake wear; travel on unpaved roads; and road construction. In 2010, the PM-10 emissions from these four source categories total 103.3 metric tons per day. This represents the onroad mobile source emissions budget for conformity.

Figure ES-5
Reductions in 2010 for Committed Control Measures in the Five Percent Plan for PM-10



Source: Maricopa Association of Governments, 2007

Figure ES-6
2010 PM-10 Emissions
with Committed Control Measures
Total = 82,829 tons/year
(19.3% reduction)



Source: Maricopa Association of Governments, 2007

TABLE ES-1

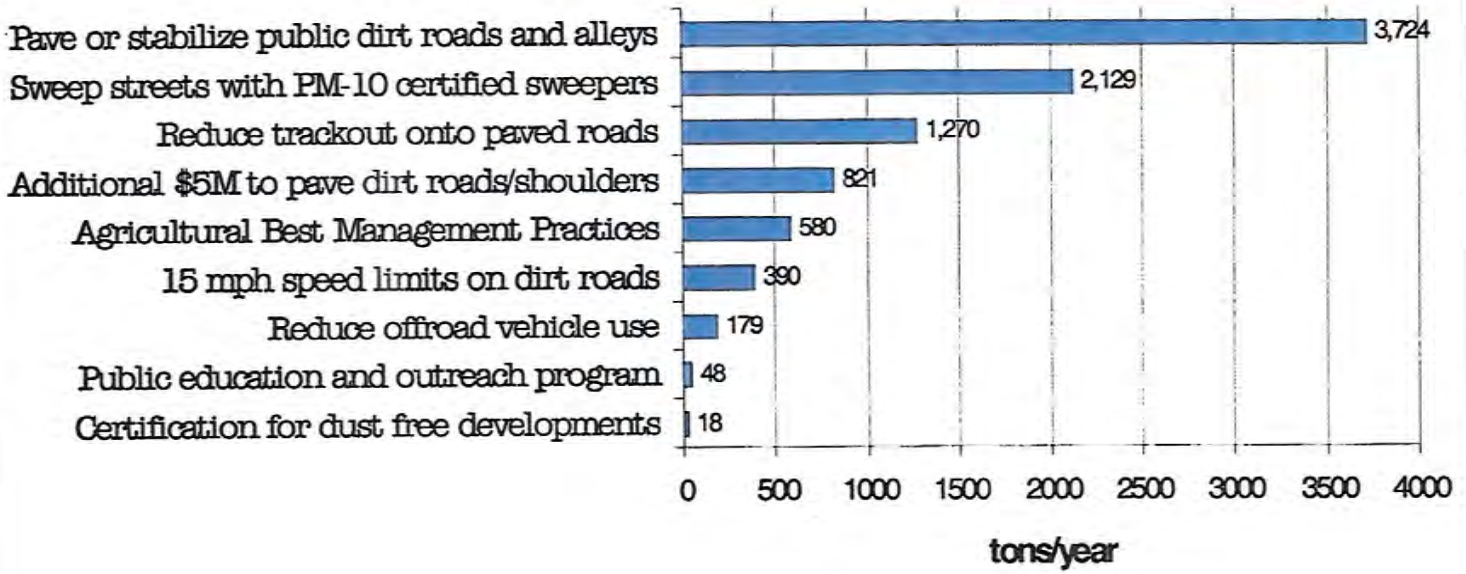
EMISSIONS REDUCTIONS FOR COMMITTED CONTROL MEASURES QUANTIFIED TO MODEL ATTAINMENT AND MEET THE FIVE PERCENT REDUCTION REQUIREMENT

- 6,605 tons vs. five percent reduction target of 4,872 tons in 2008
- 15,423 tons vs. five percent reduction target of 9,744 tons in 2009
- 19,840 tons vs. five percent reduction target of 14,616 tons in 2010

EMISSIONS REDUCTIONS FOR COMMITTED CONTINGENCY MEASURES QUANTIFIED TO MEET THE CONTINGENCY MEASURE REQUIREMENT

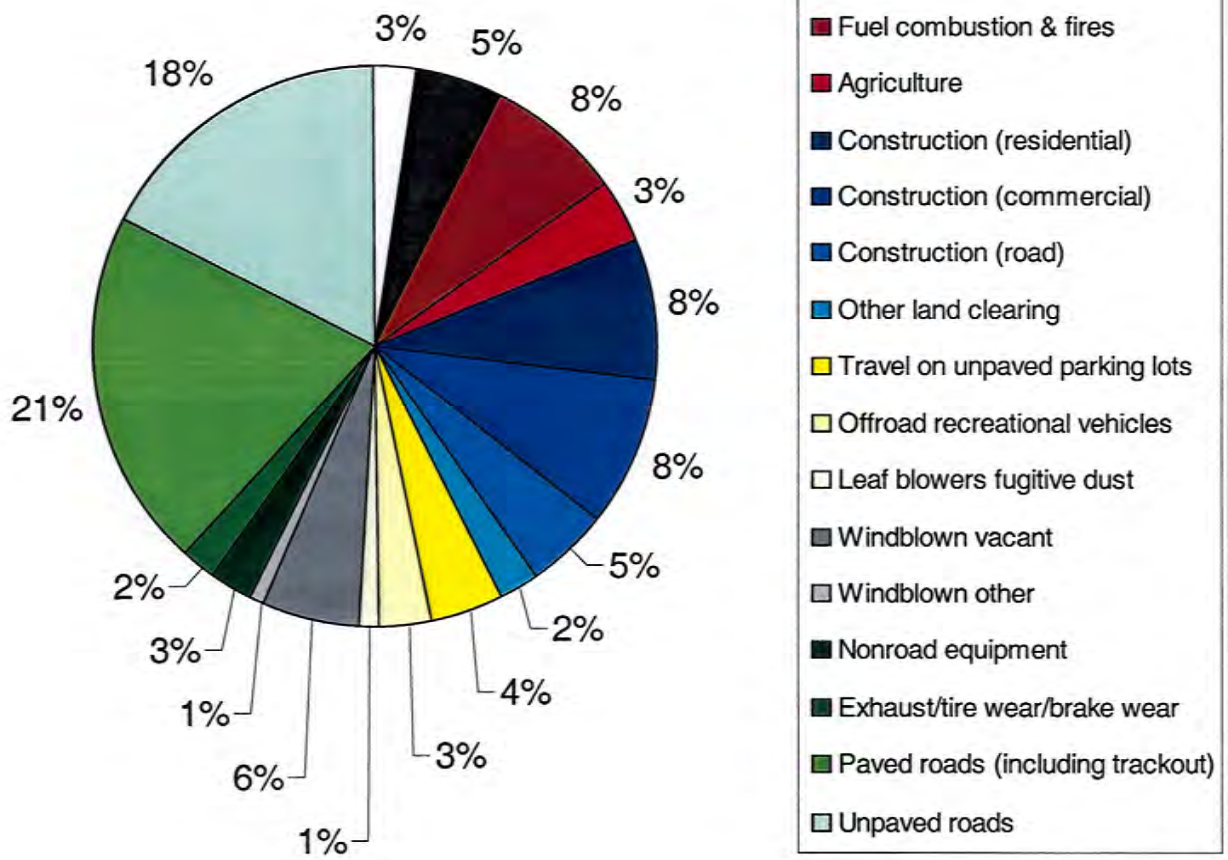
- 5,223 tons vs. contingency reduction target of 4,869 tons in 2008
- 7,213 tons vs. contingency reduction target of 4,869 tons in 2009
- 9,159 tons vs. contingency reduction target of 4,869 tons in 2010

Figure ES-7
Reductions in 2010 for Contingency Measures in the Five Percent Plan for PM-10



Source: Maricopa Association of Governments, 2007

Figure ES-8
2010 PM-10 Emissions
with Committed Control and Contingency Measures
Total = 73,670 tons/year
(28.2% reduction)



Source: Maricopa Association of Governments, 2007