

March 20, 2014

TO: Members of the MAG Air Quality Technical Advisory Committee

FROM: Philip McNeely, Phoenix, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Thursday, March 27, 2014 - 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 McNeely 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.

3. Approval of the January 23, 2014 Meeting Minutes

4. Update on the MAG 2012 Five Percent Plan for PM-10 and Exceptional Events

On February 6, 2014, the Environmental Protection Agency (EPA) published a notice proposing to approve the MAG 2012 Five Percent Plan for PM-10. The plan includes a wide variety of existing control measures and projects that have been implemented to reduce PM-10 and a new measure designed to reduce PM-10 during high risk conditions, including high winds. The plan demonstrated that the measures will reduce emissions by five percent per year and demonstrated attainment of the standard by December 31, 2012. EPA is also proposing to make a determination that the region has met the standard based upon three years of clean data for 2010-2012, as measured by the air quality monitors. Comments were due by March 10, 2014.

2. For information.

3. Review and approve the January 23, 2014 meeting minutes.

4. For information and discussion.

The Arizona Center for Law in the Public Interest submitted comments urging EPA to reconsider its proposal to approve the plan as submitted. As a supplement to the comment letter, the Arizona Center for Law in the Public Interest submitted an independent analysis of the July 18, 2011 exceptional events submission. Several letters in support of the EPA proposed approval of the MAG 2012 Five Percent Plan were also submitted. In 2013, there were six exceptional event days due to regional dust storms, thunderstorms and high winds. Documentation for the exceptional event days has been prepared and submitted to EPA for concurrence. Please refer to the enclosed material.

5. EPA Proposed Approval of the MAG 2009 Eight-Hour Ozone Redesignation Request and Maintenance Plan

On March 14, 2014, EPA signed a notice proposing to approve the MAG 2009 Eight-Hour Ozone Redesignation Request and Maintenance Plan for the 1997 ozone standard of 0.08 parts per million. The plan demonstrates maintenance of the standard through 2025. According to the proposal, the region would be redesignated to attainment status for this standard. Please refer to the enclosed material.

6. Update on the MAG 2014 Eight-Hour Ozone Plan-Submittal of Marginal Area Requirements

On June 6, 2013, the Environmental Protection Agency published a proposed rule on the Implementation of the 2008 National Ambient Air Quality Standards for Ozone State Implementation Plan Requirements. As a Marginal Area, the Maricopa nonattainment area will have a December 31, 2015 attainment date. EPA assumes that Marginal Areas will be in attainment of the eight-hour ozone standard (0.075 parts per million) within three years of designation without any additional control measures. According to the proposed guidance, Marginal Areas would not be required to submit an attainment demonstration, reasonably available control

5. For information and discussion.

6. For information and discussion.

technologies and measures, reasonable further progress demonstration, and contingency measures. However, the plan will need to address how other Marginal Area requirements have been met, such as an emissions statement, baseline emissions inventory, New Source Review, and transportation conformity requirements. An update will be provided on the plan and the submittal of the Marginal Area requirements. Please refer to the enclosed material.

7. EPA Review of the Federal Ozone Standards

As part of EPA's ongoing review of the National Ambient Air Quality Standards, EPA has prepared a second draft Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards. With regard to potential alternative standards, levels within the range of 70 to 60 parts per billion are currently being considered. A presentation will be provided on the implications of the alternatives under consideration. Please refer to the enclosed material.

8. Update on the MAG 2014 State Implementation Plan Revision for the Removal of Stage II Vapor Recovery Controls

The Maricopa Association of Governments has been preparing a Draft MAG 2014 State Implementation Plan Revision for the Removal of Stage II Vapor Recovery Controls through a coordinated effort among the Arizona Department of Weights and Measures, Arizona Department of Environmental Quality, and Maricopa County Air Quality Department. Based upon EPA's reevaluation of the approach for this region to remove Stage II, the plan revision would now request that the Environmental Protection Agency remove the requirement for Stage II vapor recovery in this area for new gasoline dispensing facilities in 2014 and for existing facilities beginning in October 2016, before a regional disbenefit begins to occur in 2018. A status report will be provided.

7. For information and discussion.

8. For information and discussion.

9. CMAQ Annual Report

In accordance with federal guidance, the 2013 Congestion Mitigation and Air Quality Improvement (CMAQ) Funds Annual Report describes how funds have been spent and the expected air quality benefits. The report was prepared by MAG in cooperation with the Arizona Department of Transportation. The report is in the electronic format required by the Federal Highway Administration. Please refer to the enclosed material.

10. Call for Future Agenda Items

The next meeting of the Committee has been tentatively scheduled for **Thursday, April 24, 2014 at 1:30 p.m.** The Chair will invite the Committee members to suggest future agenda items.

9. For information and discussion.

10. For information and discussion.

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

Thursday, January 23, 2014
MAG Office
Phoenix, Arizona

MEMBERS ATTENDING

- Philip McNeely, Phoenix, Chairman
- William Mattingly, Peoria, Vice Chair
- * Daniel Culotta, Avondale
- John Minear, Buckeye
- # Jim Weiss, Chandler
- # Jamie McCullough, El Mirage
- * Jessica Koberna, Gilbert
- Megan Sheldon, Glendale
- * Cato Esquivel, Goodyear
- Kazi Haque, Maricopa
- # Greg Edwards for Scott Bouchie, Mesa
- Tim Conner, Scottsdale
- Antonio DeLaCruz, Surprise
- Oddvar Tveit, Tempe
- * Youngtown
- Ramona Simpson, Queen Creek
- Walter Bouchard, American Lung Association of Arizona
- Kristin Watt, Salt River Project
- # Rebecca Hudson, Southwest Gas Corporation
- Ann Carlton, Arizona Public Service Company
- # Gina Grey, Western States Petroleum Association
- Robert Forrest, Valley Metro/RPTA
- * Dave Berry, Arizona Motor Transport Association
- * Jeannette Fish, Maricopa County Farm Bureau
- Steve Trussell, Arizona Rock Products Association
- * Claudia Whitehead, Greater Phoenix Chamber of Commerce
- * Amanda McGennis, Associated General Contractors
- * Spencer Kamps, Homebuilders Association of Central Arizona
- # Mannie Carpenter, Valley Forward
- # Kai Umeda, University of Arizona Cooperative Extension
- Joonwon Joo for Beverly Chenausky, Arizona Department of Transportation
- Diane Arnst, Arizona Department of Environmental Quality
- * Environmental Protection Agency
- Thomas Ekren, Maricopa County Air Quality Department
- Scott DiBiase, Pinal County
- Michelle Wilson, Arizona Department of Weights and Measures
- Ed Stillings, Federal Highway Administration
- * Judi Nelson, Arizona State University
- Stan Belone, 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
- Matt Poppen, Maricopa Association of Governments
- Julie Hoffman, Maricopa Association of Governments
- Kara Johnson, Maricopa Association of Governments
- Dean Giles, Maricopa Association of Governments
- Patrick Shaw, Maricopa Association of Governments
- Cathy Arthur, Maricopa Association of Governments
- Taejoo Shin, Maricopa Association of Governments
- Randy Sedlacek, Maricopa Association of Governments
- Teri Kennedy, Maricopa Association of Governments
- Barbara Cenalmor, Salt River Project
- Lee Jimenez, Maricopa County Department of Transportation
- Sam Brown, City of Scottsdale
- Joe Gibbs, City of Phoenix
- Shane Kiesow, City of Apache Junction
- Ronald Pope, Maricopa County Air Quality Department
- John Rusinek, Citizen
- Dianne Barker, Citizen
- # Wendy Crites, Salt River Project

1. Call to Order

A meeting of the Maricopa Association of Governments (MAG) Air Quality Technical Advisory Committee (AQTAC) was conducted on January 23, 2014. Philip McNeely, City of Phoenix, Chair, called the meeting to order at approximately 1:30 p.m. Greg Edwards, City of Mesa; Gina Grey, Western States Petroleum Association; Jim Weiss, City of Chandler; Rebecca Hudson, Southwest Gas Corporation; Wendy Crites, Salt River Project; Mannie Carpenter, Valley Forward; Kai Umeda, University of Arizona Cooperative Extension; and Jamie McCullough, City of El Mirage, attended the meeting via telephone conference call.

Chair McNeely indicated that copies of the handouts for the meeting are available. He noted for members attending through audio conference, the presentations for the meeting will be posted on the MAG website under Resources for the Committee agenda, whenever possible. If it is not possible to post them before the meeting, they will be posted after the meeting.

2. Call to the Audience

Chair McNeely 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 that fall under the jurisdiction of MAG and nonaction agenda items. Chair McNeely noted that two public comment cards had been received.

Chair McNeely called forward Dianne Barker for public comment. Ms. Barker stated that she lives in Phoenix and she rode her bicycle to the meeting. Ms. Barker indicated that she saw Chair McNeely at a City of Phoenix bicycle meeting. She commented that she appreciates the work done to keep particulates out of the air to protect children. Ms. Barker noted that she was once a bus driver and that busses without particulate traps are dangerous for children's health. She mentioned older adults being affected by leaf blowers in their community. Ms. Barker discussed that Arizona needs to increase sweeping as opposed to using leaf blowers. She commented on the particulate matter plan submitted to the Environmental Protection Agency (EPA). Ms. Barker referred to information from the previous AQTAC meeting that discussed construction in Pinal County, unpaved roads, and increased unpaved roads due to lot splitting. She indicated that the region needs to reduce more than five percent of particulates. Ms. Barker stated that she does plan to continue living in the area and riding her bicycle. She commented that others who are using public transit are models. Ms. Barker commented that judges need to enforce anti-litter laws, especially to eradicate cigarette butts from getting into the water table. She thanked the Committee.

Chair McNeely called forward John Rusinek for public comment. Mr. Rusinek stated that he is speaking on a non-dustproofed driveway in Phoenix. He commented that the City has not fixed the problem despite a City ordinance addressing non-dustproof areas. Mr. Rusinek met with City representatives from Zoning and Neighborhood Services to discuss the non-dustproofed driveway. He played a recording of a portion of that meeting. Mr. Rusinek passed around pictures of the non-dustproofed driveway. He commented that a rock company stated that the rock that was previously laid was decorative rock and will not settle. Mr. Rusinek stated that there is 13 feet of driveway that is not dustproofed. Chair McNeely thanked Mr. Rusinek for his comments.

3. Approval of the December 3, 2013 Meeting Minutes

The Committee reviewed the minutes from the December 3, 2013 meeting. John Minear, City of Buckeye, moved and Steve Trussell, Arizona Rock Products Association, seconded, and the motion to approve the December 3, 2013 meeting minutes carried unanimously.

4. Update on the MAG 2012 Five Percent Plan for PM-10 and Exceptional Events

Lindy Bauer, Maricopa Association of Governments, provided an update on the MAG 2012 Five Percent Plan for PM-10 and exceptional events. She stated that the MAG 2012 Five Percent Plan for PM-10 was prepared through a collaborative effort with the Arizona Department of Environmental Quality (ADEQ), Maricopa County Air Quality Department, Arizona Department of Transportation, and MAG. The Plan includes a wide variety of existing control measures and projects to reduce PM-10, as well as, a new measure to control PM-10 during high risk conditions, such as high winds. Ms. Bauer indicated that MAG has been tracking the Environmental Protection Agency's progress to take approval action on the Plan.

Ms. Bauer presented the timeline of the MAG 2012 Five Percent Plan for PM-10. On May 23, 2012, the MAG Regional Council adopted the Plan, which was then submitted to EPA. Ms. Bauer indicated that on July 20, 2012, the EPA completeness determination on the Plan stopped the 18 month and 24 month sanctions clocks. On April 19 and August 23, 2013, EPA proposed approval of several statutes for measures in the Plan. Ms. Bauer noted that on April 30, 2013, the Arizona Center for Law in the Public Interest filed a lawsuit against EPA for not acting on the Plan by the deadline. She stated that on July 1, 2013, EPA completed its review of the 2011-2012 exceptional events documentation. EPA concurred with 17 of the 18 packages submitted by ADEQ; EPA took no action on one of the packages. Ms. Bauer mentioned that this was a major milestone because this was the first high wind exceptional events package approved by EPA. On August 28, 2013, EPA proposed a consent decree to address the Arizona Center for Law in the Public Interest lawsuit against EPA for not acting on the Plan. In the consent decree, EPA agreed to propose action by January 14, 2014 to either approve the Plan, promulgate a federal implementation plan, or approve the Plan in part with promulgation of a partial federal implementation plan. In addition, EPA agreed to finalize action by June 2, 2014. Ms. Bauer indicated that on December 3, 2013, EPA published a notice of final approval for several statutes for measures in the Plan. She stated that on December 5, 2013, EPA also published an adequacy determination for the PM-10 motor vehicle emissions budget for conformity purposes.

Ms. Bauer stated that on January 14, 2014, EPA signed a notice to propose full approval of the MAG 2012 Five Percent Plan for PM-10. Ms. Bauer reported that specifically EPA proposed approval of the following: 2008 baseline emissions inventory and the 2007, 2009, 2010, 2011, and 2012 projected emission inventories; modeled attainment demonstration; five percent reduction in emissions demonstration; reasonable further progress and quantitative milestone demonstrations; contingency measures; motor vehicle emissions budget; and a determination that the Maricopa County nonattainment area has met the PM-10 standard based upon three years of clean data for 2010-2012. EPA intends to finalize action on the Plan by June 2, 2014. A 30 day comment period will occur once the Federal Register notice is published. Ms. Bauer stated that she would like to thank every single member of the AQTAC for all their hard work in preparing the 2012 Five Percent Plan for PM-10, as well as, the private sector, agriculture, and the jurisdictions for their work to prevent PM-10 exceedances.

Ms. Bauer discussed the aggressive prevention activities to achieve three years of clean monitoring data. She stated that the prevention activities greatly contributed to the success of the Plan. Ms. Bauer summarized some of the prevention activities. The City of Phoenix established a Dust Reduction Task Force involving several City departments that created short and long term goals. MAG produced a PM-10 prevention video used to both educate and train city, County, and private sector staff. Maricopa County provides near real time monitor data with \$90,000 of funding provided by the MAG Regional Council. Ms. Bauer added that a network was established to prevent PM-10 exceedances region-wide that included the public and private sector; this network was called the Maricopa County Rapid Response Program. She noted that Maricopa County coordinates with MAG member agencies to avoid duplication of enforcement and the investigation of sources. The MAG member agencies developed customized Rapid Response Action Plans to be implemented on a local level to prevent exceedances based on a MAG template and tool kit. Ms. Bauer indicated that the cities and towns working cooperatively with Maricopa County led to the success of preventing exceedances. MAG conducted and will continue to conduct PM-10 Prevention Workshops with local governments, Maricopa County, and ADEQ. In addition, ADEQ sends out the Maricopa County Dust Control Action Forecast five days in advance that alerts when high risk conditions may be approaching. Business, industry, and agriculture associations notify members when high winds are forecasted. Ms. Bauer stated that these prevention activities were absolutely critical to the success of the MAG Five Percent Plan for PM-10.

Ms. Bauer presented the next steps for the Plan. She discussed that EPA needs to take final approval action on the Five Percent Plan by June 2, 2014 to avoid imposing a federal implementation plan. Ms. Bauer mentioned that the aggressive prevention efforts must continue because clean data at the monitors and throughout the region must be maintained. Once EPA finalizes the approval action, MAG will begin work on a Redesignation Request and Maintenance Plan for PM-10.

Ms. Bauer indicated that EPA's Exceptional Events Rule (EER) and process still needs to be streamlined. EPA anticipates proposing rule revisions by April 2014 with final revisions in April 2015. Ms. Bauer stated that it is important to keep the exceptional events issue on the forefront since the region may continue to experience dust storms, haboobs, and microbursts that are beyond control. EPA has made some improvements to the EER, however EPA acknowledges that the EER requires additional streamlining. Ms. Bauer noted that the exceptional event documentation is very resource intensive. She reported that EPA worked with the region on streamlining some of the exceptional event packages; however, more work needs to be done.

Ms. Bauer indicated that there were six exceptional event days in 2013. MAG staff has been working with ADEQ and Maricopa County on the exceptional events documentation. MAG staff has prepared five out of the six of the exceptional event packages that are currently out for public review. ADEQ is accepting comments on the exceptional event documentation through February 11, 2014. Ms. Bauer thanked the Committee for all of their work on the MAG 2012 Five Percent Plan for PM-10.

William Mattingly, City of Peoria, thanked ADEQ, Maricopa County, and MAG staff for their work on the Plan and exceptional events. He commented on the resource intensive nature required for the exceptional event packages. Chair McNeely thanked MAG and the members of the AQTAC for their work on the Plan. He stated that this is a major milestone for the region. Chair McNeely thanked Ms. Bauer for the update.

5. Evaluation of Proposed PM-10 Certified Street Sweeper Projects for FY 2014 CMAQ Funding

Dean Giles, Maricopa Association of Governments, presented the evaluation of proposed PM-10 Certified Street Sweeper Projects for Fiscal Year (FY) 2014 Congestion Mitigation and Air Quality Improvement (CMAQ) funding. The deadline for submitting projects applications was November 22, 2013. The FY 2014 Unified Planning Work Program and Annual Budget and FY 2011-2015 MAG Transportation Improvement Program contain \$900,000 in FY 2014 CMAQ funding to encourage the purchase and utilization of PM-10 certified street sweepers. An additional \$330,599 in CMAQ is available for FY 2014 street sweeper purchases. Mr. Giles stated that under the programming process the MAG Street Committee is required to review the street sweeper applications. The MAG Street Committee met on December 10, 2013 and January 14, 2014. Mr. Giles noted that comments made by the MAG Street Committee are provided in the agenda materials. MAG staff applied the CMAQ methodologies using the data supplied by the project applications to calculate the PM-10 emission reductions shown in the table as kilograms per day and cost-effectiveness shown in the table as CMAQ dollar cost per annual metric ton of PM-10 reduced. Overall 13 projects requesting \$2.7 million in federal funds were evaluated. Mr. Giles noted that the projects are displayed with the PM-10 emissions reductions in descending order of cost-effectiveness. He indicated that six projects could be funded with the CMAQ funds currently available. The MAG AQTAC is requested to recommend a prioritized list of proposed PM-10 Certified Street Sweeper Projects for FY 2014 CMAQ Funding to the MAG Management Committee.

Diane Arnst, Arizona Department of Environmental Quality, inquired why some projects have a higher ranking when additional staff has not been committed to support the project. Mr. Giles responded that some projects are for replacing existing street sweepers and do not require additional staff for the new sweeper. Ms. Arnst asked why Phoenix #1 project is seventh on the project list while it appears to be sweeping the same area as Phoenix #2 project with a different cost-effectiveness ranking. Mr. Giles replied that approximately \$60,000 is available to fund street sweeper project Phoenix #1 with a remaining balance of \$169,998. The prioritized list would be retained when the MAG Regional Council approves the list. Additional street sweeper projects on the list may be funded if additional funds become available. Ms. Arnst inquired if both Phoenix projects would be sweeping different sections of the same area. Mr. McNeely responded that one project has a higher cost-effectiveness ranking because it is a replacement sweeper for a street sweeper that is frequently down for repairs.

The Committee reviewed the prioritized list of proposed PM-10 Certified Street Sweeper Projects for FY 2014 CMAQ funding. Antonio DeLaCruz, City of Surprise, moved and Ramona Simpson, Town of Queen Creek, seconded, and the motion to recommend a prioritized list of Proposed PM-10 Certified Street Sweeper Projects for FY 2014 CMAQ funding to the MAG Management Committee carried unanimously.

6. Evaluation of Proposed Paving Unpaved Road Projects in the Pinal PM-2.5 Nonattainment Area for Fiscal Year 2014, 2015, 2016, and 2017 CMAQ Funding

Mr. Giles presented the evaluation of proposed Paving Unpaved Road Projects in the Pinal PM-2.5 Nonattainment Area for FY 2014, 2015, 2016, and 2017 CMAQ funds. He indicated that the Federal Moving Ahead for Progress in the 21 Century (MAP-21) Legislation requires that states utilize a portion of CMAQ funding to reduce PM-2.5 emissions in PM-2.5 nonattainment areas. Mr. Giles stated that the Arizona Department of Transportation has allocated CMAQ funding to MAG for

projects that reduce PM-2.5 in portions of the West Central Pinal County PM-2.5 nonattainment area. The planning boundaries of both MAG and the Sun Corridor Metropolitan Planning Organization (MPO) are located within the PM-2.5 nonattainment area. Mr. Giles presented a map displaying the West Central Pinal County PM-2.5 nonattainment area. Jurisdictions that could apply for funding included the City of Maricopa, Pinal County, and Pinal County for Casa Grande.

Mr. Giles discussed the Paving Unpaved Road Projects in the Pinal PM-2.5 Nonattainment Area. He stated that under the programming process the MAG Street Committee is required to review the project applications for completeness. The MAG Street Committee met on December 10, 2013 and January 14, 2014. Mr. Giles noted that comments made by the MAG Street Committee are provided in the agenda packet. He stated that MAG staff applied the CMAQ methodologies using the data supplied in the project applications to calculate the PM-2.5 emission reductions shown in the table as kilograms per day and cost-effectiveness shown in the table as CMAQ dollar cost per annual metric ton of PM-2.5 reduced. The combined amount of CMAQ funding available for programming is \$3.36 million, with the four projects requesting a total of \$3.33 million. Mr. Giles indicated that enough funding is available to fund all four projects. He added that together the four projects would pave five miles of unpaved roads. Mr. Giles stated that it is requested that the Paving Unpaved Road Projects in the Pinal PM-2.5 nonattainment area be forwarded to the MAG Transportation Review Committee.

Ms. Arnst inquired if the left over balance from the projects is available for carryover. Mr. Giles replied that page two of the MAG Street Committee handout provides a cost accounting of the funds available and how the funds would be carried over from year to year to fund projects. Mr. Giles commented that there is carryover displayed for FY 2014, 2015, 2016, and 2017.

Mr. Mattingly, moved, and Mr. Trussell, seconded, and the motion to forward the proposed Paving Unpaved Road Projects in the Pinal PM-2.5 Nonattainment Area for FY 2014, 2015, 2016, and 2017 CMAQ funding to the MAG Transportation Review Committee carried unanimously.

7. Update on the MAG 2014 State Implementation Plan Revision for the Removal of Stage II Vapor Recovery Controls

Matt Poppen, Maricopa Association of Governments, provided an update on the MAG 2014 State Implementation Plan (SIP) Revision for the Removal of Stage II Vapor Recovery Controls. Mr. Poppen stated that Arizona agencies participated in a conference call with EPA on November 15, 2013. EPA recommended following a Stage II removal schedule for new gasoline dispensing facilities beginning in 2014 and existing facilities after the 2016 ozone season. Mr. Poppen noted that a Stage II removal schedule that begins after the 2016 ozone season results in the smallest temporary emission increases of the scheduling options. He added that EPA requested that the statutory authority for Stage II removal be included with the SIP revision. Mr. Poppen stated that EPA prefers one SIP revision for both new and existing facilities. EPA indicated that they are unlikely to issue a federal enforcement discretion letter for the removal of Stage II controls. Lastly, Mr. Poppen noted that EPA indicated that emission offsets would not be necessary if the Stage II removal schedule that results in the smallest temporary emission increases was selected.

Mr. Poppen discussed a tentative schedule for the SIP revision. He indicated that the draft SIP revision will be completed within one week after the legislation is passed and available for inclusion. Mr. Poppen noted that this assumes no substantial changes to the legislation. Once the draft SIP revision

is completed, a notice of public hearing is advertised and the draft SIP revision will be available 30 days prior to the public hearing. A response to public comments received on the draft SIP revision will be necessary. Mr. Poppen mentioned that the MAG committee process, which will include MAG Regional Council adoption, will take approximately a month and a half. He indicated that the MAG submission of the SIP revision to ADEQ and EPA would occur within two days of the MAG Regional Council adoption. Mr. Poppen invited Michelle Wilson, Arizona Department of Weights and Measures, to discuss the Stage II legislation.

Ms. Wilson provided an overview of the proposed legislation at the Arizona State Legislature. She stated that House Bill (H.B.) 2128 has a reading scheduled for February 3, 2014. Ms. Wilson indicated that former statute, Arizona Revised Statute 41-2132 provided requirements for both Stage I and Stage II in Area A, Maricopa County area, and Area B, Tucson area. The revised legislation will add a section that is applicable to Stage II only that will retain Stage II provisions for existing Stage II systems. Ms. Wilson stated that the legislation will also add requirements to the Arizona Department of Weights and Measures to establish rules for decommissioning Stage II systems beginning October 1, 2016 through September 30, 2018. She noted that all sites are to be decommissioned by September 30, 2018 or the date approved by EPA in the SIP. New stations will be exempt from the installation of Stage II controls as of the effective date of the legislation. Ms. Wilson indicated that this was an important section of the legislation to stakeholders; Stage II equipment is expensive to install and remove. She noted that this section will automatically be repealed September 30, 2018. Ms. Wilson stated that H.B. 2128 is being run as an emergency bill; therefore, the legislation is effective immediately upon approval. Once the bill is passed, the SIP revision can move forward and new sites will not be required to install Stage II vapor recovery equipment.

Ms. Wilson discussed that H.B. 2128 maintains existing Stage I vapor recovery requirements. She indicated that the section has been modified that is applicable to both Stage I and II to remove references of Stage II. The statute will maintain requirements for the sales, installation, and use of California Air Resources Board certified Stage I vapor recovery systems and components. Ms. Wilson stated that sites in Areas A and B with a throughput greater than 10,000 gallons per month will be required to use Stage I when transferring gasoline into the storage tanks. She added that the bill will also maintain the installation, training, maintenance, and proper operations of Stage I in those areas. Ms. Wilson discussed that requirements for annual testing of Stage I equipment in Area A will be maintained. Area A has annual equipment testing for Stage II which tests the whole system, including Stage I equipment. H.B. 2128 will maintain the annual equipment testing for Stage I. Ms. Wilson indicated that the plan review and approval prior to installation and modification of equipment in Areas A and B will also be maintained. In addition, the definition of Stage I was updated to mirror the Federal definition while removing an outdated definition of vapor control system. Ms. Wilson mentioned that EPA had come out with new definitions and the definitions in the current statutes are outdated. She explained that the provisions have been modified that formally allowed cities, towns, and counties to opt into Stage II to now have the option for Stage I and/or Stage I testing. Additionally, she stated that this option was available for sites that are not able to meet air quality standards, so that they may opt into these requirements in an effort to reduce emissions. The provisions provide specific requirements for resolution approval, analysis by ADEQ, and rulemaking to implement the program, as well as, provisions for opting out. Ms. Wilson commented that the goal was to keep the present state of affairs. She indicated that throughout the sections of the statutes the language was modified to generic terms such as vapor recovery systems so that the language applies to both Stage I and Stage II for now and just Stage I once Stage II is decommissioned. Ms. Wilson thanked the Committee.

8. Call for Future Agenda Items

Chair McNeely requested suggestions for future agenda items. He indicated that the next meeting of the Committee has been tentatively scheduled for Thursday, February 27, 2014 at 1:30 p.m. With no further comments, the meeting was adjourned at approximately 2:15 p.m.

ACLPI**ARIZONA CENTER FOR LAW IN THE PUBLIC INTEREST**dedicated to ensuring government accountability
and protecting the legal rights of Arizonans

March 10, 2014

VIA ELECTRONIC MAIL

Gregory Nudd (Air-2)

U.S. Environmental Protection Agency Region IX

75 Hawthorne St.

San Francisco, CA 94105-3901

RE: EPA-R09-OAR-2013-0762, Proposed Approval of Implementation Plans—Maricopa County PM-10 Nonattainment Area –Five Percent Plan for Attainment of the 24 Hour Standard

Dear Mr. Nudd:

We submit the following comments regarding EPA’s proposed approval of the *Maricopa Association of Governments Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area* (“2012 Five Percent Plan”). For the following reasons, we urge EPA to reconsider its proposal to approve the plan as submitted.

1. Failure to Require State to Demonstrate Compliance with All Applicable CAA Requirements.

In the proposed rulemaking, EPA sets out an overview of applicable CAA requirements for a serious PM-10 nonattainment area that failed to meet its applicable attainment date. EPA correctly notes that the Maricopa PM-10 Nonattainment Area (“the Area”) is subject to CAA section 189(d) which requires the submission of a plan that provides for the annual emissions reduction of at least 5%. EPA further itemizes other CAA requirements that apply to either all attainment plans, or apply to PM-10 plans. Specifically, EPA addresses the following CAA requirements: emission inventories (§172(c)(3)); reasonable further progress (RFP) (§172(c)(2)); quantitative milestones for PM-10 plans (§189(c)(1)); contingency measures (§172(c)(9)); transportation conformity and motor vehicle emissions budgets (§176(c)); and adequate authority (§110(a)(2)(E)(i)).

EPA omits entirely any discussion or analysis of the requirement for PM-10 serious area plans found in CAA section 189(b)(1)(B) (“Provisions to assure that the best available control measures for the control of PM-10 shall be implemented no later than 4 years after the date the area is classified (or reclassified) as a Serious Area.”) (“BACM”) and CAA section 188(e) (requiring states seeking extension of the attainment date for serious areas to “demonstrate[] to the satisfaction of the Administrator that the plan for that area includes the most stringent measures that are included in the implementation plan of any State or are achieved in practice in any State, and can feasibly be

implemented in the area.”)(“MSM”) Under the express provisions of the CAA, both of these requirements apply to the Area, which is a serious PM-10 nonattainment area that obtained a five year extension of its attainment date pursuant to §188(e) in 2001, extending its attainment date to December 31, 2006. There is no legitimate reason to exclude or ignore these continuing requirements when evaluating the 2012 Five Percent Plan, especially when EPA acknowledges that the requirements of §172 and other requirements of §189 apply to a SIP submittal under §189(d).

EPA’s proposed approval of the 2012 Five Percent Plan without an updated BACM and MSM demonstration is an abuse of discretion and contrary to the law. At the time that the State sought the §188(e) extension, EPA required a demonstration of both BACM and MSM. And EPA approved those demonstrations in 2002. However, as EPA itself has advised the State both in correspondence and in a proposed rulemaking in 2010, since that approval in 2002 several air pollution control agencies in California and Nevada have adopted new control measures that are more stringent than those included in the 2012 Five Percent Plan. Thus, in light of these developments it is not at all clear that the Plan meets the BACM and MSM requirements imposed by the CAA. As discussed separately below, by EPA’s own analysis, the only agricultural controls included in the current SIP, no longer represent BACM. Without an updated demonstration with respect to the other control measures, it is impossible for EPA to determine whether the requirements of Sections 189(b)(1)(B) and 188(e) continue to be met. Moreover, whether existing controls satisfy BACM is a crucial inquiry in the evaluation of ADEQ’s request to treat 133 exceedances in 2011 and 2012 alone as “exceptional events.” We believe that EPA’s approval of the 2012 Five-Percent Plan without requiring the State to make an updated BACM and MSM demonstration is an abuse of discretion and contrary to law.

2. The 2012 Five-Percent Plan Does Not Include Adequate Control Measures for Agricultural Emissions.

The 2012 Five-Percent Plan should not be approved because it does not include adequate control measures for agricultural emissions. As EPA is aware, one of the reasons that EPA proposed to partially disapprove the 2007 Five-Percent Plan back in 2010 (before it was withdrawn by the State) was because ACC R18-2-611 “Agricultural PM-10 General Permit”(“Maricopa BMP Rule”), which the State had included as a contingency measure, no longer qualified as BACM. EPA noted that although the rule had been approved as BACM in 2002 and the State had strengthened the Rule in 2007 by increasing the number of BMPs required under each category from 1 to 2, by 2010, other nonattainment areas had adopted programs to control agricultural emissions that were significantly stronger and did not have the enforceability issue found in the Maricopa BMP Rule. See Notice of Proposed Rulemaking, 75 FR 54813.

We realize that in response to EPA’s observations set forth in its 2010 proposed rulemaking and as well as in correspondence to the Agricultural BMP committee from EPA (see letter dated April 14, 2010 from Colleen McKaughan to Dan Thelander), the State made further changes to the Maricopa BMP Rule, effective 12/31/2011. Those changes purport to address at least some of the concerns expressed by EPA (See also Minutes of Agricultural BMP Committee meeting Tuesday, February 8, 2011 available at http://www.azdeq.gov/environ/air/plan/download/AgBMP_Committee_Mtg_Minutes_2_8_2011_FINAL.pdf); however, it is not clear that the amended Maricopa BMP Rule was sufficiently strengthened to qualify as BACM. For example, the rule still does not make

limited activity during a high wind event mandatory, despite the area's continuing problems with high wind events. Nor does the revised rule prevent a source from selecting and implementing relatively ineffective control measures when more effective measures are feasible.

However, even if the revised Maricopa BMP Rule did satisfy all of EPA's previously expressed concerns, because the State opted not to include it in the 2012 Five Percent Plan, and has not yet submitted it as a separate SIP revision, the 2012 Five-Percent Plan fails to adequately address this important source of emissions. Consequently, it would be an abuse of discretion for EPA to approve the current plan without requiring the State to remedy this critical omission and demonstrate that it has adopted BACM level controls for agricultural emissions and that those controls are federally enforceable as an approved part of the SIP.

3. The State's Claim that the Dust Action General Permit Increases the Effectiveness of Rule 310.01 by One Percent on High Wind Days Cannot Be Confirmed and Should Not Be Relied Upon to Satisfy the 5% Reduction Requirement or Demonstrate Attainment.

We also object to the State's reliance upon the Dust Action General Permit to satisfy the 5% reduction requirement and in its attainment demonstration. In the Plan, ADEQ and MAG estimate that the Dust Action General Permit will increase the rule effectiveness of Rule 310.01 by one percent. However, we are not persuaded that the Permit achieves any measurable reduction in emissions. Because of the way the Permit is structured, the extent of its actual scope is unclear. Moreover, because compliance is only measured by instances of lack of compliance discovered by inspectors who happen upon an owner or operator of a regulated activity who is not implementing a BMP, there is no way to gage that the issuance of the permit is actually impacting behavior in a manner that reduces emissions. According to ADEQ, since the Permit was issued, ADEQ has not yet issued a single "Requirement to Operate" ("RTO"). The significance of that fact in terms of Rule efficacy or emissions reductions, however, is inconclusive. It is possible that owners and operators not already subject to permits implemented BMPs as a result of the Permit, but it is equally plausible that BMPs are not being implemented but inspectors have not discovered the violations. Or it is possible that the universe of potential permittees under the Dust Action General Permit was so small that the adoption of the Permit had no practical effect whatsoever. Under these circumstances, we believe it is an abuse of discretion to allow the State to claim emissions reduction credit for this additional control measure.

4. EPA's Proposal to Exclude 131 Exceedances that Occurred Over Twenty Five Days As "Exceptional Events" Represents an Abuse of Discretion and Is Contrary to Law.

In its Proposed Rulemaking, EPA states that "ADEQ submitted three packages containing demonstrations for high wind PM-10 exceptional events covering a total of one hundred thirty-three measured exceedances occurring over twenty-seven days in the years 2011 and 2012 at monitors within the Maricopa County PM-10 Nonattainment Area" and indicates that it has concurred with respect to one hundred and thirty one of the submitted exceedances. 79 FR 7122. We have extensively reviewed the documentation prepared by EPA in its evaluation of these events and are unable to reconcile some of the numbers cited by EPA. For example, in evaluating the first package submitted by ADEQ, EPA stated that it was a demonstration for 29 exceedances of the 24 hour PM-10 standard that occurred at several monitoring stations within the Phoenix PM-10 nonattainment area on July 3, 4, 5, 7 and 8, 2011. (See Analysis included in September 6, 2012 letter from Jared

Blumenfeld to Eric Massey, p.1.) Table 1, entitled “EPA PM-10 Exceedance Summary,” lists the reported averages over 150 ug/m³ for each event day, which add up to 29, but the summary shows two monitor readings for the JLG Supersite on July 3. (*Id.*, p. 2).

The concurrence letter for the second submittal by ADEQ references 65 exceedances, but Table 1 of the supporting analysis lists a total of 69 reported averages over 150 ug/m³, and that summary includes two monitor readings for the JLG Supersite on August 25, 2011 and November 4, 2011; and two monitor readings for the Buckeye site on August 25, 2011, and two monitor readings for the North Phoenix site on November 4, 2011.

Finally, the third concurrence letter dated July 1, 2013 refers to thirty seven exceedances and in the supporting documentation, Table 1 lists thirty seven reported averages over 150 ug/m³ and the summary includes two reported averages for the JLG Supersite and North Phoenix on September 11, 2011, and two reported averages for the JLG Supersite on June 27, 2012.

Thus it appears that EPA’s treatment of multiple monitor readings at a single site on a single day is inconsistent as between the three packages, and we did not see any explanation for it in the analysis. Consequently, we are not sure how EPA arrived at the total of 131 of 133 exceedances referenced in the Proposed Rulemaking. Admittedly, if you add up the subtotals included in the concurrence letters (29 + 65 +37) the total number of exempted exceedances is 131. However, if you add up the subtotals from each of the Tables in the supporting documentation (29+69+37) the total number of exceedances that EPA has concurred with is 135. Finally, if you only count one of the two exceedances for those sites with double monitors reporting a 24 hour average above 150 ug/m³, then the total number of exceedances is 127. For purposes of our analysis, we have opted to use the lowest number and treat the averages reported by the double monitors as a single exceedance.

With that clarification, we believe, frankly, that EPA’s proposal to exempt 127 exceedances that occurred over 25 days is unconscionable, and by excluding the data, EPA and ADEQ misrepresent the extent of the particulate pollution in the Area to the grave detriment of public health. As shown below, if these exceedances were not excluded, 14 of the 16 monitoring sites that reported exceedances would be violating the standard by a significant measure (the violating monitors are in bold). According to EPA’s interim guidance, these exceedances are, to say the least, “frequent.” (See Interim Guidance on the Preparation of Demonstrations in Support of Requests to Exclude Ambient Air Quality Data Affected by High Winds Under the Exceptional Events Rule, May 2013 (“Interim Guidance”) p. 13.fn. 25 (“Frequent is enough exceedances from high wind dust events to cause of [sic] violation of the NAAQS.”).

Monitor/Site	2011	2012	3 yr. avg.
Apache Junction	5	0	1.66
Buckeye	8	1	3
Central Phoenix	8	1	3
Durango Complex	8	4	4
Dysart	5	1	3
Glendale	5	1	3
Greenwood	6	2	2.66

Higley	8	3	3.66
JLG Supersite	6	1	2.33
North Phoenix	2	1	1
South Phoenix	8	3	3.66
Tempe	0	1	.33
West 43rd	7	5	4
West Chandler	11	3	4.66
West Phoenix	8	1	3
Zuni Hills	3	1	1.33
Total	98	29	

Moreover, as the following chart shows, 45* of the 127 exceedances that EPA has proposed to exclude are greater than 250 ug/m³, the threshold that EPA has identified as “severe” in its interim guidance. *Id.* at fn. 26 (“A severe exceedance could be a 24-hour average PM-10 concentration >250 ug/m³”) And the severe exceedances are spread over 14 days:

Date	Monitoring Site	24 hour Avg.
7/3/2011	Greenwood	254
7/3/2011	Zuni Hills	260
7/3/2011	Durango Complex	277
7/3/2011	Central Phoenix	279
7/3/2011	South Phoenix	280
7/3/2011	Buckeye	385
7/5/2011	Central Phoenix	277
7/5/2011	West Phoenix	278
7/5/2011	JLG Supersite	331
7/5/2011	West Chandler	360
7/5/2011	Higley	362
7/7/2011	Higley	266
7/18/2011	Durango Complex	267
7/18/2011	South Phoenix	303
8/18/2011	Buckeye	296
8/25/2011	Dysart	273
8/25/2011	West Chandler	278
8/25/2011	Central Phoenix	308
8/25/2011	South Phoenix	308
8/25/2011	West 43 rd	369
8/25/2011	Buckeye	388
8/25/2011	Durango Complex	436
8/27/2011	Durango Complex	261
8/27/2011	West 43 rd	292
8/27/2011	South Phoenix	301
8/28/2011	Apache Junction	283

9/2/2011	Central Phoenix	308
9/2/2011	South Phoenix	339
9/2/2011	West Chandler	387
10/4/2011	West Chandler	251
11/4/2011	Durango Complex	251
11/4/2011	Higley	258
11/4/2011	Zuni Hills	258
11/4/2011	West Phoenix	279
11/4/2011	Buckeye	284
11/4/2011	West Chandler	670
6/27/2012	Zuni Hills	285
6/27/2012	Greenwood	323
6/27/2012	JLG Supersite	329
6/27/2012	JLG Supersite	344
6/27/2012	Glendale	337
6/27/2012	Central Phoenix	340
6/27/2012	South Phoenix	342
7/11/2012	South Phoenix	285
8/14/2012	West 43 rd	254

*JLG Supersite only counted once for 6/27/2012

Given the frequency and severity of the exceedances that ADEQ submitted as “exceptional events,” as well as the Area’s status as serious nonattainment and the State’s previous withdrawal of its earlier Five-Percent Plan, we believe EPA’s analysis regarding whether the exceedances were not reasonably controllable or preventable should have been significantly more probing. Instead, reviewing the analysis accompanying the concurrence letters, it appears as though EPA simply took at face value the assertions by ADEQ regarding the reasonableness of controls in place and the extent to which these incidents were preventable.

It appears that both ADEQ and EPA simply developed “cookie cutter” templates for the submissions and concurrences that packaged the data but required minimal analysis. Yet when the 127 exceedances are considered in the aggregate, there is a clear pattern that demonstrates that these are neither exceptional nor isolated events. Rather, they are predictable events that are seasonal in nature and could be significantly ameliorated if the State were to adopt appropriate control measures for windblown dust both within the attainment area and statewide. By treating these exceedances as “exceptional events,” EPA is allowing the State to avoid addressing the serious issue of windblown dust and is abdicating its responsibility to protect the public health and safety. The reasons we believe EPA’s concurrence is contrary to law are set forth below. But even if we assume for purposes of argument that EPA has the discretion to treat these frequent and serious exceedances as exceptional events, we believe that doing so without requiring the State to undertake comprehensive mitigation measures is an abuse of that discretion.

a. The State's Claim that the Exceptional Events Were Not Reasonably Controllable or Preventable Is Refuted by the Fact that BACM Level Controls Were Not in Place within the Area.

In its submissions, ADEQ repeatedly makes the claim that the events were not reasonably controllable or preventable because "BACM-approved" control measures were in place, an assertion accepted at face value by EPA in its concurrence analysis. That assertion, however, is misleading at best. Moreover, it should be noted that although having BACM in place during the time of the event is an important consideration, EPA has indicated that it may not be sufficient on its own. Interim Guidance, p 15. BACM measures may be insufficient if the SIP has not been recently reviewed. *Id.* EPA has indicated that it will only consider windblown dust BACM to constitute "reasonable controls" for exceptional event purposes if the measures have been reviewed and approved in the context of a SIP revision for the emission SIP within the past three years. *Id.* And the controls must be specific to windblown dust.

As discussed above, the last full BACM demonstration approved by EPA for the Area was in 2002, with a supplemental analysis of CARB diesel in response to a remand in 2006, well outside the three year window recognized by EPA in its guidance. Moreover, 98 of the 127 exceedances that EPA has proposed to exempt as Exceptional Events occurred in 2011. During that time period, the 2007 Maricopa BMP Rule was the only control measure in place for agricultural emissions and EPA had expressly found in its 2010 proposed rulemaking that the Rule no longer represented BACM for agricultural emissions. Although as noted above, the Rule was subsequently revised through an exempt rulemaking, the Rule revision was not submitted to the Arizona Secretary of State until December 29, 2011 and commercial farmers did not have to begin implementing it until March 2012. Thus, for at least 98 of the 127 exceedances at issue, the State cannot satisfy the requirement that dust originating from anthropogenic sources within the nonattainment area were controlled with BACM.

Moreover, as noted above, in 2010 EPA wrote the BMP Committee and suggested that in light of all of the High Wind Exception Event requests, the Committee should consider making no till and no harvest mandatory on high wind days. The Committee did not adopt that suggestion, however, and the revised Maricopa BMP Rule continues to include no till / no harvest on high wind days as one of several control measures that a source can choose to implement. And the current rule does not require a commercial farmer to adopt the most effective BMP that is feasible. A source need only select any two control measures off the menu regardless of efficacy. So ADEQ's implication in its Exceptional Events documentation that these events could not have reasonably been prevented because BACM level controls were in place is simply incorrect. Controls were in place but by EPA's own assessment, they weren't BACM level controls at least through the entirety of 2011, and quite possibly into 2012.

In its concurrence analysis, EPA does not address this departure from the Interim Guidance, or make any attempt to determine whether the controls in place during the events did, in fact, represent BACM. Rather, both EPA and ADEQ simply rely upon the outdated, prior approval of the State's BACM demonstration that occurred over a decade ago to claim that there were "BACM-approved controls" in place. We contend that concurrence under these circumstances is an abuse of discretion and contrary to law.

b. The State Has Failed to Demonstrate that Sources Outside of the Area Were Subject to Reasonable Controls, and, in Fact, They Were Not.

The state's claim (and EPA's concurrence) in the demonstrations that the events were caused by "winds transporting dust from desert areas of Pima and Pinal Counties" does not adequately address the issue of whether the events were reasonably controllable or preventable. The Interim Guidance states that "all upwind areas of disturbed soil to be considered potential contributing sources." (6.3.2.3 Basic controls analysis). Further, "[a] basic controls analysis should identify all contributing emission sources in upwind areas and provide evidence that those sources were reasonably controlled, whether anthropogenic or natural." (6.3.2.3 Basic controls analysis) and "inspection reports and/or notices of violations (NOVs) in upwind areas should be submitted, if available." None of the demonstrations submitted by the State or the concurrence documents prepared by EPA indicate that control measures outside of Maricopa County were even evaluated for their "reasonableness."

The controls cited by the State for Pinal County, County Fugitive Dust Rules, are minimalist rules that largely address dust-causing activities, but fail to require any sort of controls that are designed to prevent emissions caused solely by high wind events. The fact that Pinal County was only recently designated moderate nonattainment and is in the process of preparing its moderate nonattainment SIP should not excuse the required showing that sources in that county were subject to "reasonable controls." Moreover, in evaluating the reasonableness of the controls in Pima County in 2011 and 2012, both ADEQ and EPA should take into account the fact high wind events have been particularly problematic in both Pinal County and the Area since at least 2008.

Further, the state's claim (and EPA's proposed concurrence) that the events were caused by "winds transporting dust from desert areas of Pima and Pinal Counties" is not substantiated. The exceptional events demonstrations submitted by the State make no attempt to determine source locations, as required under the Interim Guidance, (See, e.g. 3.1.5.1 "Basic controls analysis"). Our independent analysis of July 18 2011 indicates that the dust sources for that event included agricultural sources in Pinal and Maricopa Counties. Further, our analysis successfully determined the location of four downdrafts and four outflows impacting monitors from multiple locations. Our findings are in stark contrast to the State's assertion that dust came from one thunderstorm outflow that lifted and transported dust from desert portions of Pinal and Pima counties into the Phoenix PM-10 nonattainment area.

The exceptional events demonstrations also claim that "specific source areas are difficult to determine" and "[t]he exact origin of the PM sources is often difficult to determine due to the less dense monitoring networks in the general source area". Our analysis also demonstrates that dust storms can be reconstructed using meteorological modeling coupled with observational data to determine likely source locations. EPA should require the State to make a more concerted effort to identify the actual sources in order to adopt controls that will avoid or ameliorate future events.

Finally, the fact that some of the sources are located outside of the Area, does not absolve the State of its responsibility to ensure that they are reasonably controlled. Under the Clean Air Act, the EPA generally considers a state (not including areas of Indian country) to be a single responsible actor. Accordingly, neither the EPA nor the Exceptional Events Rule provides special considerations

for intrastate scenarios when an event in one county affects air quality in another county in the same state, assuming that the event occurs on land subject to state authority (versus tribal government authority).. Because ADEQ is the single responsible actor for air quality control in Arizona, it had a responsibility to address the public health risk that the Pinal County sources represent. Certainly, given the high wind events experienced in 2008 and 2009, the State was well aware of the need to address the problem and had an obligation to do so in an expeditious matter.

4. EPA's Proposal to Find that the Area Reached Attainment by December 2012 Before Resolving the 2013 Exceedances Is an Abuse of Discretion.

We also strenuously object to EPA's proposal to approve the attainment demonstration and find that the Area reached attainment by December 2012 before resolving the status of the 2013 exceedances that ADEQ has flagged as "exceptional events." As EPA has acknowledged in the Proposed Rulemaking, the Area experienced thirty exceedances over 6 days in 2013. ADEQ has flagged those exceedances and is currently in the process of preparing exceptional events demonstrations for each of them. That EPA is prepared to find the Area in attainment and simply assume that it will concur in these 2013 demonstrations is unsupportable, particularly in light of the failure of EPA to require any mitigation measures to prevent or minimize future events on the part of the State.

For citizens who have to suffer the health and safety consequences of these recurring, predictable and preventable high wind events, it is inexcusable for ADEQ, with EPA's approval, to abuse the exceptional events rule to avoid addressing the serious problem of PM-10 pollution. Particulate pollution has plagued the Phoenix metropolitan area since the 1970s and continues to do so today, despite the regulatory agencies' claim that Phoenix has now "attained" the PM-10 NAAQS. We will be among the first to applaud true attainment of the 24 hour standard if and when the Area ever achieves it, but declaring the Area in "attainment" because ADEQ has figured out a way to ignore the frequent and severe violations of the standard at multiple monitors, many of which are located in low income neighborhoods, is no cause for celebration.

5. EPA's Policy of Allowing the State to Satisfy the Requirement of Contingency Measures With Control Measures that are Already Implemented Is Contrary to the Plain Language of the CAA.

Finally, we disagree that the 2012 Five-Percent Plan properly includes contingency measures. As EPA acknowledges in the proposed rulemaking, the measures designated as "contingency measures" in the 2012 Five-Percent Plan are already implemented. According to Section 175(d), the purpose of contingency provisions is to assure that the state will act promptly to protect the public health if a milestone for reasonable further progress or attainment is not met. Obviously, if the so called "contingency measures" are already being implemented when that occurs, there is nothing to suggest that their continued implementation would ensure that the situation will be corrected. Rather, the Act clearly envisions additional measures which are automatically and immediately implemented. If and when a RFP or attainment is not met, the fact that the state did not rely upon these measures in its attainment demonstration is meaningless. If the state fails to make reasonable further progress or fails to attain by its attainment date, protection of the public health is paramount and the Clean Air Act contemplates and requires an immediate response that does not require additional EPA or state action.

We understand that EPA is relying upon *LEAN v. EPA*, 382 F. 3d 575(5th Cir. 2004) as support for its position. However, we believe that decision, which is not binding on the Ninth Circuit Court of Appeals, is contrary to the plain language of the CAA. Consequently, we continue to believe that EPA's approval of the 2012 Five-Percent Plan without requiring meaningful and appropriate contingency provisions would be arbitrary and capricious and contrary to law.

These comments are submitted on behalf of:

Sandra L. Bahr
2046 N. 10th St.
Phoenix, Arizona 85006

David Matusow
43311 N. 18th Street
Phoenix, AZ 85087

Sincerely,

A handwritten signature in black ink, appearing to read "Joy E. Herr-Cardillo". The signature is fluid and cursive, with a large initial "J" and "H".

Joy E. Herr-Cardillo

Cc: Colleen McKaughan (via email)
Eric C. Massey (via email)

March 10, 2014

VIA ELECTRONIC MAIL

Gregory Nudd (Air-2)
U.S. Environmental Protection Agency Region IX
75 Hawthorne St.
San Francisco, CA 94105-3901

RE: EPA-R09-OAR-2013-0762, Proposed Approval of Implementation Plans—Maricopa
County PM-10 Nonattainment Area –Five Percent Plan for Attainment of the 24 Hour
Standard

Dear Mr. Nudd:

As a supplement to our Comment Letter submitted separately, attached please find an
independent analysis of the July 18, 2011 exceptional events submission.

This supplemental comment is submitted on behalf of:

Sandra L. Bahr
2046 N. 10th St.
Phoenix, Arizona 85006

David Matusow
43311 N. 18th Street
Phoenix, AZ 85087

Sincerely,



Joy E. Herr-Cardillo

Cc: Colleen McKaughan (via email)
Eric C. Massey (via email)

Draft Technical Review: State of Arizona Exceptional Events Documentation for the Event of July 18, 2011, for the Phoenix PM₁₀ Nonattainment Area

Leonard Montenegro*

NumAIRic, Inc. Tempe, Arizona 85285, USA

Keywords: Exceptional Events, Haboob, Microburst, Arizona dust storms

Executive Summary

The aim of this analysis is to determine likely dust sources that contributed to the July 18, 2011 dust storm over Phoenix, AZ and multiple exceedances of the National Ambient Air Quality Standards (NAAQS) for 24-hour PM₁₀. We reconstruct the dust storm using the Weather Research and Forecasting model (WRF-ARW) of 1km horizontal resolution to determine the location and magnitude of thunderstorm downdrafts that occurred between 07/18/2011 21:00 hours and 07/19/2011 03:00 hours UTC. Radar reflectivity data from the NEXRAD sites: KIWA, TPHX, and KTUS were then used to track outflow progression into Phoenix. The radar data also provides verification for the model output by backtracking each outflow to the modeled downdraft. Ambient PM₁₀ concentrations and meteorological variables of wind speed and wind direction from monitoring networks operated by the Maricopa County Air Quality Department (MCAQD), the Pinal County Air Quality District (PCAQD) and the Arizona Department of Environmental Quality (ADEQ) were also used to verify the outflow progression. Land use and vegetation condition data from the United States Department of Agriculture's National Agricultural Statistics Service were examined for dust sources in the vicinity of each modeled downdraft and along the outflow path. We found four thunderstorm downdrafts that occurred within the administrative boundaries of both Pinal and Maricopa Counties. Each modeled downdraft coincided with one distinct outflow as indicated by the radar reflectivity data. The first downdraft originated in eastern Pinal County at approximately 14:00 hours MST. Modeled maximum vertical velocity was -4.2 m/s. KIWA tracked the outflow from its origin as it moved from east to west into the Phoenix PM₁₀ nonattainment area. The second outflow originated within Maricopa County at approximately 15:00 hours MST. Modeled maximum vertical velocity was -7.7 m/s. KIWA tracked the outflow from its origin as it moved from east to west to the Phoenix PM₁₀ NAA. The third outflow originated over Casa Grande over anthropogenic dust sources at approximately 16:00 hours MST. The fourth outflow originated within the Phoenix PM₁₀ nonattainment area over the river bottom at approximately 18:00 hours MST.

Introduction

This document contains a storm reconstruction analysis of the July 18, 2011 dust storm over Phoenix, Arizona. The purpose of this document is to demonstrate a method for Arizona air quality agencies to investigate air quality exceedances that are believed to be caused by thunderstorm outflows. The products derived from this method can be used by air quality regulators and stakeholders to determine if PM₁₀ exceedances qualify for treatment under the exceptional events rule.

This report comprises three parts. We begin with general background about exceptional events demonstrations already submitted by the State of Arizona to EPA for consideration under the exceptional events rule, including the demonstration for July 18, 2011. Second, we describe the analytical methods and the results of our analysis. Finally, we present our conclusions.

Background

Exceptional Events demonstrations already submitted by the State

On December 3, 2012, the Arizona Department of Environmental Quality issued a public notice titled: Request for Public Comments on Exceptional Events in the Greater Phoenix Area. In its solicitation for comments, ADEQ presented ten individual demonstration packages in support of its application for a waiver to exclude a portion of air quality data collected in 2011, under EPA's exceptional events rule. In total, the ADEQ demonstrations identify fourteen potential exceptional event days for blowing dust in 2011 where Phoenix-area air quality monitors recorded multiple exceedances or violations of the National Air Quality Standard (NAAQS) for 24-hour PM₁₀.

In its demonstrations, ADEQ argues that PM₁₀ exceedances were caused by "dust-carrying thunderstorm outflow boundaries which moved into Phoenix from remote desert areas in Pinal, Pima and Maricopa Counties." The demonstrations explain further, that downward bursts of air hit the ground and then disperse as areas of outflow which kick-up and transport dust over long distances.

The two main points that are made in the demonstrations is that:

- PM₁₀ exceedances within the Maricopa County PM₁₀ nonattainment area are due to transported dust driven by high winds.; and
- that due to the nature of these monsoonal dust events, specific source areas are difficult to determine.

However, without more detailed knowledge about the spatial relationship between dust-source areas and the outflows that are believed to have contributed to the PM₁₀ exceedances, a thorough evaluation of which control measures were in place and establishing causality between the event and a portion of the ambient concentration is impossible.

Analysis method

The aim of this analysis is to determine likely dust sources that contributed to the July 18, 2011 dust storm over Phoenix, AZ and multiple exceedances of the National Ambient Air Quality Standards (NAAQS) for 24-hour PM₁₀. The analysis is carried out by coupling model output from the Weather Research and Forecasting model (WRF-ARW) with observational reflectivity data from NEXRAD radar stations and ambient PM₁₀ monitoring networks. The WRF model was used to model the July 18th thunderstorms. Surface temperature and wind velocities were decomposed from the model output to isolate downdrafts from the thunderstorms. Radar reflectivity data from KIWA and TPHX are then used to track outflow progression from the modeled downdraft to Phoenix area PM₁₀ monitors. Land use and vegetation condition data from the United States Department of

Agriculture's National Agricultural Statistics Service are examined in the vicinity of each modeled downdraft and along the outflow path in order to determine

The non-hydrostatic Weather Research and Forecasting model (WRF-ARW) was used to reconstruct thunderstorms over Arizona during July 18, 2011. Thunderstorm downdrafts can be characterized divergent surface winds and cold pool formation directly beneath the downdraft. These variables are represented in the WRF model output as surface wind vectors from modeled U and V parameters and surface temperature at two and ten meters above ground, respectively. The WRF model was configured to output five-minute average results for all meteorological variables between 07/18/2011 21:00 hours and 07/19/2011 03:00 hours UTC. Initial and boundary conditions for the model are from the North American Regional Reanalysis (NARR) dataset. Three nested modeling domains were used with a horizontal resolutions ranging from 12km to 1km. The physics parameters used in the model are listed below in table 1.0.

Reflectivity data from the TPHX and KIWA radar stations was downloaded from the National Climatic Data Center (NCDC) and conditioned to see particles of airborne dust, which are typically visible at very low DBZ values. Both composite reflectivity and reflectivity at specified inclinations were used in order to best resolve the outflows.

Ambient PM₁₀ concentrations and meteorological variables from monitoring networks operated by the Maricopa County Air Quality Department (MCAQD), the Pinal County Air Quality District (PCAQD) and the Arizona Department of Environmental Quality (ADEQ) are also used to verify the outflow progression. Ambient data of five-minute temporal resolution can be used to estimate source specific PM₁₀ impacts with reasonable accuracy. See figure XX below.

Table 1.0. Model physics used in the WRF modeling analysis.

MODEL PHYSICS

DYNAMICS	Nonhydrostatic
MICROPHYSICS	Lin et al.
RADIATION	RRTMG Scheme
PLANETARY BOUNDARY LAYER	Yonsei University
LAND SURFACE MODEL	Noah 4-Layer LSM
SURFACE LAYER	Monin-Obukhov

Land use and vegetation condition data from the United States Department of Agriculture's National Agricultural Statistics Service are examined to identify and characterize dust sources in the vicinity of each modeled downdraft and along the outflow paths.

Table 2.0 lists threshold friction velocities for different land surface types. For potential dust sources that are identified by close proximity to the modeled downdraft, the threshold friction velocity for the source type is then compared to the modeled friction velocity. If the modeled surface friction velocity is greater than the listed threshold friction velocity for a particular land type, then wind erosion from the source is expected. However dust controls, if used, increase the threshold friction velocity for that land surface type by stabilizing the soil. Thus, if controls are in place on a source, its dust contribution may be minimized, if at all.

TABLE 2.0 THRESHOLD FRICTION VELOCITIES FOR DIFFERENT LAND TYPES.

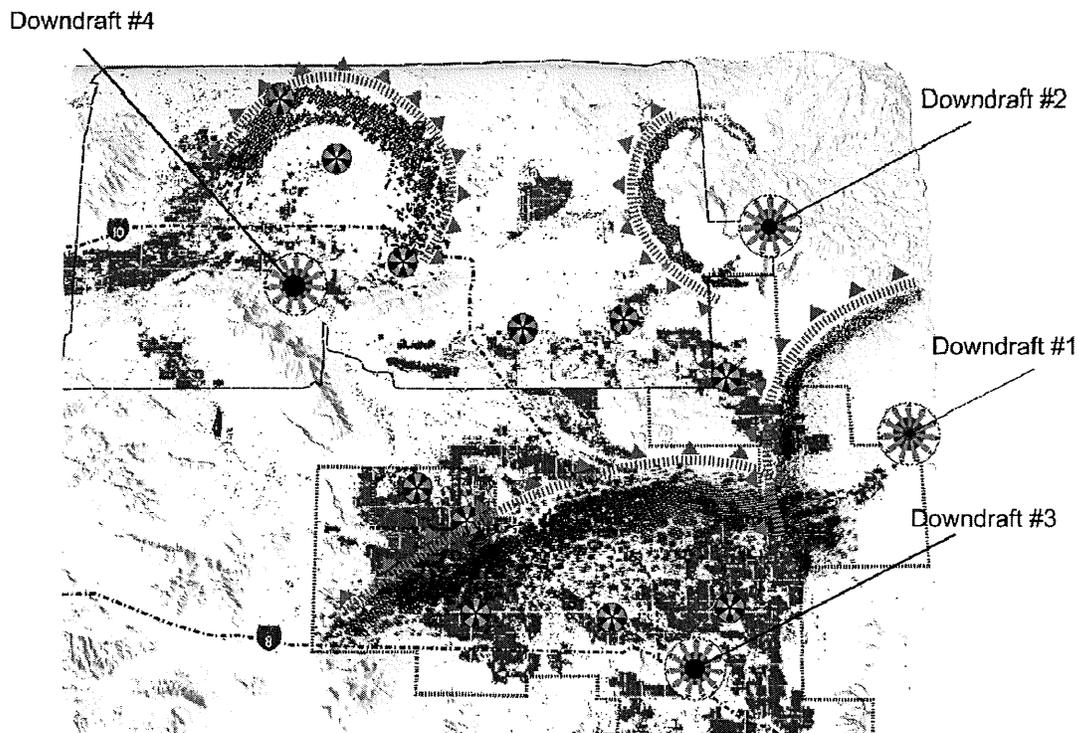
SURFACE TYPE	UNDISTURBED	DISTURBED
AGRICULTURAL	1.29 m/s	0.55 m/s
FALLOW/OPEN AREAS	2.90 m/s	0.24 m/s
DESERT FLAT	0.75 m/s	0.51 m/s
DESERT PAVEMENT	2.17 m/s	0.59 m/s

Summary of results for the July 18, 2011 storm over Phoenix, Arizona

We found four thunderstorm downdrafts that occurred within the administrative boundaries of both Pinal and Maricopa Counties. Each modeled downdraft coincided with one distinct outflow as indicated by the radar reflectivity data. See figure 3.0 below.

Figure 3.0. Overview of modeled thunderstorm downdrafts coupled with NEXRAD radar reflectivity.

WRF model output was decomposed to July 18th 2011 to determine the locations of four thunderstorm downdrafts. Downdraft #1 occurred at approximately 14:30 hours MST. Downdraft #2 occurred at approximately 15:40 hours MST. Downdraft #3 occurred at approximately 15:40 hours MST. Downdraft #4 occurred at approximately 18:10 hours MST.

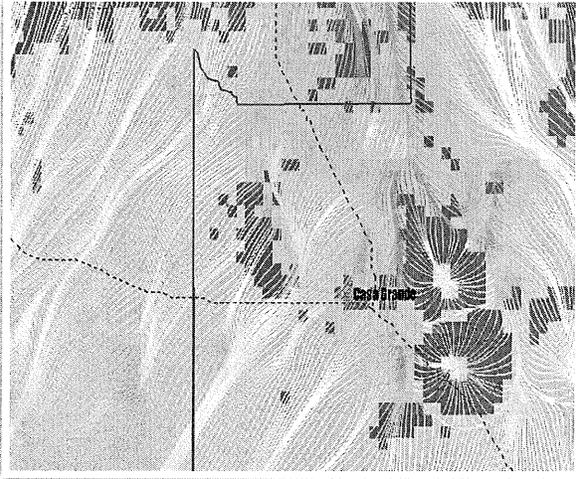


The first downdraft originated in eastern Pinal County at approximately 14:30 hours MST. Modeled maximum vertical velocity was -4.2 m/s. KIWA tracked the outflow from its origin as it moved from east to west into the Phoenix PM₁₀ nonattainment area. The second outflow originated within Maricopa County at approximately 15:00 hours MST. Modeled maximum vertical velocity was -7.7 m/s. KIWA tracked the outflow from its origin as it moved from east to west to the Phoenix PM₁₀ nonattainment area. The third outflow originated over Casa Grande over anthropogenic dust sources at approximately 16:00 hours MST. The fourth outflow originated within the Phoenix PM₁₀ nonattainment area over the river bottom at approximately 18:00 hours MST.

Storm track 3

Dust-source areas

We examined dust uplift potential from the storm. The figure below illustrates modeled surface friction velocities resulting from the outflows. The streamlines illustrate winds and temperature. Beneath the streamlines are gridded values for surface friction velocity. Red areas depict friction velocities between 0.51 m/s and below 0.9 m/s.



SURFACE TYPE	UNDISTURBED	DISTURBED
AGRICULTURAL	1.29 m/s	0.55 m/s
FALLOW/OPEN AREAS	2.90 m/s	0.24 m/s
DESERT FLAT	0.75 m/s	0.51 m/s
DESERT PAVEMENT	2.17 m/s	0.59 m/s

Conclusions

- The July 18 2011 dust storm was caused by four thunderstorm downdrafts.
- Downdrafts 2, 3 and 4 occurred over anthropogenic sources.



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March 6, 2014

VIA ELECTRONIC AND OVERNIGHT MAIL

Mr. Gregory Nudd (Air-2)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

RE: Docket No. EPA-R09-OAR-2013-0762
Maricopa Association of Governments Comments on the Proposed Approval and Promulgation of Implementation Plans—Maricopa County PM-10 Nonattainment Area; Five Percent Plan for Attainment of the 24-Hour PM-10 Standard

Dear Mr. Nudd:

The Maricopa Association of Governments (MAG) represents 27 incorporated cities and towns within Maricopa County and the contiguous urbanized area, the Gila River Indian Community, the Salt River Pima-Maricopa Indian Community, Fort McDowell Yavapai Nation, and Maricopa and Pinal Counties. As the designated Regional Air Quality Planning Agency, the Maricopa Association of Governments Regional Council adopted the MAG 2012 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area on May 23, 2012. On February 6, 2014, the Environmental Protection Agency (EPA) published a notice proposing full approval of the plan and a determination that the PM-10 standard has been met. At this time, MAG is submitting comments to EPA in support of the proposed approval of the plan.

Collectively, the MAG 2012 Five Percent Plan for PM-10 exemplifies a tremendous collaborative effort among all levels of government and the private sector. The plan was prepared through a well-coordinated approach with the Arizona Department of Environmental Quality, Arizona Department of Transportation, Maricopa County Air Quality Department, and Maricopa Association of Governments. There was also extensive coordination with EPA Headquarters and EPA Region IX. The measures in the plan have been successfully implemented by the local governments, the State, business, and industry. As a result, EPA has determined that the region has the three years of clean data in 2010-2012 that were necessary to attain the PM-10 standard.

Specifically, the MAG 2012 Five Percent Plan for PM-10 is designed to meet the requirements of Section 189(d) of the Clean Air Act and address the technical approvability issues with the prior 2007 Five Percent Plan identified by EPA. The plan contains a wide variety of existing control measures and projects that have been implemented to reduce PM-10 and a new measure designed to reduce PM-10 during high risk conditions, including high winds. While the 2007 Five Percent Plan was withdrawn to include new information, a wide range of control measures in that plan continued to be implemented to reduce PM-10 and were resubmitted. The plan demonstrated that the measures will reduce emissions by five percent per year and demonstrated attainment of the PM-10 standard as expeditiously as practicable, which was 2012.

As required by the Clean Air Act, the MAG 2012 Five Percent Plan for PM-10 includes contingency measures, which achieve emissions reductions beyond those measures relied upon for the five percent reductions in emissions and attainment of the standard. For conformity, the plan also contains the onroad mobile source emissions budget for 2012.

A Voluntary Association of Local Governments in the Maricopa Region

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

Again, the Maricopa Association of Governments supports the proposed full approval of the MAG 2012 Five Percent Plan for PM-10. We have greatly appreciated the close coordination and technical assistance from the Environmental Protection Agency. We are looking forward to working cooperatively with EPA in our continuing efforts to improve air quality. If you have any questions, please do not hesitate to contact me at (602) 254-6300.

Sincerely,

A handwritten signature in cursive script that reads "Lindy Bauer".

Lindy Bauer
Environmental Director

cc: Henry Darwin, Arizona Department of Environmental Quality
William Wiley, Maricopa County Air Quality Department
Colleen McKaughan, Environmental Protection Agency



City of Phoenix
OFFICE OF ENVIRONMENTAL PROGRAMS

March 7, 2014

Mr. Gregory Nudd (Air-2)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Docket ID No. EPA-R09-OAR-2013-0762

Dear Mr. Nudd:

The city of Phoenix ("Phoenix") appreciates the opportunity to submit comments on the Environmental Protection Agency's (EPA's) proposed approval of the "2012 Five Percent Plan for the Maricopa County (Phoenix) PM-10 Nonattainment Area" (the Plan). Phoenix supports EPA's proposed approval of the Plan.

We would like to thank all the local stakeholders, both public agencies and private partners who, in coordination with EPA, worked diligently in a most respectful and collaborative manner to develop, complete, and submit this Plan. Building bridges among all the partners will allow Phoenix, and our region, to maintain successful efforts to meet our committed goal of an ever-improving air quality for our current and future community.

Please don't hesitate to call me at (602) 256-5654 with any questions or comments.

Sincerely,

Philip McNeely, Manager
Office of Environmental Programs

JEFF FLAKE

ARIZONA

SR-368 RUSSELL SENATE OFFICE BUILDING
(202) 224-4521

COMMITTEE ON FOREIGN RELATIONS
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
COMMITTEE ON THE JUDICIARY
COMMITTEE ON AGING

United States Senate

WASHINGTON, DC 20510-0305

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5840 NORTH ORACLE ROAD
SUITE 150
TUCSON, AZ 85704
(520) 575-8633

March 10, 2014

Mr. Gregory Nudd,
Region IX, U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Mr. Nudd,

I write to urge the approval of the Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area (2012 Five Percent Plan) by the U.S. Environmental Protection Agency (EPA).

As I am certain you are aware, Maricopa County has struggled since the 1970s to attain EPA's air quality standard for dust. This nationwide standard simultaneously struggles to reflect the physical realities of a place like Arizona while carrying the potential for stiff penalties for regulatory noncompliance. EPA is now proposing to approve the 2012 Five Percent Plan that helped put the region on the path to attainment. I am pleased to see that, consistent with the Clean Air Act, the regulatory lead has been maintained at the state and local level. The Arizona Department of Environmental Quality (ADEQ), Maricopa County Air Quality Department, and Maricopa Association of Governments as well as those participating among the regulated community and stakeholders are to be congratulated for their collaborative and creative efforts. They are on the verge of achieving a herculean feat in meeting regulatory requirements to control dust in the middle of a desert.

Coupled with the dramatic number of control measures that have been adopted, EPA's concurrence with a number of submitted exceptional event demonstrations was influential in the region's success with the dust standard. While the first in the country to be approved under the agency's recent guidance, I would be remiss if I failed to highlight that the agency's approach to exceptional events remains problematic. Even ADEQ officials, presumably with more experience with EPA's current approach to excluding air quality data from events beyond regulatory control than anyone in the country, are critical. At a minimum, the burden to escape being held responsible for events that by their very nature defy control remain far too burdensome and costly and exceptional events will continue to happen.

I am pleased EPA is proposing to adopt the 2012 Five Percent Plan. In addition, I look forward to the forthcoming rulemaking and assisting EPA in developing an efficient and commonsense approach to exceptional events. Should there be any questions or further information required, please do not hesitate to contact Brian Kennedy at (202) 224-4521.

Sincerely,



JEFF FLAKE
U.S. Senator



Maricopa County

Air Quality Department

Office of the Director
William D. Wiley, P.E.
1001 North Central Avenue
Suite 125
Phoenix, Arizona 85004
(602) 506-6443 – desk
(602) 372-6440 – fax

March 10, 2014

Mr. Gregory Nudd
US Environmental Protection Agency
Region IX, Mail Code: Air 2
75 Hawthorne Street
San Francisco, CA 94105-3901

RE: Docket #EPA-R09-OAR-2013-0762

Dear Mr. Nudd:

The Maricopa County Air Quality Department appreciates the opportunity to comment on the proposed approval of the State Implementation Plan (SIP) for the Maricopa County PM₁₀ nonattainment area. As an active participant in the process, we strongly support the proposed action and believe that the measures included in the plan have been effective in reducing PM₁₀ violations. The plan represents countless hours of hard work by numerous stakeholders and has resulted in the most comprehensive PM₁₀ plan in the county. Critical to the success of the plan was EPA's concurrence with submitted exceptional event packages which reflect conditions that are outside the ability of the county to control, such as giant dust storms. We appreciate EPA's involvement in this process.

A number of actions and programs contributed to the effectiveness of this plan. We would like to highlight several that contributed significantly to our efforts to reduce PM₁₀ and the associated impacts to health. These include widespread stakeholder involvement, the development of innovative actions, partnerships to address critical issues, the development of dust training programs, and a commitment to vigilance by all parties to ensure we maintain our air quality.

Widespread Stakeholder Involvement

The 2012 Five Percent Plan was prepared through a collaborative effort by the Arizona Department of Environmental Quality (ADEQ), the Maricopa Association of Governments (MAG), the Maricopa County Air Quality Department (MCAQD) and numerous stakeholders. More than 100 individuals including representatives from over 50 organizations participated in various meetings, discussing or commenting during the development of the plan. These stakeholders included representatives from the construction industry, the rock products industry, agriculture, off-highway vehicle associations, state and federal land managers, chambers of commerce, utilities, transportation departments, public health representatives, non-governmental organizations, federal agencies, state agencies and local governments, as well as members of the public. In addition to participation and advocacy in the development of the plan, this broad range of stakeholders helped develop tools to implement various measures and disseminated information to their members, residents and affiliates. As a result, many additional affected parties became aware of these new programs, tools, and information sources.

Development of Innovative Actions

A number of innovative actions were initiated to enhance effectiveness of committed measures in the plan further reducing PM₁₀. These actions are described below:

- Availability of Real-time PM₁₀ Data—The department updated the telemetry and capacity of our air monitoring network with the assistance of a grant from MAG. The updated monitoring network now compiles and displays real-time PM₁₀ monitoring data in 5-minute intervals for individual PM₁₀ monitoring sites. The department's monitoring data webpage displays the 5-minute PM₁₀ data by site on an easy-to-read, user-friendly map and links the data to a real-time notification system advising people of elevated PM₁₀ concentrations. A user can see current readings for all sites or the last 300 readings in text form or graphically for the last 24 hours at a particular site. The notification system allows residents to plan actions to minimize impacts from the elevated PM₁₀ readings and dust generating operations to take appropriate action.
- Maricopa County Dust Control Forecast—ADEQ implemented a Maricopa County Dust Control Forecast that provides the risk of elevated PM₁₀ concentrations five days in advance of high wind or stagnation events. The forecast allows dust generating operations to take pro-active steps to reduce or eliminate dust emissions before or during the forecast event. Any person may also sign up for the forecast, enabling sensitive individuals to take actions that minimize their exposure during an event. The department also responds to the forecast by initiating surveys of the county to identify and address any problems in advance of the event.
- Rapid Response—The availability of 5-minute PM₁₀ data also enabled the department to develop a "Rapid Response" program. This award-winning program activates real-time notifications via text message or email whenever PM₁₀ levels rise, allowing the department and other partners to deploy staff to investigate the situation. The notification system also enables residents to take action to minimize impacts of the elevated PM₁₀ readings and dust generating operations to take appropriate action as necessary. More than 7,000 have signed up for these alerts. This program supplements the dust control forecast and the department's ongoing inspection and complaint response activities that occur daily throughout the county.
- Clean Air Make More Mobile Application—The department developed a mobile app for Android or iOS mobile devices to improve public access to air monitoring information. The app displays any high pollution advisories or restrictions that are in place, the current air quality index for pollutants, the current 3-day forecast and the weather forecast. The app also allows a user to report a violation and submit a picture of the problem, if desired. To date, the app has been downloaded more than 10,500 times.

Partnerships to Address Critical Issues

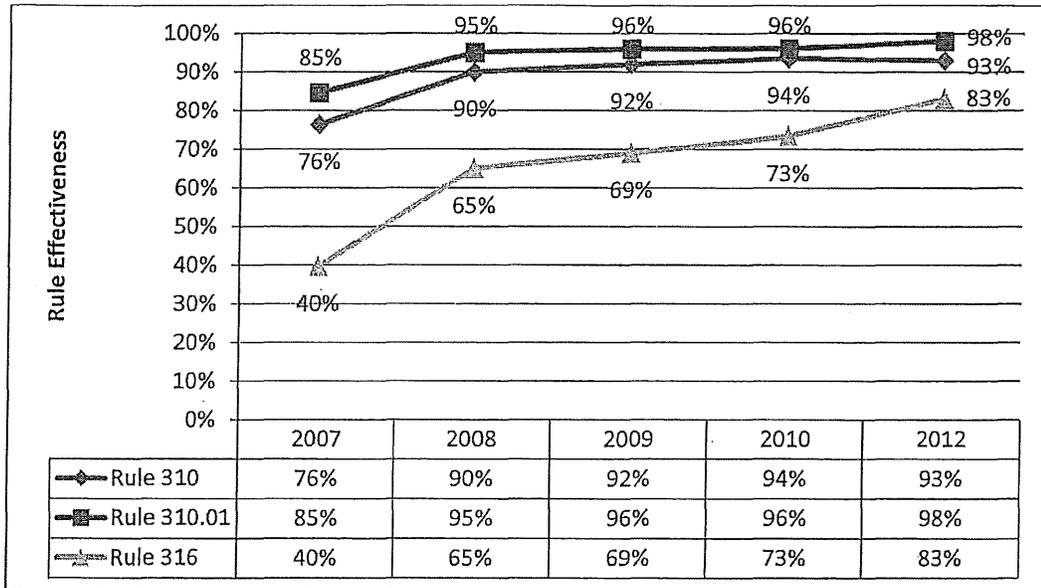
A variety of stakeholders worked collaboratively with the department to increase the effectiveness of the plan's dust control programs, further reducing PM₁₀ emissions. These efforts ranged from the development and distribution of dust rule-specific handbooks, to outreach and education for cities and towns, to working with state and federal land managers and

other government agencies on off-highway vehicle programs. As a result of these partnerships, compliance with dust control requirements increased leading to a reduction in PM₁₀ emissions. Some specific examples are described below:

- In a collaborative effort with the Home Builders Association of Central Arizona and Arizona Chapter of Associated General Contractors, the department developed and distributed a Dust Abatement Handbook and small field guide to provide guidance and facilitate compliance with Rule 310—Fugitive Dust from Dust-Generating Operations. Another collaborative effort with the Arizona Rock Products Association produced the Rule 316 Handbook for Nonmetallic Mineral Processing that also provides guidance and facilitates compliance with that rule.
- Working with cities and towns, ADEQ, MAG and the department provided educational materials and developed contact lists for assistance and response responsibilities for the Rapid Response program. The department has continued outreach and education efforts to the cities by holding quarterly meetings to address dust and other air quality issues as they arise.
- The department participates in a collaborative effort with state and local land managers and enforcement agencies to develop educational materials, coordinate actions, and work through various issues associated with the diverse off-highway vehicle community.

Dust Training Programs and Site Coordinators

In 2008, new requirements for dust training and the presence of dust control coordinators on sites subject to Rule 310 or Rule 316 became effective. Nearly 5,000 contractors and subcontractors take basic or comprehensive training each year. Onsite dust control coordinators complete comprehensive training and are responsible for maintaining dust control on their sites. The department's rule effectiveness studies from 2007 through 2012 demonstrate the significant improvement in compliance resulting from these programs, illustrating how crucial the programs have been to our successful implementation of the 2012 Five Percent Plan. See the graph below:



Commitment to Vigilance

Stakeholders who participated in the development of the Five Percent Plan continued to work with ADEQ, MAG and the department to implement the measures in the plan. Not only did they participate in the development of educational materials, the stakeholders actively disseminated information about the forecasts, Rapid Response program and the availability of educational materials and training. Over the past several years, they have demonstrated continued vigilance in maintaining dust control measures and in responding effectively to ADEQ forecasts and alerts. We believe all parties remain committed to ensure that we maintain our air quality.

Approval of the Maricopa County PM₁₀ SIP represents a long but successful journey for the people of Maricopa County. Our air is cleaner and our partnerships are stronger for it. That said, we are committed to maintaining the quality of our air and support EPA recognizing our hard work to reach this goal.

Sincerely,

William D. Wiley
 Director

cc: Lindy Bauer, Maricopa Association of Governments
 Eric Massey, Arizona Department of Environmental Quality



Janice K. Brewer
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
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Henry R. Darwin
Director

March 10, 2014

Mr. Gregory Nudd
U.S. Environmental Protection Agency
Region IX, Mail Code: Air 2
75 Hawthorne Street
San Francisco, CA 94105-3901

Subject: Docket # EPA-R09-OAR-2013-0762

Dear Mr. Nudd:

The Arizona Department of Environmental Quality (ADEQ) is proud to provide you with this letter supporting the United States Environmental Protection Agency's (EPA's) proposed approval of the *Maricopa Association of Governments Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area* and the *Final 2012 Five Percent Plan for PM10 for the Pinal County Township 1 North Range 8 East* portion (2012 Five Percent Plan). ADEQ notes that the Notice of Proposed Rule Making includes Apache Junction and portions of Pinal County in the proposed approval. While we understand EPA's action appears to propose approval for the entire 2012 Five Percent Plan, including the Pinal County portions, we request that EPA make its actions regarding Pinal County explicitly clear in the Notice of Final Rule Making.

INTRODUCTION

EPA's proposed approval of the 2012 Five Percent Plan is the result of many years of plans, rules and efforts to reduce the emission of dust into the atmosphere. In fact, the Phoenix metropolitan area has been out of attainment with some form of a dust standard (e.g. total suspended particulates and PM-10) since the 1970 Clean Air Act. The constant effort to reduce the health impacts associated with dust has resulted in the area applying dust control measures that are among the most stringent in the Country.

The success of this most recent plan is the result of exceptional collaboration between air quality planning organizations, air quality regulatory agencies, the regulated community, members of the public and advocates for environmental improvement. Between January 1, 2011 and the submission of the plan to EPA in 2012, the Director of ADEQ, Henry Darwin, and the Chairwoman of the Arizona Legislature's House Environmental Committee, Amanda Reeve, hosted a series of stakeholder meetings with the sole purpose of fixing the problems that EPA identified in the *MAG 2007 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area* (2007 Five Percent Plan). These meetings generally took place once every two weeks to discuss potential developments that would improve upon the region's past efforts.

Southern Regional Office

400 West Congress Street • Suite 433 • Tucson, AZ 85701

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The resulting collaboration gave ADEQ, the Maricopa County Air Quality Department (MCAQD) and the Maricopa Association of Governments (MAG) the platform upon which to add innovative control strategies to address the dust issues that remained after the submission of previous plans.

In between stakeholder meetings, technical staff from ADEQ, MCAQD, MAG and representatives of the regulated community met with technical staff from EPA to ensure that the new plan would address all of the issues that EPA proposed to disapprove in the 2007 Five Percent Plan. The coordination between all of the parties in these meetings was the foundation for the success of this plan. Those that were responsible for developing the technical solutions were able to discuss strategies for resolving the problems, get immediate feedback from EPA technical staff, and work together to overcome new challenges that arose.

TECHNICAL WORK TO SUPPORT 2012 FIVE PERCENT PLAN

The most critical element that this group developed was the revised emissions inventory. Each non-attainment area State Implementation Plan is required to contain an accounting of all the emissions from the various sources of air pollution during the baseline year. Using information related to population and economic growth, this baseline emissions inventory is then grown to project emissions in future years. The 2007 Five Percent Plan included both the baseline emissions inventory and the projection of that inventory into the attainment year of 2010. Unfortunately, at the time that the 2007 Five Percent Plan was developed, no one could have predicted the economic recession that would occur in 2008 and 2009. As a result, the best possible predictions in 2007 were ultimately proved to be inaccurate at the time the plan was reviewed in 2010.

Despite the fact that the 2007 Five Percent Plan's crystal ball was inaccurate, the plan was still foundational to the work that has been accomplished in the 2012 Five Percent Plan. After redeveloping the 2008 and 2011 emissions inventories, the technical work demonstrated that the dust reduction strategies employed by the 2007 Five Percent Plan achieved sufficient reductions to satisfy the Clean Air Act's requirement of annual five percent emissions reductions between 2008 and the ultimate attainment year of 2012. This also meant that the technical work demonstrated reasonable further progress toward attainment of the 24-hour PM-10 standard.

Correction of the technical issues with the 2007 Five Percent Plan allowed the stakeholder group to focus on resolving the remaining dust issues that were reported by the monitors. In 2005 and 2006, the Maricopa County area's primary dust issues were the result of local generated air pollution remaining suspended during periods of air mass stagnation. The 2007 Five Percent Plan's focus was to reduce exceedances that occurred during stagnation periods. By 2010, it was clear that these efforts had great success, as the year was one of the cleanest on record. In 2011 and 2012, however, the area experienced exceedances during high wind events or large dust storms that are common during the monsoon season in the desert Southwest. Each of these events would either overwhelm the Best Available Control Measures and Most Stringent Measures that were employed to reduce dust within the area, or transport dust into the area from areas that were outside of the nonattainment area's boundaries.

IMPACT OF EXCEPTIONAL EVENTS RULE

ADEQ, MCAQD and MAG had previously attempted to document exceptional events in accordance with EPA’s Exceptional Events Rule (EER) in an effort to obtain EPA’s approval of the 2007 Five Percent Plan; however, EPA disagreed with the demonstrations that had been provided. Between 2010 and 2012, EPA acknowledged the problems that existed within the EER and began developing a new policy and guidance document to provide additional clarity on how to make successful exceptional event demonstrations. In 2011 and 2012, ADEQ, MCAQD, and MAG worked closely with EPA to develop an exceptional event demonstration for the dust exceedances that occurred between July 2 and 8, 2011. This effort set national precedent in September 2012 when EPA concurred with the demonstration, marking the first time that an exceptional event demonstration was approved under the revised policy and guidance. By the middle of 2013, ADEQ, MCAQD and MAG repeated this feat an additional 16 times, demonstrating that the dust issues in the Maricopa County area were the result of natural conditions that either overwhelmed the stringent dust controls, or winds that blew large concentrations of dust throughout the region. Overall, EPA concurred that 131 of 133 exceedances were the result of dust that could not be reasonably controlled through the application of dust controls within the Maricopa County nonattainment area.

Throughout the development of these exceptional event demonstrations, ADEQ, MCAQD, MAG and EPA looked for additional methods to reduce the overall effort necessary to successfully make an exceptional event demonstration. Prior to EPA’s revised guidance, ADEQ, MCAQD and MAG spent hundreds of staff hours and created more than 400 pages of technical information to support the demonstration that a single day’s exceedance was the result of an exceptional event. As previously noted, EPA did not concur with this demonstration. The entire exceptional event demonstration for July 2 through 8, 2011, still required hundreds of staff hours, and seventy-five thousand dollars of contractor assistance, but significantly reduced the overall number of pages necessary to make a successful demonstration. This effort also identified additional efficiencies, and the next 17 demonstrations were made using fewer staff hours and contractor support. Ultimately 16 of these demonstrations were approved. Still, the overall costs to the State and its partners were not insignificant, as demonstrated below.

Phoenix Event	Total Staff Hours/Event	Staff Cost Estimate/Event	Contractor Cost Estimate/Event	Subtotal Cost Estimate
July 2-8, 2011	615	\$31,000	\$75,000	\$100,000
17 Additional Events	175	\$8,800	\$25,000	\$575,000
Total Estimated Costs for Phoenix Exceptional Events To Date				\$675,000

Note: “Total staff hours/event” include time estimates from ADEQ, MCAQD and MAG

It should be noted, that ADEQ has no information regarding how much time or money EPA has spent providing technical consultation and reviewing the 18 successful demonstrations. In addition, should EPA finalize approval for the 2012 Five Percent Plan, ADEQ expects to submit an unpredictable number of exceptional event demonstrations each year throughout the 20-year maintenance period as Arizona’s natural dust storms continue to impact the Maricopa County Nonattainment area.

Despite the successful efforts to reduce the cost and time spent making an exceptional event demonstration, the process remains unsustainable. The \$675,000 and thousands of staff-hours spent making these demonstrations do nothing to further ADEQ or EPA's mission of protecting public health or the environment. ADEQ's air quality division is primarily funded by fees for the services it provides, with less than ten percent of its overall revenue coming from EPA grants. These resources are best spent doing work that protects public health and the environment from controllable sources of air pollution, rather than simply providing technical proof for something that most Arizonans know for fact - that natural events will, from time-to-time, create uncontrollable large dust storms in Arizona, especially during the monsoon season. Absent the burden of documenting the well-known, ADEQ's money and staffing resources could be better spent on more proactive efforts such as forecasting and providing the public with advanced notification of dust issues so that people can take action to protect themselves.

ADEQ maintains that additional streamlining and correction need to be made to the Exceptional Events Rule and its guidance. ADEQ has previously provided recommendations in other forums regarding the need for clear deadlines for EPA decisions, the need for a clear evidentiary threshold, the need for specific criteria for determining what constitutes an exceptional event, and the need for a dispute resolution process. Instead of repeating the details of those recommendations here, it is sufficient to note that States continue to need transparency, predictability and certainty regarding EPA's decisions. EPA has shown a high degree of partnership in beginning to address these issues, and that effort is greatly appreciated, but additional work needs to be done given the unsustainable levels of effort that are required to develop such demonstrations.

AIR POLLUTION FORECASTING AND THE DUST ACTION GENERAL PERMIT

Technical fixes to the 2007 Five Percent Plan and Exceptional Event Demonstrations were not the only efforts that resulted in the proposed approval of the 2012 Five Percent Plan. ADEQ, MCAQD, MAG, the stakeholder community and the public also pioneered other strategies to reduce dust emissions and their impact to both public health and the environment.

The first such strategy is an increased reliance on air pollution forecasting. Most people are familiar with weather forecasting. It helps us all to make decisions regarding outdoor activities, the type of clothing to wear during the day, and whether carrying an umbrella might be appropriate. In a similar approach, ADEQ has a history of doing voluntary air pollution forecasts to help the public to know what to expect in terms of air pollution episodes, and whether they should plan activities to avoid exposure to unhealthy concentrations of air pollution. As noted above, the vast majority of elevated dust concentrations occur as a result of natural or otherwise uncontrollable conditions. Because these conditions can be predicted, the public is empowered to protect their own health. If a known poor air quality day is coming up, those that are sensitive to the air pollution can take early action to mitigate exposure, and lessen the risk of a health-episode.

As part of the 2012 Five Percent Plan, ADEQ is now required to provide the public and the regulated community with a dust risk forecast that identifies the risk of dust generation for the

Subject: Docket # EPA-R09-OAR-2013-0762

next five days. If there is a high risk of dust generation, A.R.S. 49-457.05 requires owners and operators of a dust generating activity to employ best management practices to reduce dust as soon as practicable before and during a day forecast to be at high risk. Sources that already have air quality permits must employ the best management practices already identified in the permit. Sources without an air quality permit must meet the best management practices that are identified in the Dust Action General Permit.

The Dust Action General Permit is unique in that its dust control requirements are applicable even if the owner or operator of the dust generating activity is not required to operate under the permit. The 2007 Five Percent Plan focused heavily on achieving emissions reductions from activities that generally require an air quality permit. Through the stakeholder process for the 2012 Five Percent Plan, it was determined that unpermitted sources remained an area of concern, especially on days with high wind. This permit was designed to identify Best Management Practices for unpermitted dust generating activities and to add additional enforceability through the requirement to operate under the permit if it was demonstrated that Best Management Practices were not employed as soon as practicable before and during a day forecast to be at high risk of dust generation. The permit adds new monitoring, record keeping and reporting requirements to the previously unpermitted source of dust, as well as ensures more timely pursuit of penalties for additional violations.

Because the Dust Action General Permit is an innovative and emerging control practice, the only way that the 2012 Five Percent Plan could demonstrate its benefit was through increase compliance with the dust control requirements for unpermitted sources. The plan itself relied upon a one percent increase in the effectiveness of Maricopa County Rule 310.01, and, as noted in MCAQD's comments regarding the plan, a two percent increase was observed.

To ADEQ's knowledge, this is the first time that an air pollution control program has used a forecasting tool as a regulatory trigger, making the program innovative in its approach. In addition to the innovation, however, the program makes sense for Arizona, where air quality is not the only environmental concern. Water is often times one of the best controls for mitigating the generation of dust. In a desert environment, however, this commodity is precious and must also be conserved. Using the forecast as a trigger for the use of controls allows the regulated community to use this precious resource in the most effective way, ensuring that the best controls are employed when there is a significant risk of dust generation. Both the requirement to do forecasting and the Dust Action General Permit are critical components of the 2012 Five Percent Plan, and ADEQ encourages EPA to fully approve the Dust Action General Permit as soon as practicable.

INNOVATIVE VOLUNTARY EFFORTS TO REDUCE DUST CONCENTRATIONS

In addition to mandatory new controls that have been included in the 2012 Five Percent Plan, other programs were not included in the plan as commitments because of their emerging nature, and the inability to predict whether those efforts were sustainable. Although they were not included in the plan, it is important to highlight those measures in an effort to show the area's commitment to clean air.

MCAQD and MAG have been on the leading edge of providing real time air quality information to the public through MCAQD's web site. While many states and agencies provide the public with access to air quality data, MCAQD and MAG have pioneered a method of reporting current air pollution concentrations on five-minute intervals. MCAQD has taken this a step further by developing an alert system called the Rapid Response network to let its inspectors and the public know when unusually high concentrations of air pollution are observed. Should an unusually high concentration be observed, Maricopa County staff is alerted to the concentration. If the cause cannot be quickly attributed to a regional event, Maricopa County staff uses an e-mail and text alert system to deploy inspectors to the area, inform the regulated community that action to reduce dust concentrations should be taken, and inform the public that they should take measures to protect their own health.

By providing this real time information to everyone near the specific monitor, MCAQD and its partners have successfully taken action to quickly identify the cause of the high concentrations and reduce dust within the area. In addition, ADEQ has heard testimony that cities have employed their public works departments and other city staff to reduce dust from activities that are not near monitors, as the alerts have heightened the general awareness of the problem.

Although the implementation of the network has not stopped every exceedance from occurring, it has improved the entire community's efforts to take corrective action quickly and improved efforts to maintain compliance with EPA's 24-hour health based PM-10 standard.

ONGOING CONTROL STRATEGIES

ADEQ and its partners are well aware that proposed approval of the 2012 Five Percent Plan does not mean that air pollution control planning for the area has ended. In truth, the forty-five years of planning that has already occurred can be considered training for the next twenty-years where maintenance of our efforts must occur.

One of the challenges for the Maricopa County area will be the growth that is expected to occur. With new people comes additional dust generating activities, more vehicular traffic, and more potential for disturbing sources of dust. The area is already subject to some of the most stringent dust controls throughout the Country, and the continued application of these controls will be central to the effort to maintain attainment with the 24-hour PM-10 standard. Other strategies outlined within the MAG Transportation Improvement Plan and Regional Transportation Plan will also be employed to ensure that dust from unpaved roads and vehicular traffic is minimized.

ADEQ and its partners will also continue to improve outreach and continuing education of the community regarding the importance of dust controls and methods that can be used to identify and then reduce exposure to high concentrations of air pollution. MCAQD, Pinal County Air Quality Control District (PCAQCD) and ADEQ all operate school flag programs that are tied to the air quality forecast to help inform children and the community about the potential daily dangers of air pollution. ADEQ has educated many school districts regarding the air pollution impacts of school bus idling at schools. MCAQD has developed a free smart phone app to provide the public with automatic access to ADEQ's pollution forecast. MCAQD's www.cleanairmakemore.com web site also provides information about the daily air pollution

Mr. Gregory Nudd

Page 7 of 7

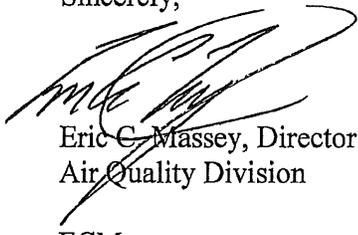
Subject: Docket # EPA-R09-OAR-2013-0762

requirements and tips for protecting public health and reducing emissions. These are but a few examples of the efforts that our agencies will build upon in the coming years.

In conclusion, ADEQ provides its unequivocal support for EPA's proposed approval of the 2012 Five Percent Plan, and recommends final approval of the plan. This letter serves only to highlight some of the provisions that assisted in making this plan successful. We also recognize that our efforts must remain vigilant. Through its partnership with its stakeholders, air quality planning and regulatory agencies, ADEQ will continue to support the development and application of new and innovative methods of reducing concentrations of dust.

Thank you for this opportunity to comment, and should you have any questions or concerns, please contact me at (602) 771-2288.

Sincerely,



Eric C. Massey, Director
Air Quality Division

ECM

cc: William Wiley, Maricopa County Air Quality Department
Lindy Bauer, Maricopa Association of Governments
Colleen McKaughan, United States Environmental Protection Agency



ARIZONA CHAPTER ASSOCIATED GENERAL CONTRACTORS

1825 West Adams • Phoenix, Arizona 85007 • (602) 252-3926 • Fax (602) 252-5870

March 10, 2014

Mr. Gregory Nudd
Region IX, U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Mr. Nudd,

First I would like to thank you for all the assistance you and your staff provided to the Arizona Department of Environmental Quality (ADEQ), Maricopa Association of Governments (MAG) and Maricopa County Air Quality Departments (MCAQD) in preparing the Exceptional Events packages which are part of the attainment demonstration for the 2012 Five Percent Plan. Dedicating staff resources to help navigate through all the required elements was beneficial to those organizations providing supporting attainment documentation.

Today I am writing urging USEPA Region IX to approve the 2012 Five Percent Plan for PM₁₀ for the Maricopa County Nonattainment Area. The region has worked collaboratively over the last 5 years to bring the area into attainment. The documentation submitted by ADEQ, MAG and MCAQD, shows the significant number of actions and programs that have been implemented throughout Maricopa County to bring the region in compliance with the National Ambient Air Quality Standards (NAAQS). This widespread stakeholder involvement has increased the overall effectiveness of the plan.

As you read through the numerous requests asking you to consider approving the 2012 Five Percent Plan, I hope you will take a moment to reflect upon how far this region has come over the last 12 years with regards to working together to develop a plan that a. actually works, and b. is proving effective for those sources regulated by the Five Percent Plan as well as the region. We can all take pride in the collaborative and creative efforts that got us to this point. All that is left is for your office to give the region a stamp of approval – as you can see stakeholders and regulators are serious about working together to provide the optimal result for Arizonans – clean air to breath.

The Arizona Chapter Associated General Contractors thanks you for considering this request to approve the 2012 Five Percent Plan. We look forward to working with our local regulators as well as USEPA Region IX in developing future efficient and commonsense approaches to achieving compliance with the NAAQS. Should there be any questions or further information required, please do not hesitate to contact me at (602) 252-3926.

Sincerely,

Amanda McGennis
Sr. Vice President



**ARIZONA
ROCK
PRODUCTS
ASSOCIATION**

March 10, 2014

Via Email (Nudd.Gregory@EPA.gov)

Mr. Gregory Nudd (Air-2)
U.S. Environmental Protection Agency Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

Re: Docket No. EPA-R09-OAR-2013-0762

Dear Mr. Nudd:

The Arizona Rock Productions Association ("ARPA") appreciates the opportunity to provide these comments concerning EPA's proposed approval of the Maricopa County PM10 Nonattainment Area Five Percent Plan (the "Five Percent Plan").

ARPA is a trade association that represents the interests of Arizona's sand, gravel, cement, concrete, asphalt, and aggregate industries. ARPA's mission is to promote and preserve the sustainability of the rock products industry through active involvement in the community, regulatory, and political processes. In 2010, the Arizona Rock Products Industry created a direct economic impact valued at nearly \$1.6 billion with a direct indirect effect of \$2.9 billion. The producers of aggregates, stone, cement, asphalt, and ready mix employ over 6,124 employees and supply essential materials to the construction industry that employs an additional 112,577 workers. The Rock Products industry is a significant and dynamic force in Arizona's economy.

ARPA's members operate extensively in Maricopa County and ARPA members' asphalt plants, concrete batch plants, and crushing and screening plants are subject to Maricopa County Rule 310 and Rule 316, two of the pillars on which the Five Percent Plan is built. As a result, ARPA's members are directly affected by this action.

The Five Percent Plan is the result of years of efforts from countless stakeholders to achieve attainment with the National Ambient Air Quality Standards for PM10. ARPA and its members are pleased to support EPA's proposed approval of the Five Percent Plan.

The Five Percent Plan Demonstrates the Benefits of a Collaborative Process.

To develop the Five Percent Plan, the Arizona Department of Environmental Quality, the Maricopa County Air Quality Department, and the Maricopa Association of Governments undertook an exceptional effort to discuss, solicit feedback, and incorporate ideas from a wide range of stakeholders. EPA also played a vital role, particularly through its significant efforts to review the exceptional events demonstrations provided by ADEQ.

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The result of this group effort is a plan that has credibility with and broad support from state and local officials, agencies, regulated industries, and the public. ARPA appreciated the opportunity to participate in this process.

The good will and collaborative spirit that was fostered during the Five Percent Plan stakeholder process has continued to yield positive results for our region's air quality. Recently, ARPA worked with MCAQD to develop the Rule 316 Nonmetallic Mineral Processing Handbook, which provides companies in the Rock Products Industry an easy-to-use guide to achieve and maintain compliance with Rule 316. The Rule 316 Handbook will further increase Rule 316 rule effectiveness - to a rate much higher than the very conservative, low estimate contained in the Five Percent Plan.

EPA Correctly Determined that Exceedances in 2011 and 2012 were Caused by Exceptional Events.

We live in a desert and dust storms happen. These natural events are not reasonably controllable or preventable, and therefore EPA correctly identified them as exceptional events as that term is defined in 42 U.S.C. § 7619(b). ARPA appreciates the extensive work done by ADEQ and others to document these exceptional events, and the significant review conducted by EPA to conclude that these events were exceptional.

ARPA is concerned, however, that these efforts may not be sustainable given the extraordinary efforts required to document and confirm an exceptional event under the current Exceptional Events Rule. It is clear that the rule needs to be improved and the demonstration process streamlined to ensure that the process is sustainable and consistent with 42 U.S.C. § 7619(b).

Even the best control measures are often not enough to keep high winds, stagnation, inversion, drought and unseasonably hot and dry weather from producing emissions well above the PM₁₀ NAAQS, hence the necessity for the Exceptional Events Rule ("EER"). Thankfully EPA recognizes the need to improve its EER Guidance, and for implementing modifications based on comments received from state agencies and key stakeholders. We are encouraged by the collaborative effort in which the EPA and the Arizona Department of Environmental Quality ("ADEQ") have worked to streamline the documentation process for the easier demonstrations.

Further, appreciate the efforts by the EPA to work with its state partners on streamlining the documentation process for the easier demonstrations; and we support the continuation of such collaboration to further refine the process, in addition to addressing and resolving other impediments with the EER and guidance. It is disconcerting, after all, that the streamlined process still required more than 600 staff hours and approximately \$100,000 to prepare the documentation to prove that the July 2-8, 2011 dust storm, which was substantially documented in video footage airing across the nation by news media outlets, was indeed an exception event.

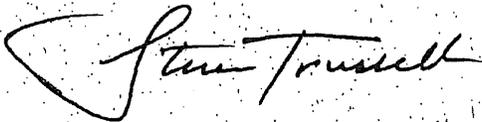
The Arizona Rock Products Association expressed these concerns to the EPA during the November 20, 2013 stakeholder meeting with the EPA and U.S. Senator Jeff Flake. We greatly

appreciated the EPA's participation, especially that of Assistant Administrator Janet McCabe, in that constructive exchange of ideas and thoughts regarding the EER. We strongly support and encourage the continuation of such collaboration and look forward to future and ongoing opportunities to work with the EPA to improve such complex and unnecessarily overly-burdensome processes.

The Five Percent Plan complies with all applicable requirements and should be approved as proposed.

ARPA appreciates the efforts of all stakeholders to develop and implement the Five Percent Plan. The end results are a very stringent but fair State Implementation Plan, stronger partnerships, and cleaner air. ARPA urges EPA to approve the Five Percent Plan as proposed.

Regards,

A handwritten signature in black ink, appearing to read "Steve Trussell". The signature is written in a cursive style with a large, sweeping initial "S".

Steve Trussell
Executive Director



March 10, 2014

Via Email (Nudd.Gregory@EPA.gov)

Mr. Gregory Nudd (Air-2)
U.S. Environmental Protection Agency Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

Re: Comments on Proposed Approval and Promulgation of Maricopa County PM₁₀ Nonattainment Area Five Percent Plan for Attainment of the 24-Hour PM₁₀ Standard; Arizona; Docket No. EPA-R09-OAR-2013-0762

Dear Mr. Nudd:

I am writing on behalf of the Arizona Chamber of Commerce and Industry (“Arizona Chamber”) and the Arizona Manufacturers Council (“AMC”) with regard to the proposal by the U.S. Environmental Protection Agency (“EPA”) to approve the Five Percent State Implementation Plan for the Maricopa County PM₁₀ Nonattainment Area, submitted on May 25, 2012 (“2012 Five Percent SIP”) by the State of Arizona.

Representing members of the Arizona business community across all sectors of the economy, the Arizona Chamber and the AMC place great value on sustaining a safe and healthy living environment for the people of Arizona while working to maintain a positive and reasonable regulatory climate. Arizona businesses understand and appreciate the importance of addressing the state’s air quality issues, especially since all our families and employees breathe the same air.

Like much of the nation, Arizona recently experienced significant economic struggles and a state budget crises resulting in a considerable reduction in the State funding of governmental services, thereby requiring the shift of that financial burden onto the business community for the purpose of ensuring the maintenance of State primacy on delegated and authorized programs. Even now, as Arizona’s economy is still recovering from a recession, the impact to the business community remains significant and burdensome. The Arizona Chamber and the AMC strive to work with federal, state and local agencies to reduce the legal and regulatory burdens borne by Arizona businesses while addressing the critical environmental issues impacting the health of our families and employees. We believe these joint efforts result in better laws, rules, and guidance being drafted and much more complete and effective SIPs being submitted.



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We are particularly pleased to support the EPA's proposed approval of the 2012 Five Percent SIP, because of the collaborative nature in which this plan was developed, the completeness in which issues have been/are being resolved, and the actions that have ensued as a result of the overall experience. This plan represents the unprecedented exhaustive stakeholder process and painstaking efforts put towards successfully developing a revised SIP addressing the EPA's concerns over its perceived flaws of Arizona's previously submitted plan for the Maricopa County Nonattainment Area for PM₁₀ ("Maricopa County Area").

The level of participation from the very extensive and inclusive list of stakeholders which included the EPA, state and local regulatory agencies, non-governmental organizations, associations, businesses, elected officials and the Governor's office, was impressive. Countless hours were spent reviewing issues; discussing options; addressing concerns; educating each other on the potential impacts associated with each issue; crafting language for legislation or rules; modifying existing language or data in the SIP to address the issues raised by the EPA; and making final decisions.

This process provided an environment that enabled: healthy exchanges of informative and enlightening ideas and thoughts; real-time discussions and decisions to be made; an extraordinary level of collaboration among all involved; and an overall streamlined approach for developing a technically complete SIP. Furthermore, this collaborative process was conducive for generating creative solutions and the implementation thereof. For instance, The Dust Action General Permit was not only a concept established during stakeholder meetings, but the permit itself is a product of each stakeholder's input as is the legislation that was passed through the Arizona Legislature providing ADEQ the authority to develop the permit. Both the legislation and the permit were drafted and revised throughout countless meetings until all stakeholders reached a consensus.

While Arizona's unique geographical terrain and climate make this region special in its own right, these same features unfortunately add to the daunting challenge of maintaining the PM₁₀ National Ambient Air Quality Standards ("NAAQS"), especially for businesses operating in the Maricopa County Area. Regulations imposed on a business operating in the Maricopa County Area require that it not only reduce its own generated PM₁₀ emissions, but it must also implement measures to reduce the PM₁₀ emissions resulting from the wind blowing. Through the stakeholder process we came to the realization that there are other sources within the Maricopa County Area that are contributing factors in the PM₁₀ emissions created by high wind events, for which we recognized the necessity in developing the Dust Action General Permit.

However, even the best control measures are often not enough to keep Mother Nature from producing emissions well above the PM₁₀ NAAQS, hence the necessity for the Exceptional Events Rule ("EER"). We applaud the EPA for recognizing the need to improve its EER Guidance, and for implementing modifications based on comments received from state agencies and others. We are encouraged by the collaborative effort in which the EPA and the Arizona Department of Environmental Quality ("ADEQ") have worked to streamline the documentation process for the easier demonstrations. In fact, ADEQ credits the frequent involvement of the EPA Region IX during the development of Arizona's exceptional events demonstrations as being instrumental in Arizona receiving concurrence on 17 of its 18 demonstrations under the new EER Guidance for high wind dust events.

We appreciate the efforts by the EPA to work with its state partners on streamlining the documentation process for the easier demonstrations; and we support the continuation of such collaboration to further refine the process, in addition to addressing and resolving other impediments with the EER and guidance. It is disconcerting, after all, that the streamlined process still required more than 600 staff hours and approximately \$100,000 to prepare the documentation to prove that the July 2-8, 2011 dust storm, which was substantially documented in video footage airing across the nation by news media outlets, was indeed an exception event.

The Arizona Chamber and the AMC reiterated these concerns to the EPA during the November 20, 2013 stakeholder meeting with the EPA and U.S. Senator Jeff Flake. We greatly appreciated the EPA's participation, especially that of Assistant Administrator Janet McCabe, in that constructive exchange of ideas and thoughts regarding the EER. We strongly support and encourage the continuation of such collaboration and look forward to future and ongoing opportunities to work with the EPA to improve such complex and unnecessarily overly-burdensome processes.

The Arizona Chamber and the AMC absolutely supports the EPA's approval of the 2012 Five Percent SIP because it represents the very best that government, public and private entities can accomplish through cooperation and collaboration. In fact, we firmly believe this is the exact process that the U.S. Congress envisioned, and even required, in the implementation of the Clean Air Act; and is one that should serve as a model for all future SIP actions.

Sincerely,



Glenn Hamer
President and CEO

cc: Chamber Board of Directors
AMC Board of Directors
Chamber Environment Committee



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Submitted electronically via www.regulations.gov

March 10, 2014

U.S. Environmental Protection Agency Region IX
Greg Nudd (Air-2)
75 Hawthorne Street
San Francisco, CA 94105-3901

RE: *SRP Comments in Response to Air Quality State Implementation Plans; Approvals and Promulgations: Maricopa County PM-10 Nonattainment Area; Five Percent Plan for Attainment of the 24-Hour PM-10 Standard – Docket ID No. EPA-R09-OAR-2013-0762*

Dear Mr. Nudd:

The Salt River Project Agricultural Improvement and Power District (SRP) appreciates the opportunity to provide comments to the U.S. Environmental Protection Agency (EPA) on their proposed approval of the State Implementation Plan (SIP) for Maricopa County's nonattainment area for particulate matter nominally less than 10 microns (PM-10).

SRP is a political subdivision of the State of Arizona that provides retail electric services to more than 950,000 residential, commercial, industrial, agricultural and mining customers in Arizona. SRP relies on a diverse portfolio of owned and purchased generation resources that includes coal, natural gas, hydroelectric, nuclear, solar, wind, biomass, and geothermal. SRP is an owner and/or operator of six coal-fired power plants located in Arizona, New Mexico and Colorado, as well as five natural gas-fired power plants located in Arizona. Given SRP's ownership and operating interests in jurisdictions impacted by the proposed action, SRP has a clear and significant interest in this action.

SRP supports EPA's proposal to approve the SIP revision submitted by the State of Arizona. The SIP revision incorporates Maricopa Association of Governments' (MAG) Five Percent Plan for the Maricopa County PM-10 Nonattainment Area, which was developed through a collaborative effort that included representatives from EPA, state and local government, industry, and members of the public.

SRP understands the consequences associated with failing to comply with the National Ambient Air Quality Standards and was actively involved in the development of the following SIP components:

SRP Comments on Proposed SIP Approval

Docket ID No. EPA-R09-OAR-2013-0762

March 10, 2014

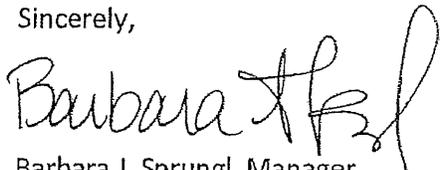
Page 2

- MAG's Five-Percent Plan (including serving on the MAG Air Quality Technical Advisory Committee, which ultimately approved the Five-Percent Plan);
- The Maricopa County Air Quality Department's (MCAQD) fugitive dust regulations; and
- The Arizona Department of Environmental Quality's Dust Action General Permit.

SRP demonstrates its commitment to the measures developed in the Five Percent Plan by participating in MCAQD's Rapid Response Program, which provides real-time notifications via email when PM-10 levels rise. This advanced notification enables SRP to take additional actions to help curtail the impacts of dust generating activities to the extent possible. SRP also receives the Maricopa County dust control forecast, which indicates the level of risk for elevated PM-10 levels five days in advance of a high wind or stagnation event, allowing SRP to plan dust generating activities accordingly.

SRP appreciates EPA's consideration of these comments. If you have any questions regarding the content of this letter, please contact me at Barbara.Sprungl@srpnet.com or by telephone at (602) 236-5374.

Sincerely,



Barbara J. Sprungl, Manager
Air Quality and Laboratory Services

March 10, 2014

Hon. Amanda A. Reeve
1 East Washington St.
Phoenix, Arizona 85004

Via Email (Nudd.Gregory@EPA.gov)

Mr. Gregory Nudd (Air-2)
U.S. Environmental Protection Agency Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

**Re: Docket No. EPA-R09-OAR-2013-0762
Comments on Proposed Approval and Promulgation of the Five Percent Plan for
Attainment of the 24-Hour PM₁₀ Standard for the Maricopa County PM₁₀
Nonattainment Area; Arizona.**

Dear Mr. Nudd:

I write today to express my ardent support of the proposed approval by the U.S. Environmental Protection Agency ("EPA") of the Five Percent State Implementation Plan for the Maricopa County PM₁₀ Nonattainment Area, which was submitted by the State of Arizona on May 25, 2012 per Section 189(d) of the Clean Air Act ("2012 SIP").

I served in the Arizona House of Representatives from February 2010 to January 2013. As the Chair of the House Environment Committee, I was thoroughly immersed in the development of the 2012 SIP; and I am intimately aware of the exceptionally daunting nature in which Arizona had to revise its SIP for the Maricopa County PM₁₀ Nonattainment Area ("Maricopa County Area"). However, through a state-driven process this SIP was revised via collaborative stakeholder efforts resulting in the additional development of creative regulatory measures addressing the particulars specific to the Maricopa County Area.

Developing the 2012 SIP entailed countless arduous hours of frequently occurring and exhaustive stakeholder meetings that were inclusive, transparent, and cooperative. Due to an extensive and impressive list of stakeholders, which included: all impacted state and local agencies, businesses, associations, non-governmental organizations including the Sierra Club among others, members of the public, EPA Region IX, and representatives from municipalities, the state legislature, and the Governor's office, these meetings fostered an environment in which the exchange of information and feedback was instant, cooperative, and critically insightful.

Through the stakeholder process we confirmed that the options were very limited on the remaining available most stringent control measures that could be imposed on the permitted regulated community operating in the Maricopa County Area. However, the stakeholders agreed

that having the ability to engage certain control strategies proactively, as opposed to at the onset of a high wind dust event, would further reduce PM₁₀ emissions. Thus it was suggested that the Arizona Department of Environmental Quality (“ADEQ”) issue a Dust Control Forecast (“DCF”) for the Maricopa County Area providing advance notice of possible conditions that could lead to high wind dust events. It was agreed that the DCF would be issued six days a week, providing the forecast for the next five consecutive days; and would assign a “low”, “moderate” or “high risk for dust generation” category to each day based on projected meteorological conditions for the area, including: wind speed and direction, stagnation, recent precipitation, and potential for precipitation, as well as considerations of historic air pollution concentrations observed during conditions similar to those being predicted.

Additionally, through stakeholder discussions we were able to identify sources within the non-permitted regulated community residing in the Maricopa County Area that are contributors of fugitive dust emissions resulting from high wind dust events. It was collectively determined that the need to better inform and educate this particular community about the direct impact its actions has on the Maricopa County Area was essential, thus we collaboratively created the Dust Action General Permit (“DAGP”). This permit, developed in compliance with the guidelines set forth by the EPA for adopting and implementing emerging control measures, is an innovative and groundbreaking control strategy that doubles as an educational outreach tool with preventative Best Management Practices (“BMP”) applications. Furthermore, with the implementation of this DAGP, the DCF notification system will better enable both the permitted and non-permitted regulatory communities to more effectively implement BMPs prior to a high wind dust event, thereby significantly reducing fugitive dust emissions from occurring during the event.

Language granting ADEQ the required statutory authority and mandating specific parameters for the development of the DCF system and the DAGP was drafted for legislation via consensus from the stakeholders. House Bill 2208, containing these statutory provisions, passed with bipartisan and unanimous support from both the Senate and House chambers of the Arizona 50th Legislature, in 2011 during its first regular session. This would not have been achieved without the support of every single stakeholder, including the environmental and health organizations which especially have considerable sway among many of the members.

Another piece of legislation, passed in 2012 during the second regular session of the 50th Legislature, attributable to the stakeholders is House Bill 2798. As stakeholder discussions ensued it became evident that the perception of some of the participants, specifically the EPA, Sierra Club and several members of the business community, was that the municipalities were not enforcing the ordinances that they were statutorily and federally mandated to implement in conjunction with the Maricopa County PM₁₀ SIP. Through a comprehensive review conducted via the stakeholder meetings we discovered that the municipalities had implemented the statutorily required ordinances in compliance with the SIP and have been appropriately enforcing them since inception. However, each of the regulatory agencies (the municipalities, Maricopa County, ADEQ and the Arizona Department of Transportation) subject to enforcing provisions

of the SIP agreed to annually submit documentation reporting their activities and efforts thereof, so as to assuage any doubt to the contrary. Therefore, the legislation statutorily mandating these reporting requirements was passed as House Bill 2798.

These additional regulations, in conjunction with the existing and some of the most stringent control strategies being imposed on the permitted regulated community operating within the Maricopa County Area, have proven to significantly reduce emissions and exceedances thereof for the PM₁₀ National Ambient Air Quality Standards (“NAAQS”). However, even these extraordinary measures will not prevent fugitive dust emissions from occurring during high wind dust events. Under the previous SIP, ADEQ submitted documentation to the EPA demonstrating that most of the exceedances associated with that SIP were directly related to days experiencing high wind dust events, circumstances of which ADEQ believed were naturally occurring or not reasonably controllable or preventable thereby qualifying as Exceptional Events. In part, the EPA’s disagreement with the state’s assessment on several of the reported exceedances, led to Arizona revising its plan and submitting the 2012 SIP.

However, while the EPA disagreed with several of those purported exceptional event-related exceedances submitted under the previous plan, it did acknowledge that the Exceptional Events Rule (“EER”) inadequately addressed high wind dust events, and announced that the rule would undergo review and modification to provide the guidance and clarity required for state agencies to properly implement it for such events. It is very encouraging that as part of this undertaking the EPA enlisted feedback from, and is working with, state and local air quality regulatory agencies to improve the EER. In fact, ADEQ has diligently been working with the EPA to ensure that the rule and guidance better address the circumstances that are unique to the southwestern desert region. Additionally, U.S. Senator Jeff Flake arranged for Arizona stakeholders the opportunity to directly discuss with Assistant Administrator Janet McCabe concerns with the current provisions of the rule and suggestions for improving it to better accommodate differing climates and environments.

The continuation of these cooperative efforts in further refining the EER and guidance is greatly appreciated as it is a very important undertaking because one size truly does not fit all when it comes to addressing air quality concerns. Not only is Arizona’s climate and environment drastically different than that of Oregon or Maine; but even within Arizona, Maricopa County is vastly dissimilar to that of its neighboring Yavapai County. Thus, state and local governments are best situated to address the factors unique to their surrounding area thus being paramount in providing invaluable input to the revision of the EER and in the development of all state air plans.

In the passage of the Clean Air Act, Congress had the foresight to mandate that the prevention and control of air pollution *at its source* is the primary responsibility of the states and local governments; and that the EPA shall encourage cooperative activities by states and local governments in addition to promoting reasonable actions. Sections 101 and 102 of the Clean Air Act, in which Congress made these requirements, were the impetus for the stakeholder process

utilized to develop the 2012 SIP. The long-term partnerships and voluntary actions that have ensued as a result of this overall collaborative experience, have increased the effectiveness of the dust mitigation efforts thereby further reducing emissions; and have become critical in addressing other air quality matters.

The 2012 SIP stakeholder discussions revealed that the Maricopa County Air Quality Department's Rule 310: Fugitive Dust from Dust-Generating Operations and Rule 316: Nonmetallic Mineral Processing could benefit from the development of guidance to help facilities better comply with the rules. In fact, several of the stakeholders worked with the county to develop and distribute a Dust Abatement Handbook for Rule 310, while another set of stakeholders did the same for a handbook specific to Rule 316. Other stakeholders have assisted in developing educational materials, participating in outreach activities and/or disseminating DCF notifications to ensure that proactive measures are being implemented. Some stakeholders have even worked with the municipalities in researching options for more effective sealants or stabilizing methods to be implemented during road construction activities. More importantly, however, the stakeholders continue to work with the state and local agencies to ensure compliance with the 2012 SIP and maintenance thereof.

The stakeholders who participated in the development of the 2012 SIP are not only committed to remaining vigilant in reducing PM_{10} emissions; but are also thoroughly engaged in reducing other pollutant emissions, such as for fine dust/soot particulate matter (" $PM_{2.5}$ "). This past year, the state and county air agencies enlisted the stakeholders to assist in a monumental outreach campaign to educate residents and businesses operating within Maricopa County about the importance of reducing $PM_{2.5}$. Having experienced the successful collaboration in tackling PM_{10} and gaining an understanding and appreciation in the value of cooperatively and proactively addressing such issues, the stakeholders have eagerly been working with the state and county in addressing $PM_{2.5}$ concerns.

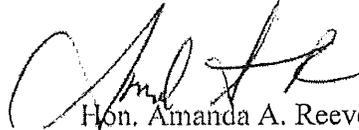
Former EPA Administrator William K. Reilly wrote, in a press release that can be found on the EPA's website, that the passage of the Clean Air Act Amendments of 1990 was a major milestone, in part because "its implementation envisions an unprecedented degree of cooperation between government and the private sector." Possibly for the first time ever, this vision has finally been realized under Arizona's state-driven process utilized to develop the 2012 SIP. Stakeholders engaging in a solution-oriented manner, collaboratively working towards the same overarching goal, understanding the impact of each action from all perspectives and encouraging practical and preemptive measures are proving to be fundamental in addressing Arizona's air quality issues.

The partnerships and the resulting extraordinary actions, the comprehensively complete plan, the innovative control strategies created, the unanimously supported legislation, and the continuing vigilance by the stakeholders are the byproduct of the successful state-driven process in which the 2012 SIP was developed. As a participating stakeholder in this process, the EPA's assistance and encouragement throughout was equally invaluable and integral to the plan's

Mr. Gregory Nudd
Page 5

development. The Clean Air Act was written with the understanding that the successful implementation thereof requires that the primary responsibility be that of the governmental entities most intimately familiar with the impacted area(s); and that collaboration amongst the federal, state and local governments is paramount. I absolutely support approval of the 2012 SIP, because it is the very embodiment of this intent and most definitely should serve as the model process for all current and future SIP actions across the nation.

Sincerely,



Hon. Amanda A. Reeve
Former Member & House Environment Chair,
Arizona House of Representative

cc: Dir. Eric Massey, Arizona Department of Environmental Quality
Dir. William D. Wiley, Maricopa County Air Quality Department

U.S. EPA FACT SHEET

Proposed Approval of Arizona's Request to Redesignate the Phoenix-Mesa Area To Attainment for the 1997 Ozone Standard

March 14, 2014

Summary

- EPA is proposing to approve Arizona's request to redesignate the Phoenix-Mesa ozone nonattainment area to attainment for the 1997 8-hour ozone National Ambient Air Quality Standard (1997 ozone standard).
- EPA is also proposing to approve the State's plan, along with related inventories and motor vehicle emissions budgets, for maintaining attainment of the 1997 ozone standard for ten years beyond redesignation.

Background

- In April 2004, EPA designated the Phoenix-Mesa area as nonattainment for the 1997 ozone standard. Today's proposed actions are based in part upon complete, quality-assured, and certified ambient air quality monitoring data from 2010-2012 showing that Phoenix-Mesa area has attained and continues to attain the 1997 ozone standard. Air quality data collected in 2013, which are preliminary at this time, are consistent with attainment.
- In proposing to approve the State's redesignation request and maintenance plan for the Phoenix-Mesa area, EPA has concluded that the area has met the criteria for redesignation in section 107(d)(3)(E) of the Clean Air Act and requirements for maintenance plans and contingency provisions in section 175A of the Clean Air Act.
- Today's action signifies a milestone for continued air quality improvement in the Phoenix-Mesa area accomplished through the joint efforts of the Maricopa Association of Governments, Arizona Department of Environmental Quality, Maricopa County Air Quality Department, Pinal County Air Quality Control District, and EPA to protect public health.
- Today's action only concerns the 1997 ozone NAAQS. Despite today's significant milestone in terms of the 1997 ozone standard, the area still remains nonattainment for the more stringent 2008 ozone standard.
- Exposures to ozone can reduce lung function, making it more difficult for people to breathe, especially for those with lung disease, such as children with asthma and older

adults. Ground-level ozone is not emitted directly into the air, but forms through a reaction of nitrogen oxides and volatile organic compounds in the presence of sunlight.

Next Steps

- Today's proposed action will be published in the Federal Register in approximately two weeks and include a 30-day period for public comment.
- After the close of the comment period, EPA will evaluate and respond to any comments in a subsequent rulemaking action.

For More Information:

<http://www.epa.gov/region9/air/actions/az.html>

MARGINAL AREA REQUIREMENTS
2008 EIGHT-HOUR OZONE STANDARD (0.075 PARTS PER MILLION)

On June 6, 2013, the Environmental Protection Agency published a proposed rule on the Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements. As a Marginal Area, the Maricopa nonattainment area will have a December 31, 2015 attainment date. EPA assumes that Marginal Areas will be in attainment of the eight-hour ozone standard (0.075 parts per million) within three years of designation without any additional control measures. According to the proposed guidance, Marginal Areas would not be required to submit an attainment demonstration, reasonably available control technologies and measures, reasonable further progress demonstration, and contingency measures. Final planning guidance from EPA will be forthcoming.

Requirements for Marginal Areas:

- An emissions statement-CAA Section 182(a)(3)(B)
- A baseline emissions inventory-CAA Section 182(a)(1)
- A periodic emissions inventory, no later than every three years until attainment of the standard-CAA Section 182(a)(3)(A)
- A pre-1990 reasonably available control technology fix-up-CAA Section 182(a)(2)(A)
- A nonattainment area preconstruction program-CAA Section 182(a)(2)(C)
- New source review-CAA Title I, Part D
- Pre-1990 corrections to previously required vehicle inspection and maintenance programs-CAA Section 182(a)(2)(B)
- Meet transportation conformity requirements-CAA Section 176(c)
- Offset requirements: 1.1 to 1 (ratio of total emissions reductions of volatile organic compounds to total increased emissions)-CAA Section 182(a)(4)
- If the region fails to attain the standard by December 31, 2015, the region may be bumped up to the Moderate Area category with additional requirements to meet. -CAA Section 181(b)(2)
- Upon application by any State, EPA may extend the attainment date for one additional year if:
 - the state has complied with all applicable requirements and commitments pertaining to the area in the applicable implementation plan, and
 - no more than one exceedance of the ozone standard has occurred in the area preceding the Extension Year.
- No more than two one-year extensions of the attainment date may be issued.-CAA Section 181(a)(5)

- EPA proposed Marginal Area Plan Due Date: July 20, 2014 (EPA Proposed Rule on the Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements. June 6, 2013)

EPA-452/P-14-002

January 2014

*Policy Assessment for the Review of the Ozone National Ambient Air
Quality Standards*

Second External Review Draft

U.S. Environmental Protection Agency
Office of Air and Radiation
Office of Air Quality Planning and Standards
Health and Environmental Impacts Division
Ambient Standards Group
Research Triangle Park, North Carolina 27711

EXECUTIVE SUMMARY

This second draft Policy Assessment (PA) has been prepared by staff in the Environmental Protection Agency's (EPA) Office of Air Quality Planning and Standards (OAQPS) as part of the Agency's ongoing review of the primary (health-based) and secondary (welfare-based) national ambient air quality standards (NAAQS) for ozone (O₃). It presents analyses and preliminary staff conclusions regarding the policy implications of the key scientific and technical information that informs this review. Preliminary staff conclusions are presented regarding the adequacy of the current standards and, as appropriate, potential alternative standards appropriate for consideration in this review. Staff analyses in this second draft PA are based on the scientific and technical information, as well as uncertainties and limitations related to this information, assessed in other EPA documents, including the scientific assessment presented in the *Integrated Science Assessment for Ozone*, the second draft *Health Risk and Exposure Assessment for Ozone* and the second draft *Welfare Risk and Exposure Assessment for Ozone*. The final PA is intended to "bridge the gap" between the relevant scientific evidence and technical information and the judgments required of the EPA Administrator in determining whether to retain or revise the current standards. Development of the PA is also intended to facilitate advice and recommendations on the standards to the Administrator from an independent scientific review committee, the Clean Air Scientific Advisory Committee (CASAC), as provided for in the Clean Air Act (CAA).

The overarching questions in this review, as in all NAAQS reviews, regard the support provided by the currently available scientific evidence and exposure/risk-based information for the adequacy of the current standards and the extent to which the scientific evidence and technical information provides support for concluding that consideration of alternative standards may be appropriate. Comments and recommendations from CASAC and public comments based on review of this draft PA will inform final staff conclusions and the presentation of information in the final PA.

Health Effects and Review of the Primary Standard

The longstanding and comprehensive evidence base, stronger today than in the last review, documents the effects of O₃ in ambient air on health. In particular, O₃ affects the respiratory system, posing greatest hazard to those with respiratory disease and those with highest exposures, including children with asthma. The evidence indicates that higher exposures and repeated occurrence of exposures lead to more severe effects, including increased susceptibility to other respiratory stressors, and that higher exposures lead to greater prevalence of effects among the exposed population. Based on the staff evaluation presented in this draft

1 document, staff preliminarily concludes that the currently available evidence and exposure and
2 risk information call into question the adequacy of the current primary standard and that
3 consideration should be given to revising the standard to provide increased public health
4 protection. With regard to potential alternative standards, staff concludes it is appropriate to
5 consider standards with the same indicator, averaging time and form as the current standard with
6 alternative levels within the range from 70 ppb to 60 ppb.

7 In drawing these preliminary conclusions, staff additionally notes that the final decision
8 on the adequacy of the current standard and consideration of potential alternative standards is
9 largely a public health policy judgment to be made by the Administrator, drawing upon the
10 scientific information as well as judgments about how to consider the range and magnitude of
11 uncertainties that are inherent in the scientific evidence and technical analyses.

12 **Welfare Effects and Review of the Secondary Standard**

13 The longstanding evidence base, strengthened since the last review, documents the
14 welfare-related effects of O₃ in ambient air. In particular, O₃ affects vegetation and poses risk of
15 related effects on terrestrial ecosystems. Based on the staff evaluation presented in this draft
16 document, staff preliminarily concludes that the currently available evidence and exposure and
17 risk information call into question the adequacy of the current secondary standard and that
18 consideration should be given to revising the standard to provide increased public welfare
19 protection. In considering the level of protection achieved by potential alternative standards,
20 staff preliminarily concludes it is appropriate for the Administrator to judge O₃ welfare impacts
21 using the W126-based cumulative seasonal index, defined as an index of the sum of weighted
22 hourly concentrations, cumulated over 12 hours per day (8 am to 8 pm) during the consecutive
23 three-month period within the O₃ season with the maximum index value. With regard to
24 potential alternative standards, staff preliminarily concludes it is appropriate to consider
25 standards in terms of the W126-based cumulative seasonal metric with a form averaged across
26 three consecutive years and levels extending somewhat above 15 ppm-hrs (e.g., to 17 ppm-hrs)
27 down to 7 ppm-hrs.

28 In drawing these preliminary conclusions, staff additionally notes that the final decision
29 on the adequacy of the current standard and consideration of potential alternative standards is
30 largely a public welfare policy judgment to be made by the Administrator, drawing upon the
31 scientific information as well as judgments about how to consider the range and magnitude of
32 uncertainties that are inherent in the scientific evidence and technical analyses.

CMAQ DETAILED PROJECT LISTING REPORT (FY 2013)

05-March-2014

Fiscal Year = '2013' and Status Selection Criteria = 'Approved by Division' and State = 'Arizona'

STATE	Apportionments	APPORTION. AMOUNT	OBLIGATED AMOUNT	OBLIG. %	PROJECT AMOUNT	PROJECT TYPE	PROJECT TITLE & DESCRIPTION	VOC (Kg/Day)	CO (Kg/Day)	NOx (Kg/Day)	PM 10 (Kg/Day)	PM 2.5 (Kg/Day)	CO2 (MT/Day)	CONTINUING PROJECT?
Arizona		\$0	\$41,367,207	0 %										
Arizona					\$1,579,761	I/M and Other TCMs	Phoenix: Pave unpaved alleys Pave 38.1 miles of unpaved alleys				147			
Arizona					\$1,414,500	I/M and Other TCMs	Phoenix: Pave unpaved alleys Pave 31.8 miles of unpaved alleys				615			
Arizona					\$1,227,728	I/M and Other TCMs	Maricopa Association of Governments: PM-10 Certified Street Sweepers Purchase PM-10 certified street sweepers region wide				667			
Arizona					\$1,000,000	I/M and Other TCMs	Salt River Pima-Maricopa Indian Community: Pave unpaved roads Right-of-way for pave unpaved roads for approximately 5.4 miles on Center Rd; Mesa Dr; McDonald Dr; and Alma School Rd				884			
Arizona					\$961,105	I/M and Other TCMs	Tempe: Alley stabilization Construct 10.5 mile alley stabilization project in North Tempe Neighborhood area				53			
Arizona					\$747,823	I/M and Other TCMs	Tempe: Alley stabilization Construct 7.8 mile alley stabilization project in Holdeman Neighborhood area				166			
Arizona					\$741,198	I/M and Other TCMs	Chandler: Pave unpaved alleys Pave unpaved alleys for a length of 9.68 miles.				50			
Arizona					\$581,180	I/M and Other TCMs	Surprise: Pave unpaved shoulders Pave unpaved shoulders at various locations on 10 segments including Cactus Rd from 143rd Ave to Bullard Ave				17			

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Arizona					\$554,144	I/M and Other TCMs	Maricopa County: Pave unpaved roads Design and construct pave unpaved road on 87th Ave from Deer Valley Rd to Peoria city limits				25			
Arizona					\$482,057	I/M and Other TCMs	Tempe: Alley stabilization Construct 4.5 mile alley stabilization project in Evergreen Neighborhood area bounded by Broadway Rd; the Price Fwy; Southern Ave and the eastern city limits				23			
Arizona					\$277,215	I/M and Other TCMs	Maricopa County: Pave unpaved roads Design various low volume roads in the Dove Valley area				350			
Arizona					\$249,518	I/M and Other TCMs	Buckeye: Pave unpaved road Design and construct pave unpaved road on N Watson Rd and MC85 Phase I and Phase II				41			
Arizona					\$220,000	I/M and Other TCMs	Maricopa County: Pave unpaved roads Design paving project at seven locations in the New River area for 4.37 miles				309			
Arizona					\$215,000	I/M and Other TCMs	Buckeye: Pave Unpaved Road Design pave unpaved road on Watson Rd 650 feet North of Van Buren St to McDowell Rd				237			
Arizona					\$50,000	I/M and Other TCMs	Phoenix: Pave unpaved alleys Design 29.3 miles of unpaved alleys in various locations in twelve quarter sections				113			
Arizona					\$37,500	I/M and Other TCMs	Maricopa County: Pave Unpaved Roads Design pave dirt road on Rockaway Hills Dr from beginning of Maintenance to End of Maintenance a distance of approximately 0.7 mile				114			

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Arizona					\$2,946,039	Pedestrian/Bicycle	Glendale: Multi-use path Construct New River east bank multi-use path and underpasses between Northern Ave to Bethany Home Rd	1	1	1	1			
Arizona					\$2,349,956	Pedestrian/Bicycle	Tempe: Bicycle and pedestrian facilities Construct bicycle and pedestrian facilities for 1.0 mile on University Dr - Priest Dr and Union Pacific Railroad	1	1	1	1			
Arizona					\$1,811,884	Pedestrian/Bicycle	Tempe: Pedestrian and bicycle facilities Construct 1.0 mile pedestrian and bicycle improvements on Hardy Dr from University Dr to Broadway Rd	1	1	1	1			
Arizona					\$961,861	Pedestrian/Bicycle	Tempe: Multi-use path Construct 1.0 mile multi-use path along Salt River from Interstate-10/Tempe Drain to Priest Dr	1	1	1	1			
Arizona					\$455,469	Pedestrian/Bicycle	Phoenix: Pedestrian facilities Construct Pedestrian Enhancement on 32nd Street from Washington St to McDowell Rd	1	1	1	1			
Arizona					\$320,000	Pedestrian/Bicycle	Cave Creek: Bicycle lanes Design bike lanes on Cave Creek Rd from Carefree Hwy to Pima Rd	1	1	1	6			
Arizona					\$217,000	Pedestrian/Bicycle	Avondale: Multi-use path Design asphalt path and underpass at Interstate-10 and Agua Fria River	1	1	1	1			
Arizona					\$146,500	Pedestrian/Bicycle	Mesa: Multi-use path Design multi-use path along Rio Salado	1	1	1	1			

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Arizona					\$99,000	Pedestrian/Bicycle	Phoenix: Pedestrian facilities Design pedestrian facilities on Roosevelt St from 4th St to 7th St	1	1	1	1			
Arizona					\$70,725	Pedestrian/Bicycle	Youngtown: Multi-use path Design 5.0 mile multi-use path on Grand Ave and 111th Ave to Olive Ave and Agua Fria Pkwy	1	1	1	1			
Arizona					\$942,373	Shared Ride	Maricopa Association of Governments: Trip Reduction Program Maricopa County Trip Reduction Program	100	1,297	273	137			
Arizona					\$606,065	Shared Ride	Maricopa Association of Governments: Regional Rideshare and Telework Program Regional Rideshare and Telework Program	57	744	157	79			
Arizona					\$135,000	Shared Ride	Maricopa Association of Governments: Travel Reduction Program Capitol Rideshare Program	1	9	2	1			
Arizona					\$972,721	Traffic Flow Improvements	Glendale: Intelligent Transportation Systems project Install variable message signs including ITS conduit and fiber on 59th Ave; Northern Ave; Bethany Home Rd; Glendale Ave; 51st Ave and 67th Ave; Peoria Ave; 47th Ave and 67th Ave	3	26	7	1			

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Arizona					\$943,000	Traffic Flow Improvements	Maricopa County: Intelligent Transportation Systems project Install arterial dynamic message signs and associated conduit pull boxes fiber optic cable communication equipment and electrical service equipment on McDowell Rd at Avondale Blvd; McDowell Rd at Estrella Pkwy; and other various locations	8	75	19	3			
Arizona					\$899,276	Traffic Flow Improvements	Glendale: Intelligent Transportation Systems project Install ITS fiber optic cable and closed-circuit television cameras on Cactus Rd; Thunderbird Rd; and Greenway Rd	2	14	2	1			
Arizona					\$848,700	Traffic Flow Improvements	Goodyear: Intelligent Transportation Systems project Implement traffic signal system including installation of ITS backbone and communications equipment	15	118	49	5			
Arizona					\$737,031	Traffic Flow Improvements	Phoenix: Intelligent Transportation Systems project Construct Intelligent Transportation Systems fiber optic backbone Phase B-1	66	673	89	26			
Arizona					\$726,110	Traffic Flow Improvements	Tempe: Intelligent Transportation Systems project Procure and install traffic control cabinets and hardware citywide	1	4	1	1			

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Arizona					\$683,675	Traffic Flow Improvements	Surprise: Intelligent Transportation Systems project Construct fiber optic interconnect to connect traffic interchange traffic signals; closed-circuit television cameras; dynamic message signs; and connection to ITS fiber backbone on Loop 303 from Peoria Ave to Mountain View Blvd	1	1	1	1			
Arizona					\$660,100	Traffic Flow Improvements	Arizona Department of Transportation: Freeway Management System Design Freeway Management System on Loop 202 Santan from Dobson Rd to Val Vista Dr	3	58	10	1			
Arizona					\$549,362	Traffic Flow Improvements	Mesa: Intelligent Transportation Systems project Install Anonymous Re-Identification (ARID) Sensors to Detect Travel Time and Traffic Incidents	15	145	39	6			
Arizona					\$494,963	Traffic Flow Improvements	Mesa: Intelligent Transportation Systems project Upgrade central traffic control system software to accommodate a lite version of adaptive control West Side Real Time Adaptive Project (initial deploy in Fiesta district) West city limits to Country Club Dr and Broadway Rd to Baseline Rd	5	45	12	2			
Arizona					\$402,739	Traffic Flow Improvements	Maricopa County: Intelligent Transportation Systems project Develop and implement arterial Advanced Traveler Information Systems (ATIS) Enhancements region wide	1	1	1	1			

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Arizona					\$400,000	Traffic Flow Improvements	Glendale: Intelligent Transportation Systems project Install Traffic Management Center including the purchase of video wall and control equipment	28	232	63	14			
Arizona					\$377,200	Traffic Flow Improvements	Arizona Department of Transportation: Freeway Management System Rehabilitation Design Freeway Management System Rehabilitation region wide	14	285	49	3			
Arizona					\$314,094	Traffic Flow Improvements	Arizona Department of Transportation: Freeway Management System Construct Freeway Management System on Loop 202 Red Mountain from Loop 101 to Gilbert Rd	1	29	5	1			
Arizona					\$300,000	Traffic Flow Improvements	Maricopa County: Intelligent Transportation Systems project Design Adaptive Signal Control Technology (ASCT) deployment in Surprise; Glendale; Phoenix; and Scottsdale	1	2	1	1			
Arizona					\$254,235	Traffic Flow Improvements	Queen Creek: Intelligent Transportation Systems project Construct traffic signal and closed circuit television system on Ellsworth Rd from Sierra Park Blvd to Empire Blvd (Hunt Hwy)	1	3	1	1			
Arizona					\$174,676	Traffic Flow Improvements	Gilbert: Intelligent Transportation Systems project Design 3 miles of Gilbert Advanced Traffic Management System (ATMS) Fiber East Ring Project - Phase II for seven intersections near Baseline Rd and Val Vista Dr	2	17	5	1			

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Arizona					\$128,486	Traffic Flow Improvements	Chandler: Intelligent Transportation Systems project Construct ITS fiber communications from signals on Ray Rd; Elliot Rd; and Dobson Rd connecting at Arizona Ave back to Traffic Management Center	2	11	6	1			
Arizona					\$108,000	Traffic Flow Improvements	Phoenix: Intelligent Transportation Systems project Design dynamic message signs on 7th Ave at Northern Ave; Glendale Ave; Camelback Rd; and McDowell Rd; and on 7th St at Bell Rd; Thunderbird Rd; Camelback Rd; and McDowell Rd	32	277	93	9			
Arizona					\$94,300	Traffic Flow Improvements	Phoenix: Intelligent Transportation Systems project Design fiber optic backbone expansion Phase B	92	930	123	36			
Arizona					\$88,850	Traffic Flow Improvements	Avondale: Intelligent Transportation Systems project Design ITS components on Dysart Rd from Rancho Santa Fe to Indian School Rd	1	9	1	1			
Arizona					\$73,000	Traffic Flow Improvements	Phoenix: Intelligent Transportation Systems project Design closed-circuit pan tilt zoom traffic monitoring cameras at 65 identified intersections	5	48	6	2			
Arizona					\$56,580	Traffic Flow Improvements	Peoria: Intelligent Transportation Systems project Design ITS upgrades the existing cabinets; traffic controllers; existing loop detection to video detection; and hardware and software on Peoria Ave; Northern Ave; and Olive Ave for an approximate distance of 15.0 miles	1	3	1	1			

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Arizona					\$47,150	Traffic Flow Improvements	Maricopa County: Construct Intelligent Transportation Systems Design a multi-agency Operations Plan in the Southwest Valley from 99th Ave to Cotton Ln to include McDowell Rd; Van Buren St; MC85/Buckeye	1	1	1				
Arizona					\$38,000	Traffic Flow Improvements	Scottsdale: Highway Advisory Radio Design highway advisory radio	8	79	9	3			
Arizona					\$36,000	Traffic Flow Improvements	Tempe: Intelligent Transportation System project Design ITS project for fiber optic interconnection at various locations including Broadway Rd and Interstate-10 and Rio Salado and Loop 101	7	72	10	3			
Arizona					\$5,308,358	Transit	Valley Metro Rail: Fixed Guideway Corridor Tempe South Fixed Guideway Corridor Preliminary Engineering/Final Environmental Impact Statement	1	15	3	2			
Arizona					\$3,900,000	Transit	Valley Metro Rail: Light Rail Transit Light Rail Transit extension and right-of-way acquisition on Main St from Mesa Dr to Gilbert Rd	3	49	8	7			
Arizona					\$350,000	Transit	Maricopa Association of Governments: Southeast Valley Local Transit Study Southeast Valley Local Transit Study	1	6	2	1			
Nationwide Totals . . .		\$0	\$41,367,207	0 %										

States without ozone or CO Nonattainment or maintenance areas QA - Qualitative Assessment PR - Previously Reported c - Changed benefit from previous year r