

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

Thursday, August 22, 2019
MAG Office
Phoenix, Arizona

MEMBERS ATTENDING

Jon Sherrill, Chandler, Chair
Megan Sheldon, Glendale, Vice Chair
Hether Krause, Avondale
Robert van den Akker, Buckeye
* Derek Castaneda, El Mirage
Benjamin Bitter, Florence
* Hondo Judd, Gilbert
Mario Saldamando, Goodyear
Benjamin Cereceres, Maricopa
Aaron Chavez, Mesa
Rhonda Humbles, Peoria
Nancy Allen, Phoenix
Martin Lucero, Surprise
Oddvar Tveit, Tempe
* Youngtown
Ramona Simpson, Queen Creek
Tim Conner, Scottsdale
Walter Bouchard, American Lung
Association of Arizona
Bill McClellan for Kristin Watt, Salt River Project
* Southwest Gas Corporation
Michael Denby, Arizona Public Service
Company
Susie Stevens, Western States Petroleum
Association
Lauren Esposito for Robert Forrest, Valley
Metro/RPTA

* Members neither present nor represented by
proxy.
Participated via telephone conference call.

OTHERS PRESENT

Lindy Bauer, Maricopa Association of Governments
Julie Hoffman, Maricopa Association of Governments
Matt Poppen, Maricopa Association of Governments
Dean Giles, Maricopa Association of Governments
Taejoo Shin, Maricopa Association of Governments
Randy Sedlacek, Maricopa Association of Governments
Lesa Young, Maricopa Association of Governments
Alejandro Morales, City of Scottsdale
Jennifer Anderson, Arizona Center for Law in the
Public Interest

* Dave Berry, Arizona Motor Transport
Association
Liz Foster, Maricopa County Farm Bureau
* Steve Trussell, Arizona Rock Products
Association
* 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
Beverly Chenausky, Arizona Department of
Transportation
Mike Sonenberg for Joseph Martini, Arizona
Department of Environmental Quality
* Environmental Protection Agency
Kimberly Butler, Maricopa County Air Quality
Department
Scott DiBiase, Pinal County
Michelle Wilson, Arizona Department of
Agriculture, Weights and Measures
@* Ed Stillings, Federal Highway
Administration
JC Porter, Arizona State University
Stan Belone, Salt River Pima-Maricopa
Indian Community

+ Participated via video conference call.
@ Ex-Officio member, non-voting member.

Ivan Racic, Arizona Department of
Transportation
Phil Cummings, Maricopa County Air Quality
Department
Hanna Valenzuela, Maricopa County Air Quality
Department
Tina Wesoloskie, Maricopa County Air Quality
Department

1. Call to Order

A meeting of the Maricopa Association of Governments (MAG) Air Quality Technical Advisory Committee (AQTAC) was conducted on August 22, 2019. Jon Sherrill, City of Chandler, Chair, called the meeting to order at approximately 1:35 p.m.

Robert van den Akker, City of Buckeye, Benjamin Bitter, Town of Florence, Benjamin Cereceres, City of Maricopa, Martin Lucero, City of Surprise, Oddvar Tveit, City of Tempe, Ramona Simpson, Town of Queen Creek, Walter Bouchard, American Lung Association of Arizona, Mannie Carpenter, Valley Forward, Kai Umeda, University of Arizona Cooperative Extension, Scott DiBiase, Pinal County, and JC Porter, Arizona State University, attended the meeting via telephone conference call.

Chair Sherrill 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 Materials 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 Sherrill stated that the Call to the Audience provides an opportunity for members of the public to address the 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. Comment cards for those wishing to speak are available on the tables adjacent to the doorways inside the meeting room. 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 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. Chair Sherrill noted that no public comment cards had been received.

3. Approval of the May 23, 2019 Meeting Minutes

The Committee reviewed the minutes from the May 23, 2019 meeting. Aaron Chavez, City of Mesa, moved to approve the May 23, 2019 meeting minutes. Amanda McGennis, Associated General Contractors, seconded, and the motion passed unanimously with Mr. van den Akker, Mr. Bitter, Mr. Cereceres, Mr. Lucero, Mr. Tveit, Ms. Simpson, Mr. Bouchard, Mr. Carpenter, Mr. Umeda, and Mr. Porter, voting in favor of the motion by teleconference. Mr. DiBiase was not present for this vote.

4. Update on the Maricopa County Travel Reduction Program

Phil Cummings, Maricopa County Air Quality Department, presented an update on the Travel Reduction Program. Mr. Cummings stated the P-7 Trip Reduction Ordinance was last updated in July 1997; major changes in the Ordinance include: remove equivalent emissions reductions (EER) credits calculations details, addition of language to clarify and allow for flexibility in annual audits from staff, and incorporate six Substantive Policy Statements.

Mr. Cummings reviewed the new Travel Reduction Program Plan Template. Currently, it is required to be submitted annually by employers. Major changes to the template include: student count requested, added fuel after dark as other AMU incentives, added survey incentive, added date field for TRP training requirement, moved walk and bike to Other AMU Incentives, added EVCS to physical amenities, updated communication methods, added "Total Plan Budget", revised "Statement of Participation" to require employers maintain 36 months of documentation.

Mr. Cummings reviewed the Electric Vehicle Charging Station Credit Policy which was developed in July 2018. It is a policy that provides guidance to employers that provide a subsidy to employees for charging an employee-owned electric vehicle as a credit on their Travel Reduction Plan. The employer tracks and logs use. Credit is given in dollar amounts.

Beverly Chenausky, Arizona Department of Transportation, asked if the Trip Reduction Survey was going to be updated. Mr. Cummings indicated that the survey has been modified to keep it up to date. The survey is now on version 8.

5. Draft 2017 Periodic Emissions Inventory for Ozone Precursors for Maricopa County

Hanna Valenzuela, Maricopa County Air Quality Department (MCAQD) presented on the 2017 draft ozone periodic emissions inventory. Ms. Valenzuela stated that the purpose of the periodic emissions inventory was to meet requirements in the Clean Air Act and for inclusion in State Implementation Plans.

Ms. Valenzuela reported that emissions are estimated for Maricopa County and both the 2008 and 2015 eight-hour ozone nonattainment areas. Emissions are estimated for Volatile Organic Compounds (VOCs), Carbon Monoxide (CO) and Nitrogen Dioxides (NOx). Emissions estimates are categorized by point, nonpoint, onroad mobile, nonroad mobile, and biogenic sources.

Ms. Valenzuela stated that point sources are major sources as classified by the Air Emissions Reporting Rule (AERR). Emissions data from point sources is obtained from annual surveys and may be calculated using a variety of methods. Ms. Valenzuela stated that information on emissions categorized as emission reduction credits are included in the point source category. She stated that MCAQD is

currently in the process of finalizing MCAQD Rule 204 which address emission reduction credits for use in the Arizona voluntary emissions bank.

Ms. Valenzuela stated that nonpoint sources are stationary sources which are too small or too numerous to be treated as a point source. Nonpoint emissions data is calculated through various methods.

Ms. Valenzuela stated that onroad mobile sources include vehicles operated on highways and streets. Onroad emissions were calculated by MAG using the MOVES 2014b model.

Ms. Valenzuela stated that nonroad mobile sources include sources such as lawn and garden equipment, construction equipment, and aircraft and locomotives. Nonroad emissions were calculated by MAG using the MOVES 2014b model and the Aviation Environmental Design Tool, ver. 2d. Locomotive emissions were calculated by MCAQD based upon survey data.

Ms. Valenzuela stated that biogenic sources include vegetation and soil. Biogenic emissions are calculated by MAG using the MEGAN 2.1 model.

Michael Denby, Arizona Public Service, asked whether local data is used in the process of calculating emissions from onroad sources. Ms. Valenzuela confirmed that local data is used as an input to the MOVES2014b model which estimates emissions from onroad and nonroad sources.

Ms. Valenzuela stated that the 2017 periodic emissions inventory has been updated to include emissions in the 2015 ozone nonattainment area. The inventory has also been streamlined to increase readability.

Ms. Valenzuela presented pie charts of 2017 emissions of VOC and NOx in Maricopa County. The largest category of VOC emissions in Maricopa County is biogenic sources at 73 percent. The largest category of NOx emissions in Maricopa County is onroad mobile sources at 51 percent.

Ms. Valenzuela presented bar charts showing the change in VOC and NOx emissions in Maricopa County between 2011, 2014 and 2017. She stated that overall, anthropogenic emissions of VOC and NOx have declined from 2011 to 2017.

Ms. Chenausky, Arizona Department of Transportation, asked whether or not carbon monoxide (CO) emissions are only calculated for the ozone season. Ms. Valenzuela replied that CO emissions are only calculated for the ozone season as they are no longer required to be calculated for other seasons.

Mannie Carpenter, Valley Forward, asked what were the sources of biogenic NOx emissions, and whether they were indirectly or directly emitted. Ms. Valenzuela

stated that soils emit NOx emissions directly. Mr. Carpenter inquired whether annual emission inventory forms were used to calculate nonpoint source emissions. Ms. Valenzuela stated then when available, annual emission inventory forms are used to calculate emissions, but that not all nonpoint sources submit annual forms.

Mr. Denby asked whether something changed between 2011 and 2014 to cause the decrease in NOx emissions from onroad vehicle sources. Ms. Valenzuela replied that the EPA MOVES model was used to calculate the onroad emissions in 2011, 2014 and 2017.

Aaron Chavez, City of Mesa, asked what category standby emergency generators are in. Ms. Valenzuela replied that emissions from emergency generators are in the nonpoint source category.

6. Update on 2015 Ozone Standard

Matt Poppen, Maricopa Association of Governments, presented an update on issues related to the 2015 ozone standard. Mr. Poppen stated that the Maricopa nonattainment area was classified as a Marginal Area for the 2015 ozone standard (0.070 parts per million) effective August 3, 2018. He stated that the attainment date for Marginal Areas is August 3, 2021. Since the attainment date is in the middle of the 2021 ozone season, Marginal Areas will be required to attain the standard in the prior 2020 ozone season. Three years (2018-2020) of clean data at the monitors in 2020 will be needed to meet the standard.

Mr. Poppen presented a map of the Maricopa nonattainment area for the 2015 ozone standard. He reported that the boundary of the nonattainment area has been expanded to include the Tonto National Monument monitor in Gila County and the Queen Valley monitor in Pinal County.

Mr. Poppen presented the requirements for a Marginal Area plan including: a baseline emissions inventory, periodic emissions inventory updates, emissions statement rule, Nonattainment New Source Review (NNSR) program, emissions offset ratio of 1.1 to 1 for major sources, and transportation conformity. He stated that a Marginal Area plan is due to EPA by August 3, 2020.

Mr. Poppen reported that Marginal Areas are not required to submit an attainment demonstration, reasonably available control technologies and measures, reasonable further progress demonstration and contingency measures. He stated the EPA assumes Marginal Areas will be in attainment of the standard within three years of designation without any additional control measures. Currently, the Maricopa region has 93 existing control measures approved by EPA to reduce ozone.

Mr. Poppen reported that in coordination with the Arizona Department of Environmental Quality, MAG has been evaluating the impacts of some hypothetical

measures on 2017 ozone concentrations in the Maricopa nonattainment area, including: setting the compliance rate of the vehicle inspection and maintenance program to 100 percent, expanding Area A to cover all of Maricopa County and Pinal County, using California Air Resources Board (CARB) Phase 3 gasoline in the summer, replacing 10-50 percent of light-duty vehicles in Maricopa County with electric vehicles, 20 percent reduction in vehicle miles traveled in the Maricopa nonattainment area, and removing model year 2003 and older passenger cars and trucks in the Maricopa nonattainment area.

Mr. Poppen presented a table showing the impact of the hypothetical measures on NOx and VOC emissions and 2017 concentrations in the Maricopa nonattainment area. He stated that the impact of the hypothetical measures on ozone concentrations range from 0.0001 to 0.0024 parts per million. The 2015 ozone standard is 0.070 parts per million.

Mr. Poppen reported that the impact of the hypothetical measures on ozone concentrations will be even less in future years (i.e., later than 2017) as the vehicle fleet continues to get cleaner. He stated that the control measures with the greatest ozone impacts going forward remain the federal tailpipe standards, fuel measures (e.g., Tier 3) and continued vehicle fleet turnover.

Mr. Poppen presented data on the number of light-duty battery electric vehicles registered in Maricopa County: 21,367. He stated that the purchase and use of these vehicles could help to accelerate the benefits of fleet turnover.

Mr. Poppen presented a graph showing trend data from 2001-2019 of the highest three-year average of the fourth highest eight-hour ozone concentration in the Maricopa nonattainment area. He stated that the value of 0.077 parts per million in 2019 might be lower once wildfire exceptional events in 2018 and 2019 are evaluated. Mr. Poppen mentioned that a list of exceedances of the 2015 and 2008 ozone standards have been provided to committee members at their place.

Mr. Poppen stated that ozone exceedances in 2018 and 2019 are being screened to identify days that may be the result of an ozone wildfire exceptional event. He provided an example of preliminary screening tools analysis for wildfire impacts on August 9, 2018. Mr. Poppen discussed three wildfires that occurred within the nonattainment area in 2019. Ozone exceedances that occurred when these wildfires were active will be evaluated as possible ozone wildfire exceptional events.

Mr. Poppen discussed the issue of background ozone within the Maricopa nonattainment area. He stated that there is concern that background ozone may be approaching the level of the ozone standard at certain times and areas. Background ozone includes ozone from natural sources, international sources, and interstate sources. Mr. Poppen discussed the challenges in estimating background ozone.

Mr. Poppen presented figures that estimate 52 percent of the ozone concentration in the Maricopa nonattainment area is from background ozone. For the Queen Valley monitor and the Tonto monitor, the percentages are 67 percent and 64 percent, respectively. Mr. Poppen provided an EPA showing that the highest background ozone concentrations occur within the intermountain west region of the United States.

Mr. Poppen discussed two Clean Air Act provisions that address background ozone: Section 319(b) – Exceptional Events, and Section 179B – International Border Areas. Mr. Poppen stated that the EPA final rule for implementation of the 2015 ozone standards does not require an area to be adjacent to an international border in order to seek relief under 179B. EPA intended to provide additional guidance on 179B requirements in early 2019.

7. EPA Proposed Attainment Determination for the 2008 Ozone Standard

Lindy Bauer, MAG, indicated that on June 13, 2019, the Environmental Protection Agency published a proposed rulemaking to determine that the Maricopa Nonattainment Area has attained the 2008 ozone standard by the attainment date of July 20, 2018. The attainment determination was based on complete, quality assured, and certified data for 2015-2017. The proposed rule was transmitted to the Air Quality Technical Advisory Committee in the agenda packet. When EPA issues a final rulemaking, it will be transmitted to the Committee.

8. Electric Vehicle Charger Addition Model Plan

Ms. Bauer indicated that the Salt River Project has created a model plan that can be used when installing an electric vehicle charger at a residence. This plan can be used by any local jurisdiction to provide to their customers when doing such an installation. The MAG Building Codes Committee recommended the optional model plan, and its addition to the MAG Building Code Amendments and Standards Manual as number 18. On June 26, 2019, the MAG Regional Council approved MAG Building Code Amendments and Standards Manual number 18, Electric Vehicle Charger Addition Model Plan. This model plan may be useful to the members of the MAG Air Quality Technical Advisory Committee. According to the August 6, 2019 ADOT Motor Vehicle Registration Data, there are 21,367 light-duty electric vehicles in Maricopa County. Ms. Bauer thanked the Salt River Project for bringing this model plan forward to MAG. It is greatly appreciated.

9. CMAQ Annual Report

Dean Giles, Maricopa Association of Governments, presented the 2018 Congestion Mitigation and Air Quality Improvement (CMAQ) Funds Annual Report. He indicated that the Federal Highway Administration guidance requires that an annual report be

prepared for the projects that obligated by the year ending September 30, 2018 and the expected air quality benefits.

Mr. Giles noted that the report includes 17 projects. The report contains information such as project description, cost information, and the estimated emissions reduction in kilograms per day.

He mentioned that the projects in the report were previously reviewed by the Committee for their estimated emissions reduction prior to being selected for funding in the Transportation Improvement Program. MAG staff calculated the estimated emissions reduction using data provided by MAG member agencies in the project applications.

Mr. Giles indicated that MAG worked closely on the report with the Arizona Department of Transportation and the Federal Highway Administration Arizona Division Office.

Mr. Denby inquired if this is set-aside funding for the paving of unpaved roads. Is there any opportunity for Emission Reduction Credits? Ms. Bauer responded that some companies have been interested in the paving unpaved road projects in the MAG Unpaved Roads Inventory and Transportation Improvement Program. Maricopa County has a program for Emission Reduction Credits.

Mario Saldamando, City of Goodyear, asked if these 2018 projects are underway. Mr. Giles responded that was correct.

10. Request for Future Agenda Items

Chair Sherrill requested suggestions for future agenda items. No suggestions were noted.

11. Adjournment

There being no further business, the meeting adjourned at 2:28 p.m.