

AGENDA
AIR QUALITY ADVISORY COMMITTEE*
TUESDAY July 29, 2014
10:00 a.m. - 12:00 noon
East-West Gateway Board Room

- I. Call to Order**
 - Michael Coulson, Chair, East-West Gateway Council of Governments
 - A. Minutes of June 24, 2014 Meeting

- II. Ecological Approach to Infrastructure Development Initiative**
 - Mary Grace Lewandowski, East-West Gateway Council of Governments

- III. OneSTL Update**
 - Aaron Young, East-West Gateway Council of Governments

- IV. Update on Proposed U.S. Environmental Protection Agency Carbon Rule**
 - Wendy Vit, Missouri Department of Natural Resources
 - Mark Leath, Missouri Department of Natural Resources

- V. American Fuel Group Report**
 - St. Louis Regional Clean Cities Program

- VI. Update Activities of the States**
 - Missouri Department of Natural Resources
 - Illinois Environmental Protection Agency

- VII. Other Business - Next Meeting Date September 16, 2014**

- VIII. Adjournment**

*Please note that this meeting will serve as a part of the Inter-Agency Consultation Process as detailed in the Missouri Transportation Conformity SIP.

MINUTES
AIR QUALITY ADVISORY COMMITTEE
Tuesday, June 24, 2014
East-West Gateway Board Room

Members Present:

Michael Coulson, Chair, East-West Gateway Council of Governments
Michael Zlatic - St. Louis County Health Department
Joe Gray - Illinois Department of Transportation, District 8
Joe Winkelmann - Missouri Department of Natural Resources
Jack Fishman - St. Louis University
Mike Henderson, Missouri Department of Transportation
Heather Navarro - Missouri Coalition for the Environment
Susannah Fuchs - American Lung Association
David Bloomberg - Illinois Environmental Protection Agency (telephone)
Christopher Schmidt - Illinois Department of Transportation (telephone)

Others Present:

Aaron Beswick - Intern, City of St. Louis Department of Health
Curtis Jones - Illinois Department of Transportation
Sara Chappell - Illinois Department of Transportation
David Shanks - Boeing
Andy Knott - Sierra Club
Joseph Wilkins - St. Louis University
Kevin Jemison - Illinois Department of Transportation, District 8
Kevin Herdler - St. Louis Regional Clean Cities Program
Rafael Gonzalez - Madison County Transit/RideFinders (telephone)
Lenora Fisher - Citizens for Modern Transit (telephone)
Scott Leopold - Illinois Environmental Protection Agency (telephone)
Jeff Sprague - Illinois Environmental Protection Agency (telephone)

Staff:

David Wilson Peter Koppel Carol Lawrence Gary Pondrom

- I. Call to Order
 - Michael Coulson, Chair, East-West Gateway Council of Governments

The meeting of the Air Quality Advisory Committee (AQAC) was called to order by Chair Michael Coulson, East-West Gateway Council of Governments (EWG). The minutes of the April 29, 2014 AQAC meeting were approved as circulated. Participants introduced themselves.

- II. Update on Missouri Proposed Sales Tax
 - Peter Koppel, East-West Gateway Council of Governments

During the 2013 Missouri legislative session there was a proposal to place a measure to have a one cent sales tax for transportation improvements on the November 2014 ballot. This proposal was filibustered in the Senate and did not move forward. During 2013 the Missouri Department of

Transportation (MoDOT) published a number of documents outlining their future financial situation with growing needs and shrinking revenue. In the Fall of 2013 a group of contractors, engineers and concerned citizens formed Missourians for Safe Transportation and New Jobs and began to explore the collection of signatures on a petition to put a sales tax proposal on the November 2014 ballot. It was to be a one cent sales tax which would be renewable every ten years. Of the funds collected, five percent would go to counties, five percent to cities and the remainder would go to the Missouri Highways and Transportation Commissions/MoDOT. The only guidance given for project selection was that an emphasis be placed on safety. Projects beyond roads and bridges would be eligible, including but not limited to aviation, mass transit, transportation for the elderly and handicapped, railroads, ports and bicycle and pedestrian improvements. This mode inclusiveness was considered to be the biggest selling point because gas tax monies can only be used for transportation projects.

In February 2014, the Missourians for Safe Transportation and New Jobs stopped gathering signatures due to legal challenges. The Missouri Senate and House prepared bills. The ballot language was identical but now it would be a 0.75 percent sales tax and Metropolitan Planning Organizations (MPO) /Regional Planning Commissions were to assist in development and prioritization of the project list. This list is to be attached to the ballot measure so that citizens would know what they are voting for. A bill was passed. When the Governor signed the bill, he placed on the August 5, 2014 primary ballot instead of the November 2014 ballot. This action has compressed the schedule.

If the sales tax passes, it is estimated to generate \$5.4 billion statewide over the next ten years. Over this time, cities would receive \$270 million, counties \$270 millions and MoDOT would receive \$4.8 billion. MoDOT has already announced that \$500 million would be dedicated to I-70 between Kansas City and St. Louis areas. Over ten years, the St. Louis area is estimated to receive \$1.5 billion.

As the MPO, EWG was tasked with identifying candidate projects from various modes of transportation and assisting in prioritizing them. Staff examined MoDOT's long range transportation plan, the regional bike/pedestrian plan, Metro's long range plan, EWG's RTP update work and EWG's freight study. EWG worked with its transportation partners on performance measures and scoring criteria. EWG hosted a series of stakeholder meetings at which the first cut of projects and evaluation criteria were presented. Potential projects then were evaluated and scored in-house. The project list was presented to the stakeholder groups a second time to obtain feedback and buy-in for the process. The results of EWG's work was provided to each county and they were asked to identify their priorities. MoDOT is to receive this information shortly and made a final recommendation to the Highways and Transportation Commission in early July.

There are other ways to fund transportation projects. Gas tax funds are only available for transportation projects. To change that, the Missouri Constitution would have to be amended. Missouri does allow tolls to be placed on existing facilities. Another option would be a vehicle miles traveled (VMT) fee where distance driven is tracked and individual would pay according to how much they use transportation system. But there are privacy concerns with a VMT fee and it is difficult to implement. Observed that there is very little appetite for any of these options.

Mr. Knott, Sierra Club, asked how transit projects fared. Mr. Koppel, EWG, said that in the City

of St. Louis, transit did quite well. Mr. Henderson, MoDOT, said that statewide there were a number of OATS public transportation projects. He added that the project list can be found on the MoDOT Moving Forward section of their web site and that with a sales tax other modes of transportation could be funded.

Mr. Koppel, EWG, announced that as part of our long range transportation planning effort, EWG and the Missouri History Museum are hosting a speaker series/regional conversation about the past, present and future of transportation in the St. Louis region.

III. Effect of Distant Meteorology/Event on Local Air Quality Measurements during August 2013

- Jack Fishman, Ph.D., St. Louis University
- Joseph Wilkins, St. Louis University

Dr. Fishman, St. Louis University (SLU), said that the National Aeronautics and Space Administration (NASA) had planned to conduct in 2013 Studies of Emission and Atmospheric Composition, Clouds and Climate Coupling by Regional Surveys (SEAC4Rs) project in southeast Asia. Because of anticipated political problems with various southeast Asian governments, it was decided to move this project. SEAC4Rs took place in the U.S. last year and used both satellite and aircraft to collect information. NASA was interested in how chemicals and cloud formation interact with climate. Another NASA program focused on air quality already had a 2013 mission planned for the Texas region. To support both these projects, the SouthEast American Consortium for Intensive Ozonesonde Network (SEACIONS) was set up. St. Louis University and six other sites launched ozonesondes (weather balloon with equipment package) to provide a synoptic 3-D picture of what the atmosphere looked like on mission days. St. Louis was the northermost site. A lot of good science has come out of this effort. Mr. Wilkins assisted with the University's efforts.

Mr. Wilkins, SLU, said that SEACIONS was a strategic approach to determine how pollutants from different sources can travel in the troposphere across the country and affect air quality in the St. Louis region and beyond. A total of 31 ozonesondes were launched from each of the seven different locations in the southeast U.S. during August and September. Objective was to identify how ozone was affecting different meteorological parameters. The launches were designed to supplement/verify information gathered from satellite overpasses and aircraft flights. Before each launch date, there was a three to five day preparation period where the equipment and the parachute were tested and then the equipment was placed in a styrofoam container (with a return label) attached to the weather balloon. Launch day weather and estimated ozonesonde trajectory would be reviewed. On each launch day, the nine foot diameter weather balloon would be filled with helium. Ozone readings from the equipment would be validated against information from the nearby Forest Park ozone garden. The ozonesonde launch would then take place. As result of extensive outreach, 23 of the 31 instrument packets were recovered and returned to SLU.

Research conducted by Dr. Fishman indicates that in the past 32 years background ozone concentration has risen eight to ten parts per billion (ppb). Also, plants begin to show symptoms at ozone levels of 40 ppb or greater.

With ozonesondes, question was: can we capture what is being transported across the U.S. For Case August 30, 2013, two ozone plumes were observed in the St. Louis area. None of the smoke was

from the St. Louis area or the central U.S. Additional analysis was performed to determine source and what processes were the cause of these plumes. Satellite imagery from NASA's hazard mapping system smoke and fire product and other instruments indicated that potential sources of ozone included pollution from wildfires in California and Idaho and previous pollution from agricultural fires in Kansas and Mississippi/Louisiana. Forest fire(s) in California burned from the middle of August to the end of October. There were also forest fires in Idaho. The Hysplit transportation model was used to determine the origin of the two plumes aloft. Fire were estimated to originate in the far west and central plains. Another source of ozone could be and subsidence of stratospheric air due to a blocking high pressure system in the Four Corners area. Wanted to see if similar readings occurred at other ozonesonde launch sites. Data from Huntsville, AL and Idabel OK sites also contained similar plumes.

Meteorological systems can bring air up and also down (subsidence) from stratosphere. Temperature and other parameters like relative humidity can be plotted to determine where air masses are moving. If there is a folding of the troposphere, allowing stratospheric air to move in. Found that there were four to five days where stratospheric air did come into the troposphere and mix.

In conclusion, between August 8, 2013 and September 23, 2013, 31 ozonesondes were launched to support NASA's SEACIONS/SEAC4RS missions. Before each balloon launch, ozonesonde measurements were verified with ozone readings from the Forest Park ozone garden. Air quality features effecting the St. Louis area could also been seen at other cities, depending on the wind patterns. Preliminary analysis of data shows that enhance ozone levels over the St. Louis area at the end of August 2013 can be traced back to stratospheric air intrusions (into the troposphere) from the Great Plains, cross country transport of smoke from wildfires out west and local biomass burning from prescribed/agricultural fires to the west and south of the area.

IV. St. Louis Regional Clean Air Partnership Activities - Susannah Fuchs, American Lung Association

For the 2014 ozone season, the St. Louis Regional Clean Air Partnership (SLRCAP) is doing more media outreach with their media partner, KMOV. Have added social media (tweets, Facebook alerts) to each day's air quality forecast. SLRCAP is working to increase outreach on "No Idle" zones to schools and trying to expand effort into places like grocery store parking lots. Continue to try to identify different approaches can use with municipalities and schools. Some changes have been made to the SLRCAP website. Issues/actions that American Lung Association (ALA) wants USEPA to do, ALA will push through social media. Ms. Fuchs, ALA, said that she is going to attend meeting with ALA staffers from ten states to the north and east of Missouri. Group works a lot with alternative fuels like ethanol. Look for new, innovative ways to do things related to reducing air pollution and improve public health in metropolitan areas. In the next week or so the ALA Plains/Gulf region is dissolving and Missouri ALA will be joining with these ten upper Midwest states.

Ms. Fuchs, ALA, asked for input on a personal air quality pet peeve. There have been a number of events (even green events) that normally she would attend to do public education on behalf of SLRCAP/ALA but she has not due to food trucks either idling and/or using portable generators. Mr. Tilley, St. Charles County, said that in St. Charles County, food trucks are regulated through

his division. The focus is on food safety but idling/generators could be a topic of discussion. He added that usually prior to an event with food trucks there is a vendor meeting which could be a opportunity for discussion. Try to get voluntary action. Mr. Herdler, St. Louis Regional Clean Cities Program (SLRCCP), suggested organizing a food truck event to show them alternative fuel options and costs and benefits. He added that bucket trucks and police cars now have power packs which can run for several hours. Mr. Herdler and Ms Fuchs agreed to coordinate.

V. American Fuel Group Report
- Kevin Herdler, St. Louis Region Clean Cities Program

The St. Louis Regional Clean Cities program (SLCC) along with Kansas, Iowa and Nebraska received a grant from the U.S. Department of Energy (DOE) for an Alternative Fuel Implementation project. The group is currently reviewing proposals for a green fuel program. At the end of July there will be a two-day workshop in Kansas City on local, state and national safety codes for alternative fuels projects. Consultant has completed a report on methodology to use MOVES to evaluate the air quality impact/emission reduction of alternative fuel vehicles. Once the report is approved, the consultant will conduct a webinar.

In May the MotorWeek television show filmed two segments here. The first was about AT&T putting their 8,000th CNG vehicle on the road. The second segment was on the biodiesel program at the Rockwood Summit High School.

The Propane/Natural Gas Fuel Conversion Solution business recently opened in St. Louis. The Waste Management compressed natural gas (CNG) refueling station on Hall Street in the City of St. Louis began operating this month. Waste Management is switching all their vehicles to natural gas as have of a number of waste haulers. At the airport, some of the privately-owned companies with shuttle buses are switching their fleets to natural gas. MoDOT is going to let the Parkway School District keep green railings (alternative fuel indicator) on their new CNG school buses.

Ms. Fuchs, ALA, suggested that SLRCAR and SLRCC work together to do a media pitch focused on companies with airport-related shuttle service that use CNG to encourage people to use these companies.

VI. Update Activities of the States
- David Bloomberg, Illinois Environmental Protection Agency
- Joe Winkelmann, Missouri Department of Natural Resources

Illinois Environmental Protection Agency (Illinois EPA) is reviewing USEPA's recently proposed CAA Section 111D greenhouse gas rule for power plants and identifying potential actions. The proposal was published in the Federal Register last week. Mr. Winkelmann, MoDNR, said that the comment period ends in October. Mr. Bloomberg, Illinois EPA, said that he has heard that USEPA anticipates 1 - 2 million comments. Due to short timeframe, most states are starting to move ahead. Mr. Coulson, EWG, asked if with the proposed carbon rule a process has been set up for outreach. Mr. Bloomberg, Illinois EPA, said that Illinois is establishing a process. He added that in addition to environmental agency this rule will involve a number of state agencies. There will be multiple agencies doing multiple things, including outreach, hopefully culminating in a state plan. Legislation will need to be passed. Anticipate there will be legal challenges to rule. State is

proceeding with assumption that Plan will be due in June 2017.

Illinois has submitted its final lead rule to USEPA Region 5 and an update to a previous State Implementation Plan (SIP) submittal. Mayco Industries in Granite City has been issued a construction permit to install controls so they can comply with the lead rule. USEPA approval is anticipated.

Illinois EPA continues to work on sulfur dioxide (SO₂) rules/plans for the Phase 1 non-attainment areas in the state, none of which are in the Metro East. Future SO₂ non-attainment designation rounds may affect the Metro East.

Mr. Winkelmann, MoDNR, announced that the Missouri Air Conservation Commission (MACC) is not meeting in June. The July 30 meeting in Jefferson City has been cancelled due to a lack of a quorum. There will be a meeting on July 21 in Jefferson City to adopt the revision to 10 CSR10-5.220, Control of Petroleum Liquid Storage and Transfer rule, removing requirement for Stage II vapor recovery controls at gas dispensing stations in the St. Louis ozone non-attainment area and the 10 CSR 10-6.040 Reference Methods rule. The Marginal Plan for the Missouri portion of the St. Louis non-attainment area and Regional Haze Plan five year progress report will be approved at the August MACC meeting.

On June 26 in Jefferson City there will be a stakeholders (community, regulated industries, others) meeting on the SO₂ national ambient air quality standard. MoDNR will take comments on how the state will be addressing this standard. A new SO₂ standard rule amendment, 10 CSR 10-6.261, is expected to be posted later this year.

Earlier this month USEPA proposed a Clean Power Plan rule under section 111D of the Clean Air Act to reduce CO₂ emissions from existing power plants. Missouri is reviewing the proposal and may submit comments. There will be a stakeholders meeting on July 14 in Jefferson City. USEPA Region 7 will present an overview of the proposed rule and MoDNR staff will discuss the rule-making process.

The final stakeholders meeting on the Air Pollution Control Program fee structure was held June 16. The group recommended that the focus be on increasing fees for permit processing and asbestos registration and to have a two year time frame instead of ten years. No change to emission tonnage fee was recommended. MoDNR has to have a draft fee rule prepared by the end of 2014 so the Missouri legislature can consider it during their 2015 session. Anticipate that there will continue to be stakeholder meetings on this topic.

VII. Other Business

The next AQAC meeting was scheduled for July 29, 2014. There being no other business the meeting of the Air Quality Advisory Committee was adjourned.