

AGENDA
AIR QUALITY ADVISORY COMMITTEE*
TUESDAY September 16, 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 July, 2014 Meeting

- II. St. Louis Green Building Council Programs**
 - Emily Andrews, St. Louis Green Building Council

- III. St. Louis Climate Group**
 - Jack Fishman, Ph.D., St. Louis University
 - John Posey, Ph.D., East-West Gateway Council of Governments

- IV. EPA's Response to States' Designation Recommendations for 2012 Annual PM2.5 Standard (120-Day Letter)**
 - Joe Winkelmann, 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 October 28, 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, July 29, 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
Wendy Vit - Missouri Department of Natural Resources
Jack Fishman - St. Louis University
Mike Henderson, Missouri Department of Transportation
Susannah Fuchs - American Lung Association
Betsy Tracy - Federal Highway Administration IL

Others Present:

Don Kotur - Missouri Department of Natural Resources
Amy Funk - Metro East Community Air Project
Patricia Maliro - Missouri Department of Natural Resources
Joe Winkelmann - Missouri Department of Natural Resources
Aaron Beswick - Intern, City of St. Louis Department of Health
Mark Leath - Missouri Department of Natural Resources
Curtis Jones - Illinois Department of Transportation
David Shanks - Boeing
Kevin Jemison - Illinois Department of Transportation, District 8

Staff:

Mary Grace Lewandowski Aaron Young 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. Mr. Herdler, St. Louis Regional Clean Cities Program was unable to attend the meeting today. Mr. Coulson, EWG, announced that our friend and colleague Ken Hagg passed away earlier this summer. His air quality expertise was valuable to the St. Louis region. There was a moment of silence in his memory.

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

This initiative began in 2008 as EWG was beginning to work on the Regional Transportation Plan (RTP) 2040. The aim is to develop an integrated ecosystem-based planning approach within the long-range transportation planning process. This is a way to try to balance conservation goals/objectives in the region with transportation planning. At the national level, trying to identify impacts and build more wisely and avoid delays in the environmental review process. Looking for

a smarter way to build and avoid impacts. Also, if there is an impact to focus mitigation resources on areas with the greatest restoration potential.

This process has engaged a number of federal, state and local transportation and natural resource agencies and local, regional and national environmental organizations/groups. Data sources were identified, tools were developed and collaboration was facilitated among these agencies and organizations. The goals of the Initiative were to: develop ecological geo-spatial tools; integrate these tools into the long-range transportation planning and develop a regional ecological framework; and to integrate “State of the Art” geospatial tools into resource and regulatory agencies activities and make the data tools easily available for use. Geospatial tools include: the development of ecological significant natural resource GIS data layers; mapping Conservation Opportunity Areas; and floodplain and wetland mapping. In the most recent update to the RTP, these tools were incorporated into the planning process. A regional ecological framework was created and identifying areas of ecological significance were identified. The impact of the RTP on these areas was determined. Now at the stage of trying to integrate these tools into resource and regulatory agencies planning activities.

At the beginning of this initiative, there were 16 categories of vegetation and land cover used in GIS mapping and now there are 65 land cover classifications. Patches of regional ecological significance area were grouped and then ranked regionally based on ecological significance. Also have a more refined project level ecological significance. Each individual patch was ranked for ecological significance and used in the project evaluation process in the RTP. Missouri and Illinois conservation strategies were also mapped. Ideally these tools would be used to identify locations either for expansion or connection. LIDAR (light detection and ranging remote sensing) data was used to map wetlands. Identify areas of wetlands of importance and should try to preserve. Target areas of higher restoration potential. The ecological initiative tool is now posted on the Missouri Spatial Data Information Service (MSDIS) website hosted by the University of Missouri, Columbia at <http://msdis.missouri.edu>.

The Strategic Highway Research Program 2 (SHRP2) C40B studies transportation-related subjects and is operated out of the National Academy of Sciences by the Transportation Research Board (TRB). EWG’s Ecological Initiative was part of the was involved in the proof-of-concept of SHRP2 C40B Geospatial Resources for Ecology and Transportation. EWG’s geospatial tool was used with national environmental data sets. The aim is to get ecological data sets out to planners earlier in the planning process. Idea is that a planner of any GIS skill level could go to Federal Highway Administration web site and download national level environmental data sets. EWG component was to look at our current data and refined land use classifications. This data better reflects conditions on the ground and opportunities for green infrastructure. Hope to have these data tools more incorporated into planning work by regional, state and federal agencies. There is interest/emphasis at the federal level in looking at possible impacts, early in the transportation planning process. Want to look early instead of waiting until the NEPA phase or when project is under design.

Further work with this data tool will occur on the Missouri Department of Transportation (MODOT) I-70 Corridor Planning and Environmental Linkages Study. MoDOT is interested in applying the refined vegetation/land cover data sets to this corridor study which extends from Wentzville to the end of the reversible lanes in the City of St. Louis. EWG is also looking to do wetland mapping along the Meramec River and Upper Silver Creek in Madison County. The goal is to identify more

areas of restoration potential. This information could be used in wetland and watershed planning, mitigation banking, updating Conservation Opportunity Areas map. Areas of possible connectivity between COAs will be researched and then identify regional mitigation and restoration priorities. The Initiative can help inform the discussion/debate on where are mitigation sites with greatest potential.

Mr. Kotur, Missouri Department of Natural Resources (MoDNR) asked why does metropolitan area, like St. Louis and St. Charles Counties, have less ecological significant patches. Ms. Lewandowski, EWG, these are areas where more urbanization has occurred. In areas with less urbanization/development there are more intact natural communities so they reflect higher on scale. Ms. Funk, Metro East Community Project (MECAP), asked if urban areas are ranked lower in the evaluation, could this impact significance on other areas. Ms. Lewandowski, EWG, said that want the data set to have more reflective land cover data. Know there are more opportunities than what the data is showing.

III OneSTL Update

- Aaron Young, East-West Gateway Council of Governments

The OneSTL Plan for sustainable development was adopted in December 2013. Grant funding has ended. The OneSTL partners now are involved in a number of activities to implement the strategies delineated in the Plan. EWG staff have been making presentations on OneSTL as requested and refining the OneSTL website. The Partners are working on reformulating committee structure to help implement the strategies identified in OneSTL.

OneSTL is meeting with the Department of Housing and Urban Development (HUD) Federal Sustainability Partnership. HUD has invited all of the federal agencies in the region to meet quarterly and discuss how they can approach things more efficiently at the federal level. Eight agencies are involved in this partnership. OneSTL will be working with the local HUD office and will start meeting with this partnership to look at how their resources can be used to help accomplish some of the strategies identified in the OneSTL Plan. Interested state agencies and OneSTL Network partners will also be brought into the conversation. Agencies interested in participating in the Network can go to the OneSTL web page and sign up.

The St. Louis Metropolitan Research Exchange is a loose-knit group of researchers from the region's universities who meet and discuss what kind of research they should do. OneSTL is collaborating with the Research Exchange to guide research efforts in order to help people practice sustainability in the region. A workshop/conference is planned for January 2015. Also working with the City of St. Louis Civil Rights Enforcement Agency on a Fair Housing Conference scheduled for September 5, 2014.

Mr. Young is serving on the planning committees for two conferences. The St. Louis Association of Community Organizations (SLACO) Neighborhood Conference is November 1 at Harris Stowe State University. The Missouri state-wide American Planning Association (APA) conference to be held October 15-17 in St. Louis. The conference theme is building sustainable communities.

To refine the classification of natural resources found in the City of St. Louis, the City's Sustainability Coordinator has initiated a natural resource inventory. EWG is assisting in the

establishment of a database. It will take time to populate the database with information and update the GIS data layers.

OneSTL is working with the Institute for Sustainable Communities. This group has an agreement with HUD to assist areas that received grants for regional sustainability plans. They provide information-sharing and suggestions and help areas to brainstorm on alternatives to move forward and implement strategies in their plans.

Mr. Coulson, EWG, asked if any follow-up was planned for the Community Planning Areas (CPAs). Mr. Young, EWG, said that a final round of meetings had been planned for the 11 CPAs but the schedule did not allow for this to occur. It would be good to bring plan back to these groups and let them know that it is the result of their input.

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

Ms. Vit, Missouri Department of Natural Resources (MoDNR), said that the Planning Section of the Air Pollution Control Program (APCP) is responsible for pulling together the carbon pollutant plan for the State of Missouri. The U.S. Environmental Protection Agency (USEPA) released their proposed carbon rule on June 18 and is accepting comments until October 16, 2014. The proposed rule is a complex proposal and it is possible that the rule could change. Missouri is actively working with USEPA Region 7 to figure out what this proposal could mean for the state. The State of Missouri has not made any decision and has not taken a position on this proposed rule. This presentation is for information purposes only.

Mr. Leath is serving as the technical lead on this project. He said that on June 18 USEPA published in the Federal Register a proposed rule to control carbon dioxide (CO₂) emissions from existing electrical generating units (EGUs) at power plants in the U.S. This is part of the President's Climate Action Plan. USEPA was directed to develop CO₂ emission standards, regulations or guidelines, as appropriate, for the following: new power plants (proposed January 2014); modified and reconstructed power plants (proposed June 2014); and existing power plants.

Authorization for USEPA to issue the proposed existing power plant rule comes from Clean Air Act (CAA) Section 111d, Best System of Emission Reduction. USEPA considered the following CAA factors: costs; size of reductions; technology; and feasibility. The rule will establish guidelines for the states to meet new source performance standards and the states will have to develop plans to implement rule and meet the guidelines.

For affected EGUs in each state, the proposed rule sets an interim (2020 - 2029 phase-in period) and final goal (starting in 2030 on) to reduce CO₂ emissions. It will be a rate-based performance level (pounds of CO₂ per megawatt hour [lb CO₂/MW-h]). USEPA is not prescribing measures for states to implement to meet goals. The state plan has to demonstrate that the strategies contained in its plan can meet the rate-based performance level. The state goals were developed based on a consistent national formula (Four Building Blocks). To calculate each state's goal, these blocks were applied to that state's specific 2012 electricity generation portfolio. The Four Building Blocks are: measures to make coal-fueled plants more efficient; increased use of high efficiency, natural gas

combined cycle (NGCC) plants (re-dispatch from coal, etc. to lower CO₂ emissions, more efficient natural gas); build more renewable energy low/zero emitting power generating facilities; and demand-side energy efficiency programs. To calculate the proposed interim and final goals for each state, the total CO₂ emissions from power plants is divided by the electricity generation in the state. This includes: covered fossil sources; existing and new renewable energy sources; new nuclear and 5.8 percent of existing nuclear generation; and energy efficient accounted for as zero-emitting megawatt hours. The process USEPA used to calculate the proposed goals for Missouri was described. For the 2020-2029 interim period, Missouri has to meet the statewide average rate goal of 1,621 CO₂/MW-h. Starting in 2030 the final goal for the state of Missouri is 1,544 CO₂/MW-h. This would be a 27 percent reduction in emissions. The 2012 performance level was estimated to be 1,963 CO₂/MW-h.

If the Building Blocks are applied as projected by 2030, USEPA estimates that there would be an increase in sources using natural gas, nuclear power, renewable sources to generate electricity and energy efficiency and a decline in the use of coal as fuel for EGUs. USEPA is not proscribing how the states should reach their goals. The states have flexibility in how they reach the final 2030 goal and can use any or all of the Four Building Blocks. In addition, there are other alternative measures that can be considered such as co-fired natural gas at coal EGUs. Either a rate-based or mass-based (meeting a statewide budget cap in tons of CO₂) form of the goal can be chosen by a state. This option is still under analysis by MoDNR. States can use averaging or trading with both rate- or mass-based approaches. Existing state energy efficiency and renewable energy programs can be recognized. Both the rate-based and mass-based approaches have different considerations. Under the rate-based approach, growth is not limited as long as the goal is met. In addition, measures that reduce EGU emissions can be credited but this requires evaluation, measurement and verification (EMV) which can be administratively complex to perform. Credits/allowances are based on generation each year. EGU compliance has to be determined on an annual basis. With the mass-based approach, growth can be accounted for in the State Implementation Plan (SIP) but the forecast must be accurate. This approach would be administratively straightforward as EMV is not required. As credits/allowances an base on a statewide cap, it is easier for EGU operators to plan for future. EGU compliance would be determined using a three-year average.

Ms. Vit, MoDNR, said that a new state rule will be the regulatory, enforceable component of the Section 111d SIP. It will include all the enforceable, binding requirements on the affected entities. The non-regulatory, non-binding SIP elements demonstrate that it meets USEPA's guidelines and approvability criteria. USEPA intends to promulgate a final rule in June 2015 with SIPs due in June 2016. From proposal to adoption, Missouri rule-making typically takes 18 months or more. MoDNR will need to do some work up-front prior to USEPA finalizing this rule. The proposed rule has some deadline extension opportunities which MoDNR could use. Large part of this effort is focused on energy efficiency and renewable energy programs which are outside of MoDNR's typical purview. MoDNR is working closely with the State Energy Office of the Department of Economic Development and the Missouri Public Service Commission. For more information on this rule should go to <https://dnr.mo.gov/env/apcp/airadvisory/apcpstakeholder.htm>.

Ms. Funk, Metro East Community Project (MECAP), asked if the state will be evaluating co-benefits with criteria pollutants. Ms. Vit, MoDNR, said that the states are not required to do but the proposed rule does present information on this. Perhaps over time could look at this but there is a lot of work to do to meet the plan deadline.

Ms. Lewandowski, EWG, asked how would progress in energy efficiency be tracked. Mr. Leath, MoDNR, said that the process was still under evaluation. EGUs that are regulated through the Public Service Commission already perform EMV to determine amount of energy savings. USEPA seems to be calling for that level of rigor.

Mr. Coulson, EWG, distributed copies of the USEPA press release and a Post-Dispatch article on the July stakeholders meeting. He said that USEPA is holding two-day public hearings this week in Washington, D.C., Atlanta, Pittsburgh and Denver. Mr. Leath, MoDNR, added that each hearing day will last 12 hours and each speaker will have five minutes.

V Update Activities of the States
- Joe Winkelmann, Missouri Department of Natural Resources

The Illinois Environmental Protection Agency was unable to attend the meeting today.

Mr. Winkelmann, MoDNR, congratulated Ms. Vit and Mr. Leath on their understanding of the contents of the proposed Carbon rule. He pointed out that this proposal had been published on June 18. He introduced Patricia Maliro who is the Air Quality Monitoring Unit Chief. In June, due to quorum issues, the July 31 meeting of the Missouri Air Conservation Commission (MACC) was cancelled and re-scheduled for July 21 in order to adopt two rules. Other agenda items were postponed until the August 28 meeting in Jefferson City. In August, there will be a presentation on the lead compliance plan for a secondary lead smelter in northwest Missouri. In addition, the St. Louis area marginal non-attainment area plan for the 2008 eight-hour ozone standard and the Regional Haze Plan five year update are to be adopted.

At the end of 2013 the Doe Run Company ceased operating the primary lead smelter at their Herculaneum facility in Jefferson County. Operations have been downsized to casting and refining operations. In April 2013 MACC approved a SIP demonstrating attainment. USEPA has published the proposed approval of this SIP in the Federal Register. There are no longer any primary lead smelters in the U.S., only 12 secondary smelters recycling car batteries (two in Missouri). Ore mined in the U.S. is transported to other countries for processing.

Ms. Vit, MoDNR, said that another issue facing the APCP is funding. A primary source of funding is emission tonnage fees. If APCP continues to do its job and emissions decrease, then fees go down. It is projected that the APCP could be insolvent by 2016. Since 2008, emission fees have been capped at \$40 per ton in state statute. Permit processing fee and asbestos registration fees are also set by state statute and have not changed since 1972. In the 2014 session, the Missouri legislature passed SB642 which was signed into law by the Governor. It gives the APCP the opportunity to follow a specified process to adjust fees for permitting work and asbestos as well as emissions. Rule-making has to be completed by the end of 2014 so that the legislature has a full session (in 2015) to review the rule before it can become effective. MoDNR held three stakeholder meetings to discuss the over-arching plan for raising these fees and getting agreement from agriculture and industry. From these meetings a proposal was developed that permit processing and asbestos registration fees be increased. This proposal was presented to the MACC at their July 21 meeting. It is anticipated that at the August meeting the MACC will approve the APCP moving forward to start rule-making.

Ms. Funk, MECAP, asked what would happen if APCP had to dissolve. Ms. Vit, MoDNR, said that Missouri has a delegation agreement with USEPA and has to maintain a core level of activities, like permitting. USEPA could take over these actions. The stakeholders do not want that to happen as they have a good working relationship with MoDNR staff. Mr. Winkelmann, MoDNR, pointed out that when Mr. Walker of REGFORM spoke to the AQAC last year, it appeared that industry was in favor of fee increases in order to keep the level of service they receive from Missouri.

Mr. Coulson, EWG, asked if there has been any movement on appointing people to serve on MACC. Ms. Vit, MoDNR, said that she was not aware of any action to fill empty positions.

VII Other Business

Mr. Coulson, EWG, pointed out that so far there have been no exceedances of the 2008 eight-hour ozone standard. According to EWG records, this is longest that there has not been an exceedance.

Mr. Henderson, MoDOT, talked about the constitutional amendment for a 0.75 percent sales tax for transportation purposes on the August 5 primary ballot. He said it was the view of the opposition that a sales tax is not the way to fund transportation. In his opinion, this sales tax looks to be the best way in Missouri. The 2014 legislation allowed this sales tax proposal to go to a vote of the people. This approach has been mulled over for a number of years. Attached to the proposed constitutional amendment is a list of 800 projects to be funded across the state over the next ten years. He pointed out that gas tax monies can only be used on road and bridge projects.

Ms. Funk, MECAP, announced that the fourth Metro East Air Quality Forum will be on October 17 at the Caseyville Community Center. Keynote speakers will talk on public health impact of climate change and indoor environmental health assessments for high risk asthma pediatric patients. She also announced that the Illinois Department of Public Health received an asthma grant from the Centers for Disease Control for a environmental health assessment pilot project in St. Clair County. MECAP will assist in this effort.

Mr. Fishman, St. Louis University, announced that on Sunday August 24 there will be a meeting of the Climate Reality Group-St. Louis at the Schafly Bottleworks in Maplewood. At this meeting there will be a brainstorming session on how can St. Louis take a leadership role in informing the public on this issue.

There will be no AQAC meeting in August. The next meeting will be on Tuesday, September 16. It is earlier in the month due to a scheduling conflict. There being no other business the meeting of the Air Quality Advisory Committee was adjourned.