

Creating Solutions Across Jurisdictional Boundaries

AGENDA AIR QUALITY ADVISORY COMMITTEE* TUESDAY, October 24, 2023

10:00 - 11:30 a.m.

In Person at East-West Gateway and Virtual

Please join my meeting from your computer, tablet, or smartphone.

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Access Code: 622-459-341

I. Call to Order

- Carol Lawrence, Chair, East-West Gateway Council of Governments A. Minutes of the August 29, 2023 Meeting

II. Overview of the City of St. Louis' Building Energy Performance Standards and the Building Energy Exchange

- Katarina Michalova, City of St. Louis Office of Building Performance
- Malachi Rein, St. Louis Building Energy Exchange

III. Summary of the 2023 Ozone Season

- Maureen McCarthy, East-West Gateway Council of Governments

IV. Climate Pollution Reduction Grant Update

- Aaron Young, East-West Gateway Council of Governments

V. American Fuels Report

- Kevin Herdler, St. Louis Clean Cities Program

VI. Update Activities of the States

- Illinois Environmental Protection Agency
- Missouri Department of Natural Resources

VII. Other Business & Adjournment

Next meeting will be on January 30, 2024

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

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Non-voting Members

Holly Bieneman Illinois Department of Transportation

Illinois Department of Commerce and Economic Opportunity Patrick McKenna

Missouri Department of Transportation

Taulby Roach

Bi-State Development

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Executive Director
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MINUTES AIR QUALITY ADVISORY COMMITTEE Tuesday, August 29, 2023 10:00 am – 11:30 am VIRTUAL AND IN-PERSON MEETING

Members Present:

Carol Lawrence, Chair – East-West Gateway Council of Governments
Mike Henderson – Missouri Department of Transportation
Kevin Jemison – Illinois Department of Transportation
Susannah Fuchs – American Lung Association
Francisco Cortalezzi- Missouri Department of Natural Resources
Aaron Cadman – St. Louis County Department of Health
Guosen Chen – Illinois Environmental Protection Agency
Betsy Tracy – FHWA, Illinois
Dan Weitkamp – FHWA, Missouri

Others Present:

Stacy Allen - Ameren
Michael Hutcheson – Ameren
Tom Caldwell – Illinois Department of Transportation
Alicia Daniels – Missouri Department of Natural Resources
Tom Wilson - ARA
Jason Heitman – Environmental Protection Agency Region 7
Mark Leath – Missouri Department of Natural Resources
Wesley Fitzgibbons – Missouri Department of Natural Resources
Stephanie Doolan – Environmental Protection Agency
Steven Donatiello – The Laclede Group
Nicole Weidenbenner – Missouri Department of Natural Resources
Cecelie Cochran – Federal Highway Administration Missouri
Kyle Sottoriva – Illinois Environmental Protection Agency
Jade Ruether

Staff:

Mary Grace Lewandowski, Aaron Young, Jennifer Vuitel, Anna Chott, Maureen McCarthy, Michael Wohlstadter

1. Call to Order

Carol Lawrence, Chair, East-West Gateway Council of Governments

The meeting of the Air Quality Advisory Committee (AQAC) was called to order by Chair Carol Lawrence, East-West Gateway Council of Governments (EWG). The minutes of the June 27, 2023 AQAC meeting were approved as circulated.

2. 2023 Ozone Season Since June

- Maureen McCarthy, East-West Gateway Council of Governments

So far in 2023, there have been 131 exceedances. There were no exceedances in the month of July and no exceedances up to this point in August, which is very unusual. The last year comparable to the 2023 ozone season was 2012—the 2012 ozone season recorded 167 exceedances based on the 2008 ozone standard, which was less stringent than the 2015 standard.

3. Proposed Missouri State Implementation Plan Revision: St. Louis Moderate Non-Attainment Area Plan for the 2015 Ozone Standard

- Wesley Fitzgibbons, Missouri Department of Natural Resources

General Moderate Non-Attainment Plan Requirements:

- CAA Section110(a)(2): Requires Public Participation
 - Public comment period for the St. Louis Moderate Non-attainment Area Plan opened June 26, 2023, and closed August 3, 2023.
- CAA Section 172(c)(1): Requires Attainment Demonstration modeling to show that standard will be attained
 - o Comprehensive photochemical modeling included in Appendix D of the plan
- CAA Section 172(c)(9): Requires Contingency Plan
 - EPA's rules and guidance: One year's worth of emission reduction progress in the
 Contingency Plan in case there is a future violation of the ozone standard

Moderate Ozone Non-Attainment Plan Requirements to be addressed:

- CAA Section 182(b): Moderate Nonattainment Area Ozone Requirements
 - \circ Reasonable Further Progress (RFP) 15% reduction in VOC and NO_X emissions within 6 years of designation.
 - Reasonably Available Control Technology (RACT) Requirements for major industrial (point) sources of VOC and NO_X to employ technology for the lowest emission limitation, which is technologically and economically feasible.
 - Vehicle Inspection and Maintenance (I/M) This plan updates the nonregulatory narrative for the Gateway Vehicle Inspection Program (GVIP) and describes how GVIP meets EPA's minimum I/M program standards.

- Gasoline Vapor Recovery Historically required by Clean Air Act, EPA has required all vehicles since 1996 model year to include this technology in vehicle design. It does not need to be addressed.
- \circ General Offsets New or modified point sources of VOC and NO_X have to ensure there is an emissions reduction of 1.15 tons for every one ton of new emissions.
- All Marginal Area Requirements: Section 182 (a) are to be continued to be met

Contingency Plan:

- EPA has traditionally required a Contingency Plan to achieve one year's worth of progress toward the RFP requirements in case there is a violation of the standard in the future
- Because RFP requires a 15% emissions reduction for 5 years following designation, one year's worth of reduction is equivalent to 3%
- Missouri's Contingency Plan is based on adjusting the 2023 Motor Vehicle Emissions Budget (MVEB) prepared for the Attainment Demonstration Plan:
 - Enforceable contingency measures are separate from Reasonable Further Progress efforts and modeled attainment
 - MVEB is used in the Transportation Conformity, which ensures that projected vehicle emissions do not exceed MVEBs allowed through the SIP

The plan was posted on the department's website for public review and comments from June 26, 2023, to August 3, 2023. The department is working on responding to the more than 40 comments received from environmental groups and members of the public. Plan adoption may take place in late September.

4. St. Louis Region Urban Heat Island Research

- Aaron Young, East-West Gateway Council of Governments

The urban heat island effect is a complex issue but is defined as the effect or phenomenon whereby cities experience higher air temperatures than the surrounding countryside. Many physical contexts create an urban heat island, including the color of concrete, the types of buildings, how close the buildings are together, and the density of vegetation.

East-West Gateway is trying to map out where the urban heat island is occurring rather than determining to what extent the St. Louis region is affected. The aim is to map out where the urban heat island is actually occurring. The National Climate Assessment has estimated an increase in the number of days over 100 degrees in the coming decades. This summer, there

have been about 12 days over 100 degrees. A number of local partners are interested in researching this issue.

Besides the increased burden on energy usage and production, there are many other reasons to study urban heat islands. Higher temperatures cause increases in health risks such as heat stroke, heat exhaustion, asthma, and depression. Those who work and recreate outside have to limit their time outside to avoid heat-related health issues. There has been a measured increase in crime when temperatures rise. More heat-related health problems and incidents put a strain on emergency services—the transportation infrastructure experiences significant damage and structural issues during severe heat waves. The water quality suffers due to algae blooms and fish die-offs triggered by the heat. The lives of those who rely on alternative forms of transportation, such as cycling and public transit, will be significantly affected if temperatures continue to rise.

Several years ago, EWG's Transportation Department approached Michael Wohlstadter in EWG's Research Department and asked him to analyze satellite data in order to begin analyzing how heat affects the transportation infrastructure. After that, Ameren began convening a group of stakeholders to examine how the urban heat island effect was also affecting their infrastructure and the impact of an increased energy burden on low-income residents.

The satellite data analysis began with the City of St. Louis and St. Louis County. Still, since EWG is a regional entity, the analysis was expanded to try to examine the entire region. Due to the coverage of the satellites, 90% of the EWG region is captured by one satellite, and 10% is captured by a different satellite. This creates a hurdle for regional data analysis as time goes on. The pilot study final report is available.

5. Update Activities of the States

- Guosen Chen, Illinois Environmental Protection Agency

The attainment demonstrations for the 2015 ozone standard for the St. Louis and Chicago non-attainment regions will be released for public notice very soon. Illinois EPA is continuing to work on the revisions to the NO_x RACT rules that apply to the non-attainment areas.

Two weeks ago, Illinois EPA began its consultation period with federal land managers on the regional haze plan submittal.

The redesignation request for the Alton SO_2 non-attainment area has been released for public comment. If this request is approved by EPA, Illinois will have no SO_2 non-attainment areas.

Francisco Cortalezzi, Missouri Department of Natural Resources

The Missouri Air Conservation Commission (MACC) held a public hearing on the St. Louis moderate non-attainment area plan at the July 27, 2023, Commission meeting. The Air Program is currently developing its response to the comments received during the public comment period. The next MACC meeting is on Thursday, August 31, 2023, in Kansas City, MO. Two items will be up for public hearing, which involves amendments to two state-wide incinerator rules: 10 CSR 10-6.161 Commercial and Industrial Solid Waste Incinerators and 10 CSR 10-6.200 Hospital, Medical, and Infectious Waste Incinerators. The amendments are for the administrative updates to the incorporation of reference language in the two rules. The following MACC meeting will be in Jefferson City on September 28, 2023. The agenda for this meeting is not yet finalized.

The Air Program just submitted its FY 2024 state DERA grant application. Once the EPA approves the application, the Air Program plans to open applications for diesel repower and replacement projects across the state. The application period is targeted to open in the fall of 2023.

The Air Program has received an official award from the EPA for the Missouri Climate Pollution Reduction Grant (CPRG) program. On August 14, the department hosted a kickoff webinar to explain the program and announce the plans to award grants to municipalities across the state to help conduct outreach meetings and solicit project proposals for inclusion in the plan. The Air Program is planning to open the application period for the municipality grant in September. More information on the CPRG grant can be found on the Missouri Department of Natural Resources website.

6. Other Business

There is a OneSTL Sustainability Lab this afternoon at T-Rex in downtown St. Louis, with the option to attend virtually. This lab will focus on watershed stormwater management planning efforts in East St. Louis and Cahokia Heights.

East-West Gateway received authorization for the St. Louis MSA Climate Pollution Reduction Grant effort last week. The first steps will include contacting local government and other partners to see what carbon-reducing projects they have in mind. These projects will be included in the phase 1 report, so they will be eligible for implementation grants. More robust engagement will happen after phase 1 is completed in March 2024.

Nominations are now open for East-West Gateway's Outstanding Local Government Achievement Awards (OLGAs). These awards recognize the work of local governments, school districts, and individuals in the St. Louis region. Nominations are open through September 29

and the application can be found on the East-West Gateway website. The OLGAs will be awarded at the Annual Meeting later this year.

This morning we forwarded an announcement from NASA about the first images released from the satellite-based TEMPO instrument that Dr. Fishman presented in a previous AQAC meeting. This mission was designed to measure air quality from a different perspective.

7. Adjournment

The next meeting will be on October 24, 2023. There being no other business, the meeting was adjourned.