



**EAST-WEST GATEWAY**  
**Council of Governments**

Creating Solutions Across Jurisdictional Boundaries

**AGENDA**  
**AIR QUALITY ADVISORY COMMITTEE\***  
**TUESDAY, January 29, 2019**  
**10:00 a.m. – 12 noon**  
**East-West Gateway Board Room**

**Chair**

Steve Stenger  
County Executive  
St. Louis County

**Vice Chair**

Mark A. Kern  
Chairman, St. Clair County Board

**2nd Vice Chair**

Robert Elmore  
Chairman, Board of Commissioners  
Monroe County

**Executive Committee**

Tim Brinker  
Presiding Commissioner  
Franklin County

Steve Ehlmann  
County Executive  
St. Charles County

Lyda Krewson  
Mayor, City of St. Louis

Kurt Prenzler  
Chairman, Madison County Board

Ken Waller  
County Executive  
Jefferson County

**Members**

Emeka Jackson-Hicks  
Mayor, City of East St. Louis

Carol Johnson  
Franklin County

Reggie Jones  
St. Louis County

Mark Kupsy  
Vice President,  
Southwestern Illinois  
Council of Mayors

Norman C. McCourt  
Municipal League of Metro St. Louis

Roy Mosley  
St. Clair County

Lewis Reed  
President, Board of Aldermen  
City of St. Louis

Herbert Simmons  
President, Southwestern Illinois  
Metropolitan & Regional  
Planning Commission

Tom Smith  
President, Southwestern Illinois  
Council of Mayors

Michael Walters  
Madison County

John White  
St. Charles County

**Regional Citizens**

Barbara Geisman  
C. William Grogan

Richard Kellett  
John A. Laker

**Non-voting Members**

Erin Aleman  
Illinois Department of  
Transportation

Erika Kennett  
Illinois Department of Commerce  
and Economic Opportunity

Patrick McKenna  
Missouri Department of  
Transportation

John Nations  
Bi-State Development

Aaron Willard  
Missouri Office of Administration

**Executive Director**

James M. Wild

- I. Call to Order**  
-Carol Lawrence, Chair, East-West Gateway Council of Governments  
A. Minutes of October 30, 2018 Meeting
- II. Fourth National Climate Assessment**  
- John Posey, East-West Gateway Council of Governments
- III. Illinois Green Economy Network**  
- Nate Keener, Lewis and Clark Community College  
- Rob Hilgenbrink, Illinois Green Economy Network
- IV. American Fuel Group Report**  
- St. Louis Regional Clean Cities Program
- V. Update Activities of the States**  
- Illinois Environmental Protection Agency  
- Missouri Department of Natural Resources
- VI. Other Business – Next Meeting Date March 26, 2019**
- VII. 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.

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MINUTES  
AIR QUALITY ADVISORY COMMITTEE  
Tuesday, October 30, 2018  
10:00 am – 12:00 pm  
East-West Gateway Board Room

Members Present:

Carol Lawrence, Chair – East-West Gateway Council of Governments  
Susannah Fuchs – American Lung Association  
Curtis Jones – Illinois Department of Transportation  
Mallory Box – Citizens for Modern Transit  
Mike Henderson – Missouri Department of Transportation  
Mike Right – AAA Auto Club of Missouri  
Buzz Asselmeier – Illinois EPA (Telephone)  
Stacy Allen – Missouri Department of Natural Resources  
Jed Wolkins – U.S. Environmental Protection Agency Region 7 (Telephone)  
David Driver – City of St. Louis

Others Present:

Laura Jones – Regent Power, LLC  
Kevin Herdler – St. Louis Clean Cities  
David Shanks – Boeing  
Kevin Jemison – Illinois Department of Transportation  
David Driver – City of St. Louis  
Steve Whitworth – Ameren (Telephone)  
Kimberly Bauman – Mississippi Lime (Telephone)  
Ward Burns – U.S. EPA Region 7 (Telephone)

Staff:

Mary Grace Lewandowski   Aaron Young   Bonnie Harper   Maureen McCarthy

**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 August 28, 2018 AQAC meeting were approved as circulated.

## 2. Proposed Affordable Clean Energy Rule

- Ward Burns, U.S. Environmental Protection Agency Region 7

The U.S. Environmental Protection Agency (EPA) is proposing the Affordable Clean Energy (ACE) rule, which will empower states to reduce carbon dioxide (CO<sub>2</sub>) emissions and provides reliable power at an affordable cost. ACE would replace the Clean Power Plan (CPP), which EPA has proposed to repeal because it exceeded EPA's authority. The CPP was stayed by the Supreme Court and has never been implemented. The proposed ACE rule has several components:

- Establish emission guidelines for state plans to address greenhouse gas emissions from existing coal-fired power plants
- Determine on-site efficiency improvements to be the best system of emission reduction at existing coal plants
- Revise implementing regulations to give states adequate time and flexibility to develop state plans

The proposed repeal of the Clean Power Plan was published in October 2017 and received more than 1.3 million comments. The Advance Notice of Proposed Rulemaking (ANPRM) was published in December 2017 and received more than 270,000 comments.

Carbon dioxide (CO<sub>2</sub>) emissions from the power sector are already dropping due to market forces, technology improvements, and policy changes. The ACE rule will continue the downward CO<sub>2</sub> trend by pushing the power sector CO<sub>2</sub> emissions to 34 percent below the 2005 levels.

The proposed implementation of the ACE rule involves modernizing and conforming more closely to CAA and clarifying the roles of the EPA, states, and unit levels. There will be a new definition of "standard of performance" and "emission guideline" as well as completeness criteria and a variance provision. The ACE rule rebalances state and federal roles in developing and implementing rules under the Clean Air Act (CAA) section 111(d). The best system of emission reduction (BSER), which is determined by the EPA, includes technology and practices, information on the degree of emission limitation, and no presumptive standard of performance. The states are then able to establish standards of performance based on the application of the BSER.

The proposed ACE rule includes four main actions:

- Defines the BSER for existing coal-fired power plants as on-site, heat-rate efficiency improvements
- Provides states with a list of "candidate technologies" for states to consider in establishing standards of performance and in developing state plans
- Revises EPA's New Source Review permitting program to streamline associated efficiency improvements at existing power plants
- Proposes new CAA section 111(d) general implementing regulations to give states adequate time and flexibility to develop state plans

The ACE rule sets “emission guidelines” for states to develop and submit to the EPA; these state plans establish standards of performance for existing units based on revised BSER. The states will evaluate the BSER technologies for each source, and can adjust a standard of performance based on remaining useful life and other factors. The ACE proposes that states can allow for compliance flexibilities and solicits comment on whether trading and averaging should be allowed.

The ACE proposes a new preliminary applicability test for determining whether a physical or operational change made to a power plant might be a “major modification” under the New Source Review (NSR) program. The ACE proposes revisions to the NSR rules that would give states the option to adopt an hourly emissions increase test for power plants to be used alongside the current annual emissions test required by NSR.

The EPA’s regulatory impact analysis (RIA) includes a variety scenarios that calculate the benefits and costs of three replacement scenarios and one repeal scenario. All four of these scenarios show future CO<sub>2</sub> emissions would be below current levels. The EPA projects replacing the CPP with the ACE could result in \$3.4 billion in net benefits, including \$400 million annually. Under some scenarios, avoided compliance costs total \$6.4 billion compared to the CPP. Approximately 600 coal-fired electric generation units at 300 facilities could be covered by this proposed rule.

The comment period lasts through October 31, 2018 and the public hearing is on October 1, 2018 in Chicago. More information on the proposed ACE rule can be found at <https://www.epa.gov/stationary-sources-air-pollution/proposal-affordable-clean-energy-ace-rule>

### **3. Smart City Activities in the St. Louis Region**

- Laura Jones, Regent Power

Ms. Jones’ background is in energy. Regent Power began working on smart city street lights with MoDOT and St. Charles. It is a way to reduce energy use and costs. Ms. Jones co-invented a gunshot detector that can be placed in the smart city street lights in combination with surveillance cameras. Regent Power is hoping to implement a gunshot detection demonstration project in St. Charles and University City. To install the many different possible features on street lights, only the head of the pole needs to be replaced. Cities or neighborhoods that are considering these street lights will work with an architect to decide the best features and locations for the smart city street lights.

Another focus is electric vehicles (EV) and EV infrastructure. Ms. Jones showed a video that discussed the beginnings of Regent Power’s involvement in EV infrastructure. The transition to sustainable transportation is hindered by a lack of supporting infrastructure. The goal for many involved in the VW settlement and Electric Drive America efforts is to install EV charging stations that are attached to the grid across the United States. These types of charging stations are more expensive, slower, and do not include an energy storage system. Energy storage plays a fundamental role in the integration of the new power systems related to EV charging stations. Energy storage for EV charging (ESEVC) provides many benefits to the greater EV charging

market, including reduced demand charges and improved grid stability. A major benefit of EV energy storage charging units is that they can be moved in the event of a crisis or emergency and that energy can be used for other things. Regent Power is collaborating with organizations and municipalities to install six of these charging stations in the St. Louis area in the spring of 2019.

The EV growth and market forecast shows that the number of people transitioning to electric vehicles between 2017 and 2021 will be steadily increasing. The biggest problem for the increasing EV market is the lack of needed infrastructure to support its growth. Level one EVs take about ten hours to fully charge and level two EVs take about five hours to charge. Newer vehicles that utilize direct-current fast chargers are able to fully charge in less than one and a half hours or less depending on the kW. The ideal situation is to have direct-current vehicles using energy storage stations which would allow drivers to fully charge in about ten minutes.

There is currently a case study of fast-charging EV being conducted in Canada. There is a joint venture to build a network of DC fast-charging stations along a 3,400 km segment of the Trans-Canada Highway. There will be 102 DC fast-chargers at 34 different locations. Total of \$17.3 million of public and private funding for this case study. Smart city programs and their work with EV infrastructure is not a well-known effort. Projects like the one along the Trans-Canada Highway are helping to educate more people about smart city efforts and the need for EV infrastructure and energy storage stations.

#### **4. 2018 Ozone Season**

- Carol Lawrence and Maureen McCarthy, East-West Gateway Council of Governments

The ozone data sharing project begins on March 1 and ends on October 31. During that time period EWG receives ozone data from the Illinois Environmental Protection Agency (IEPA) and the Missouri Department of Natural Resources (MoDNR). EWG acts as a clearinghouse for this data and then share the combined ozone data with IEPA, MoDNR, and EPA Region 7. We monitor the one hour concentration for a twelve hour period from 9:00am- 9:00pm, as well as eight hour ozone averages over a twenty-four hour period. Throughout the ozone season EWG prepares weekly and monthly ozone reports for our Illinois, Missouri, and EPA Region 7 partners.

The ozone monitor network is made up of ten monitors located in the EWG region with six in Missouri and four in Illinois. In addition to those monitors there are also transport tracking ozone monitors which are outside of the East-West Gateway region. The transport tracking monitors allow us to assess the quality of the air entering and leaving the region.

As a reminder, the 2015 ozone standard is 70 parts per billion (ppb) and an exceedance occurs when an eight hour average for a monitor is greater than 70 ppb. A violation of the standard is when the three year average of the fourth highest annual average for a monitor is greater than 70 ppb. The extent of the non-attainment area for the 2015 ozone standard is smaller. Both Missouri and Illinois have been found to be in attainment for the 2008 ozone standard and are now classified as maintenance.

During the 2018 ozone season there were 14 days with 53 exceedances with every monitor having a recorded exceedance. For the transport tracking monitors there were seven days with ten exceedances with four of the five monitors having a recorded exceedance. A graph in the presentation showed that the number of yearly exceedances has been falling and the five year running average of exceedances has been declining since 1999.

Occasionally there is incomplete one hour data for some monitors. If there are four or more hours with no values recorded we document the monitor, date, time, and reason for the incomplete data. Incomplete data does not always mean that data was unmonitored. If the data is recovered at a later time it will be added to the rest of the data. The cause of the incomplete data is provided by the partner agencies and can be a result of power failure, equipment calibration, or storm interference. For the 2018 season the two reasons for incomplete data were equipment malfunction and operator error.

One of the tools EWG utilizes is EPA's Air Quality Index (AQI). It is a calculator that people can use to learn about pollution levels and associated health impacts. The calculator takes the eight-hour average and converts it to a standardized AQI value on a scale of 0 to 500. To compare that with the 2015 standard, 70 ppb is equal to 100 on the AQI scale. There are six different categories on the AQI each with different health concerns. For our purposes, EWG displays the AQI data in a calendar format in order to view the air quality over an entire month.

There are several products of the ozone data sharing project. EWG produces tables for one hour ozone values by day, days with eight hour exceedances, the fourth highest eight hour averages, and days with incomplete data. The maximum eight hour values by monitor and the AQI calendar can both be found on the EWG website. More information can be found at the online Air Quality Resource Center [www.ewgateway.org/community-planning/environmental/air-quality](http://www.ewgateway.org/community-planning/environmental/air-quality)

## **5. American Fuel Group Report**

- Kevin Herdler, St. Louis Regional Clean Cities Program

2019 marks twenty-five years of the Clean Cities Program in the St. Louis region. Mr. Herdler will be attending the National Clean Cities Conference in Florida which will provide many updates for the Clean Cities program. There are several truck expos scheduled for 2019.

## **6. Update Activities of the States**

- Stacy Allen, Missouri Department of Natural Resources

At the October 25 Missouri Air Conservation Commission (MACC) meeting in Springfield, MO there was a public hearing on the re-designation request for the 2012 PM<sub>2.5</sub> standard for St. Louis. The clean data has already been collected and MoDNR is going to ask EPA for the designation of unclassifiable to be reconsidered and classify the area as attainment. Comments

on the re-designation request are due on November 1, 2018. There were also 16 rule amendments at the public hearing, and 15 were approved. The approved amendments are being sent to EPA. The one rule amendment not approved was for the emergency episode rule, which the commissioners decided needed to be investigated further. The next MACC meeting is on November 29, 2018 in Jefferson City. At the November 29 meeting MoDNR will be asking the commissioners to vote on their redesignation request and there will be 17 more rule amendments. The approved amendments will become effective in February or March 2019.

On September 20, 2018 EPA redesignated the Missouri portion of the EWG region as being in attainment of the 2008 ozone standard. The five counties in Missouri are now in maintenance. The Illinois portion of the EWG region was found to be in attainment of the 2008 standard in March 2018. In April 2018 EPA announced that the non-attainment area for the 2015 ozone standard was smaller due to Jefferson County and a portion of Franklin County being identified as in attainment of this standard. On October 2, 2018 the Missouri portion of the EWG region was redesignated as in attainment for the 1997 PM<sub>2.5</sub> standard. More information on designations, rules, and requests about PM<sub>2.5</sub> can be found on MoDNR's website at [https://dnr.mo.gov/env/apcp/fine\\_particulate.htm](https://dnr.mo.gov/env/apcp/fine_particulate.htm)

In August 2018 MoDNR released their Beneficiary Mitigation Plan coming out of the Volkswagen settlement. The first application period open was for those seeking new school buses and DERA grants. There were 67 applications in the first round of applications. Of those applications 64 of them were from school districts that own their own buses and three were from contractors that own their own buses. In total they asked to replace 137 buses, for up to \$22,000 per bus. The applicants who received funding were chosen in a lottery draw. There are 40 districts that will receive funding for buses before June 2019. The applicants who do not receive funding from the first round will receive funding after May 2019. The second application period will be for transit shuttle buses and government trucks and the applications will be chosen based on a scored process. When the applications become available it will be available online with the new Funding Opportunities Portal on the MoDNR website. All official notifications will occur through that online portal.

The electric vehicle infrastructure team will soon be meeting to decide how to develop EV infrastructure as it was laid out in the plan. Anyone is welcome to join this team. The number one goal for electric vehicle infrastructure is a highway charging network that will allow electric vehicles to travel further.

Mark Leath is the new State Implementation Plan (SIP) unit chief at MoDNR. The Department of Natural Resources also looking to hire three new people.

- Buzz Asselmeier, Illinois Environmental Protection Agency

As of August 2018 the notice of the redesignation request of the 1997 PM<sub>2.5</sub> standard for Illinois has gone to public notice. The attainment redesignation for the Alton sulfur dioxide (SO<sub>2</sub>) area is close to going to public notice.

Ms. Lawrence received information on the Volkswagen program from Brad Frost at Illinois EPA. Illinois has finalized their beneficiary mitigation plan and submitted it to Wilmington Trust in August 2018. Based on comments the plan was changed to increase funding directed to on-road projects. The goals and priority areas in the plan remain the same. There are six action categories that identify eligible projects for each round of applications. For non-government projects a cost share of at least 50 percent is required. Government projects are required to have a cost share of at least 25 percent. The first round of funding was provided over the summer of 2018 for public transportation projects in the Chicago metropolitan area, government owned public passenger commuter line locomotive rail projects through DERA, and the all-electric school bus pilot project in Cook County.

In early October in the Federal Register there was a proposed rule from EPA for Illinois and areas in Indiana that are currently designated as unclassifiable for the 2012 PM<sub>2.5</sub> standard are being redesignated as in attainment for that standard.

## **7. Other Business**

East-West Gateway's Annual Meeting is on November 15, 2018 at the Hyatt in downtown St. Louis. The meeting starts at noon, but there will be two sessions in the morning before the meeting. Questions about this event can be sent to [annualmeeting@ewgateway.org](mailto:annualmeeting@ewgateway.org)

The OneSTL Sustainability Lab will be held this evening, October 30, at T-Rex in downtown St. Louis.

Bloomberg Philanthropies has awarded the City of St. Louis a \$2.5 million grant to help with climate initiatives such as greenhouse gas reductions.

## **8. Adjournment**

There being no other business, the meeting was adjourned. The next meeting will be on January 29, 2019.