

**AGENDA**  
**AIR QUALITY ADVISORY COMMITTEE\***  
**TUESDAY May 27, 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 April 29, 2014 Meeting
- II. National Climate Assessment: Climate Change Impacts in the United States**
  - John Posey, Ph.D., East-West Gateway Council of Governments
- III. Place, Pollution and Asthma: Environmental and Social Predictors of Asthma Hospitalization in the St. Louis Area**
  - Amy Funk, Metro East Community Air Project
  - Rebecca Gernes, Washington University
- IV. St. Louis Regional Clean Air Partnership Activities**
  - Susannah Fuchs, American Lung Association
- 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 June 24, 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, April 29, 2014  
East-West Gateway Board Room

Members Present:

Michael Coulson, Chair, East-West Gateway Council of Governments  
Mike Henderson - Missouri Department of Transportation  
Michael Zlatic - St. Louis County Health Department  
David Bloomberg - Illinois Environmental Protection Agency  
Joe Gray - Illinois Department of Transportation, District 8  
Christopher Schmidt - Illinois Department of Transportation  
Joe Winkelmann - Missouri Department of Natural Resources  
Jack Fishman - St. Louis University  
Jeanine Arrighi - City of St. Louis Department of Health  
Betsy Tracy - Federal Highway Administration, Illinois Division

Others Present:

Stephen Hall - Missouri Department of Natural Resources  
Kevin Herdler - St. Louis Regional Clean Cities  
Andy Knott - Sierra Club  
Amy Funk - Metro East Community Air Project  
Rafael Gonzalez - Madison County Transit/RideFinders  
Rebecca Gernes - Washington University  
Curtis Jones - Illinois Department of Transportation  
Sara Chappell - Illinois Department of Transportation

Staff:

Lubna Shoaib      Carol Lawrence

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). There is a spelling correction to the March minutes in that the name of the Waste Management landfill near Granite City is Milam not Milan. With this revision, the minutes of the March 25, 2014 AQAC meeting were approved and posted on EWG website.

II.     East-West Gateway Travel Demand Modeling and On-Board Transit Survey  
- Lubna Shoaib, East-West Gateway Council of Governments

Modeling is a mathematical representation of a system or a concept. It can be used to forecast weather or travel times and vehicle miles traveled (VMT). Travel Demand Modeling (TDM) is a mathematical representation of how, where, when and why people travel. TDM can be performed

at the micro scale (intersection) to a macro level (regional) with links or corridor studies in-between.

Information flows back and forth between these different levels or scales.

The TDM can be thought of as a multi-dimensional tool consisting of: land use and demographic information (which creates the demand for travel); travel demand measures and policy measures part of long range transportation plan which influence travel; and highway and public transit network showing what options people have to make trips. The TDM is used to test out different combinations of scenarios and see what the impact on travel (speeds or travel time) is. With scenario evaluation can study the effects of various combinations of actions and data and come up with “best” solution. TDM output is used in the decision-making process for developing the long range transportation plan.

Input to and output of the TDM is used in the MOtor Vehicle Emissions Simulation (MOVES) model to forecast emissions. MOVES is the USEPA approved mobile source emissions model for use in the regional emissions analysis portion of transportation air quality conformity determinations. Conformity is performed to make sure that transportation investments in the future do not negatively impact air quality. Important inputs for MOVES include: vehicle age distribution; vehicle population; VMT; road type distribution (which roads carry how much traffic); and average speed distribution of the vehicle population. MOVES can be run in either the Inventory Mode or the Emissions Rate Mode. In the Inventory Mode, TDM input and assumptions and traffic projections are input into MOVES. MOVES generates total emissions estimates for the model domain. The disadvantage is that MOVES has to be run every time the TDM is modified. In the Emissions Rate Mode, the MOVES model is run using the best possible inputs and assumptions to generate an emissions rate look-up table stratified by pollutant by speed bins, vehicle type, roadway facility type, time of day, month and year. These emission rates are then applied to the VMT projections from the TDM with the same stratification order. With the Emissions Rate Mode, MOVES needs to be run once and the emission rates are set. If there are changes to the transportation network (VMT, speed distribution, road type), then only the TDM model needs to be run, cutting down on computer run time. The majority of metropolitan planning organizations are using this approach.

Mr. Coulson, EWG, asked what the computer run time was for one analysis year. Ms. Shoaib, EWG, said that if there are no problems, it will take around 20 hours for the TDM and now, with dedicated servers, about six hours for MOVES. Before, a MOVES run would require 12 - 15 hours.

Mr. Coulson, EWG, asked about VMT growth rate. Ms. Shoaib, EWG, said that historically VMT had been increasing but since 2006-2007 it has leveled off and then dipped. There are so many moving parts, it is hard to say what happened. The economy, attitude changes/perceptions and technological changes all have an impact on trip making.

Mr. Winkelmann, MoDNR, said that the Air Pollution Control Program (APCP) in their SIP planning can not take credit for economic-related downturn in VMT. So often there is disparate VMT estimate the State uses for SIPs and Management Plans. When there is an economic downturn, people may have to travel further for work. Have observed an urban sprawl snap back with people wanting to live closer to where they work. The number of two income households as well as the percentage of two car households has peaked. All of these items contribute to stagnate VMT. Over last several years, best estimate for VMT growth rate is 0.7 to one percent. For planning purposes APCP has been assuming a conservative 1.5 percent. He added that in good

economic times people buy new cars which have improved emission controls, so emissions by VMT decreases. In bad times, there is slower vehicle turnover, so older vehicles remain in use, impacting emissions.

Ms. Shoaib, EWG, said that the TDM consists of four steps: trip generation (decision to travel); trip distribution (destination for travel); mode choice (how person will travel by car, bus, rail or walk); and assignment of travel (route to be taken based on time and distance). In the St. Louis region, the transit share is around three percent. Transit here consists of light rail, express buses and local buses. Transit services are provided by Metro (bus and light rail) for Missouri and St. Clair County in Illinois and by the Madison County Transit District (MCT). Options for transit service expansion continue to be evaluated.

From March - May 2013 a consultant conducted an on-board transit survey for EWG. The purpose was to gather data from a statistically valid sample of transit riders in the eight-county St. Louis region on how people use transit to travel. The results will be used to update the mode split forecast abilities of the TDM and to enhance regional transportation planning efforts.. The goal of the survey was to obtain completed surveys from ten percent of the transit boardings in the region in each of four time periods.

Survey results will help to better understand current transit patterns. When EWG applies for funds from the Federal Transit Administration (FTA) , model input and output are reviewed by FTA. EWG worked with FTA on the language for the Request for Proposals for consultant services and the survey form. EWG also sought input from the local transit providers and the St. Clair County Transit District.

The survey was conducted using iPads. Survey participants could use Google Earth to identify their locations and would be able to enter socio-economic information privately. Survey responses were sent directly to the consultant and those conducting the surveys on the trains or buses did not have access to this information. The iPad response rate was 80 percent. Set survey targets based on ridership estimates from Metro and MCT. Individual survey targets were also set based on morning peak, mid-day, afternoon peak and night time periods. The TDM uses these time periods. An on to off survey and the iPad (or paper form) survey were conducted. For the on to off survey, 20 percent of riders on a particular bus or train were given a card with a bar code when they got on and were to return the card when they got off. The full survey form was used for the other riders. Survey results are assumed to represent the full 100 percent of transit riders and the on to off survey responses were expanded to represent the full 100 percent of individuals using a particular bus stop or train station. During the survey period there were 161,000 total bus boardings. Of this number, there were 69,680 on to off surveys and 18,130 full surveys were conducted. Survey data is still being analyzed.

### III. Near-Roadway NO<sub>2</sub> Air Monitoring Results Update - Stephen Hall, Missouri Department of Natural Resources

Mr. Coulson distributed copies of an article from the St. Louis Post-Dispatch about funding for MoDNR's APCP. There appears to be good news and bad news. Progress is being made in reducing overall air pollution emissions but that is going to impact the air program in a negative way with reduction in fees taken in. Mr. Hall MoDNR, observed that there was some confusion and mis-

statements in the article. MoDNR is involved in an effort with stakeholders (sources paying emissions fees) to work out an equitable fee structure in order to continue the operations of the APCP. As sources put on controls, emission trends for SO<sub>2</sub> and NO<sub>x</sub> decline and fees tied to emissions also decrease. Mr. Winkelman, MoDNR, added that the APCP is self funded with funds from General Revenue, permit fees and cost for staff to review permits.

The U.S. Environmental Protection Agency (USEPA) Region 7 funded the initial set-up cost of the near-roadway monitoring effort. MoDNR covers the operating costs. In February 2010 USEPA issued the final rule revising the nitrogen dioxide (NO<sub>2</sub>) standard. The rule requires near-road (within 50 meters) monitoring to measure expected peak concentrations starting in January 2013. Based on population and traffic counts the St. Louis Core-Based Statistical Area (CBSA) is to have two sites and one in the Kansas City CBSA. The first St. Louis site and the Kansas City site were to begin operation in January 2014 and the second St. Louis site in January 2015. As a result of USEPA Region 7 funding, the first St. Louis monitor site went online in January 2013 and the Kansas City site began operation in July 2013. USEPA also promulgated near-roadway monitoring requirements for the carbon monoxide (CO) standard and the fine particulate (PM<sub>2.5</sub>) standard. Missouri has co-located CO and PM<sub>2.5</sub> monitors at these sites in St. Louis and Kansas City.

To measure expected peak concentrations, near-roadway monitoring stations are to be within 50 meters (164 feet) of a targeted road segment which has high traffic counts. Site is to represent air quality in an area of 3 to 100 square meters. In the St. Louis area, using information from Missouri Department of Transportation (MoDOT), MoDNR identified high traffic count segments along I-270, I-70 west of I-270 interchange, and I-64/US 40 east of I-170. The site has to be downwind of the road segment. The first monitoring site is located in the maintenance area of the City of St. Louis Parks Department at Forest Park and is 25 meters north of I-64. Winds are primarily from the northwest and the southeast. For the second site, MoDNR is negotiating with several property owners.

St. Louis monitoring output for January 2013 - March 2014 for NO<sub>2</sub>, CO and black carbon concentrations shows significant morning peaks during the work week. There are no significant evening peak concentrations. However, NO<sub>2</sub> and CO concentrations do not show strong potential to violate their respective standards. In addition, black carbon contributes, on average, less than one microgram per cubic meter (ug/m<sup>3</sup>) to PM<sub>2.5</sub> levels.

At the Kansas City I-70 site, NO<sub>2</sub> and CO concentrations (June 28, 2013 - February 2014) and black carbon concentrations (September 2013 - February 2014) show significant morning peaks on weekdays and evening peaks on both weekdays and weekends. The evening peak concentrations are, on average, higher than the morning peaks. NO<sub>2</sub> and CO concentrations do not show strong potential to violate their respective standards. In addition, black carbon contributes, on average, less than one microgram per cubic meter (ug/m<sup>3</sup>) to PM<sub>2.5</sub> levels. MoDNR is looking at different hypotheses for the higher afternoon and weekend peaks. It could be the make-up of the weekday diesel truck fleet or that I-70 is more of a corridor for interstate traffic than I-64 in St. Louis.

#### IV. Metro East Community Air Project Report

- Amy Funk, Metro East Community Air Project

The Metro East Community Air Project (MECAP) is operated under a special grant from the University of Illinois. MECAP is focused on outreach and education, monitoring and research. For the last three years MECAP has hosted a Metro East Air Quality and Health Forum. Planning is underway for the fourth Forum for October 17, 2014. Speakers will discuss public health issues and responses that might come out of climate change and indoor air quality issues as relates to indoor health assessments and asthma. Part of the program will highlight sustainable activities occurring in the Metro East.

MECAP, County Health Departments and the American Lung Association sponsored bookmark contests for students in Madison County and St. Clair County. Students are to highlight things people can do to improve air quality. MECAP is finishing up a joint research project with USEPA Region 5 comparing different volatile organic compounds (VOC) monitoring technologies.

MECAP partnered with Rebecca Gernes of Washington University on USEPA's Toxic Release Inventory (TRI) University Challenge. She was one of eight college students selected to participate. Her project used GIS to examine socio-economic variables, asthma hospital emissions and stationary sources emission inventories in the St. Louis region. Maps were developed of asthma admissions by zip codes with stationary sources and major interstates. This information will be of use to the Southwestern Illinois Asthma Coalition and the Madison County Health Department's air quality committee. Later this year Ms. Gernes will attend USEPA's TRI Conference in Washington, D.C.

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

Mr. Herdler, St. Louis Regional Clean Cities Program (SLRCC), announced that on May 2 there will be a ribbon cutting ceremony for a new Waste Management compressed natural gas (CNG) refueling station on Hall Street in the City of St. Louis. Later on this station will be open to the public.

Work on the development of a methodology using MOVES to evaluate the air quality impact/emission reduction of alternative fuel vehicles under different scenarios is wrapping up. Mr. Herdler thanked Ms. Shoaib and Mr. Coulson of EWG and Mr. Leath of MoDNR for their assistance and input into this project.

At the end of May the MotorWeek television show will be here to film two segments. One will be about AT&T and their 8,000<sup>th</sup> CNG vehicle put on the road. Another segment will focus on the renewable fuel classrooms and labs at the Rockwood Summit High School in the Rockwood School District. The school district received a \$100,000 grant from Monsanto for this effort.

Earlier this month, SLRCC participated in the dedication of 30 new CNGs school buses at the Parkway School District. The new buses are yellow and have green rails so first responders (and the public) know they use alternative fuel. However, MoDOT has a rule that bus rails have to be black. Parkway is fighting to retain the green railings.

An event to celebrate the 20<sup>th</sup> anniversary of the establishment of the SLRCC will be held on November 18, 2014 at the Ameren Headquarters in the City of St. Louis.

According to research performed by Ameren, there are 2,500 electric vehicles registered in the St. Louis (MO-IL) region. Mr. Coulson, EWG, asked about charging stations. Mr. Herdler, SLRCC, said that most of the local Nissan dealerships each have five DC fast charging stations. Ms. Funk, MECAP, asked about maps of CNG or electric charging stations. Mr. Herdler, SLRCC, said that a good source of information would be the Alternative Fuel Data Center at [www.afdc.gov](http://www.afdc.gov).

#### VI. Update Activities of the States

- David Bloomberg, Illinois Environmental Protection Agency
- Joe Winkelmann, Missouri Department of Natural Resources

This week is Air Quality Awareness Week in Illinois. Illinois EPA announced that the Air Quality Flag program has expanded from schools in Chicago area to interested businesses. In this program a color-coded flag (based on the Air Quality Index forecast) is placed on the flagpole of a participating school or business. Illinois EPA in Springfield was the first business to join.

The U.S. Supreme Court has upheld USEPA's Cross State Air Pollution Rule (CSAPR) by a vote of 6 to 2. At this time the meaning of this decision is unclear. But there will be a lot of work to do in Illinois and Missouri may be brought into CSAPR. Under CSAPR, if a state is designated a significant contributor (one percent or 0.8 parts per billion) to non-attainment for ozone in another area, the contributor state will have to reduce emissions.

The state lead rule has been finalized. Mayco Industries in Granite City has been issued a construction permit to install controls so they can comply with the lead rule. Mayco adding another fabric filter structure. They are moving some of their equipment that previously was not in a total enclosure into a baghouse. Mayco has added hooding to sorting areas and have increased general housekeeping. Illinois EPA has filed for parallel processing and plans to submit an updated SIP to USEPA Region 5 in the next few months. Ms. Funk, MECAP, said that at the March meeting on Mayco's permit, Brad Frost of Illinois EPA remarked that with the general housekeeping/operations improvements already made by Mayco, the lead monitor in Granite City has shown a decrease in lead emissions over the last six months.

USEPA has released proposed guidance for monitoring for the Phase 2 sulfur dioxide ( $\text{SO}_2$ ) designation process. It also release the final guidance on how the states are to implement Phase 1  $\text{SO}_2$  State Implementation Plans (SIPs). Ms. Funk, MECAP asked if under  $\text{SO}_2$  Phase 2, Illinois EPA would do modeling for the Metro East and Granite City. Mr. Bloomberg, Illinois EPA, said that his agency will be sending letters to  $\text{SO}_2$  sources about options. If company does not respond or says it does not care, then Illinois EPA will model. If company indicates it is interested in having monitors, Illinois EPA will work with them on the number needed and locations and the company will have to pay for them. Some companies may want to do that. Monitoring has to continue until USEPA finds monitor is at 50 to 80 percent of the standard. A company may be more hesitant to agree to pay for monitoring if they know it could be for an extended period of time. If company thinks model output will show them causing a non-attainment area, it may be beneficial for the company to pay for monitors and see what the actual monitoring data shows. Best situation for a company is if three years of monitor data shows attainment and model would not.

Last month, Ms. Andria of American Bottom Conservancy (ABC) had talked about a notification on a construction permit for Mississippi Lime in Randolph County and a May public meeting. Illinois EPA and Mississippi Lime had been working to address the issues the USEPA's Environmental Appeals Board had raised at the time the permit was remanded back to Illinois EPA in 2011. The March 2013 notice was pulled so that Federal Land Managers could review the permit. They had no problems with it so another hearing has been scheduled for June 2.

On April 24 the Missouri Air Conservation Commission (MACC) met in Jefferson City. There was a public hearing for a minor amendment to the odor rule to align definitions with the stand-alone definition rule. The MACC adopted the Maintenance Plan and Redesignation Request for the Missouri portion of the St. Louis area under the 1997 ozone standard. At the March public hearing Mr Knott of the Sierra Club commented on the public health concern regarding ozone in the St. Louis area and whether working on a Maintenance Plan and redesignation request for the 1997 ozone standard was a good use of resources. In Mr. Winkelmann's opinion it was a good use of resources. This standard could be revoked if USEPA releases the implementation guidance for the 2008 standard. After the April MACC meeting the AQ Advisory Forum stakeholder group met to discuss adjusting emissions fees. This meeting was described in the Post-Dispatch article. MoDNR is planning to hold additional stakeholder meetings on May 19 and June 16.

The next MACC meeting will be on May 29 at the MoDNR St. Louis Regional Office in south St. Louis County. At this meeting there will be a public hearing on the five year review of the Regional Haze Plan and on the Marginal Plan submittal for the Missouri portion of the St. Louis non-attainment area for the 2008 ozone standard. The Marginal Plan was posted for public notice last week. Public hearings also will be held on the following: revision to 10 CSR10-5.220, Control of Petroleum Liquid Storage and Transfer, removing requirement for Stage II vapor recovery controls at gas dispensing stations in the St. Louis ozone non-attainment area; and 10 CSR 10-6.040, Reference Methods, amending it to update the incorporation by reference date to include the latest Federal Register notices for ambient air monitoring methods.

There are several Missouri rules in development. The St. Louis and Kansas City aerospace manufacturing rules are being amended to add an exemption from cleaning operations/housekeeping requirements for those facilities already regulated under the hazardous waste rule. MoDNR is working on the annual update to the New Source Performance Standards rule for hazardous air pollutants to align it with the most recent federal standards. Missouri's large internal combustion engine rule is being amended to clarify the 25 ton applicability exemption requirement and to add flexibility to compliance method. The opacity rule, 10 CSR 10-6.220 is being amended to remove statement on Director's discretion which does not match federal regulations and to an exemption for those power plants already complying with federal air toxic rule. The SO<sub>2</sub> rule, 10 CSR 10-6.260, is being amended to incorporate new sulfur standard requirements and controls. This is being done in conjunction with the SO<sub>2</sub> SIP under development now. Finally, the Industrial Surface Coating rule is being amended to remove coating of rubber parts from regulation.

In March USEPA's Science Advisory Committee confirmed their recommendation for the ozone standard to be set between 60 - 70 ppb. The schedule now is for USEPA to release a proposed revised ozone standard in January 2015 with a final rule in November of that year. USEPA has proposed a SO<sub>2</sub> data reporting rule for future rounds of non-attainment designations which will

determine which SO<sub>2</sub> sources the State will need to evaluate with modeling and/or monitoring approach. USEPA has also issued guidance for one-hour SO<sub>2</sub> standard SIP submissions.

Mr. Zlatic, St. Louis County asked if Missouri's SO<sub>2</sub> monitoring approach will be similar to what Illinois is proposing. Mr. Hall, MoDNR, said that Missouri is still evaluating its options and there are a number of logistical pieces that the State has to evaluate. It may be that facilities are aware that modeling attainment is going to be difficult and if modeling is used, Missouri will submit designation recommendations in December 2017. But if the State works with a facility on a monitoring program, data for 2017-2019 will be used to determine non-attainment designation in 2020. There is a \$75,000 - \$100,000 initial set-up cost per location and \$17,000 - \$25,000 annual operation and maintenance cost. Missouri does not have the funds to do this on its own. In the past Missouri has had agreements for facilities to operate monitors with MoDNR oversight.

Mr. Fishman, St. Louis University, asked if anyone had been appointed to the MACC. Mr. Winkelmann, MoDNR, said that he was unaware of any appointments.

## VII. Other Business

Mr. Schmidt, Illinois Department of Transportation (IDOT), announced that Illinois has prepared a statewide bicycle transportation plan (<http://ilinoisbikeplan.com>) and that information is available on the Illinois Transportation Enhancement program at the following web address: <http://www3.illinois.gov/PressReleases>ShowPressRelease.cfm?SubjectID=3&RecNum=12121> .

The next meeting of the AQAC was scheduled for May 27, 2014. There being no other business, the meeting of the Air Quality Advisory Committee was adjourned.

**AGENDA**  
**AIR QUALITY ADVISORY COMMITTEE\***  
**TUESDAY March 25, 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 January 28, 2014 Meeting
- II. CMT Transit Oriented Development (TOD) Efforts**  
- Kim Cella, Citizens for Modern Transit
- III. TravelGreen Program**  
- Meredith Klekotka, Trailnet
- IV. Update on Lake Michigan Air Directors Consortium (LADCO) Activities**  
- Rob Kaleel, Lake Michigan Air Directors Consortium
- 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 April 29, 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, January 28, 2014  
East-West Gateway Board Room

Members Present:

Michael Coulson, Chair, East-West Gateway Council of Governments  
Joe Winkelmann - Missouri Department of Natural Resources  
Mike Henderson - Missouri Department of Transportation  
Jeremy Rogus - St. Louis County Health Department  
David Bloomberg - Illinois Environmental Protection Agency  
Brad McMahon - Federal Highway Administration, MO  
Joe Gray - Illinois Department of Transportation, District 8  
Christopher Schmidt - Illinois Department of Transportation  
Susannah Fuchs - American Lung Association (telephone)

Others Present:

Lachala Kemp - U.S. Environmental Protection Agency Region 7 (telephone)  
Bob Randolph - Missouri Department of Natural Resources  
Kevin Herdler - St. Louis Regional Clean Cities  
Meredith Klekota - Trailnet  
Angie Hoecker - Missouri Department of Transportation  
Andy Knott - Sierra Club  
John Hickey - Sierra Club  
Joe Right - RideFinders  
Joe Wilson - Citizen

Staff:

David Wilson        Carol Lawrence        Johnnie Smith

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 October 29, 2013 AQAC meeting were approved as circulated. Mr. Coulson announced that Mr. Kaleel was not able to attend the meeting and has been rescheduled for the March 25 AQAC meeting.

II.    OneSTL Next Steps

- David Wilson, East-West Gateway Council of Governments

In 2010, EWG received funding from the U.S. Department of Housing and Urban Development (HUD) through the Partnership for Liveable Communities program to prepare a regional plan for sustainable development. The Partnership is made up of HUD, U.S. Environmental Protection

Agency (USEPA) and U.S. Department of Transportation (DOT). There were also ten local partners involved. The regional plan, now called OneSTL, took two and one half years to complete. By the time plan goals, objectives and strategies identified, more than 50 organizations and agencies had input into the plan. The EWG Board of Directors approved OneSTL in December 2013.

A OneSTL implementation steering committee will be put together over the next few months. It is to be a broad-based, representative committee that can help in planning programs, identifying projects and helping the partners to move forward with implementation over the next few years. Have begun to schedule speaking opportunities with organizations and local governments to introduce the plan and invite them to get involved. Joining the OneSTL Network is one way. The Network allows anybody (Public agency/organization, business, community group or a resident) interested in sustainability to have access to information. Hope to create a dynamic interchange in which people will use the OneSTL website's comment form to share information on what is going on in their community and learn of data and activities. OneSTL has been asked to co-sponsor or help organize several workshops and conferences this year.

OneSTL is not solely dependent on EWG for implementation. The notion is that no one agency can make this region sustainable and no one local government can. The only way regional plan can be implemented is with many people getting involved, identifying their issues and working on them. Many agencies have a piece of plan and as long as each does their piece, region will move forward. Hope to see the number involved grow.

EWG staff have been refining the OneSTL website ([www.OneSTL.org](http://www.OneSTL.org)). OneSTL is designed to be a web-based plan. Website is to serve as a consolidated clearinghouse for information. On the website can access each section of the OneSTL document or download the entire document as a pdf. The plan has been structured around nine themes for the future of the St. Louis region. These themes grew out of an extensive community engagement effort to learn the public's and local governments' attitudes and concerns. The themes include: collaborative; prosperous; distinctive; inclusive; green; prepared; connected; efficient; and educated. Each theme has several goals associated with it and each goal has at least one objective. For each objective, several strategies were identified and implementing agencies were delineated. Also on-line is a sustainable solutions toolkit containing information on 100 different sustainability-related topics. The About Us section contains information on the OneSTL partners and associated links. As organizations joins the OneSTL Network information about them will be added.

A key element of OneSTL is how to measure movement toward sustainability at a regional scale. EWG's Research Department has investigated what indicators can be tracked using existing sources of information. Each theme have six to ten metrics. EWG Research Department will be responsible for tracking and preparing regional snapshots to see if the region is moving in the right direction or not or there is no change. Metrics are to be part of the website and can change over time. The theory is that if we track and report on these metrics, that is going to call attention to these issues and raise level of awareness. Awareness will spur more action toward improved practices.

The Resources section on the website contains over 75 reports, research documents and studies

prepared by the partners over the last three years. For example, St. Louis County developed draft ordinances and codes and prepared a code assessment how-to manual. A consultant hired by Metro, EWG and Great Rivers Greenway evaluated the general economic development potential for all MetroLink stations and performed an in-depth Transit Oriented Development analysis for a representative sample of stations which can serve as a framework for future planning.

III. St. Louis Area Ozone SIP Update: 1997 NAAQS Maintenance Plan and 2008 NAAQS Implementation Rule  
- Joe Winkelmann, Missouri Department of Natural Resources

The Missouri Department of Natural Resources (MoDNR) is moving forward with their Maintenance Plan and redesignation request for the 1997 eight-hour ozone National Ambient Air Quality Standard (NAAQS) for Missouri portion of St. Louis area. There has been clean monitoring data since the 2007-2009 time period. With an attainment designation for the 1997 standard, Missouri can focus its efforts on 2008 standard. In November 2011 Missouri submitted a Maintenance Plan and Redesignation Request to USEPA for the 1997 ozone national ambient air quality standard. USEPA did not find the motor vehicle emissions budgets adequate for conformity and did not approve the Plan due to litigation surrounding federal interstate transport regulations (Clean Air Interstate Rule or CAIR) that were relied on in the Plan. The Washington, D.C. U.S. District Court found that until a replacement rule comes out, CAIR shall remain in place. Based on November 2012 USEPA guidance, Maintenance Plans which rely on CAIR can be approved.

MoDNR is revising the Maintenance Plan for the 1997 standard so that 2025 is the end year (ten years after expected 2015 approval by USEPA). In February, the Maintenance Plan and redesignation request are to be posted on the MoDNR website. The Missouri Air Conservation Commission (MACC) will hold a public hearing in March and is to adopt them both in April. Later this year USEPA should approve the Maintenance Plan and designate the Missouri counties in attainment. These actions should occur before the implementation rule for 2008 standard is finalized in August 2014.

In June 2013 USEPA's proposed implementation rule for the 2008 ozone standard was published. This rule would revoke the 1997 standard for all purposes and delineates how the states are implement this standard. It includes proposed anti-backsliding obligations and transition guidance for moving to the 2008 standard. All anti-backsliding obligations under the Clean Air Act are met if an area is redesignated to attainment of the 1997 standard prior to the standard's revocation. The final rule is expected to be published in August 2014.

In USEPA's July 2012 2008 standard area classification rule, the St. Louis area (MO-IL) was classified as a Marginal non-attainment area. Marginal areas have fewer implementation plan requirements as they are closest to attainment. A Marginal State Implementation Plan (SIP) is to have: comprehensive base year emissions inventory; non-attainment New Source Review (NSR) permitting program; emission reporting requirement for major sources; and transportation conformity determination. Missouri prepares an emissions inventory every three years and is working with USEPA on a 2008 inventory. The state has an on-going NSR construction permit program as well

as an emission reporting program for large sources. Transportation Air Quality Conformity is coordinated by EWG. The 2008 eight-hour ozone Marginal SIP will be posted on the MoDNR website for public comment on April 28, 2014. On May 29 the MACC will hold a public hearing on this SIP and adopt it at their July 2014 meeting.

In the July 2012, USEPA revoked the 1997 standard for Conformity Determination purposes only. Non-attainment areas were given one year to conduct Conformity Determination using the 2008 standard. EWG addressed this requirement in their January 2013 Conformity Determination. Since USEPA revoked the 1997 standard for conformity purposes, the revision to the Maintenance Plan for the 1997 standard does not have to establish budgets.

To aid EWG's future Conformity Determination efforts, MoDNR voluntarily developed an Early Progress Plan for the 2008 standard which contained 2015 motor vehicle emission budgets. In March 2013 the MACC adopted the Early Progress Plan. It was then submitted to USEPA. In a letter to MoDNR dated October 28, 2013, USEPA found the budgets adequate for use in future Conformity Determinations.

Mr. Henderson, MoDOT, asked if there was any indication when USEPA will take action to revise or maintain the 2008 ozone standard. Ms. Kemp, USEPA Region 7, said that in February USEPA is to release for external review a second draft Risk/Exposure Assessment for Ozone and a second draft Policy Assessment. USEPA will then meet with the Clean Air Science Advisory Committee (CASAC) at the end of March. It is possible that there could be a decision late this year.

IV. 2010 One-Hour Sulfur Dioxide National Ambient Air Quality Standard Designation and State Implementation Plan Requirements  
- Bob Randolph, Missouri Department of Natural Resources

Sulfur dioxide ( $\text{SO}_2$ ) is produced during the combustion of sulfur-containing fossil fuels such as coal and fuel oil during metal smelting and industrial processes. Sources include industrial boilers, power plants and mobile sources.  $\text{SO}_2$  is more of a localized phenomena with highest concentrations generally near large combustion sources. With the lowering of sulfur levels in gasoline and diesel, mobile sources make up a smaller portion of  $\text{SO}_2$  emissions.

The  $\text{SO}_2$  standard was established in the 1970s and USEPA has reviewed it over the years. In June 2010, USEPA revised the  $\text{SO}_2$  standard to be a one-hour standard of 75 parts per billion (ppb). MoDNR's first task was to develop boundary recommendations based on 2007-2009 data from the monitor network in place at the time the standard was finalized. Missouri recommended that portions of Jackson County, Jefferson County and Greene County be designated as non-attainment.

Mr. Hickey, Sierra Club, asked if the biggest emitter of  $\text{SO}_2$  in the greater St. Louis area was the Ameren Labadie power plant (Franklin County). Mr. Randolph, MoDNR, responded yes. Mr. Hickey Sierra Club, then asked if there were any  $\text{SO}_2$  monitors located in St. Charles, Franklin or St. Louis Counties. Mr. Randolph, MoDNR, said no and that he will talk about this later.

Mr. Randolph, MoDNR, said that the current monitoring network nationwide was not designed to address the one-hour SO<sub>2</sub> standard. Many large SO<sub>2</sub> sources in the U.S. are not in first round non-attainment areas. USEPA recognizes there are deficiencies in the existing monitoring networks. The Monitoring Group in the Air Pollution Control Program is reviewing the SO<sub>2</sub> network and evaluating future monitoring sites. Based on 2007-2009 monitoring data, in August 2013 USEPA designated a portion of Jackson County (Kansas City area); and portion of Jefferson County (Herculaneum and Festus townships and Missouri portion of Valmeyer and Selma townships) as non-attainment. Attainment Demonstration SIPs are due to USEPA in April 2015. The deadline to attain the standard is October 4, 2018.

There are five required elements for a non-attainment area SIP. A Reasonable Further Progress document is to be prepared. MoDNR is working on an accurate emission inventory of all current SO<sub>2</sub> sources within and impacting the non-attainment area. In the Attainment Demonstration, MoDNR staff will conduct computer modeling and work with facilities located within a 10 kilometer (km) buffer (immediate surrounding area) of the violating monitor and those within a 50 km buffer. All sources of SO<sub>2</sub> near the non-attainment area were included in an initial evaluation to determine which sources/facilities to explicitly include the computer model. Modeling must be performed using potential or allowable (permanent and enforceable) emission rates. Actual emissions from a facility's Emissions Inventory Questionnaire (EIQ) can only be used as a screening tool. The modeling can include facility negotiated limits/conditions necessary for it to be in compliance. Any limit identified has to be shown to be necessary to comply with the standard and part of a permanent and enforceable action. MoDNR is working with those largest sources/facilities inside the 50 km buffer, including Ameren Labadie, to verify potential limits and identify what actions are occurring or what plans already made to lower SO<sub>2</sub>. Begun dialogue on what control options facilities are going to do to reduce impact for future rounds and develop recommendations. Our task is to determine their impact on any receptor within the Jefferson County non-attainment area. At the end of 2013 the Doe Run Company closed their primary lead smelter in Herculaneum. A model assumption was that there will be no smelting operations and that the remaining units at this facility will use natural gas, minimizing SO<sub>2</sub> emissions.

Options for controls include incorporating limits into the Missouri SO<sub>2</sub> SIP. MoDNR is working on an amendment to the state sulfur rule as many requirements focused on motor fuels and outdated codes. The State could issue construction and/ operating permits with emissions limit/condition. Controls can include combination of control equipment, fuel controls, emission rate limits or limits on allowable emissions. If state rule does not work, state could enter into a Consent Judgement/Decree with the source to establish an emission limit/conditions. Another option to reduce impact, would be to identify limits through a modeled attainment demonstration.

In February 2013 USEPA released a "Next Steps" paper describing their strategy for future rounds non-attainment area designations. Emission thresholds will be lower in urban areas and higher in rural areas. The states will have flexibility to rely upon monitoring or modeling data, as appropriate. This allow states to work with affected facilities and citizens in order to develop monitor or model approach. Incentives and time for facilities to reduce emissions early and avoid non-attainment designations in future rounds.

USEPA is taking the approach that in future rounds of non-attainment designations, the states will be looking at all of those larger SO<sub>2</sub> sources. MoDNR will begin a dialogue with the larger sources, like Ameren Labadie, to gear them up for future round analysis and to consider emission reduction alternatives. Options under future rounds is for MoDNR to work with individual facilities to develop individual monitor networks to determine where peak concentrations would be in facility or to go with a modeling approach. If a facility wants to establish local monitor network, has to be approved by MoDNR and USEPA. For facilities that are going to use the modeling approach, Missouri would submit designation recommendation during 2017 and submittal deadline addressing facilities using monitoring data would be during 2015-2016. USEPA is to make designations for modeled areas in December 2017 and for monitored areas in December 2020.

Mr. Hickey, Sierra Club, asked if SO<sub>2</sub> sources within the buffer zone have been modeled and if sources are shown to be above standard, does that trigger any action. Mr. Randolph, MoDNR, replied that sources in the buffer area have been modeled. Information collected could be used in the future designation round(s). The task now is to determine the impact of sources on first round non-attainment area. MoDNR is working with facilities to get better assessment of what their peak levels are. Anticipate any facility within the 50 km buffer would have a strong potential for some type of emission control strategy. Just because a facility is not within the non-attainment area, does not mean they will not have to do something for the first round. MoDNR will work with facilities. Hopefully, that will be enough to bring that area/facility into attainment for future rounds.

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

The St. Louis Regional Clean Cities program (SLCC) along with Kansas, Iowa, Nebraska and Missouri received a grant from the U.S. Department of Energy (DOE) for an Alternative Fuel Implementation project. ICF International has been selected to develop a methodology using MOVES to evaluate the air quality impact/emission reduction of alternative fuel vehicles under different scenarios. There are limited alternative fuel inputs for the MOVES model. The consultant has been asked to develop emission reduction factors for the following American fuels: liquefied natural gas (LNG); compressed natural gas (CNG); electric vehicle and electric plug-in; propane; biodiesel at 20 and 50 percent; and ethanol (E-85). Since these fuels are not in MOVES now, consultant is trying to develop a way so USEPA can substitute them. Consultant is working with USEPA Region 7, Illinois EPA and MoDNR. The beta version of the methodology should be available in the next couple of weeks. Beta version will be reviewed by EWG and other stakeholders. Once review is finished, a webinar on the methodology and how to use it will be put together. Methodology is designed so that any city, county, council of governments or state can plug

in their own numbers. Mr. Herdler is also developing and conducting training for code enforcement personnel and first responders about these fuels.

Landscape firms are beginning to utilize propane-fueled mowers. These mowers are cleaner than conventionally fueled mowers (which do not have emission controls) and have a longer maintenance life. In addition, companies have less gasoline fuel loss. Ms. Fuchs, American Lung Association

(ALA), asked about the propane shortage. Mr. Herdler, SLCC, said that it was an extreme situation, particularly in the Midwest. Previously propane cost \$1.69 a gallon for home heating and now it is \$4.00 a gallon. At a meeting with Amerigas, Mr. Herdler learned that Amerigas is using railcars to bring in propane from Alaska and elsewhere. Hopefully when the cold snap breaks, companies will be able to replenish their supplies and prices will go down. Public CNG stations are at Lambert Airport and in Pontoon Beach. Allied Waste, Progressive and Waste Management are all using propane-powered trash trucks. The Parkway school district has a fleet of CNG buses and is working on a fueling station.

SLCC is working with the Village of Marissa in St. Clair County on a landfill gas recovery project. Waste Management has given the landfill gas to Marissa. Plan to install equipment to capture the gas and send it to the Ameren pipeline. Also liquid carbon dioxide (CO<sub>2</sub>) will be collected and sold to another company. It is estimated that the landfill will be in operation until 2060 and gas will be available for 30 years after that. Waste Management has announced that it plans to install similar equipment at its Milan landfill. Aim to provide fuel for their trash trucks in Chicago and St. Louis. SLCC is working with the Coast Guard and several businesses to convert at least three St. Louis-based harbor boats to CNG or LNG.

In 2014 SLCC will be 20 years old. SLCC is planning a celebration for this summer. A round of applause was given for this milestone achievement.

#### VI. Update Activities of the States

- David Bloomberg, Illinois Environmental Protection Agency
- Joe Winkelmann, Missouri Department of Natural Resources

The Illinois Pollution Control Board (IPCB) held its first hearing on the lead rule for Granite City and Chicago. There was enough agreement from all parties that the IPCB canceled future hearings. The rule is expected to proceed to adoption. Illinois EPA has already submitted it to USEPA Region 5 for parallel processing. Mayco Industries in Granite City has applied for a construction permit to make the changes necessary for it to comply with this lead rule.

Petcoke is a by-product of the petroleum refining process and is stored in the Chicago area and the Metro East. It is a solid material similar to coal and can be a fuel source for power plants. In Chicago, 70-80 foot high petcoke storage piles are located near residential areas. After a windstorm last year blew material onto residences, the City of Chicago has proposed a petcoke management rule. The Illinois EPA proposed an emergency rule to the IPCB which the Board did not accept. Illinois EPA is examining alternatives to address concerns. This could be a multi-state issue.

For the two Illinois SO<sub>2</sub> non-attainment areas, Illinois EPA is talking with culpable sources and seeking either permit limits or regulations. Illinois looking ahead to the outcome of the litigation over the Cross State Air Pollution Rule (CSAPR) now before the U.S. Supreme Court. In the meantime, USEPA is moving forward with a possible transport rule (if ruled against). There have been many discussions on how to model and address that concern. The Ozone Transport Commission (composed of northeast and Mid-Atlantic states) wants a number of Midwest states, including

Illinois, to join the Commission. Illinois has declined and now the Commission is forcibly trying to add these states.

At the January 30 MACC meeting, three rules are up for public hearing. One is an amendment to 10 CSR 10-6.200 Hospital, Medical, Infectious Waste Incinerator rule removing start-up, shutdown and malfunction exemptions from any emission limits. The second is to rescind the outdated 10 CSR 10-5.240 Additional Air Quality Control Measures May be Required When Sources are Clustered in a Small Land Area. It was passed before the federal Clean Air Act was enacted. The last item up for public hearing is to amend 10 CSR 10-6.010 National Ambient Air Quality Standards to incorporate federal standards into the state rules so state rules are consistent.

MoDNR is in the process of preparing an amendment to 10 CSR 1-5.220 to remove Stage II Vapor Recovery systems from this rule. The draft rule amendment has been posted on the Rules in Progress section of the Air Pollution Control Program web page.

## VII. Other Business

Mr. Hickey, Missouri Sierra Club, observed that the MACC is a seven member body whose members are nominated by the Governor and approved by the Senate. Currently, the MACC only has four members. One MACC member is from Crystal City but the remainder do not reside in non-attainment areas. Sierra Club thinks that it would be good if at least two of the empty seats were filled by people from the St. Louis area (42 percent of the breathers in the state). Need to look for people who care about clean air and would be effective advocates. Mr. Coulson, EWG, said that Dr. Fishman from St. Louis University has submitted his name. Mr. Winkelmann, MoDNR, added that the MACC has been discussed at AQAC and at other meetings. Information on the MACC can be found at RSMo 643.040. He encouraged everyone to consider possible nominees.

Ms. Klekota, Trailnet, asked if at a future meeting, someone would talk about the connections between air quality and public health and could someone talk on the impact of transportation on PM<sub>2.5</sub>. Mr. Coulson, EWG, said that it is good to keep health involved when discussing air quality, and not just bureaucratic structure. Mr. Bloomberg, Illinois EPA, added that Ms. Funk of Metro East Community Air Project (MECAP) has hosted air quality and public health forums for the last several years. Mr. Winkelmann, MoDNR, said that the preamble section of the National Ambient Air Quality Standard contains a discussion on the health effects/impacts of specific pollutants

The next meeting of the AQAC will be on March 25, 2014. There being no other business, the meeting of the Air Quality Advisory Committee was adjourned.

**AGENDA**  
**AIR QUALITY ADVISORY COMMITTEE\***  
**TUESDAY January 28, 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 October 29, 2013 Meeting
- II. OneSTL Next Steps**  
- David Wilson, East-West Gateway Council of Governments
- III. Update on Lake Michigan Air Directors Consortium (LADCO) Activities**  
- Rob Kaleel, Lake Michigan Air Directors Consortium
- IV. Revised Maintenance Plan and Redesignation Request for 1997 Eight-Hour Ozone Standard**  
- Joe Winkelmann, Missouri Department of Natural Resources
- V. 2010 One-Hour Sulfur Dioxide National Ambient Air Quality Standard Designation and State Implementation Plan Requirements**  
- Bob Randolph, Missouri Department of Natural Resources
- VI. American Fuel Group Report**  
- St. Louis Regional Clean Cities Program
- VII. Update Activities of the States**  
- Illinois Environmental Protection Agency  
- Missouri Department of Natural Resources
- VIII. Other Business**
- IX. 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, October 29, 2013  
East-West Gateway Board Room

Members Present:

Michael Coulson, Chair, East-West Gateway Council of Governments  
Joe Winkelmann - Missouri Department of Natural Resources  
Mike Henderson - Missouri Department of Transportation  
Mike Zlatic - St. Louis County Health Department  
Betsy Tracy - Federal Highway Administration, IL  
David Bloomberg - Illinois Environmental Protection Agency  
Jack Fishman - St. Louis University  
Brad McMahon - Federal Highway Administration, MO  
Joe Gray - Illinois Department of Transportation, District 8  
Ryan Tilley - St. Charles County Health Department

Others Present:

Ken Anderson - AMEREN  
Mike Rogers - Illinois Environmental Protection Agency  
Amy Funk - Metro East Community Air Project  
Sara Chappau - Illinois Department of Transportation, District 8  
Pamela Brooks - Illinois Environmental Protection Agency  
Amy Bhesania - U.S. Environmental Protection Agency Region 7 (telephone)  
Lachala Kemp - U.S. Environmental Protection Agency Region 7 (telephone)  
Mark Leath - Missouri Department of Natural Resources (telephone)

Staff:

David Wilson            Carol Lawrence

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 (EWGCOG). The minutes of the September 24, 2013 AQAC meeting were approved as circulated.

II.      St. Louis University Ozonesonde Launch Project: A Program in Support of NASA's SEAC<sup>4</sup>RS Field Campaigns  
- Jack Fishman, Ph.D., St. Louis University

This summer NASA conducted a Studies of Emission and Atmospheric Composition, Clouds and Climate Coupling by Regional Surveys (SEAC<sup>4</sup>RS) project in the central U.S. Information from daily flights of NASA aircraft equipped with sophisticated data collection equipment will be

coordinated with data obtained from passes of six NASA satellites to achieve this mission's science objectives. Data from the aircrafts' equipment will be used to validate satellite measurements and to develop a synoptic picture of what was going on in the atmosphere.

Coordinated with the SEAC<sup>4</sup>Rs project was the NASA Deriving Information on Surface Conditions from Column and Vertically Resolved Observations Relevant to Air Quality (DISCOVER-AQ) project. This project was focused on air quality in and around Houston. NASA aircraft with data collection equipment and satellites were also used. The objective of the project was to improve the interpretation of satellite observations to diagnose near-surface conditions relating to air quality.

To support both these projects, the Souther American Consortium for Intensive Ozonesonde Network Study (SEACIONS) program was set up in order to develop a synoptic 3-D picture of what the atmosphere looked like and ozone levels on flight days. An ozonesonde is a weather balloon equipped with a three to four pound instrument package to measure temperature, humidity, air pressure and ozone levels in the atmosphere plus a radio transponder. Information is transmitted in real time during the balloon's ascent and descent. St. Louis University (SLU) was one of seven sites in the central and southern U.S. involved in this effort. A helium-filled balloon could travel up to 100,000 to 120,000 feet before bursting. The aim is to understand what the satellite sees in coordination with what is observed at the surface and improve understanding of ozone pollution. Between August 8 and September 23, SLU students successfully launched every balloon/instrument packages as scheduled. A total of 31 ozonesondes were launched with just three failures due to technical issues with the instruments. Sixteen packages were found and the equipment can be reused. Data from these measurements will become part of these SEACIONS/SEAC<sup>4</sup>RS science study. Findings should be available in Spring 2014. The St. Louis portion of this effort was featured on two local television stations and this story was carried nationally on National Public Radio and internationally through the Voice of America.

As an example of data collected, preliminary calculations of data from the August 30 ozonesonde indicate there was an ozone plume (135 ppb) at approximately 30,000 feet. Modeling suggested that the origin of the plume could have been from fires in Yellowstone National Park and California. An ozone plume found lower in the atmosphere appears to have a different origin. Further analysis and interpretation of the data collected is needed.

### III. Illinois Air Quality Planning Activities and Air Quality Issues of Interest - David Bloomberg, Illinois Environmental Protection Agency

Mr. Bloomberg is the Manager of the Air Quality Planning Section in the Bureau of Air at the Illinois Environmental Protection Agency (Illinois EPA). The Regulatory Unit (Jackie Sims, Manager) researches and writes rules and tracks U.S. Environmental Protection Agency (USEPA) activities. The Modeling Unit (Jeff Sprague, Manager) is responsible for modeling activities and is involved in State Implementation Plan (SIP) development and non-attainment area boundary determinations. The

Inventory Unit (David “Buzz” Asselmeier, Manager) prepares annual Emissions Reports, conducts emissions inventories and assembles information used by other units and sections.

Both the Chicago area (six counties) and the Metro East (three counties) are non-attainment for the 2008 eight-hour ozone standard. The Metro East and Baldwin Township are non-attainment for the 1997 annual fine particulate matter ( $PM_{2.5}$ ) standard. Based on 2007-2012 monitoring data and USEPA approval of revision to the Illinois  $PM_{2.5}$  SIP, the Chicago area (six counties plus three township) has been redesignated to attainment of the 1997  $PM_{2.5}$  standard. The redesignation was published in the October 2, 2013 Federal Register.

Three townships around Pekin and three townships around Lemont in northeast Illinois have been designated as non-attainment for the sulfur dioxide ( $SO_2$ ) standard. For both non-attainment areas Illinois EPA has identified about 18 sources in or near these areas which contribute to the problem not just a single source. Illinois EPA performed extensive modeling to identify all “culpable” sources of non-attainment within or outside of the two non-attainment areas. Discussions have begun with these sources. Originally USEPA had proposed that a state perform modeling state-wide to delineate  $SO_2$  non-attainment areas. After the states expressed their concerns, USEPA decided to go with a phased approach. In Phase 1 non-attainment areas are based on monitored data and in Phase 2 non-attainment areas will be determined by either monitoring and/or modeling. USEPA has released draft guidance informing the states that modeling is the default but monitoring can be an option. This guidance is still to be finalized. It is the position of Illinois EPA that if companies want to have  $SO_2$  monitors, the companies will be paying for them. Illinois can not afford them. USEPA is being sued for the phased approach to designation. USEPA is to make designations for modeled areas in December 2017 and for monitored areas in December 2020. Attainment dates will be five years after designations. Illinois EPA will propose a statewide rule for sulfur content in fuel oil. Rules covering specific sources/units impacting the non-attainment areas will also be proposed.

The lead non-attainment area in the Chicago area consists of a few blocks around one specific facility. When the Granite City lead non-attainment area (two townships) was established, there was uncertainty about what sources were responsible. It has since been determined that Mayco Industries is causing the violation there. Illinois EPA will soon be proposing lead rules applying to these specific non-attainment areas and requiring emissions controls on the two specific sources. These proposed rules are at the Governor’s office for approval and then will be submitted to the Illinois Pollution Control Board (IPCB).

On October 23 Illinois EPA held an outreach meeting in Chicago on recommended 2012 annual  $PM_{2.5}$  standard non-attainment area designations. There is a meeting in Collinsville this afternoon. Recommendations are due at USEPA in December 2013. Illinois is going to have prepare a rule on startup, shutdown and malfunction provisions at facilities. The Illinois rule will address startup and shutdown provisions only. USEPA has not finalized their requirements for this type of rule.

USEPA is holding a listening session in each USEPA region to obtain feedback on greenhouse gas requirements for power plants. The Cross State Air Pollution Rule (CSAPR) is to be heard at the U.S. Supreme Court in December. Whether CSAPR or some other form of transport rule, USEPA

will have to do something. Anticipate that a future transport rule will only impact larger sources. In Illinois many large sources have already been controlled or have committed to being controlled under the Multi-Pollutant/Combined Pollutant standards regulated under the state mercury rule.

#### IV. Recommended Annual PM<sub>2.5</sub> Non-Attainment Area Designations in Illinois - Pamela Brooks, Illinois Environmental Protection Agency

Madison, Monroe and St. Clair Counties and Baldwin Township are in non-attainment of the 1997 annual PM<sub>2.5</sub> standard (15 micrograms per cubic meter or ug/m<sup>3</sup>). Earlier this month, the Chicago area was designated as being in attainment for this standard.

On December 14, 2012, USEPA strengthened the annual PM<sub>2.5</sub> standard to 12 ug/m<sup>3</sup>. The states are to submit their boundary recommendations (non-attainment, attainment/unclassified) to USEPA by December 13, 2013. USEPA will review the states' recommendations and no later than 120 days before its final decision, USEPA is to notify states whether they agree or disagree with those recommendations. States then can respond and provide additional information. Final designations are to be made by USEPA by December 12, 2014. SIPs will be due in 2016 with attainment in 2021 or 2025 depending whether an area is classified as moderate or serious.

Boundary Designation Guidance for the states was released by USEPA in April 2013. Areas with monitored violations must be classified as non-attainment. The non-attainment area should contain the area around the violating monitor and any adjacent counties that have the potential to contribute to the violations. There is no presumptive boundary for a non-attainment area. The size of a non-attainment area should be evaluated and determined on a case by case basis.

Cook, Madison and St. Clair Counties each contain one monitor in violation of the 2012 standard. When look at monitor readings over time, PM<sub>2.5</sub> levels have come down a lot, so progress is being made. Regionally, Missouri is attaining the 2012 standard and Illinois is not. Ms. Funk, Metro East Community Air Project (MECAP), asked about counties in another state which are adjacent to a violating monitor. Ms. Brooks, Illinois EPA, said that Illinois can discuss an adjacent state but can not make any specific recommendations. Mr. Bloomberg, Illinois EPA, added that USEPA Regions 5 and 7 will probably take this into consideration and USEPA makes the final decision.

The Boundary Designation Guidance sets out five factors to be considered by the states. They include: 2010-2012/2013 air quality data; emissions data and emissions-related data; meteorology; geography/topography; and jurisdictional boundaries. As part of the analysis, need to identify nearby areas and sources that contribute to PM<sub>2.5</sub> violations. PM<sub>2.5</sub> emissions can come from a variety of sources and can be emitted directly or formed through chemical reaction in the atmosphere. There are a number of potential sources in the Metro East including power plants and Granite City Works of US Steel. In the Illinois nine county study area, Madison County sources contribute 35 percent of total emissions and the power plant in Baldwin Township in Randolph County contributes 24 percent of total emissions. Emission related data to be considered includes population, population density and degree of urbanization, vehicle miles traveled (VMT) and commuting patterns. Missouri counties contain 67 percent of the population in the St. Louis MSA. In the Illinois nine county study

area, St. Clair, Madison and Macoupin Counties contain over 75 percent of the total population. These figures are used to estimate the amount of population-related PM<sub>2.5</sub> emissions in the area. Annual travel statistics from Illinois Department of Transportation (IDOT) are examined to determine the vehicle emissions by county. Madison and St. Clair Counties have the highest annual VMT and Baldwin Township the lowest.

Wind speed and direction will influence what source emissions are coming into a monitor. Finding that on high emission days at the Granite City monitor, the predominant wind direction is from the southwest, south and some southeast (general direction of Granite City Works). For the East St. Louis monitor on high days the wind comes from a variety of directions. USEPA provides HYSPLIT modeled air mass trajectory end point destination information. For the monitor in Granite City, on low emission days air masses come from the north and on high concentration days, air masses are from the south (more sources which can contribute).

After examining monitor data and the five boundary designation factors, Illinois developed boundary recommendations. For Chicago, the following counties/townships are going to be proposed as non-attainment: Cook; DuPage; Kane; Lake; McHenry; Will; Oswego township in Kendall; and Aux Sable and Goose Lake townships in Grundy. For the Metro East, Illinois is going to propose the same non-attainment boundaries as for the 1997 standard non-attainment area (Madison, Monroe and St. Clair Counties and Baldwin township in Randolph County). All other counties should be designated as attainment/unclassifiable. Public meeting on these recommendations is this afternoon at the IDOT office in Collinsville. Comments will be accepted until November 12, 2013.

Ms. Funk, MECAP, asked how the contribution of regional transportation construction projects is assessed as there has been a lot of construction in the East St. Louis area in the last few years. Ms. Brooks Illinois EPA, replied that the emissions inventory has on and off road (construction vehicles, etc.) categories and inventory is examined to see what portion of sources these emissions are coming from. Do not look at specific construction projects.

Mr. Coulson, EWG, asked if Granite City Works of US Steel will have a management program in place in the next two years or so. Mr. Bloomberg, Illinois EPA, said that Granite City Works has already started construction on a new baghouse. Mr. Coulson, EWG, observed that with this action and the shut down of the Doe Run facility the area will be going in a good direction. Ms. Bhesania, USEPA Region 7, asked if the Granite City controls were part of a USEPA/state consent decree or judgement. Mr. Bloomberg, Illinois EPA, said that there was a Memorandum of Agreement (MOA) between Granite City Works US Steel and Illinois EPA but there have been changes over time including the time frame. There is nothing in the MOA that USEPA would consider enforceable. Granite City Works of US Steel has a construction permit for the new baghouse. This permit gives them permission to construct but does not mandate construction. Once the baghouse is constructed and/or operating under a permit, that will be considered federally enforceable conditions.

Mr. Tilley, St. Charles County, asked if a non-attainment area remains in non-attainment until there is good data. Mr. Bloomberg, Illinois EPA, said that an area stays in non-attainment until there is clean data and a plan with enforceable control measures which show that the area can stay in

attainment.

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

VI. 2013 Ozone Season Report  
- Michael Coulson, East-West Gateway Council of Governments

In the Ozone Data Sharing Project, EWG acts as a repository of ozone data collected from April 1 through October 31 from ten monitors in the St. Louis region. EWG performs a preliminary quality assurance screening, enters data into a computerized spreadsheet and prepares monthly and weekly reports for partner agencies.

The 2008 ozone standard is 75 parts per billion (ppb). An exceedance of the standard occurs when an eight-hour average of values is calculated to be greater than 75 ppb on any given day. A violation of the standard occurs when a three-year average of the annual fourth highest eight-hour average (out of 214 days) is calculated to be greater than 75 ppb. All ten monitors have to pass this test for the area to be considered in attainment of this standard. For the 2013 ozone season, there were 15 exceedances of the 2008 eight hour ozone standard over seven days. In comparison, the 2012 season had 40 ozone days with 170 exceedances. The temperatures of the 2013 summer were average, with a cool period, but there was a heat wave in late August and early September.

To put these numbers into context, annual exceedances of the 2008 eight-hour ozone standard for 1999-2013 were reviewed. Over this period, there were five years with over 170 exceedances. When the five-year running average of these exceedances is examined, continue to see ozone levels decrease. Over time different mobile and industrial control strategies have been implemented and area is continuing to make progress in terms of reducing overall ozone levels.

In 2012 the St. Louis area was classified as a marginal non-attainment area for the 2008 ozone standard. Marginal non-attainment areas have to attain this standard by December 2015. USEPA implementation guidance is still to be finalized identifying what kind of control strategies would be required. Ms. Kemp, USEPA Region 7, said that the comment period for the proposed implementation guidance rule ended in September and USEPA is in the process of reviewing and responding to the over 50 comments received. It is anticipated that USEPA will release the final rule in March 2014. Mr. Bloomberg, Illinois EPA, said that the Chicago area was also marginal.

Mr. Winkelmann, MoDNR, said that Missouri had provided comments to USEPA on the unique situation of the St. Louis area and requested some specificity for the region (two states, eight counties, two USEPA regions). Missouri asked for guidance on controls they can do as are running out of things to do at the federal level and commented on the redesignation substitute option for areas with overlapping standards. USEPA has indicated that they will consider the unique situation of the St. Louis area.

As part of the Conformity Determination process, vehicle emission levels and vehicle miles traveled

(VMT) have been modeled over time. Over the next ten years it is anticipated that pollutant levels will be reduced. Regional VMT levels peaked in 2004 at 72 million miles. Since then there has been a small decrease. It is projected that over time the flattening of VMT will continue. Trends like these will help the area to attain the 2008 ozone standard. Additional information on air quality in the St. Louis area can be found online at the AQ Resource Center section of the EWG website at [www.ewgateway.org/environment/aq/aq.htm](http://www.ewgateway.org/environment/aq/aq.htm).

Mr. Coulson, EWG added that much progress has been made since the 1930s when streetlights in the City of St. Louis were on during the day because of the air pollution. Mr. Winkelmann, MoDNR, pointed out that St. Louis was one of the first cities in the U.S. to ban the use of soft coal for residential furnaces. Tucker Boulevard was named for Mayor Raymond Tucker who served as Air Pollution Commissioner during the administration of Mayor Bernard F. Dickmann. Prior to that he was a Civil Engineering professor at Washington University concentrating on air pollution control. Mr. Coulson, EWG, added that in 1934 Mayor Dickmann appointed Raymond Tucker as Smoke Commissioner. Mr. Tucker led the effort to pass a Smoke Ordinance for the City of St. Louis.

Mr. Winkelmann, MoDNR, said that as the ozone season ends, it appears that the fourth highest eight-hour average for the West Alton monitor was 71 ppb which puts this monitor back into attainment of the 1997 eight-hour ozone standard (85 ppb) and the region. It has been a challenge for Missouri to receive approval of their maintenance plan for the 1997 ozone standard due to litigation surrounding the federal transport rule (Cross State Air Pollution Rule or CSAPR). As long as the earlier Clean Air Interstate Rule remains in place, the state can rely on it and can move forward with a maintenance plan for the 1997 eight-hour ozone standard.

Mr. Bloomberg, Illinois EPA, added that when there was a violation in 2012 at the West Alton monitor, USEPA required Illinois to conduct a study to determine the cause of the violation and what could be done since Illinois had an approved maintenance plan for the 1997 standard. The study concluded that the violation was the result of extraordinary weather conditions and there are controls coming which would help in the future to reduce emissions. Does not appear there is anything else Illinois has to do. A similar study had to be performed for the Chicago area.

Mr. McMahon, Federal Highway Administration Missouri (FHWA MO), asked if St. Louis area could reach attainment by 2015. Mr. Coulson, EWG, said it was possible with two more years of good monitoring data. Mr. Bloomberg, Illinois EPA, said that pollutant levels are lower but that pollutant standards can be revised. USEPA and the Clean Air Science Advisory Committee are continually evaluating what the effect of pollutant levels is on human health. In doing so, it is not uncommon for USEPA to reduce the standard. It is anticipated that the ozone standard could be set around 65 ppb. Mr. Coulson, EWG, said that after a standard is set, there are usually lawsuits by either industry or environmentalists or both and that can delay implementation.

Mr. Winkelmann, MoDNR, said that a maintenance plan for the 2008 standard containing contingency measures if a violation were to occur and redesignation request would have to be prepared. The process will be delineated in the USEPA implementation rule. As soon as implementation rule is finalized by USEPA, Missouri can move forward with a maintenance plan.

## VII. Update Activities of the States

- Joe Winkelmann, Missouri Department of Natural Resources

MoDNR has received a letter from USEPA Region 7 indicating that the motor vehicle emissions budgets from the Early Progress Plan for the Missouri portion of the St. Louis (NO-IL) marginal non-attainment area for the 2008 eight-hour ozone standard are adequate for use in future Conformity Determinations. This notice will be published in the Federal Register shortly. The budgets will be effective 15 days after publication.

The October 30 Missouri Air Conservation Commission (MACC) has been canceled due to a lack of a quorum of MACC members. It has been rescheduled for Thursday, November 21 at 9 a.m. in Jefferson City. At this meeting there will be a public hearing on the proposed PM2.5 boundary recommendations. MoDNR is statutorily required to hold a public hearing and receive comments before the Governor can submit a recommendation letter to USEPA Region 7 by the December deadline. The weight of evidence analysis and monitoring data shows that all Missouri counties are in attainment of the 2012 annual PM2.5 standard. The recommendation will be for all Missouri counties to be designated as attainment/unclassifiable. At this meeting, the MACC is to adopt on the Commercial/Industrial Solid Waste Incinerator rule and plan. This state rule incorporates by reference the federal requirements for commercial/industrial solid waste incinerator units. The MACC is to adopt the update of Missouri's general definitions rule.

## VIII. Other Business

Ms. Funk, MECAP, said that earlier this month the third Metro East Air Quality Forum was held at the Caseyville Township Center. Approximately 105 people with public health and environmental interests attended. There were presentations on indoor air pollution, the 2013 ozone season, transportation and sustainability activities. The keynote speaker was Dr. Kincaid of St. Louis University who talked on asthma as a public health issue.

The next meeting of the AQAC will be on January 28, 2014. There being no other business, the meeting of the Air Quality Advisory Committee was adjourned.

**AGENDA**  
**AIR QUALITY ADVISORY COMMITTEE\***  
**TUESDAY March 25, 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 January 28, 2014 Meeting
- II. CMT Transit Oriented Development (TOD) Efforts**  
- Kim Cella, Citizens for Modern Transit
- III. TravelGreen Program**  
- Meredith Klekotka, Trailnet
- IV. Update on Lake Michigan Air Directors Consortium (LADCO) Activities**  
- Rob Kaleel, Lake Michigan Air Directors Consortium
- 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 April 29, 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, January 28, 2014  
East-West Gateway Board Room

Members Present:

Michael Coulson, Chair, East-West Gateway Council of Governments  
Joe Winkelmann - Missouri Department of Natural Resources  
Mike Henderson - Missouri Department of Transportation  
Jeremy Rogus - St. Louis County Health Department  
David Bloomberg - Illinois Environmental Protection Agency  
Brad McMahon - Federal Highway Administration, MO  
Joe Gray - Illinois Department of Transportation, District 8  
Christopher Schmidt - Illinois Department of Transportation  
Susannah Fuchs - American Lung Association (telephone)

Others Present:

Lachala Kemp - U.S. Environmental Protection Agency Region 7 (telephone)  
Bob Randolph - Missouri Department of Natural Resources  
Kevin Herdler - St. Louis Regional Clean Cities  
Meredith Klekota - Trailnet  
Angie Hoecker - Missouri Department of Transportation  
Andy Knott - Sierra Club  
John Hickey - Sierra Club  
Joe Right - RideFinders  
Joe Wilson - Citizen

Staff:

David Wilson      Carol Lawrence      Johnnie Smith

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 October 29, 2013 AQAC meeting were approved as circulated. Mr. Coulson announced that Mr. Kaleel was not able to attend the meeting and has been rescheduled for the March 25 AQAC meeting.

II.     OneSTL Next Steps

- David Wilson, East-West Gateway Council of Governments

In 2010, EWG received funding from the U.S. Department of Housing and Urban Development (HUD) through the Partnership for Liveable Communities program to prepare a regional plan for sustainable development. The Partnership is made up of HUD, U.S. Environmental Protection

Agency (USEPA) and U.S. Department of Transportation (DOT). There were also ten local partners involved. The regional plan, now called OneSTL, took two and one half years to complete. By the time plan goals, objectives and strategies identified, more than 50 organizations and agencies had input into the plan. The EWG Board of Directors approved OneSTL in December 2013.

A OneSTL implementation steering committee will be put together over the next few months. It is to be a broad-based, representative committee that can help in planning programs, identifying projects and helping the partners to move forward with implementation over the next few years. Have begun to schedule speaking opportunities with organizations and local governments to introduce the plan and invite them to get involved. Joining the OneSTL Network is one way. The Network allows anybody (Public agency/organization, business, community group or a resident) interested in sustainability to have access to information. Hope to create a dynamic interchange in which people will use the OneSTL website's comment form to share information on what is going on in their community and learn of data and activities. OneSTL has been asked to co-sponsor or help organize several workshops and conferences this year.

OneSTL is not solely dependent on EWG for implementation. The notion is that no one agency can make this region sustainable and no one local government can. The only way regional plan can be implemented is with many people getting involved, identifying their issues and working on them. Many agencies have a piece of plan and as long as each does their piece, region will move forward. Hope to see the number involved grow.

EWG staff have been refining the OneSTL website ([www.OneSTL.org](http://www.OneSTL.org)). OneSTL is designed to be a web-based plan. Website is to serve as a consolidated clearinghouse for information. On the website can access each section of the OneSTL document or download the entire document as a pdf. The plan has been structured around nine themes for the future of the St. Louis region. These themes grew out of an extensive community engagement effort to learn the public's and local governments' attitudes and concerns. The themes include: collaborative; prosperous; distinctive; inclusive; green; prepared; connected; efficient; and educated. Each theme has several goals associated with it and each goal has at least one objective. For each objective, several strategies were identified and implementing agencies were delineated. Also on-line is a sustainable solutions toolkit containing information on 100 different sustainability-related topics. The About Us section contains information on the OneSTL partners and associated links. As organizations joins the OneSTL Network information about them will be added.

A key element of OneSTL is how to measure movement toward sustainability at a regional scale. EWG's Research Department has investigated what indicators can be tracked using existing sources of information. Each theme have six to ten metrics. EWG Research Department will be responsible for tracking and preparing regional snapshots to see if the region is moving in the right direction or not or there is no change. Metrics are to be part of the website and can change over time. The theory is that if we track and report on these metrics, that is going to call attention to these issues and raise level of awareness. Awareness will spur more action toward improved practices.

The Resources section on the website contains over 75 reports, research documents and studies

prepared by the partners over the last three years. For example, St. Louis County developed draft ordinances and codes and prepared a code assessment how-to manual. A consultant hired by Metro, EWG and Great Rivers Greenway evaluated the general economic development potential for all MetroLink stations and performed an in-depth Transit Oriented Development analysis for a representative sample of stations which can serve as a framework for future planning.

III. St. Louis Area Ozone SIP Update: 1997 NAAQS Maintenance Plan and 2008 NAAQS Implementation Rule  
- Joe Winkelmann, Missouri Department of Natural Resources

The Missouri Department of Natural Resources (MoDNR) is moving forward with their Maintenance Plan and redesignation request for the 1997 eight-hour ozone National Ambient Air Quality Standard (NAAQS) for Missouri portion of St. Louis area. There has been clean monitoring data since the 2007-2009 time period. With an attainment designation for the 1997 standard, Missouri can focus its efforts on 2008 standard. In November 2011 Missouri submitted a Maintenance Plan and Redesignation Request to USEPA for the 1997 ozone national ambient air quality standard. USEPA did not find the motor vehicle emissions budgets adequate for conformity and did not approve the Plan due to litigation surrounding federal interstate transport regulations (Clean Air Interstate Rule or CAIR) that were relied on in the Plan. The Washington, D.C. U.S. District Court found that until a replacement rule comes out, CAIR shall remain in place. Based on November 2012 USEPA guidance, Maintenance Plans which rely on CAIR can be approved.

MoDNR is revising the Maintenance Plan for the 1997 standard so that 2025 is the end year (ten years after expected 2015 approval by USEPA). In February, the Maintenance Plan and redesignation request are to be posted on the MoDNR website. The Missouri Air Conservation Commission (MACC) will hold a public hearing in March and is to adopt them both in April. Later this year USEPA should approve the Maintenance Plan and designate the Missouri counties in attainment. These actions should occur before the implementation rule for 2008 standard is finalized in August 2014.

In June 2013 USEPA's proposed implementation rule for the 2008 ozone standard was published. This rule would revoke the 1997 standard for all purposes and delineates how the states are implement this standard. It includes proposed anti-backsliding obligations and transition guidance for moving to the 2008 standard. All anti-backsliding obligations under the Clean Air Act are met if an area is redesignated to attainment of the 1997 standard prior to the standard's revocation. The final rule is expected to be published in August 2014.

In USEPA's July 2012 2008 standard area classification rule, the St. Louis area (MO-IL) was classified as a Marginal non-attainment area. Marginal areas have fewer implementation plan requirements as they are closest to attainment. A Marginal State Implementation Plan (SIP) is to have: comprehensive base year emissions inventory; non-attainment New Source Review (NSR) permitting program; emission reporting requirement for major sources; and transportation conformity determination. Missouri prepares an emissions inventory every three years and is working with USEPA on a 2008 inventory. The state has an on-going NSR construction permit program as well

as an emission reporting program for large sources. Transportation Air Quality Conformity is coordinated by EWG. The 2008 eight-hour ozone Marginal SIP will be posted on the MoDNR website for public comment on April 28, 2014. On May 29 the MACC will hold a public hearing on this SIP and adopt it at their July 2014 meeting.

In the July 2012, USEPA revoked the 1997 standard for Conformity Determination purposes only. Non-attainment areas were given one year to conduct Conformity Determination using the 2008 standard. EWG addressed this requirement in their January 2013 Conformity Determination. Since USEPA revoked the 1997 standard for conformity purposes, the revision to the Maintenance Plan for the 1997 standard does not have to establish budgets.

To aid EWG's future Conformity Determination efforts, MoDNR voluntarily developed an Early Progress Plan for the 2008 standard which contained 2015 motor vehicle emission budgets. In March 2013 the MACC adopted the Early Progress Plan. It was then submitted to USEPA. In a letter to MoDNR dated October 28, 2013, USEPA found the budgets adequate for use in future Conformity Determinations.

Mr. Henderson, MoDOT, asked if there was any indication when USEPA will take action to revise or maintain the 2008 ozone standard. Ms. Kemp, USEPA Region 7, said that in February USEPA is to release for external review a second draft Risk/Exposure Assessment for Ozone and a second draft Policy Assessment. USEPA will then meet with the Clean Air Science Advisory Committee (CASAC) at the end of March. It is possible that there could be a decision late this year.

IV. 2010 One-Hour Sulfur Dioxide National Ambient Air Quality Standard Designation and State Implementation Plan Requirements  
- Bob Randolph, Missouri Department of Natural Resources

Sulfur dioxide ( $\text{SO}_2$ ) is produced during the combustion of sulfur-containing fossil fuels such as coal and fuel oil during metal smelting and industrial processes. Sources include industrial boilers, power plants and mobile sources.  $\text{SO}_2$  is more of a localized phenomena with highest concentrations generally near large combustion sources. With the lowering of sulfur levels in gasoline and diesel, mobile sources make up a smaller portion of  $\text{SO}_2$  emissions.

The  $\text{SO}_2$  standard was established in the 1970s and USEPA has reviewed it over the years. In June 2010, USEPA revised the  $\text{SO}_2$  standard to be a one-hour standard of 75 parts per billion (ppb). MoDNR's first task was to develop boundary recommendations based on 2007-2009 data from the monitor network in place at the time the standard was finalized. Missouri recommended that portions of Jackson County, Jefferson County and Greene County be designated as non-attainment.

Mr. Hickey, Sierra Club, asked if the biggest emitter of  $\text{SO}_2$  in the greater St. Louis area was the Ameren Labadie power plant (Franklin County). Mr. Randolph, MoDNR, responded yes. Mr. Hickey Sierra Club, then asked if there were any  $\text{SO}_2$  monitors located in St. Charles, Franklin or St. Louis Counties. Mr. Randolph, MoDNR, said no and that he will talk about this later.

Mr. Randolph, MoDNR, said that the current monitoring network nationwide was not designed to address the one-hour SO<sub>2</sub> standard. Many large SO<sub>2</sub> sources in the U.S. are not in first round non-attainment areas. USEPA recognizes there are deficiencies in the existing monitoring networks. The Monitoring Group in the Air Pollution Control Program is reviewing the SO<sub>2</sub> network and evaluating future monitoring sites. Based on 2007-2009 monitoring data, in August 2013 USEPA designated a portion of Jackson County (Kansas City area); and portion of Jefferson County (Herculaneum and Festus townships and Missouri portion of Valmeyer and Selma townships) as non-attainment. Attainment Demonstration SIPs are due to USEPA in April 2015. The deadline to attain the standard is October 4, 2018.

There are five required elements for a non-attainment area SIP. A Reasonable Further Progress document is to be prepared. MoDNR is working on an accurate emission inventory of all current SO<sub>2</sub> sources within and impacting the non-attainment area. In the Attainment Demonstration, MoDNR staff will conduct computer modeling and work with facilities located within a 10 kilometer (km) buffer (immediate surrounding area) of the violating monitor and those within a 50 km buffer. All sources of SO<sub>2</sub> near the non-attainment area were included in an initial evaluation to determine which sources/facilities to explicitly include the computer model. Modeling must be performed using potential or allowable (permanent and enforceable) emission rates. Actual emissions from a facility's Emissions Inventory Questionnaire (EIQ) can only be used as a screening tool. The modeling can include facility negotiated limits/conditions necessary for it to be in compliance. Any limit identified has to be shown to be necessary to comply with the standard and part of a permanent and enforceable action. MoDNR is working with those largest sources/facilities inside the 50 km buffer, including Ameren Labadie, to verify potential limits and identify what actions are occurring or what plans already made to lower SO<sub>2</sub>. Begun dialogue on what control options facilities are going to do to reduce impact for future rounds and develop recommendations. Our task is to determine their impact on any receptor within the Jefferson County non-attainment area. At the end of 2013 the Doe Run Company closed their primary lead smelter in Herculaneum. A model assumption was that there will be no smelting operations and that the remaining units at this facility will use natural gas, minimizing SO<sub>2</sub> emissions.

Options for controls include incorporating limits into the Missouri SO<sub>2</sub> SIP. MoDNR is working on an amendment to the state sulfur rule as many requirements focused on motor fuels and outdated codes. The State could issue construction and/ operating permits with emissions limit/condition. Controls can include combination of control equipment, fuel controls, emission rate limits or limits on allowable emissions. If state rule does not work, state could enter into a Consent Judgement/Decree with the source to establish an emission limit/conditions. Another option to reduce impact, would be to identify limits through a modeled attainment demonstration.

In February 2013 USEPA released a "Next Steps" paper describing their strategy for future rounds non-attainment area designations. Emission thresholds will be lower in urban areas and higher in rural areas. The states will have flexibility to rely upon monitoring or modeling data, as appropriate. This allow states to work with affected facilities and citizens in order to develop monitor or model approach. Incentives and time for facilities to reduce emissions early and avoid non-attainment designations in future rounds.

USEPA is taking the approach that in future rounds of non-attainment designations, the states will be looking at all of those larger SO<sub>2</sub> sources. MoDNR will begin a dialogue with the larger sources, like Ameren Labadie, to gear them up for future round analysis and to consider emission reduction alternatives. Options under future rounds is for MoDNR to work with individual facilities to develop individual monitor networks to determine where peak concentrations would be in facility or to go with a modeling approach. If a facility wants to establish local monitor network, has to be approved by MoDNR and USEPA. For facilities that are going to use the modeling approach, Missouri would submit designation recommendation during 2017 and submittal deadline addressing facilities using monitoring data would be during 2015-2016. USEPA is to make designations for modeled areas in December 2017 and for monitored areas in December 2020.

Mr. Hickey, Sierra Club, asked if SO<sub>2</sub> sources within the buffer zone have been modeled and if sources are shown to be above standard, does that trigger any action. Mr. Randolph, MoDNR, replied that sources in the buffer area have been modeled. Information collected could be used in the future designation round(s). The task now is to determine the impact of sources on first round non-attainment area. MoDNR is working with facilities to get better assessment of what their peak levels are. Anticipate any facility within the 50 km buffer would have a strong potential for some type of emission control strategy. Just because a facility is not within the non-attainment area, does not mean they will not have to do something for the first round. MoDNR will work with facilities. Hopefully, that will be enough to bring that area/facility into attainment for future rounds.

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

The St. Louis Regional Clean Cities program (SLCC) along with Kansas, Iowa, Nebraska and Missouri received a grant from the U.S. Department of Energy (DOE) for an Alternative Fuel Implementation project. ICF International has been selected to develop a methodology using MOVES to evaluate the air quality impact/emission reduction of alternative fuel vehicles under different scenarios. There are limited alternative fuel inputs for the MOVES model. The consultant has been asked to develop emission reduction factors for the following American fuels: liquefied natural gas (LNG); compressed natural gas (CNG); electric vehicle and electric plug-in; propane; biodiesel at 20 and 50 percent; and ethanol (E-85). Since these fuels are not in MOVES now, consultant is trying to develop a way so USEPA can substitute them. Consultant is working with USEPA Region 7, Illinois EPA and MoDNR. The beta version of the methodology should be available in the next couple of weeks. Beta version will be reviewed by EWG and other stakeholders. Once review is finished, a webinar on the methodology and how to use it will be put together. Methodology is designed so that any city, county, council of governments or state can plug

in their own numbers. Mr. Herdler is also developing and conducting training for code enforcement personnel and first responders about these fuels.

Landscape firms are beginning to utilize propane-fueled mowers. These mowers are cleaner than conventionally fueled mowers (which do not have emission controls) and have a longer maintenance life. In addition, companies have less gasoline fuel loss. Ms. Fuchs, American Lung Association

(ALA), asked about the propane shortage. Mr. Herdler, SLCC, said that it was an extreme situation, particularly in the Midwest. Previously propane cost \$1.69 a gallon for home heating and now it is \$4.00 a gallon. At a meeting with Amerigas, Mr. Herdler learned that Amerigas is using railcars to bring in propane from Alaska and elsewhere. Hopefully when the cold snap breaks, companies will be able to replenish their supplies and prices will go down. Public CNG stations are at Lambert Airport and in Pontoon Beach. Allied Waste, Progressive and Waste Management are all using propane-powered trash trucks. The Parkway school district has a fleet of CNG buses and is working on a fueling station.

SLCC is working with the Village of Marissa in St. Clair County on a landfill gas recovery project. Waste Management has given the landfill gas to Marissa. Plan to install equipment to capture the gas and send it to the Ameren pipeline. Also liquid carbon dioxide (CO<sub>2</sub>) will be collected and sold to another company. It is estimated that the landfill will be in operation until 2060 and gas will be available for 30 years after that. Waste Management has announced that it plans to install similar equipment at its Milan landfill. Aim to provide fuel for their trash trucks in Chicago and St. Louis. SLCC is working with the Coast Guard and several businesses to convert at least three St. Louis-based harbor boats to CNG or LNG.

In 2014 SLCC will be 20 years old. SLCC is planning a celebration for this summer. A round of applause was given for this milestone achievement.

#### VI. Update Activities of the States

- David Bloomberg, Illinois Environmental Protection Agency
- Joe Winkelmann, Missouri Department of Natural Resources

The Illinois Pollution Control Board (IPCB) held its first hearing on the lead rule for Granite City and Chicago. There was enough agreement from all parties that the IPCB canceled future hearings. The rule is expected to proceed to adoption. Illinois EPA has already submitted it to USEPA Region 5 for parallel processing. Mayco Industries in Granite City has received a construction permit to make the changes necessary for it to comply with this lead rule.

Petcoke is a by-product of the petroleum refining process and is stored in the Chicago area and the Metro East. It is a solid material similar to coal and can be a fuel source for power plants. In Chicago, 70-80 foot high petcoke storage piles are located near residential areas. After a windstorm last year blew material onto residences, the City of Chicago has proposed a petcoke management rule. The Illinois EPA proposed an emergency rule to the IPCB which the Board did not accept. Illinois EPA is examining alternatives to address concerns. This could be a multi-state issue.

For the two Illinois SO<sub>2</sub> non-attainment areas, Illinois EPA is talking with culpable sources and seeking either permit limits or regulations. Illinois looking ahead to the outcome of the litigation over the Cross State Air Pollution Rule (CSAPR) now before the U.S. Supreme Court. In the meantime, USEPA is moving forward with a possible transport rule (if ruled against). There have been many discussions on how to model and address that concern. The Ozone Transport Commission (composed of northeast and Mid-Atlantic states) wants a number of Midwest states, including

Illinois, to join the Commission. Illinois has declined and now the Commission is forcibly trying to add these states.

At the January 30 MACC meeting, three rules are up for public hearing. One is an amendment to 10 CSR 10-6.200 Hospital, Medical, Infectious Waste Incinerator rule removing start-up, shutdown and malfunction exemptions from any emission limits. The second is to rescind the outdated 10 CSR 10-5.240 Additional Air Quality Control Measures May be Required When Sources are Clustered in a Small Land Area. It was passed before the federal Clean Air Act was enacted. The last item up for public hearing is to amend 10 CSR 10-6.010 National Ambient Air Quality Standards to incorporate federal standards into the state rules so state rules are consistent.

MoDNR is in the process of preparing an amendment to 10 CSR 1-5.220 to remove Stage II Vapor Recovery systems from this rule. The draft rule amendment has been posted on the Rules in Progress section of the Air Pollution Control Program web page.

## VII. Other Business

Mr. Hickey, Missouri Sierra Club, observed that the MACC is a seven member body whose members are nominated by the Governor and approved by the Senate. Currently, the MACC only has four members. One MACC member is from Crystal City but the remainder do not reside in non-attainment areas. Sierra Club thinks that it would be good if at least two of the empty seats were filled by people from the St. Louis area (42 percent of the breathers in the state). Need to look for people who care about clean air and would be effective advocates. Mr. Coulson, EWG, said that Dr. Fishman from St. Louis University has submitted his name. Mr. Winkelmann, MoDNR, added that the MACC has been discussed at AQAC and at other meetings. Information on the MACC can be found at RSMo 643.040. He encouraged everyone to consider possible nominees.

Ms. Klekota, Trailnet, asked if at a future meeting, someone would talk about the connections between air quality and public health and could someone talk on the impact of transportation on PM<sub>2.5</sub>. Mr. Coulson, EWG, said that it is good to keep health involved when discussing air quality, and not just bureaucratic structure. Mr. Bloomberg, Illinois EPA, added that Ms. Funk of Metro East Community Air Project (MECAP) has hosted air quality and public health forums for the last several years. Mr. Winkelmann, MoDNR, said that the preamble section of the National Ambient Air Quality Standard contains a discussion on the health effects/impacts of specific pollutants

The next meeting of the AQAC will be on March 25, 2014. There being no other business, the meeting of the Air Quality Advisory Committee was adjourned.