



Missouri
Department of
Natural Resources

Springfield Area Ozone Designation Process Meeting Two
The Library Center
10 a.m. to 12 p.m.
Aug. 6, 2008

Staff Members Present

Carrie Smith (Ombudsmen)
Dave Woolery (Ombudsmen)
Jeff Bennett
Paul Vitzthum, SWRO
Rebecca Birke
Tiffany Campbell

Others Present by Attendance Record

Barbara Luxe, City of Springfield Public Works
Doug Neidigh, Ozarks Clean Air Alliance
Rick Campbell, Barr Engineering
Megan Keathley, Media- KSMU
Todd Wiesehan, Christian County P&Z
Ryan Talken, Joplin Health Department
Dan Pekarek, Joplin Health Department
Tent Bowers, City of Hollister
Jeff Brown, Missouri State University
Jim Berry, Taney County Health Department
John Grubaugh, Christian County Commission
Karen Potter, Christian County Health Department
Travis Cossey, City of Nixa
Harry Rosers, Harry S Truman Coordinating Court
JD Slaughter, Springfield-Greene County Health Department
Mike Taubueson, Springfield Public Schools
Tony Moehr, Jasper County Health Department
Ramone Clemens, Springfield Air Quality
David Stokely, Republic, MO
Andy Mueller, MoDOT
Tom Huff, Christian County Commission
Larry Martin, City of Ozark
Charles Means, REGFORM
Stacy Burks, Senator Kit Bond's Office
Chuck Pennel, Taney County Commission
Jeff Seifried, Springfield Chamber of Commerce
Bill Marshall, Dade County

Cindy Stephens, OTC
Frank Schoneboom, City of Branson
Andrew Sesler, MoDOT
Michelle Garand, Community Partnership
Joel Kella, Cedar County
Bob Atchley, Christian County
Brian Adams, Springfield Air Quality Control
Jami Gay, Springfield Air Quality Control

Opening Remarks

Doug Neidigh opened up meeting with a welcome to all in attendance. He took a couple of minutes to update everyone on the Ozarks Clean Air Alliance. He is trying to put together a proactive, voluntary strategy to help reduce ground-level ozone in the Springfield area. If you are interested in participating please touch base with Michelle Garand and fill out the letter of support. He directed everyone to their Web site: www.showmecleanair.com.

He then introduced Tiffany Campbell and Jeff Bennett.

Jeff explained that the department is a regulatory agency which is different than the voluntary process that Doug was referring to in his opening remarks. He explained that today we are going to talk about the factual information that we have been reviewing. We are trying to get stakeholders to understand this process and help us to develop a recommendation to the EPA.

Tiffany then explained the revised ozone standard of 75 ppb. All of the information will be posted on the Web. Springfield's design value is at 77 ppb. A design value of 76 or over is a violation. There is only one monitor in the state of Missouri that is not currently violating the revised standard.

Question: Who is in charge of the ozone monitors? **Answer:** The department performs routine maintenance of these monitors. Each area's air program has oversight and funding to do this.

Question: Why are monitors placed where they are? **Answer:** We look to identify areas of potential air pollution issues. We also want to be downwind of sources. Ozone is a secondary pollutant. It takes sometime to form. The concept is that we want a reading of the ozone levels as they move and form. That is sometimes away from the direct source of the pollutants that create ozone.

Two Tests to determine an area's designation – see slide. Test #1 – Does a monitor in the area violate the standard? Test #2 - Do VOC and NOx emission sources in each county contribute to ozone concentrations over the standard. The second test is a little more difficult. It is about emissions and where they contribute to air quality problems.

This process is not optional. We don't get the choice of not doing this. We have to prepare a recommendation for the Springfield area. EPA will want our recommendation and the technical information that backs up that recommendation. That is why we are here today. EPA has the final decision.

Determinations are made based on eleven boundary criteria. These are set by EPA.

Eleven Boundary Criteria – see slide. Meteorology comes into this, and the problem is that there are conditions that are more prominent when ozone is forming. Mainly southerly winds come into this equation. Stagnant air flow is conducive to ozone formation.

Springfield's ozone is not nearly at the level that we are at in St. Louis and Kansas City. Because you don't have that far to go to reach the standard, it is easier to take care of these issues on your own. That is why voluntary measures are especially important in this area.

Evaluation Data

Emissions Totals – VOC emissions: 40 tons a day, NOx emissions: 60 tons a day. See slide - Taney County has emissions from recreational boating on Lake Taneycomo. This is why we are seeing higher emissions in Taney and Stone Counties. Anytime a county has higher emissions than others in the MSA, they may be a looked at a bit closer to see if controls may be necessary.

This is a collective evaluation of all the emissions sources we have. We use the best emissions data that we have.

Question: Is southwest Arkansas contributing to these totals? **Answer:** Yes, they may have some impact. Getting more data on this may be helped by the new EPA monitoring rule. This may also help us get more monitors, such as in Joplin. The state of Arkansas will have to decide if they'll place a new monitor in areas closer to the states' borders. Determining if they significantly contribute? That we don't know yet. Stay tuned.

Question: As Taney and Stone Counties are higher for recreational boating, do you see that same emissions around the Lake of the Ozarks. **Answer:** Yes, it is consistent.

Question: Do the VOCs from lakes come directly from the boats or is it transient from the lake? **Answer:** These emissions totals are not from anything that is naturally occurring. These are man-made. Biogenic emissions in this area, though, are higher overall. This means that NOx controls may be more important for this area. That has yet to be determined. But don't be confused, this is only a part of the problem; it is not the primary driver of the emissions.

It is not so important exactly where the monitor is because ozone is a regional pollutant. It transports, so we are not talking about a local-scale problem. It is a regional issue. So the monitors are measuring ozone for that region. For that reason, you have to control a variety of things to see the effects. Today, however, we are only talking about whether this area contributes to its own ozone problem. The controls and requirements if designation of nonattainment occurs are not a part of this discussion.

Emission Density Plots – see slide. You can see the NOx emissions in Greene County. This is geographic representation of the ozone forming pollutants. This tells us that there is a lot more going on as far as emissions in the afternoon. The white are areas of very few emissions. The red

areas are the areas with higher emissions. This tells us the overall spatial representation of the emissions.

The VOC emissions are the next slide. For VOCs, biogenic sources are also visible, but this is mostly an anthropogenic look at the emissions. This gives us an idea of the highest density of VOC emissions.

Question: Are all roads evaluated in that model for NO_x emissions or just a few? **Answer:** Any Vehicle Miles Traveled that end up in the Federal Highway Database are included. The majority of the traffic is on the major highways anyway, so this is an appropriate look at the emissions.

Population/Urbanization – see slide. This shows us where the majority of the population exists. It follows that these are the areas of more urbanization. This tells us where people are living and how many folks are living there. Areas of heavier urbanization obviously contribute more emissions.

Connectivity – The idea is how connected are you to other counties in your area. How many people live in one county and work in another and vice versa. There are two ways to evaluate this – see slide. This is the type of data that the local economic development offices can tell us more about. If you have more recent data, please share it with us. Local-scale data is always more helpful.

Question: Is connectivity measured within a county? **Answer:** Yes. When you look at the data, you'll see an individual number for each county.

Question: Do you take into account miles traveled from out of state to the area. **Answer:** Yes. There is information on this available.

Question: Are vehicle miles traveled the biggest problem? **Answer:** They are part of it, but not the entire problem.

Growth – Springfield is growing. From a regional economic standpoint, this is good. From an air quality perspective, this is not as good. When population increases, so do emissions. The Clean Air Action Plan will be a strong force to help curb these increasing emissions. Areas that are experiencing population growth will see some additional scrutiny in this process.

Meteorological – This shows us based on trajectory, where pollution started and where it ended up after a 24-hour period. What I find interesting, it the majority of these emissions are coming from Tulsa and northwestern Arkansas. Based on this south, southwesterly winds are causing violations at the monitor. When ozone is high, air is coming from the south. This may be more support for Springfield not being a significant contributor to violations at the Eldorado Springs monitor.

These show us the general direction of the particles, but do not point out a specific source of the pollution. This gives a general area to look at when controls are necessary. As the standard

lowers, the met data can be more varied as it causes violations. Actions from other states will also help us achieve better air quality in Missouri.

Timeline for Implementation

Our recommendation is due to EPA by March 2009. This is a pretty tight timeline. We may be able to pull 2008 data into this evaluation. EPA fully intends to use one year to come up with final designations. They are going to release a proposed designation in the Federal Register in the summer of 2009 for public comment. This is the first time they have provided this opportunity for the general public.

Our State Implementation Plans are due by the summer of 2013. Reaching attainment between 2013 and 2020 will be dependent upon the severity of the problem.

Question: Does the litigation on both sides of the issue affect our timeline? **Answer:** No, we are still required to meet these deadlines.

Opportunity for Input

You can go here to review the technical data - see slide. You can also provide data to us on this Web site. There will also be opportunities for comment through our public hearing process.

Ultimately, EPA has the final decision. EPA will make sure that justifications across the country are consistent.

More Questions:

Question: In June, I heard that the 2008 data will not be used. Is that still the case? **Answer:** We will use it if possible. It would have to be submitted as an addendum to our recommendation.

Question: What is the timeline for submitting the added 2008 data? **Answer:** The monitoring data gets collected April through October. The ultimate submittal will take place in January 2009 after the data is quality assured.

Question: The idea of climate change must come into this. Does this affect the ozone levels? **Answer:** Yes. But Springfield is continuously growing and if they slip by this year, it does not mean that they won't be in at a later date. EPA won't designate areas that aren't already violating the standard. There is a process where you can go back and redesignate an area.