

Regional Air Quality Springfield Area

February 10, 2011

USEPA – Lower Ozone Standards

- January 10, 2010, USEPA proposed stricter national ozone standards
- Clean Air Science Advisory Committee recommendations
- Several delays – current timeline July 2011
- USEPA would designate non-attainment areas
- Attainment dates would be established

Formation of Ozone

- Ozone is created from Hydrocarbons and Nitrogen Oxides exposed to UV Sunlight
- Top months for Ozone – July and August
- Human health issues include lung and respiratory problems

Why does Ozone form in Summer?

- Meteorology has a great deal to do with whether Ozone will form
- Combination of hot stagnant weather, sun and lack of wind can lead to high Ozone readings
- Ozone tends to *transport* across the country following the winds
- There are *background* Ozone levels which are being monitored all the time

Who Monitors Ozone Levels?

- The Illinois Environmental Protection Agency has air quality monitors which monitor several air pollutants all the time
- Local Ozone monitor is located on North Dirksen Parkway
- There are about 200 air quality monitors statewide

Air Quality Index (AQI)

- The United States Environmental Protection Agency (USEPA) developed the Air Quality Index (AQI)
- The AQI is a national standard for reporting air pollution levels to the general public
- The AQI is set up in ranges in parts per million(ppm)
- The scale reflects Good, Moderate, Unhealthy for Sensitive Groups and Unhealthy air quality

Ozone Non-Attainment Levels

- The current Ozone level that must be attained is **.075ppm**. (parts per million) over an 8 hour period
- New Ozone levels could range from **.060** to **.070ppm**.
- Ozone readings are an average that is taken over a rolling three year period

- Springfield's current 3 year average for 2008-2010 = **.063 ppm**
- Readings for 2011 will be added and 2008 will drop off

Illinois Background Ozone Levels

- Background Ozone levels throughout Illinois is close to .060 ppm.
- All air quality monitors throughout the State of Illinois would be non-attainment at .060 ppm.

What are others doing?

- Other areas of the state are becoming proactive before a finding of Ozone non-attainment
- Air Quality Task Force's created elsewhere
- **Quad Cities** and **Peoria** MPO's –
- Task force of composed of MPO members, Chamber interests, large business, government and health care advocates
- Activities include work plan of initiatives
- Public outreach and education

What can be done locally?

- Carpooling
- Taking transit
- Reducing Vehicle Miles Traveled (VMT)
- Trip Chaining (combining trips)
- Biking and Walking
- Air Pollution Action Days can be forecasted
- Public Education and Outreach – to change behaviors when the Ozone levels are forecasted to be high

What's the Good News?

- Good things to reduce Ozone nationally include
 - Tightened standards for all vehicle engines
 - Lower polluting diesel fuels
 - Retrofits on legacy (older) diesel trucks
 - More requirements placed on industry

What would happen with new standards?

- Controls would likely be placed on industrial sources first
- Everything would be on the table for Illinois EPA to consider in the **State Implementation Plan**
- Largest sources of air pollution include
 - Point (Industry)
 - Mobile (Mostly on-road vehicles)
 - Non-Point (Household products, etc. not covered above)

What is the Role of SATS?

- Critical issue for this group is the Transportation **Mobile Source Sector**
 - A motor vehicle budget would be developed by IEPA
 - Goals to reduce ozone levels over time

It is important that the MPO and its members become involved and provide input into the budget levels and strategies

Transportation Conformity

- If the area is in Ozone non-attainment, Transportation Conformity would be required
- Most projects going into the Transportation Improvement Program (TIP) would need to “conform”
 - Meaning that the project would not add to the air quality problem or delay the attainment dates
 - Requires modeling using an approved USEPA model called MOVES to develop emission factors and how much pollution is produced per mile of travel

How long does all this take?

- All of this can take a long time to implement, perhaps 2 or more years
- It is important to be aware of the potential impacts to the Springfield area and the requirements

Parting Message

- The message today is to provide awareness
- You may want to consider forming a local Air Quality Task Force or Steering Committee
- Keep up with what is happening at the National level