

Air Quality in Kansas City- An Overview



IDLE REDUCTION WORKSHOP

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Air Quality in Kansas City



- Current Attainment Status for Ozone
- Ozone Formation in Kansas City
- Wyandotte County Activities

Air Quality in Kansas City



- **What is Ground-level Ozone?**
 - Commonly known as smog
- **Good Ozone-** The Ozone Layer: Occurs naturally in the upper atmosphere; blocks harmful UV sunlight
- **Bad Ozone-** Ground-level Ozone: Occurs in the lower atmosphere (ground level) when VOCs and NOx + heat + sunlight combine

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What causes ground-level ozone?

Pollution + Heat + Sun = Ozone



Why is Ground-level Ozone a Concern?



- It is one of six pollutants for which EPA has set health-based standards
- Causes health problems
 - Everyone is affected
 - Most affected: young, elderly, compromised respiratory systems (asthma)
 - Ozone irritates the lungs, impairs breathing, invigorates asthma, and damages vegetation
- Causes economic problems
 - For the region: highway funds
 - For industry: operating requirements
 - Individual citizens: gasoline, vehicle inspections

Air Quality in Kansas City



- We are an Ozone Maintenance Area because we exceeded the previous ozone standard.
- We are currently in attainment with the 2004 - eight hour standard. Attainment designations with the 2008 standard were suspended.
- Good News - 2008 and 2009 ozone levels have been lower due to cool, wet summers.
- Concern – The new standard expected in Summer 2011 will almost certainly result in a nonattainment designation.

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- The ozone standard is based on the fourth highest reading per year averaged over 3 years.
- In March 2008, EPA proposed a new, **stricter 8 hour** ozone standard (75 ppb) to replace the 1997 standard (84 ppb).
- This standard will be replaced by an even stricter standard (60-70 ppb) to be released by EPA in Summer 2011.
- The EPA must base **National Ambient Air Quality Standards (NAAQS)** exclusively on health effects.
- EPA decided that the 2008 standard is not sufficient to protect public health.

Implications of Violating the New Ozone Standard

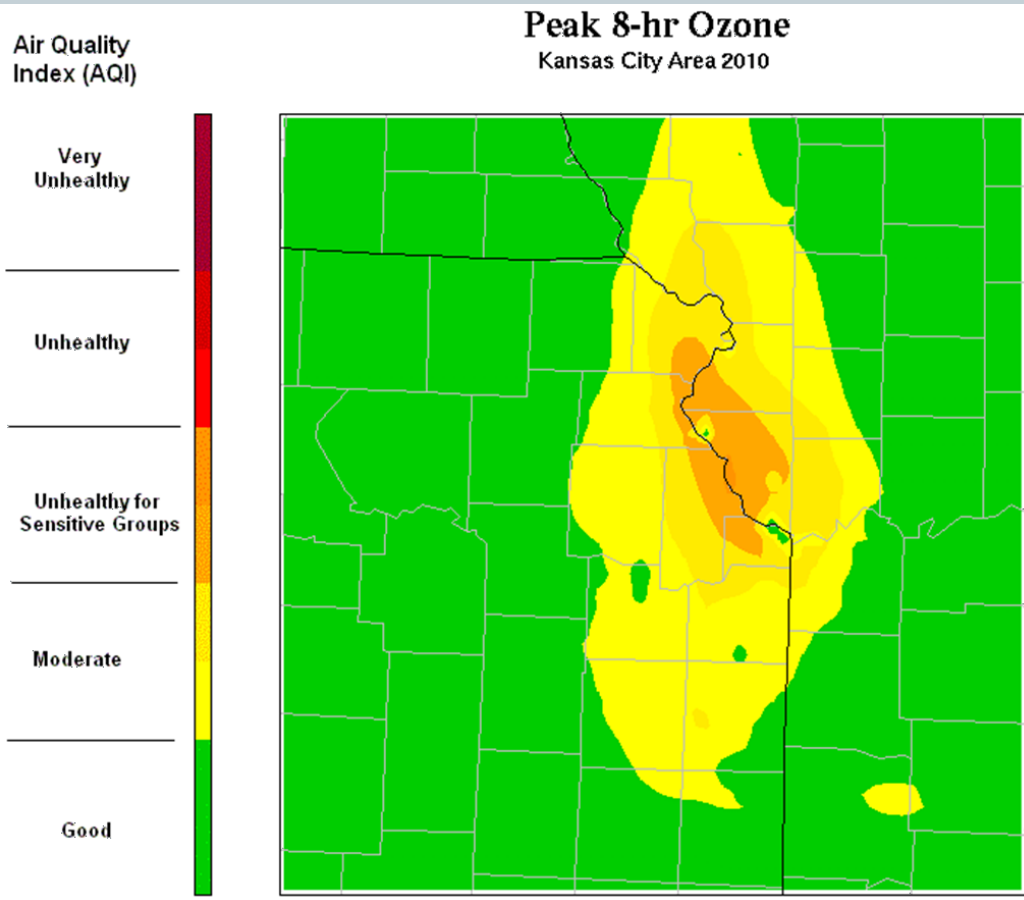


- Lengthier process for construction projects
 - Selection process
 - Review process
- Reduced flexibility in how the region spends its transportation funding
- Direct economic impacts – RFG, I/M programs, restrictions on production, more regulation
- Indirect economic impacts – Attraction for businesses to come to the KC Region

Monitors in the Greater Kansas City Region



Ozone Distribution



Wyandotte County Ozone Reduction Efforts



- Education
 - Web page
 - Health fairs
 - School visits
- Initiatives
 - No-spill gas cans
 - Charcoal chimneys
 - Gas cap testing
 - Clean Commute
 - Carpool Connection
 - Native Plantings



Accomplishments



- Since 2003, 1170 charcoal chimneys have been distributed to county and area residents
 - 156 gallons of lighter fluid has been collected and properly disposed of
 - 3 tons of pollution prevented
- Since 2008, over 320 miles have been saved through the Clean Commute bike loan program
- Since 2008, nearly 25,000 miles have been saved by UG employees participating in the Carpool Connection Program
- Over 500 gas caps have been tested

Interesting Facts



- A conventional lawn mower pollutes as much in an hour as driving a car from here to Wichita.
- Lawn and garden equipment users spill an estimated 17 million gallons of fuel each year when refilling outdoor power equipment (more than the Exxon Valdez spill in Alaska).
- If your vehicle's gas cap is faulty, you may be losing as much as 30 gallons of gas a year in evaporation.
- Keeping your car well tuned, with tires properly inflated, with clean air filters, and without extra weight, can increase fuel efficiency by over 15% (=saving \$\$\$\$).
- Turning off your computer when it is not in use will save over \$100 on your energy bill each year.

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Questions?

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