


Flint Hills Smoke Management Plan

January 18 and 19, 2011
Legislative Briefing

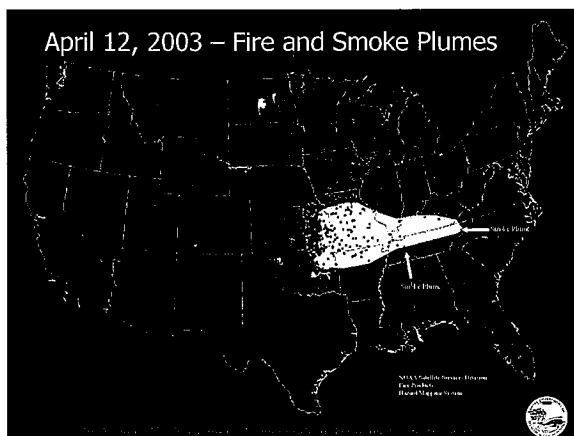
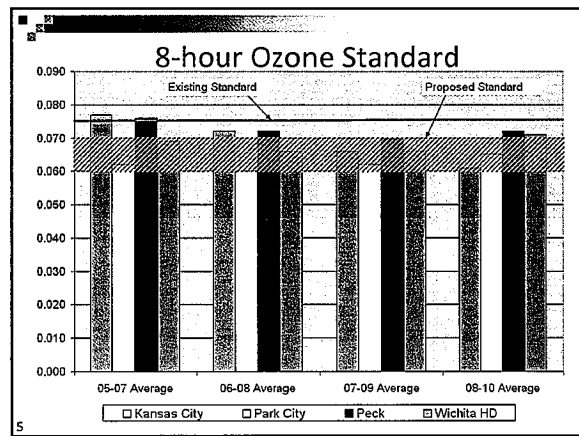
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Flint Hills Burning and Air Quality

- Flint Hills burning caused ozone exceedances in KC in 2003 and KC and Wichita in 2009 & 2010
- EPA & KDHE have met with agricultural representatives from 2003 to present
 - Research, education, outreach & field training
- EPA denied KDHE's request to flag 2009 ozone exceedance data due to lack of SMP
- KDHE contacted by ag groups in 2009
- Commitment to develop Smoke Management Plan in 2010
- Committee formed and multiple meetings in 2010 on developing SMP

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Why have a smoke management plan?

- To reduce impacts on public health
 - Emissions include Nitrogen Oxides, Volatile Organic Compounds and particulate matter
 - Nitrogen oxides and volatile organic compounds combine to form ozone
- To help meet national air quality standards
- To receive exceptional event flag in case of air quality exceedance

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What happens when air quality standards are exceeded?

- State Implementation Plan (SIP) preparation
- Economic development curtailed
- New rules to reduce NO_x & VOC emissions
- Potential sanctions for failure to meet standard
- Increased costs for fuel, electricity, goods, etc.
- Citizens breathing polluted air

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Chapter 2 - Reasons for Having a SMP

- Health Concerns
- National Ambient Air Quality Standards
- EPA Interim Fire Guidance
- Nonattainment Consequences & Costs
 - State Implementation Plans
 - Reasonably Available Control Technology regulations
 - Transportation Conformity, potential loss of federal highway funds
- Maintaining Flint Hills & Ag Economy
 - Description of intensive early stocking
 - Discussion of weight & financial gains
 - Potential for prairie loss for areas not burned

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About the Plan

- Is voluntary for prescribed burns of rangeland
- Includes restrictions on some types of burning in April
- Includes tools to assist land managers and local fire officials in making burn decisions
- Has a pilot program to evaluate use of a burn checklist
- A web site with a tool to predict smoke plume movement and other burn resources
- Includes plans for outreach and education

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Chapter 3 - Reducing Downwind Impacts of Flint Hills Burning

- Review Need for Burning
- Fire Management Practices
 - Air quality, timing, transport wind, mixing height, dispersion
 - Humidity, fuel moisture, temperature
 - Ignition & burn techniques
- Smoke Plan Pilot Project – Spring 2011
 - Greenwood & Chase counties
 - Fire Management Practices booklet

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Chapter 1 - Introduction

- Air Quality Impacts From Flint Hills Burning
 - History
- Flint Hills Ecosystem
 - Topography & geology
 - Climate
 - Animal species & habitats
 - Preservation of tallgrass
 - Historic fire cycles & roll of fire

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Chapter 4 - Restrictions on April Burning

- Counties Affected
 - Butler, Chase, Chautauqua, Cowley, Elk, Geary, Greenwood, Johnson, Lyon, Marion, Morris, Pottawatomie, Riley, Sedgwick, Wabaunsee & Wyandotte
- Examples of restricted burns
 - Crop residue
 - Land clearing
 - Yard waste
- Types of burning allowed
 - Agricultural burning to manage prairie and grasslands
 - CRP burning
 - Other burns approved by local authorities on case-by-case basis

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Chapter 5-Outreach, Education & Public Notification

- Outreach
 - Fire training events
 - Fire & Smoke Planning Resource website (www.ksfire.org)
 - Broadcast and print media
 - Group presentations
- Audience
 - General public
 - Land managers
 - Fire officials
- Message
 - Health effects
 - Fire management practices
 - April burn restrictions

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Chapter 8 - Contingency Measures

- Expand April burn restrictions to counties surrounding Flint Hills
- Require fire management practices checklist, notification, & data collection
- Require burn approvals based on weather & pre-existing conditions
- Establish time-of-day windows for burning
- Burn bans based to potential air quality impacts

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Chapter 6 - Surveillance and Enforcement

- Surveillance
 - Air monitoring
 - Review of Satellite imagery
 - Post burn season survey of land managers
- April Burn Restrictions Enforcement
 - Local fire officials/emergency managers
 - KDHE district offices

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Plan Implementation

- Work with KSU to develop web site, modeling tool, producer brochure and other outreach information
- Draft April burn restriction regulation and share with fire officials and other interested parties
- Prepare for voluntary data collection effort
- Work with KDHE health side officials on health messages for burn season
- Outreach activities by KSU, KDHE, KFS, NRCS, KLA, KFB, EPA, and more
- Gather meteorological and monitoring data during burn season for post season technical report

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Chapter 7 - Data Collection, Research Needs & Long Term Strategies

- Data Collection Pilot program for 2011
- Research Needs
 - Characterize emissions & remote sensing
 - Monitoring studies
 - Timing & frequency
 - Management techniques
 - Health impacts
 - Prairie Chicken
- Long Term Strategies
 - Computer modeling of air quality impacts

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QUESTIONS?

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