Flint Hills Smoke Management Plan
Flint Hills Smoke Management Advisory Committee
Overview & Discussion

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Overview

- Review chapter by chapter
- Highlight small group and EPA issues
- Receive input from Advisory Committee on each chapter
- Receive input from other attendees at end of draft plan review
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

- Remaining workgroup issue
  - *Prairie chickens*
Chapter 2 - Reasons for Having a SMP

- Health Concerns
  - Respiratory
  - Cardiovascular

- National Ambient Air Quality Standards
  - Particulate matter
    - Current 24-hour PM$_{2.5}$ standard = 35 μg/m$^3$
  - Ozone
    - Current 8-hour standard = 0.75 ppm
    - Lower standard proposed (0.60 to 0.70 ppm)
    - EPA to release lower standard at year-end
Chapter 2 - Reasons for Having a SMP

- EPA Interim Fire Guidance
- Nonattainment Consequences & Costs
  - State Implementation Plans
  - Reasonably Available Control Technology regulations
    - Inspection & maintenance of automobiles
    - Low vapor pressure gasoline
  - Transportation Conformity
  - Potential loss of federal highway funds
Chapter 2 - Reasons for Having a SMP

- Maintaining Flint Hills & Ag Economy
  - Description of intensive early stocking
  - Discussion of weight & financial gains
  - Actual burned acreage vs. perceived burned
  - Patch burn grazing
  - Potential for prairie loss for areas not burned

- Remaining workgroup issue
  - Paragraph on economic benefit in section 2.5
Chapter 3 - Reducing Downwind Impacts of Flint Hills Burning

- Need For Burning
  - Non-burning alternatives
    - Practicality and cost

- Fire Management Practices (topic from previous meeting)
  - Air quality, timing, transport wind, mixing height, dispersion
  - Humidity, fuel moisture, temperature
  - Ignition & burn techniques

- Smoke Plan Pilot Project – Spring 2011
  - Greenwood County.....Others?

- Remaining workgroup issue
  - EPA recommends climate zone discussion be included
Chapter 4 - Restrictions on Non-Agricultural Burning

- April of Each Year
- Flint Hills Counties, plus Sedgwick, Wyandotte & Johnson

**Types of Burning Allowed**
- Agricultural burning for prairie & grasslands
- Conservation reserve program
- Exemptions could be made for special circumstances or needs

**Types of Burning Banned**
- Land clearing, crop residue, yard waste

**Remaining workgroup issues**
- *EPA recommends clarification on burn ban categories*
- *EPA recommends crop residue should be on April ban list*
- *Implementation of ban in 2011?*
Chapter 5 - Outreach, Education & Public Notification

- Outreach
  - Predictive modeling
    - Run models daily during burn season
  - Formal fire instruction
    - Incorporated into burn schools
  - Internet
    - Fire & Smoke Planning Resource website (KSU)
  - Broadcast media
    - Daily updates during burn season
  - Print
    - Posters, flyers, press releases
  - Group presentations
    - Standardized slide show
Chapter 5 - Outreach, Education & Public Notification

- **Audiences & Message Content**
  - Land Managers
  - Agencies
  - Regulatory
  - Businesses
  - Public

- **Education & Outreach**
  - Agencies & stakeholders that helped develop SMP
  - Outreach workgroup will form when SMP finished

- **Remaining workgroup issue**
  - Funding for KSU website
Chapter 6 - Surveillance and Enforcement

- Surveillance
  - Air monitoring
  - Satellite
  - Post burn season surveys

- Non-Agricultural Burn Ban Enforcement
  - Local emergency managers
  - KDHE district offices

- No issues raised by workgroup members
Chapter 7 - Data Collection, Research Needs & Long Term Strategies

- Data Collection
  - Pilot program

- Research Needs
  - Characterize emissions & remote sensing
  - Monitoring studies
  - Timing & frequency
  - Management techniques
  - Health impacts

- Long Term Strategies
  - Modeling

*Resources for research and modeling are issues*
Chapter 8 - Contingency Measures

- Non-essential April Burn Ban
  - Expand to counties surrounding Flint Hills
- Smoke Plans, Notification, Data Collection
  - Could become mandatory
- Burn Approvals
  - Based on weather & pre-existing conditions
- Time-of-Day Window
  - Start & end times established
- Burn Ban Days
  - Daily burn ban briefing to Governor & Secretary of KDHE
- Remaining workgroup issue
  - EPA -- contingency measure triggers & implementation timeframes
Next Steps

- Work with small workgroup to make changes from today’s meeting
- Post on KDHE website to receive additional stakeholder input
- Make final changes and distribute
- Hold final meeting: December 16, 2010