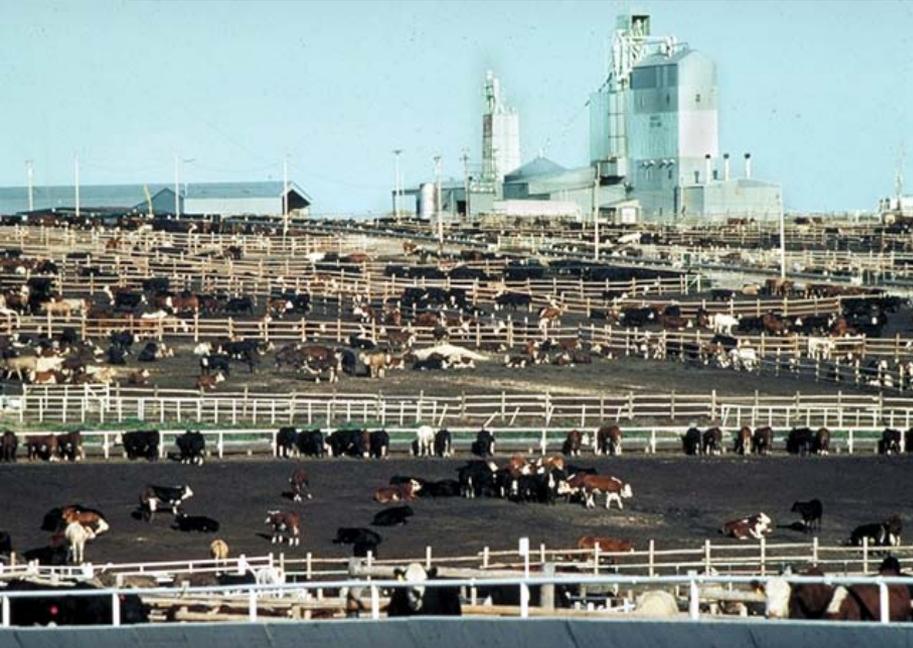


# Fire and Animal Agriculture Sector

---



# EPA Statement on Fires

---

- EPA acknowledges use of fire as land management tool for:
    - Maintaining health of fire-tolerant/dependent plant and animal ecosystems
    - Thermal treatment to promote seed germination and plant growth
    - Eliminating threat of plant and pest disease
    - Reducing risk of catastrophic wildfires.
  - Emphasize the use of **smoke management programs** to minimize impacts of burning activities on air quality and visibility impairment, without regulating fires.
  - Partnering with federal, state and private land managers to ensure equitable and appropriate use of fire while meeting air quality goals and standards.
  - Emphasize notification of advisories for public health and safety
-

# Impacts of Fires

---

- Particulate matter  
NAAQS
- Ozone NAAQS
- Regional  
haze/visibility
- Toxic pollutants
- Health



# Key Points

---

- Fires are not causing significant impacts on NAAQS or nonattainment designations
  - Short-term health impacts can be significant
  - Several policy issues need to be addressed to ensure application of consistent approach
  - Need specific information to adequately characterize air quality and health impacts
  - Several initiatives are underway
    - “Tool box” is expected outcome
      - Predict impacts
      - Develop action plan to minimize impacts
      - Plan to notify public
-

# What we've done

---

- Fire Policies
    - Exceptional Events Policy (1986)
    - **Federal Fire Management Policy (1995)**
    - PM-10 Natural Events Policy (1996)
    - Interim Air Quality Policy on Wildland and Prescribed Fires (1998)
    - **Review and Update of Federal Fire Management Policy (2001)**
    - Agricultural Burning Policy (Draft—on hold)
-

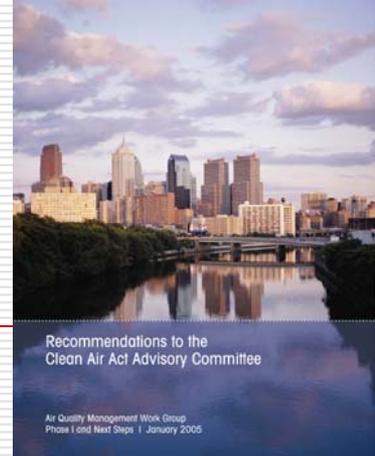
# What we still need to address

---

- Needs
    - Fuels and emissions characterization
    - Emission factors and inventories
    - Smoke dispersion and forecasting models
    - Ambient air quality data
    - National fire database
-

# AFO Background

- Several overall recommendations from AQ Management Work Group to CAAAC also apply to the CAFO sector:
  - *Recommendation 1.1 - EPA, in conjunction with S/L/T and affected stakeholders, **should pursue improved emissions measurements and reporting to enhance emissions databases for more accurate air quality assessments and tracking of progress.***
  - *Recommendation 1.2 - Where emissions measurement-based information is impractical to obtain for air quality assessments, or where improved projections are needed, EPA, in conjunction with S/L/T and affected stakeholders, **should improve emissions factors and emission estimation methods.***
  - *Recommendation 1.3 - EPA, in conjunction with S/L/T and affected stakeholders, **should quantify and take actions to reduce uncertainty** in emissions inventories and air quality modeling applications, provide guidance for incorporating uncertainty assessments into SIP planning, and improve communication of uncertainty to decision-makers.*
  - *Recommendation 1.4 - EPA, in conjunction with S/L/T and affected stakeholders, **should promote and improve integrated, multipollutant monitoring.***



Recommendations to the  
Clean Air Act Advisory Committee

Air Quality Management Work Group  
Phase I and Next Steps | January 2006

# CAFO Monitoring Study

---

- Improving emission measurements by conducting a 2-year continuous emissions monitoring study at barns and lagoons
  - To develop emission factors and estimation methods much improved over previous data sets
  - To reduce the level of uncertainty in CAFO emission inventories and models
  - To conduct multipollutant monitoring with various state of the art instruments
  - Using these data to help build comprehensive process-based models as recommended by the 2002 NAS CAFO study
-

# Some Policy Questions

---

- ❑ What size and type of farming operation impacts air quality?
  - ❑ How do CAFO NH<sub>3</sub> . . . PM . . . VOC . . . H<sub>2</sub>S emissions vary temporally and spatially?
  - ❑ What Best Management Practices (BMP) are needed to control these emissions?
  - ❑ Is NH<sub>3</sub> the missing link in managing air pollution?
  - ❑ Should we treat agriculture as a sector similarly to the transportation and energy sectors?
-