

# Animal Feeding Operations

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The AFO Air Emissions Consent Agreement  
and Final Order

# Presentation Topics

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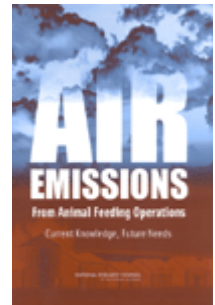
- Background information
- Federal Register Notice
- Components of the Agreement
  - Eligible participants
  - Applicable requirements
  - Covenant not to sue
  - Monitoring program



# Background Information

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- EPA & USDA asked National Academy of Science (NAS) to conduct the AFO air emissions study
- NAS study conclusions:
  - No reliable emission factors for AFO exist
  - Additional data needed to develop estimating methodologies
  - Current methods for estimating emissions not appropriate
  - Use process-based approach



# Background Information (cont.)

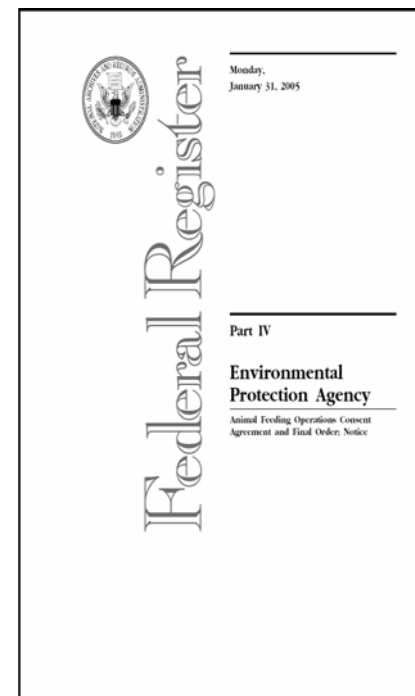
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- Consent agreement developed in response to:
  - Public concerns
  - NAS report
- Consent agreement developed by:
  - EPA
  - Industry representatives
- Proposed agreement coordinated with:
  - Agricultural industry representatives
  - State & local government officials
  - Environmental organizations
  - Citizen groups



# Federal Register Notice

- Signed on Jan. 21, 2005
- Published on Jan. 31, 2005
  - 70 FR 4958
- “Initial” public comment period closed on March 2, 2005
- Re-opening comment period from April 1 through May 2, 2005
- Extending signup period to July 1, 2005
- Information available at:
  - [www.epa.gov/fedrgstr](http://www.epa.gov/fedrgstr)
  - [www.epa.gov/airlinks/airlinks3.html](http://www.epa.gov/airlinks/airlinks3.html)
  - [www.epa.gov/compliance/resources/agreements/caa/cafo-agr-0501.html](http://www.epa.gov/compliance/resources/agreements/caa/cafo-agr-0501.html)



# Who can participate in this Agreement?

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- Eligible participants
  - Contract growers
  - Integrators
- Targeted AFO sectors
  - Swine
  - Poultry
    - Layers
    - Broilers
    - Turkey
  - Dairy
- Initial 90-day signup period extended 60 days to July 1, 2005



# This agreement will not:

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- ❑ Affect EPA's ability to respond to endangerment to public health, welfare or the environment
- ❑ Provide protection from criminal violations of environmental laws
- ❑ Affect compliance by AFOs with any requirement of the Clean Water Act
- ❑ Affect States' or citizens' ability to enforce compliance with State laws



# Participating AFO required to:

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- ❑ Pay a civil penalty (per farm)
- ❑ Contribute to nationwide emissions monitoring study
- ❑ Make farms available for monitoring
- ❑ Apply emissions estimating methodologies developed by EPA to identify applicable Clean Air Act (CAA); Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); and Emergency Planning and Community Right-To-Know Act (EPCRA) requirements
- ❑ Certify compliance with CAA permitting and CERCLA and EPCRA notification provisions



# Civil Penalty

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- Penalty is based on the number and size of farms
- Penalty ranges from \$200 - \$1000 per farm
- Penalty cap
  - \$10,000 for 1-10 farms
  - \$30,000 for 11-50 farms
  - \$60,000 for 51-100 farms
  - \$80,000 for 101-150 farms
  - \$90,000 for 151-200 farms
  - \$100,000 for more than 200 farms
- These funds go to the US Treasury and not to EPA and are not used to fund the monitoring study



# Participating AFO will receive:

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- A limited covenant not to sue for past violations of:
  - CAA permitting requirements in Title V, and Title I, and SIPs arising from emissions from animal confinement structures and agricultural livestock waste lagoons
  - CERCLA and EPCRA hazardous substance reporting requirements



# Covenant Conditions and Limits

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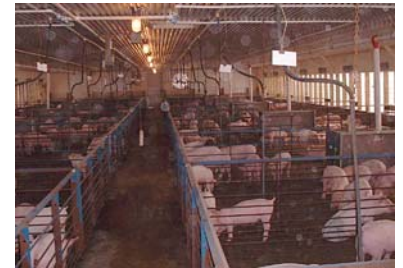
- ❑ Does not cover emissions from sources not participating in the agreement
- ❑ Allows EPA to prosecute cases that present endangerment to human health
- ❑ Applies only to past violations and terminates shortly after monitoring study is complete
- ❑ Covers only violations related to emissions from agricultural waste at emission units located at participating farms



# Covenant Conditions and Limits (cont)

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- ❑ Does not cover land application or other sources
- ❑ Does not affect permit requirements for new or modified sources
- ❑ Nullified if AFO fails to comply with State nuisance orders
- ❑ AFO subject to certain Federal or State enforcement actions may not be eligible



# Additional Protections & Benefits

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- AFO installing waste-to-energy emission control systems get additional time to apply for air permits
- Complements research into AFO air emissions to improve air quality



# How to Signup

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- Information available at:
  - [www.epa.gov/fedrgstr](http://www.epa.gov/fedrgstr)
  - [www.epa.gov/airlinks/airlinks3.html](http://www.epa.gov/airlinks/airlinks3.html)
  - [www.epa.gov/compliance/resources/agreements/caa/cafo-agr-0501.html](http://www.epa.gov/compliance/resources/agreements/caa/cafo-agr-0501.html)
- Sign and return
  - The Consent Agreement
  - Farm Information & Emission Unit Information Sheets
  - Mail to EPA
  - Signup period ends July 1, 2005

# Required Information for Signup

- Name and address of signer
- Name of owner and operator of each facility covered by the Agreement
- Location of all covered facilities
- Type and number of animal housing structures
- Type of manure handling system and number of manure storage areas
- Capacity and surface area of all manure storage areas
- Description of any emission control technology or nontraditional manure treatment system

EMISSION UNIT INFORMATION SHEET (FILL OUT ONE SHEET FOR EACH EMISSION UNIT)

Name or Farm where Emission Unit is Located: \_\_\_\_\_  
This name and/or number: \_\_\_\_\_  
Date placed in service: \_\_\_\_\_  
Design capacity (lb. of ammonia or lb. of gallons): \_\_\_\_\_  
If the emission unit is a manure storage and treatment system to use on the farm, check all that apply:  
\_\_\_ Soil bank/cover/terrestrial bioreactor system (see 102.0000, "Ammonia type")  
\_\_\_ Deep pit/aerated manure storage basin (if beyond specific types)  
\_\_\_ Anaerobic digester manure storage  
\_\_\_ Shallow pit/aerated manure storage  
\_\_\_ Deep pit/aerated manure storage  
\_\_\_ Deep pit/aerated manure storage  
\_\_\_ Manure bioreactor manure storage  
\_\_\_ Manure bioreactor manure storage  
\_\_\_ Fluidized manure storage  
\_\_\_ Other (please describe) \_\_\_\_\_  
\_\_\_ Other (please describe) \_\_\_\_\_

If the Emission Unit is a building, enclosure, or structure that permanently or semi-permanently houses agricultural livestock, check all that apply with respect to the ventilator type:  
\_\_\_ Natural  
\_\_\_ Mechanical  
\_\_\_ Other (please describe) \_\_\_\_\_

Emission Control Technology (please list type and briefly describe if applicable): \_\_\_\_\_

# Monitoring Study

- Purpose: gather data for developing emission estimating methodologies
- Funding provided by participating AFO
- Monitor for:
  - Particulate matter
  - Hydrogen sulfide
  - Volatile organic compounds
  - Ammonia
- Monitoring anticipated to begin in early 2006 and continue for 2 years
- Data made available to the public



# Monitoring Study

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- Focuses on three AFO sectors
  - Swine
  - Poultry
  - Dairy
- Types of operations
- Regional representation of AFO
- Number of farms monitored depends on the number and type of participating AFO



# Monitoring Funds

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- Funds provided by participants
- Participant pays either
  - \$2500 per farm, or
  - Pro rata share of the “Full Funding Level”
- Funds are paid into a non-profit entity
- Non-profit entity hires an independent monitoring contractor



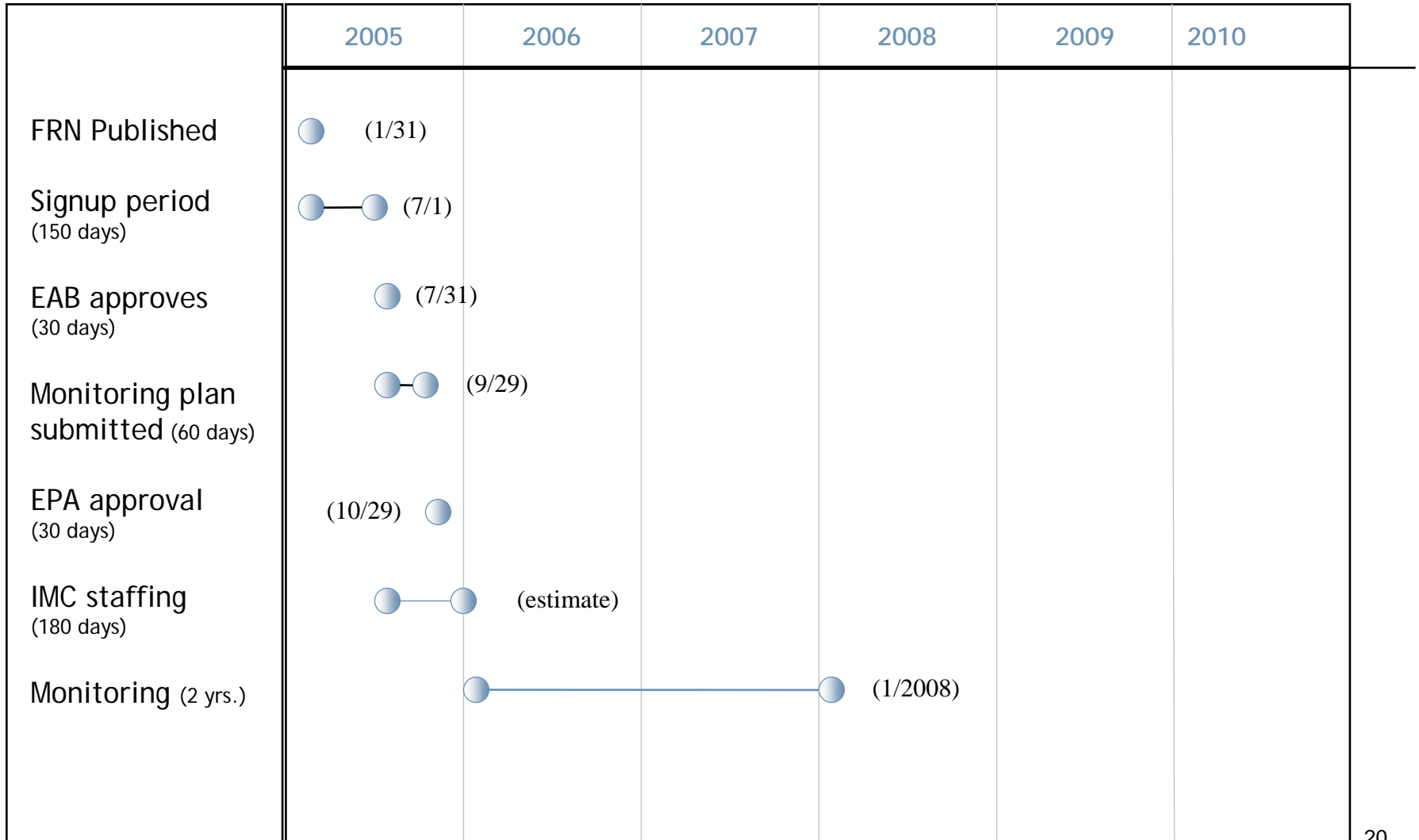
# Monitoring Plan

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- Monitoring plan:
  - Identifies the Independent Monitoring Contractor (IMC) & qualifications
  - Includes a Quality Assurance plan
  - Identifies emissions to be monitored
  - Identifies farms to be monitored
- EPA has 30 days to approve plan
- IMC has 30 days to modify and resubmit a plan disapproved by EPA



# AFO Air Quality Agreement Timeline



# Independent Monitoring Contractor

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- ❑ Develop & submit monitoring plan
- ❑ Submit quarterly reports
- ❑ Conduct periodic meetings
- ❑ Notify EPA of any problems



# Future Outlook for AFO Strategy

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- National Academy of Sciences developed recommendations to characterize all AFO processes
- Consent Agreement/Monitoring Study is just one piece of overall strategy
- Farming operations both small and large will benefit from representation in monitoring study so that their processes are included
- Air Office plans to issue strategy covering, but not limited to:
  - Regulations and/or guidance
  - Conservation practices (best management practices, technologies)
  - Emission estimating methodologies – short term
  - Process based emission model – long term
  - Outreach



# Components of AFO Strategy

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- Developing guidance and/or regulations is designed to minimize the impact of animal agriculture on air quality
- Size of farms regulated could cover small to large, depending on whether the operation is in a nonattainment area
- Collecting as much data as possible ensures guidance and/or regulations will reflect realities of various farming operations

# Timing of guidance/and or regulations

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- Emission estimating methodologies will be published within 18 months after completion of the monitoring study
- Actual guidance and/or regulations will be a 3-to-5 year process, but will be concurrently developed with the monitoring study under the consent agreement

# For More Information

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- Consent Agreement:
  - Bruce Fergusson, Office of Enforcement and Compliance Assurance (OECA), 202/564-1261, [fergusson.bruce@epa.gov](mailto:fergusson.bruce@epa.gov)
- Monitoring Study:
  - Sharon Nizich, Office of Air and Radiation (OAR), 919/541-2825, [nizich.sharon@epa.gov](mailto:nizich.sharon@epa.gov)
- Air Issues:
  - Robin Dunkins, OAR, 919/541-5335, [dunkins.robin@epa.gov](mailto:dunkins.robin@epa.gov)
  - Bill Schrock, OAR, 919/541-5032, [schrock.bill@epa.gov](mailto:schrock.bill@epa.gov)
  - Sharon Nizich, OAR, 919/541-2825, [nizich.sharon@epa.gov](mailto:nizich.sharon@epa.gov)