

Air Quality Program Development

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- ◆ 8 hr Ozone and PM2.5 NAAQS Implementation
- ◆ CAIR
- ◆ Utility Mercury Rule
- ◆ BART
- ◆ NSR Reform Rules
- ◆ AFO Workgroup Update
- ◆ Country Grain Elevators
- ◆ Dispersion Modeling Update

IOWA

Department of Natural Resources

8 hr Ozone and PM2.5 NAAQS Implementation

- **8 hr Ozone Status**
 - **April 15, 2004 Administrator signed:**
 - 8 hr ozone designations
 - Phase 1, Final Implementation Rule
 - **Phase 2: 2004?**
- **PM2.5 Status**
 - **November 2004: EPA to finalize designations**
 - **February 2005: Designations become effective**
 - **Implementation Guidance**
 - **Draft rule: Fall 2004?**
 - **Final rule: March 2005?**

8 hr Ozone and PM2.5 NAAQS Implementation

- **IA 8 hr Ozone Attainment Status**
 - Effective June 15, 2004: Attainment/Unclassifiable
 - 2000 through 2002 monitoring data
 - 1 hr revocation: 1 yr after effective 8 hr date
- **IA PM2.5 Attainment Status**
 - February 2004: IA recommends attainment/unclassifiable
 - Based on 2000 through 2002 monitoring data
 - June 2004: EPA concurs with IA
 - February 2005: Designations become effective

8 hr Ozone and PM2.5 NAAQS Implementation

- **State Activity Timeline**
 - **May 2004: Preliminary review 110 SIP elements completed.**
 - **March 2005: Complete review final ozone guidance.**
 - **January 2006: Complete review of final PM 2.5 guidance; initiate stakeholder involvement.**
 - Review rule changes
 - Develop/evaluate effected SIP program elements
 - **August 2006: Begin rulemaking process.**
 - **March 2007: Complete rulemaking process.**
 - **June 2007: Submit SIP revisions**

CAIR

- **Originally Interstate Transport Rule (December 2003)**
- **Became CAIR in June 2004**
- **Statewide NO_x and SO₂ emission reductions over next 10 years**
- **Purpose: Eliminate/reduce current and future downwind 8 hr ozone and PM_{2.5} nonattainment areas.**
- **Mechanism:**
 - Cap and trade for EGUs or
 - Equal reductions from a combination of source types
- **Final rule expected by December 2004**
 - SIP submittal: August 2006

CAIR

- **State Activities:**
 - **Provided technical comments on EPA modeling, emission inventories, and meteorological data**
 - **Verified statutory authority to adopt cap and trade programs**
- **Coordinate efforts with Transport Modeling Oversight Committee**

Utility Mercury Rule

- **Proposed March 2004**
- **Two options for EGUs:**
 - **Cap and trade program (Sec 111)**
 - **Compliance: by 2018**
 - **MACT based controls (Sec 112)**
 - **Compliance: 2007 through 2012**
- **DNR: tracking but not commenting on proposed rule**
- **Final promulgation: by Spring 2005**

BART

- BART = Best Available Retrofit Technology
- Element of federal Regional Haze Rules
- Applies to:
 - Source “built” between 1962 and 1977
 - Any of the 26 listed major stationary source types
 - Potential emissions greater than 250 tons per year of NO_x, or SO₂, or PM-10, or VOC
 - “Reasonably anticipated to cause or contribute to any visibility impairment in any ... class I area”

BART

- **BART Steps:**
 - **BART eligibility determination**
 - Meets date, type and potential emission criteria
 - **Subject to BART determination**
 - Fails state exemption test (“reasonably anticipated”)
 - **Engineering Analysis**
 - BART emission control requirement
 - Resulting visibility impact assessment
 - **Compliance options**

BART

- **Two Step Process:**
 - **Step 1: BART eligibility certification**
 - Who meets the criteria
 - Simple screening exemptions allowed by EPA
 - Start rulemaking: November 2004
 - Certification forms due by July 1, 2005
 - **Step 2: Refined BART analyses**
 - Complex exemptions allowed by EPA
 - Engineering analysis requirements
 - Start rulemaking: Spring 2005
 - Need to complete BART determinations before mid 2006
- **Coordinating rule and form development with Transport Modeling Oversight Committee**

NSR Reform Rules

- Convened technical workgroup of stakeholders with PSD experience in March 2004.
 - Task: offer recommendations and suggest alternative methods or approaches to the adoption of reform rules
 - Baseline actual emissions
 - Plantwide Applicability Limits
 - Pollution Control Projects/Clean Units
- Final recommendations due November 15, 2004
- Preliminary Recommendation: Adopt text of 40 CFR 51.165 and 51.166 into IAC
- Start rulemaking in December 2004
- SIP revision submittal due January 2005

AFO Workgroup Update

- **Purpose: increase insight, understanding, and expertise of the complex air quality technical issues related to AFOs.**
- **Convened in February 2004. Members include**
 - **Government/Regents: Iowa and Iowa State, Soil Tilth Lab, DED, Department of Public Health, EPA, DNR, EAP, State Association of Counties**
 - **Private: Iowa CCI, Sierra Club, Izaak Walton League**

AFO Workgroup Update

- **Workgroup addressing**
 - Air emissions characterization
 - Dispersion modeling
 - Best management practices
- **Product: Workgroup report that summarizes information for each area**
- **Final report expected in mid December 2004**
- **Report will be made available to public**

Country Grain Elevators

- **Developing permit templates for Country Grain Elevators**
- **Joint DNR/Agribusiness Assoc. project**
- **Three categories of templates based on storage capacity of facility**
- **Templates being developed using information from**
 - Grain Elevator Amnesty registration forms
 - PM/PM-10 bin vent testing project
 - Dispersion modeling analysis
- **Est. completion date: late 2005**

Dispersion Modeling Update

- **AERMOD Update**
 - **ISC3 still guideline model**
 - **AERMOD/ISC PRIME are alternative models**
 - **Region VII: Blanket approval to use AERMOD/ISC PRIME with state approval**
 - **DNR: Will allow use on case by case basis**
 - **Promulgation: Fall 2004?**

Dispersion Modeling Update

- **DNR Modeling Guideline**
 - Updated to reflect changes due to Kaizen and changes in construction permitting procedures
 - Reorganized (same order as input file)
 - Addresses treatment of different source types
 - Modeling exemption not changed
- **Modeling info available on-line**
 - www.iowacleanair.org
 - Guidance documents
 - Meteorological data
 - DEM files

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