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Topics

- Modeling Workgroup
- Haul Road Modeling
- PM_{2.5}

Modeling Workgroup

- April 24 – 26, 2007
- Facilitated by Iowa Department of Administrative Services
- Included DNR, local programs, EPA, industry, and consultants
- Balanced participation
 - Policy and Management
 - Permiters and Permittees
 - Experienced modelers

Modeling Workgroup Purpose

- Simplify, clarify, and improve guidance and procedures for non-PSD modeling
- Scope:
 - Modeling Guidelines, including modeling applicability procedure
 - Modeling Checklist
 - Update both for AERMOD

Workgroup Process

- Identified modeling issues and concerns
- Sub-groups addressed specific issues and revised applicable guidance
- Workgroup products reviewed by sub-groups and then workgroup as a whole
- Documents currently being reviewed by the AQB management and staff
- Expect implementation of revised guidance by mid-September

Modeling Workgroup Products

- Updated Modeling Guidelines
 - Revised format of modeling applicability determination
 - Made applicability process more transparent
- Revised Modeling Checklist
- Updated construction permit form MD
- Facilities requiring facility-wide modeling list (90% list)
 - Clarified criteria for being added or removed from list
 - Revised 90% list

Modeling Guidelines

- Updated for AERMOD and AIWG guidance
- Reflects our current practice
- Revised modeling applicability procedure – off ramps
- Existing units still modeled at actual emission rates
- Ambient air – on property easements

Facilities Requiring Modeling List (90% List)

- Existing list had been used for years
- Clarifies which facilities will be included on the list
 - SIP facilities
 - Facilities modeled within 90% of the NAAQS
 - Project at potential emissions
 - Existing units at actual emissions
 - Pollutant specific
 - List revised according to this criteria
- Clarifies how facilities can be removed from the list
 - SIP facilities only removed with SIP revision
 - Revised modeling associated with a permitting project

Haul Roads

- When to include in haul roads in modeling analyses
- How to characterize haul roads in a modeling analysis

Haul Roads – When to Include

- Required in PSD PM_{10} NAAQS and annual increment
- Not required in PSD PM_{10} 24-hour increment
- Not required in non-PSD projects unless there is a reason to believe there is a PM_{10} NAAQS problem
 - Citizen complaints
 - Ambient monitoring

Haul Roads – How to Characterize

- Volume source or area source
 - R_H = height of the tire
 - $\sigma_z = (1.5 \times \text{height of truck})/4.3$
 - $\sigma_y = (2 \times \text{width of the road})/2.15$
 - Parameters can be varied with justification
- Haul road parameters used in SIP modeling can only be changed if the trucks are changed

PM₁₀ and PM_{2.5}

- DNR will resume evaluation of annual PM₁₀ NAAQS
 - PSD immediately
 - Non-PSD October 31, 2007
- DNR had not required annual PM₁₀ NAAQS analyses since EPA revoked the annual PM₁₀ standard in October 2006
- EPA's interim PM_{2.5} implementation policy instructs that PM₁₀ should be used as a surrogate until EPA announces final PM_{2.5} implementation guidance
- EPA PM_{2.5} implementation guidance expected later this year

Questions?