

Permitting Procedures & Policy Updates



- Removing or Increasing Permit Limits
 - NDEQ will remove limits only under limited circumstances
 - Increasing limits:
 - proven burdensome or difficult to meet under normal operating conditions
 - Do not cause negative impact on NDEQ's ability to manage airshed (NAAQS or increment)
 - Be allowed by regulation
 - If revising limits also included in OP, must maintain compliance with the most stringent requirement until both permits are changed

Permitting Procedures & Policy Updates



- Permit Applications/Amending Applications
 - APP defines the scope of the project
 - NDEQ does allow limited changes to project scope early in the drafting stage
 - No changes after source review.
 - New permit application required if scope changes or additional revisions are requested.
- PM fine (PM_{2.5})
 - Evaluated during application processing
 - Included in permit documents
 - may be limited in permit

Permitting Procedures & Policy Updates



- Incorporation of Federal Standards
 - Federal Standards will be included in the operating permit as an attachment.
 - Will incorporate Federal Standards in permit at the source's request.
 - Fact Sheet will include a list of the sections of the Standard that apply based on the compliance option.
 - OPs will include a requirement to notify the NDEQ when a source changes compliance options.

Permitting Procedures & Policy Updates




Questions




Up next . . . Greenhouse Gases

GHG Overview



- Greenhouse gases (GHGs) are chemicals in the atmosphere which trap heat and may cause a rise in temperatures
 - CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ → CO₂_{equiv}
- Can be generated naturally or through human activities.
 - fuel combustion/biological activities (fermentation)
- EPA believes that GHGs have played a significant role in the environmental changes we have seen over the last 50 years.

GHG Permitting...Why now?



- “Air Pollutant”
 - Supreme Court, Massachusetts v. EPA, 2007
- “Subject to Regulation” defined
 - Jackson Memo, April 2010
- “Regulated Air Pollutant” for PSD & Title V
 - EPA has promulgated a light duty vehicle rule (LDVR) which will go into effect January 2, 2011
 - GHGs become a regulated air pollutant on this date
- It applies to EVERYONE, just like any other pollutant

GHG Permitting vs. MRR



- Not the same as GHG Mandatory Reporting Rule
 - MRR is EPA implemented
 - 25,000 metric tons (27,500 tons) or more of actual CO₂_{equiv} emissions must report electronically to EPA
 - Excludes biogenic emissions (fermentation)
- Begin reporting for CY 2010
- Sources that may be exempt from MRR will still be subject to GHG Permitting

GHG Tailoring Rule



- “Tailors” PSD & Title V (Class I) programs for GHGs
 - Promulgated June 3, 2010 (75 FR 31514)
 - Prevents a HUGE increase in Major PSD/Title V sources
 - Language “on the books”: Major Source = 100/250 tpy GHG
 - Tailoring language: Major Source = 100,000 tpy GHG
- Nebraska currently has ~100 Title V sources, expects to increase this by 30-50% with the tailoring rule
- Currently no plans for a State (minor source) GHG program
 - NDEQ will issue “avoidance” permits

Permit Thresholds (tpy)



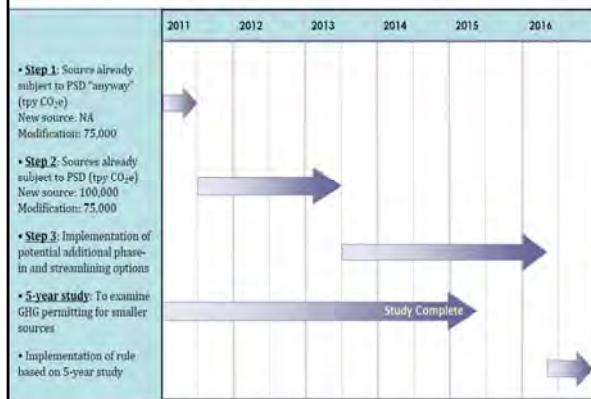
Pollutant	Title V	PSD	PSD Significance Level
PM	n/a	100/250	25
PM ₁₀ / PM _{2.5}	100	100/250	15 / 10
SO ₂ , NOx	100	100/250	40
CO	100	100/250	100
Ozone/VOC	100	100/250	40
Lead	100	100/250	0.6
HAP	10/25	n/a	n/a
GHG	100	100/250	Any Increase
GHG (tailoring)	100,000	100,000	75,000

GHG Tailoring Rule



- **Step 1:** (Jan 2, 2011 – June 30, 2011)
 - GHGs “secondary” offense: Must get pulled in by another pollutant first
 - Current Title V sources obtaining/renewing must address GHG (although no requirements yet)
 - PSD sources undergoing review for other pollutants must address GHG (if >75,000 tpy CO₂e)
- **Step 2:** (July 1, 2011)
 - Training wheels are removed, GHG alone can pull you into PSD or Title V (BACT, etc. TBD)

Permitting Steps under the Tailoring Rule



GHG Sources



- Facilities that are energy-intensive
100,000 tpy CO₂e equals a boiler capacity of:
 - 195 MMBtu/hr natural gas
 - 145 MMBtu/hr diesel
 - 110 MMBtu/hr coal
 - RICE Engines will probably Major for NO_x long before GHG
- All Ethanol plants (fuel + fermentation)
- Large Landfills may be affected
- Large CAFOs (animal + waste)?

GHG Implications for NDEQ


- NDEQ had to provide EPA a letter outlining plans by August 2nd
 - If rule can/is not adopted, EPA will be responsible for GHG piece of program on January 2, 2011
- Rulemaking is necessary to appropriately manage program
 - NDEQ plans to move forward with rulemaking in Fall 2010 that mirrors Federal program. Have effective by Jan 2, 2011
- Update application forms and instructions
- Obtain/develop training and guidance on rule, calcs, BACT, etc.

GHG Implications for Sources

- Another pollutant to consider
 - Good news? Much of the attention on how to address GHGs is through improved energy efficiency
- Many more sources brought into Title V (Class I)
 - Become subject on 7/1/11, unless a Class II permit covering GHGs is issued before this date
 - Emission fees
 - June 2012, sources will be billed for 2011 emissions of non-GHG pollutants (primarily NOx, VOC, SO2, PM10, HAPs)
 - NDEQ is in process of evaluating several different fee systems that may directly or indirectly account for GHG

Greenhouse Gas Permitting

Questions



Up next . . . Modeling Updates

Modeling Updates



- Revised Modeling guidance
 - Late 2010, incorporate guidance on new 1-hr NOx & SO2 standards, emergency equipment, haul road characterization, background concentrations, PM_{2.5}, etc.
- Haul Road Policy
 - 2009 proposed changes to policy
 - Left policy in place, no changes
- Updated Met data (AirWaves article)

Modeling the new NAAQS



- PM10 surrogacy policy is quickly fading away
 - Justification is more thorough, must show PM2.5 not possible
- Taking it a step at a time working with consultants
- Most of the effort will be done in a Modeling Protocol
- For example, the Nucor project in LA for PM2.5, the Modeling Protocol is over 70 pages in length – not a trivial step in the process.

Modeling the new NAAQS



- Modeling Protocol & Modeling Check-list has become crucial
 - Working with the facility, consultants, EPA Region 7 and NDEQ should be able to map a way forward
 - The Modeling protocol should be approached as a living document, going through many drafts until it becomes “final” once all parties are in agreement

Modeling the new NAAQS

	Lead	NO2	SO2	Ozone	CO	PM2.5
Proposal	New Schedule Being developed	Jun 26, 2009	Nov 16, 2009	Jan 6, 2010	Oct 2010	July 2011
Final	Oct 15, 2008	Jan 22, 2010	June 2, 2010	Aug 2010	May 2011	Mar 2012

Modeling Updates

Questions

Up next . . . Clean Air Transport Rule

Clean Air Transport Rule

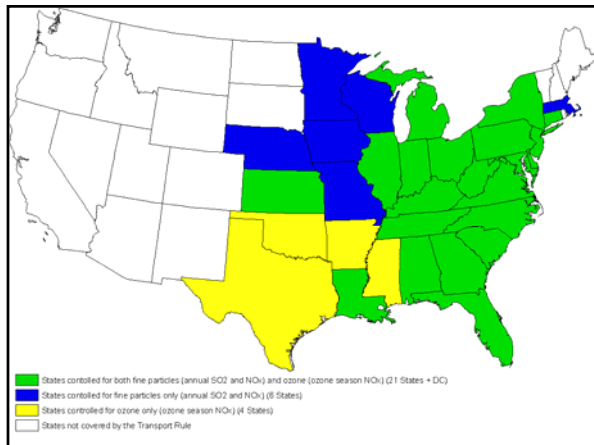
- Clean Air Interstate Rule (CAIR)
 - December 2008 court kept CAIR in place
 - Court directed EPA to issue new rule addressing issues
 - Nebraska was NOT in original CAIR program
- Clean Air Transport Rule (CATR)
 - Proposal announced July 6, 2010
 - Nebraska identified in CATR program for PM2.5
 - CATR is to address **EXISTING** ozone and PM2.5 standards **ONLY**

Clean Air Transport Rule



- EPA plans to evaluate the need to revise CATR each time the ozone and PM2.5 standards are revised
- 32 States total in CATR, Nebraska is one of 28 states required to reduce annual NOx and SO2 emissions






Clean Air Transport Rule



- EPA is fast-tracking rule adoption
- EPA proposed preferred approach, two alternatives
- Alternative #1 (EPA's preferred approach)
 - Establish emissions budget for each state
 - Allow only trading among power plants within a state



Clean Air Transport Rule 

- Alternative #2
 - Establish emissions budget for each state
 - Establish allowable limits w/ averaging for each power plant
- NDEQ will be reviewing the proposal

 **Questions**



Permit Hotline: 1-877-834-0474

Permits Section Supervisor Clark Smith, 471-4204 clark.smith@nebraska.gov	Const. Permit Supervisor Brad Reid, 471-4159 brad.reid@nebraska.gov	Modeling Lisa Alam, 471-2925 lisa.alam@nebraska.gov
--	--	--
