

# New Source Review Current Issues

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# What I Will Cover in this Talk

- Listing of useful websites for NSR information
- Listing and brief comment on a number of outstanding issues
  - 2002 reforms
  - 2007 reasonable possibility in recordkeeping
  - 2006 debottlenecking, aggregation, and project netting
  - 2007 flexible air permitting rule
  - 2007 reconsideration of inclusion of fugitive emissions
  - PM-2.5 NSR
  - Ozone nonattainment NSR
- Listing of additional issues for discussion

# Helpful Web Pages

- **NACAA site:** <http://members.4cleanair.org/>
- **EPA NSR site:**  
<http://www.epa.gov/nsr/actions.html>
- **Federal Register Air Actions site:**  
<http://www.epa.gov/fedrgstr/EPA-AIR/index.html>
- **Federal Regulations Docket site:**  
<http://www.regulations.gov/search/index.jsp>
- **Sierra Club “Stopping the Coal Rush” site:**  
<http://www.sierraclub.org/environmentallaw/coal/plantlist.asp>

# 2002 Reforms

- Baseline actual emissions (10-year lookback)
- “Actual-to-future actual” test for emission increases (replacing actual-to-potential)
- Clean unit exemption
- Plantwide applicability limits (PALs)
- Pollution control project exclusion (PCPs)
- State plans adopting these rules were due in 2006

## 2002 Reforms—Court Action in 2005

- Permissible interpretations of the CAA
  - Actual-to-future-actual applicability test
  - Use of 10-year lookback (5-yrs in some)
  - Exclusion of unrelated emissions increases due to demand growth in future emissions projections
  - The abandonment of a provision authorizing states to use source-specific allowable emissions in measuring baseline emissions
  - Actuals based PALs

## 2002 Reforms—Court Action in 2005

- Impermissible interpretations of the Act
  - Clean Unit applicability test (because it would allow increases in actual emissions without review)
  - Pollution Control Projects exemption (again because it would allow increases in actual emissions of some pollutants without review)
- EPA directed to provide clarity on “reasonable probability”
  - EPA subsequently tried to deal with this issue, but it is currently under reconsideration.

# 2002 Reforms—Remaining Issues

- EPA SIP approvals for state plans adopting the rules in nonattainment areas (backsliding?)
- EPA SIP approvals for state plans demonstrating equivalence of existing rules or modifications to the 2002 reforms
- Baseline calculation
  - 10-year lookback may have records concerns
  - Different baselines for different pollutants
  - Inclusion of emissions from startups, shutdowns, and malfunctions (lack of experience and general guidance)
- Projection of future actual emissions
  - Exclusion of demand growth (lack of experience and general guidance)
- Lack of use of the PAL provisions

# Reasonable Possibility in Recordkeeping

- In December 2007, the final “reasonable possibility” rule identified when a major source undergoing a physical or operational change not triggering major NSR permitting requirements must keep records. This final rule also specified the recordkeeping and reporting requirements on those sources.
- On February 20, 2008, the State of New Jersey petitioned EPA to reconsider and stay the final rule. The petitioner argued that:
  - EPA failed to give the notice required under both the Administrative Procedure Act and the Clean Air Act (CAA) for its decision not to require post-change recordkeeping and reporting where sources exclude certain emissions from their projections (i.e., those not related to the change) because it was not a “logical outgrowth” of the proposed rule; and
  - the final rule does not address the aspects of the NSR Rule remanded by the D.C. Circuit as, in New Jersey’s view, it remains unenforceable and unlawful.



# Reasonable Possibility in Recordkeeping

- January, 2009 Administrator Johnson denied New Jersey's petition.
- March, 2009 New Jersey resubmitted its petition.
- April, 2009 Administrator Jackson announced the rule will be reconsidered, but a stay was not issued.
- Problems with this rule are that it continues to place the decision regarding recordkeeping at the source level and then requires only pre-change records. The problem identified by the court remains—"how, absent recordkeeping, it (EPA) will be able to determine whether sources have accurately concluded that they have no 'reasonable possibility' of significantly increased emissions."

# Debottlenecking, Aggregation, and Project Netting

- Proposed in September of 2006 and Finalized in January of 2009; the rule changed (narrowed) the agency interpretation of aggregation without changing the rule itself.
- May 8, 2009 - This final rule extends until May 18, 2010, the effective date of the January 12, 2009 aggregation rule. During this time, EPA will reconsider the final aggregation rule.
- With respect to the other two components of the originally proposed rule, EPA withdrew the proposed rule options for “debottlenecking” and took no action on the proposed rule for “project netting.”

# Aggregation

- Basic goal is to prevent circumvention of the NSR process by splitting a major project into several minor projects
- While EPA is reconsidering this rule the “3M Maplewood” test remains in place
  - Economic viability
  - Technical processes
  - Physical proximity
  - Time-frame
  - Funding
- Administrative records must be kept

# Flexible Air Permitting Rule

- EPA on September 12, 2007 proposed options under the operating permits program to define and authorize the use of alternative operating scenarios (AOSs) and approved replicable methodologies (ARMs).
  - **Alternative Operating Scenarios (AOSs)** – An AOS enables a source to obtain approval to make changes to existing emissions units by including in the permit an explanation of how the facility would continue to assure compliance with the different Clean Air Act requirements. For example, an AOS for an existing boiler might allow the unit to switch from oil to coal (if it were previously capable of doing so) without a permit revision, even though the change would be subject to source to different Clean Air Act requirements.
  - **Approved Replicable Methodologies (ARMs)** – An ARM is a replicable protocol placed in a title V permit to facilitate compliance with an applicable requirement in situations that otherwise could require a permit revision. For example, an ARM could specify a replicable testing procedure for updating an emissions factor, rather than requiring a permit revision to accomplish its update. To be approvable, an ARM must deliver replicable results (usually numerical) when operating on the same input data.
- The proposal also included a new “**Green Group**” concept.

# Flexible Air Permitting Rule

- NACAA comments.
  - NACAA supports permit flexibility, but the proposal goes too far, particularly with the “Green Groups” concept.
  - Raised questions regarding the legality of portions of the proposal which will allow **unreviewed increases in actual emissions**.
- EPA “finalized” the rule in January, 2009, (minus Green Groups) but did not publish it in the *Federal Register*. Thus, it is not effective and is currently under review.

# Reconsideration of Inclusion of Fugitive Emissions

- In December 2008, EPA issued a final rule in response to an industry petition for reconsideration of the Agency's approach for including fugitive emissions in NSR applicability determinations. The final rule requires that fugitive emissions be included in determining whether a physical or operational change results in a major modification *only for sources in industries that have been designated through* rulemaking under section 302(j) of the Clean Air Act. This action changed a 2002 rule which included these emissions in determining whether a physical change at a facility was a major modification and subject to NSR requirements.

# Reconsideration of Inclusion of Fugitive Emissions—NACAA Comments

- Strong opposition to the 2008 rule for the following reasons:
  - **Unreviewed actual emissions increases would occur** under this rule.
  - No demonstrated need for the change (sources not on the 302(j) list have been including fugitive emissions in modifications calculations since 1984).
  - Consideration of fugitive emissions increases at facilities is important to protect public health.
  - Segregating fugitive emissions is unjustifiable.
  - Inclusion by EPA of a requirement that state and local agencies address this issue in minor new source review is unreasonable.

# Reconsideration of Inclusion of Fugitive Emissions

- On February 17, 2009, EPA received a Petition for Reconsideration and request for a stay from the Natural Resources Defense Council asking the Agency to:
  - Announce that EPA does not intend to require states to submit State Implementation Plan revisions to adopt the Fugitive Emissions Rule, and that states may not implement the Fugitive Emission Rule changes through mere “public announcement” that the state accepts those changes by interpretation;
  - Convene a public notice-and-comment period following reconsideration of the final rule; and
  - Withdraw and abandon the final rule.
- On April 24, 2009 Administrator Jackson granted NRDC’s petition for reconsideration and stayed the effectiveness of the rule for 3 months.



# PM-2.5 New Source Review

- EPA took three separate actions to implement the PM-2.5 standards:
  - On April 25, 2007, EPA promulgated final rule on SIP related provisions.
  - On May 16, 2008, EPA promulgated final rule on NSR provisions.
  - On September 21, 2007 EPA proposed a rule on increments, significant impact levels (SIL) and significant monitoring concentrations (SMC).
- Values of increments, SILs, and SMCs are not known in absence of EPA's final rule.

# PM-2.5 New Source Review

- New Issues
  - PM-2.5 is a subset of TSP and PM-10
  - Precursors are listed
    - SO<sub>2</sub> always, NO<sub>x</sub> presumed (except in Appendix S areas) NH<sub>3</sub> maybe
  - Not all the necessary tools are ready for NSR program
    - Increments, SILs, SMCs
    - Stack test method for condensables
    - Modeling Methodology
  - Interpollutant trading (precursors) is allowed at different ratios
- Use of PM-10 as a surrogate is allowed until issues are resolved

# PM-2.5 New Source Review

- Additional complications
  - Standard (24-hr standard strengthened) has been changed mid-stream; it is possible it could be changed further (annual standard could also be strengthened)
  - Designations for the new standard have not been finalized
  - One of the precursors, NO<sub>2</sub>, has been proposed for a strengthened 24-hr standard
  - One of the major components of the PM-2.5 SIP attainment strategy, CAIR, has been vacated, reinstated, and slated for major revision

# PM-2.5 New Source Review Reconsideration Petition

- On July 15, 2008, Natural Resources Defense Council and the Sierra Club petitioned EPA to reconsider and administratively stay specific parts of this final rule. The Petition objected to four parts of the final rule, including:
  - using the new transition schedule for PSD programs in states with PSD programs that EPA has approved;
  - “grandfathering” permit applications that were complete, before the rule’s July 15, 2008 effective date and that rely on EPA’s PM-10 Surrogate Policy, so as to continue reviewing the permit application using PM-10 emissions as a surrogate for satisfying the new PM-2.5 requirements;
  - allowing states to exclude condensable particulate matter from NSR applicability and emission control requirements until January 1, 2011; and
  - allowing states to use EPA-recommended PM-2.5 precursor trading ratios to offset PM-2.5 emissions increases in PM-2.5 nonattainment areas

# PM-2.5 New Source Review Reconsideration Petition

- On June 1, 2009, EPA published its final notice of grant of reconsideration and administrative stay of the PM-2.5 NSR rule.
  - EPA will publish a notice in the FR establishing a comment period and opportunity for a public hearing for the reconsideration proceeding.
  - EPA has administratively stayed the “grandfathering” provision for PM-2.5.
- Effective June 1, 2009, the grandfathering provision is stayed until September 1, 2009.

# The Grandfathering Provision

- (xi) The source or modification was subject to 40 CFR 52.21, with respect to  $PM_{2.5}$ , as in effect before July 15, 2008, and the owner or operator submitted an application for a permit under this section before that date consistent with EPA recommendations to use  $PM_{10}$  as a surrogate for  $PM_{2.5}$ , and the Administrator subsequently determines that the application as submitted was complete with respect to the  $PM_{2.5}$  requirements then in effect, as interpreted in the EPA memorandum entitled “Interim Implementation of New Source Review Requirements for  $PM_{2.5}$ ” (October 23, 1997). Instead, the requirements of paragraphs (j) through (r) of this section, as interpreted in the aforementioned memorandum, that were in effect before July 15, 2008 shall apply to such source or modification.

# PM-2.5 New Source Review

## NACAA Comments

- The standard was promulgated by EPA in 1997. We still are in need of emissions factors, test methods, modeling guidance, funding for speciated monitors.
- Major source applicability levels should be 25-50 TPY for areas needing five years or less to attain, and 10-25 TPY for areas needing more than five years. 100 TPY threshold for SO<sub>2</sub> and NO<sub>x</sub> precursors supported.
- Increment system recommended for PSD.
- Emissions offsets should be limited— PM-2.5 direct emissions with other PM-2.5 direct emissions and PM-2.5 precursors with the same precursor.

# Ozone Nonattainment Issues

- EPA adopted its 8-hr ozone SIP guidance in 2004. As a part of that guidance, EPA revoked the 1-hr ozone standard and the Subpart 2 NSR requirements for areas designated nonattainment under the 8-hr standard. EPA's NSR guidance for the 8-hr ozone nonattainment areas was issued in 2 parts, both of which were the subject of EPA reconsideration actions.
- In December of 2006, the United States Court of Appeals for the District of Columbia Circuit ruled to “vacate those portions of the 2004 Rule that provide for regulation of eight-hour nonattainment areas under Subpart 1 in lieu of Subpart 2 and those portions of the 2004 Rule that allow backsliding with respect to the measures addressed in Parts VI.C.1 through VI.C.5 of this opinion, and remand the matter to EPA.”



# Ozone Nonattainment Issues

- Parts VI.C.1 through VI.C.5 are:
  - New Source Review (tiered requirements based on 1-hr classifications (LAER and offsets)) (control requirements and anti-backsliding)
  - Penalties (Section 185 (a) emissions fees)
  - Milestones (rate of progress)
  - Contingency Plans (for failure to meet rate of progress or attainment)
  - Motor Vehicle Emissions Budgets (conformity determinations)
- For those areas which have failed to attain the 1-hr ozone standard, the above four requirements remain

# Additional Issues for Discussion

- Ethanol Plant emissions cutoff (100 TPY or 250 TPY and inclusion/exclusion of fugitive emissions)
- Greenhouse Gas Emissions and their future consideration in BACT/LAER determinations or New Source Performance Standards
- NSR provisions for Electric Generating Units in possible legislation (CAIR/CAMR, Climate Change)
- Future need for Routine Maintenance, Repair, and Replacement exemption (under an actual-to-future-actual applicability tests, why do you need an RMRR exemption?)
- Need for guidance on applicability calculations
- NSR rules and guidance under the more stringent standards for PM-2.5, ozone, lead, and NO<sub>2</sub>