#### **NSR Updates (PSD and NANSR)**

- Brief history/review
  - 12/31/2002 PSD/NSR Improvement Rule
    - Actual-to-Projected Actual Emissions Increase Analysis
    - Baseline Actual Emissions
    - Plantwide Applicability Limits (PALs)
    - Clean Unit Provision
    - Pollution Control Projects
  - 06/24/2005 PSD/NSR Improvement Rule –
    VACATED (only CU and PCP portions)
  - 09/14/2006 PSD/NSR Debottlenecking,
    Aggregation, and Project Netting PROPOSED

#### **NSR Updates**

- Brief history/review (cont'd)
  - 05/16/2008 PSD/NSR Implementation for PM<sub>2.5</sub>
    Under Review
  - 12/19/2008 PSD/NSR: Reconsideration of Inclusion of Fugitive Emissions Under Review
  - 01/15/2009 PSD/NSR: Aggregation Under Review
    - Project Netting no action
    - Debottlenecking withdrawn
  - 02/09/2009 PSD/NSR: Aggregation STAYED

- Part of step #1 of 2-step process (emission increase analysis)
- Will only apply prospectively
- Past policy evolved from case-by-case determinations
- No new/revised regulations, only preamble discussion

- Substantial relationship
  - Technical or economic relationship
  - Activities at same unit as a previous change are not necessarily aggregation
  - FR preamble distances this rule from the 3M memo (06/17/1993)
    - USEPA had implied that modifications cannot be presumed independent given the plant's "overall basic purpose" to make a profit

- Timing of activities
  - Closely-timed activities
    - Timing does not decide aggregation, just an indicator
    - Basis is substantial technical or economic relationship
    - Activities at same time (turnaround/outage) are not necessarily aggregated
    - FR preamble distances this rule from the 3M memo
      - USEPA had implied that activities within 12-18 months are related
    - Timing is to be used as indicator for projects that may have been split into multiple smaller projects to avoid/circumvent PSD/NSR

- Timing of activities (cont'd)
  - Time-based presumption for nonaggregation
    - >3 years apart indicates no substantial relationship
    - Based on times of NSR-avoidance permit issuance (or, if no permit, date construction commences)
    - Will only apply prospectively
    - 3-year presumptive timeframe is rebuttable if evidence of substantial relationship

### NSR Updates - Fugitive Emissions

- Decision = fugitive emissions included in determining major modification only for sources in 28 source categories (same approach for determining major source status)
- Prior Rule Language (from 12/31/2002 NSR Improvement) was to include fugitive emissions in determining major modification for all sources, regardless of source category

### **NSR Updates - Fugitive Emissions**

- Regulatory revisions:
  - "Major modification" §52.21(b)(2)(v)
  - "Baseline actual emissions" §52.21(b)(48)(i)(a), (ii)(a),
    & (iii)
  - "Projected actual emissions" §52.21(b)(41)(ii)(b) & (d)
  - "Net emissions increase" §52.21(b)(3)(iii)(c)
  - "Fugitive emissions" §52.21(b)(20)
  - Discussion of Step 1 (emissions increase) §52.21(a)(2)(iv)(b)
  - Monitoring/recordkeeping requirements §52.21(r)(6)(iii) & (iv)

- Applicability of NSR to precursors of PM<sub>2.5</sub>
  - SO<sub>2</sub> required to be regulated as precursor
  - NO<sub>x</sub> presumed regulated
  - VOC presumed <u>not</u> regulated
  - NH<sub>3</sub> presumed <u>not</u> regulated
- Major source thresholds (no changes)
  - PSD 100/250 ton/year
  - NANSR 100 tons/year

- Significant emissions rates
  - -PM<sub>2.5</sub> 10 ton/year
  - Precursors
    - SO<sub>2</sub> 40 ton/year
    - NO<sub>x</sub> 40 ton/year
    - VOC 40 ton/year
    - NH<sub>3</sub> adopted in SIP

- Condensable PM emissions
  - Not required for PM<sub>10</sub> or PM<sub>2.5</sub> during transition period (until 01/01/2011 – or sooner)
  - Any NSR permits issued, and applicability determinations performed, during transition period are not required to account for condensable emissions, unless required by SIP
  - USEPA will not revisit applicability determinations made in good faith during transition period w.r.t. condensable emissions (except SIP-required)
  - \*\*\* Be careful, to clarify basis for permit limits. If unclear presumption in Title V language, permit limits based in past on filterable only may become by default filterable and condensables.

- PSD program
  - BACT
    - No changes to regulations/policy
    - Requirements will apply to direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>X</sub> emissions
  - Increments, Significant Impact Levels, Significant Monitoring Concentrations
    - Proposed 09/21/2007, to be addressed separately
  - Air quality analysis
    - No changes to regulations/policy
    - Required to perform analysis for NAAQS
    - Will be required to perform analysis for Increment after promulgation

- PSD program (cont'd)
  - Preconstruction monitoring
    - Required for all sources, but exempt on a case-by-case basis – and use Significant Monitoring Concentrations as exemption level

- NANSR program
  - Install LAER no changes
  - Offset new emissions with creditable emissions reductions
  - Offset ratios (States may establish higher ratios)
    - Direct PM2.5 1:1
    - PM2.5 precursor with same precursor 1:1
    - NOX <> SO2 no definition, rely on local demonstration
    - NOX <> PM2.5 200:1
    - SO2 <> PM2.5 40:1
    - Interpollutant trading for offsets only NOT for netting

- NANSR program (cont'd)
  - Transition
    - After effective date (07/15/2008) State can no longer implement NANSR program for PM<sub>10</sub> as surrogate
    - Will likely implement transitional PM<sub>2.5</sub> NANSR program under 40 CFR 51 Appendix S until USEPA approves NANSR changes to SIP

- Regulatory revisions:
  - "Significant" §52.21(b)(23)(i)
  - "Regulated NSR pollutant" §52.21(b)(50)(i), (iii), (v), & (vi)
  - Exemptions §52.21(i)(1)(xi), (i)(5)(ii), & (i)(5)(iii)