Overview of New Source Review

INCLUDING PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AND NONATTAINMENT AREA NEW SOURCE REVIEW (NSR)

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What is New Source Review?

- Pre-construction permitting program
- New sources
- New modifications at existing sources
- Tool for addressing air quality problems or preventing air quality problems
- Part of the state/tribal implementation plans
Components of NSR Program

New Source Review (NSR) Program

- Major NSR in attainment areas (PSD)
- Major NSR in non-attainment Areas (NAA NSR)
- Minor NSR in all areas
Major NSR in Attainment Areas – Prevention of Significant Deterioration (PSD)

PSD functions to preserve or prevent significant deterioration of air quality

PSD is applicable for a:
- New major source; or
- Major source making major modification in an attainment area

Attainment ("Clean") Areas: Have attained the NAAQS for a given pollutant😊
Major NSR in Nonattainment Areas (NA NSR)

NAA NSR functions to enable areas to achieve NAAQS and restore air quality

Nonattainment NSR is applicable for a:
- New major source; or
- Major source making major modification in a nonattainment area

Nonattainment Areas: Have not attained the NAAQS for a given pollutant 😞
What Happens if Trigger NSR?

**PSD** – In addition to permit:
- Best Available Control Technology (BACT)
  Max degree of reduction that is achievable on a case-by-case basis (includes consideration of costs and other impacts)
- Modeling to show no violation of NAAQS and that PSD “increment” is not consumed
- Other environmental impacts analysis (visibility, soils, vegetation)
What Happens if Trigger NSR?

**NAA NSR** – In addition to permit:

*Lowest Achievable Emissions Rate (LAER)*

- Stricter of most stringent emission limit in State’s rules or achieved “in practice” within source category (generally does not consider economics or other factors); tougher than BACT

- Emission offsets (emission reduction credits)

- Cost/benefit analysis
Prevention of Significant Deterioration Permit Requirements

Main requirements:
- Install Best Available Control Technology (BACT)
- Perform air quality analysis to assess impacts on air quality
- Assess impacts on national parks & wilderness areas
- Allow for public involvement opportunities
Nonattainment NSR Permit Requirements

Main requirements:
- Install Lowest Achievable Emission Rate (LAER) technologies
- Obtain emission offsets
- Perform alternative sites analysis
- Requires a net air quality benefit from the project
- Allow for opportunities for public involvement
Netting

- Complex, but basics are:
- Net emissions change = emissions increases from the project, plus “creditable” emissions increases and decreases at the facility over the past 5 years
- If net emissions change equals/exceeds the significance thresholds, there is a significant net emissions increase and NSR applies
http://www.epa.gov/nsr/info.html
QUESTIONS?