

Guidance for Implementing 1-hour NO₂ NAAQS for PSD

Part 1: General Permit Guidance

Webinar July 15, 2010

Content of General Permit Guidance

- Air Quality Based Emissions Limits
- Compliance Demonstration
- Air Quality Offsets
- GEP Stack Height & Dispersion Techniques
- Operation of Emergency Equipment & Startup Conditions
- Screening Tools

Air Quality Based Emissions Limits

- Normal top-down BACT analysis may not be sufficient to address air quality concerns for new 1-hour NO₂ NAAQS
- Some sources may need to consider limits driven by air quality impacts

Compliance Demonstration

- Where modeled violations occur, source may demonstrate that it does not have significant contribution (spatially and temporally) to a modeled NAAQS violation
- Where a source does “cause or contribute to” a modeled violation, source may mitigate its impact by obtaining additional emissions reductions --
 - At source
 - At other existing sources (air quality offset)

Air Quality Offsets

- 40 CFR 51.165(b) provides that a source may “compensate for its adverse air quality impact”
- Air quality offsets are not same as emissions offsets (nonattainment NSR)
 - Based on air quality impact rather than emissions ratio
 - Take into account the modeling procedures for the form of the 1-hour NO₂ NAAQS

GEP Stack Height & Dispersion Techniques

- Raising stack heights to GEP is allowed for establishing source impact consistent with statutory provisions for dispersion
- A source cannot take credit for stack height greater than actual height, and for that portion of actual stack height in excess of GEP
- *De minimis* GEP stack height = 65 m, measured from ground level elevation
- A GEP stack height > refined formula height ($H + 1.5L$) may be approved when shown to be necessary to avoid “excessive concentrations” of NO₂ cause by downwash, wakes or eddies

Operation of Emergency Equipment & Startup Conditions

- EPA presently provides no exemption from complying with NAAQS during periods of (1) testing/maintenance or actual emergency operation, and (2) startup
- Some mitigation of impacts may be possible via enforceable limitations on scheduling of operations
- Direct questions to applicable permitting authority to determine most current modeling guidance

Screening Tools

- Significant Emissions Rate (SER)
 - EPA recommends use of existing SER [40 tpy]
 - SER is not applicable to a particular averaging time
 - EPA will assess need to revise existing SER for NO_x emissions based on short-term impacts
- Significant Impact Level (SIL)
 - EPA intends to use interim *de minimis* value of 4 ppb, NO₂, for permit analyses via 40 CFR 52.21
 - States have discretion to use this interim value or another that they can justify for their jurisdiction
 - Form of the standard has implications on the application of the SIL; refer to available guidance
 - EPA will promulgate a final 1-hour NO₂ SIL via notice and comment rulemaking

Contact Information

- For follow-up questions regarding policy guidance in Attachment 1 of June 29, 2010 Memo, contact:

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