

Air Permitting Overview

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Air Permitting

- New Source Review (NSR) Construction Permits
- Title V Operating Permits
- State-Specific Names for Permits
 - Examples include Permit to Install (PTI), Renewable Operating Permit (ROP), and Clean Air Act Permit Program (CAAPP)

What is New Source Review (NSR)?

- Permit for new construction or new modification to a stationary source
 - **Prevention of Significant Deterioration (PSD)** requirements apply to new major sources or major modifications in attainment and unclassifiable areas
 - **Nonattainment NSR (NNSR)** requirements apply to new major sources or major modifications in nonattainment areas. This includes sources with emissions of nonattainment precursors.
 - **Minor source NSR** permits apply to non-major new sources or modifications.
- * PSD/NSR does not apply to hazardous air pollutants (HAPS)

PSD Requirements

- Best Available Control Technology (BACT)
- Air Quality Analysis
 - NAAQS
 - PSD Increment
- Class I Area Analysis (if necessary)
- Additional Impacts Analysis
- Public Comment Period

Nonattainment NSR Requirements

- **Lowest Achievable Emission Rate (LAER)**
 - More stringent than BACT, does not consider cost
- **Emission Offsets**
 - At least a 1 to 1 ratio
- **Public Comment Period**
- **Alternative Siting Analysis**
- **Compliance Certification**

Also Included in NSR Permits

- Sufficient Monitoring, Recordkeeping, Reporting to Assure Compliance
- Construction permits typically include other CAA requirements applicable to the source/modification
 - SIP Requirements
 - Federal Emission Standards (NSPS/NESHAP)

NSR Major Source Thresholds

- PSD
 - 250 tpy for most sources
 - 100 tpy for 28 source categories
- Nonattainment NSR
 - 100 tpy
 - Lower thresholds for serious, severe, extreme areas
- Major Modifications to Existing Major Sources
 - Threshold varies by pollutant (i.e.; 40 tpy SO₂, 10 tpy PM_{2.5}, 0.6 tpy lead)

What Is a Title V Operating Permit?

- Permit to Operate for Major Sources
- Includes All Clean Air Act Requirements in Single Permit
 - SIP Requirements
 - Federal Emissions Standards (NSPS, NESHAP)
 - Construction Permits Requirements
- Permits Renewed Every 5 Years

Title V Requirements

- Title V Permits Cannot:
 - Establish New Requirements
 - Revise Existing Requirements
- Permits Must Include Monitoring, Reporting, Recordkeeping Sufficient to Assure Compliance
 - These can be newly established in Title V permits
- Public Participation and EPA Review Period
- Objections and Petitions to Object

Title V Major Source Thresholds

- 100 tpy for criteria pollutants
 - Lower thresholds in serious, severe, extreme areas
- 10 tpy of a single HAP
- 25 tpy of any combination of HAPs
- Other Title V Triggers
 - Examples: Sources subject major PSD/NNSR, Acid Rain Program Sources, some NSPS/NESHAP standards

Limiting Potential to Emit

- “Synthetic Minor” NSR Permits
 - Construction Permits with Limits to Avoid PSD or NNSR
- Federally Enforceable State Operating Permits (FESOPs)
 - Permits with Limits to Avoid Title V
- Limits Must Be Enforceable As a Practical Matter
- Public Comment Period

State Permit Program Approvals

- SIP-Approval of State Permitting Rules
 - Construction Permit Rules (PSD, NNSR, Minor NSR)
 - FESOP Rules
- Delegated Programs
 - Some states implement PSD via delegation of federal rules (40 CFR 52.21)
- Title V Program Approvals
 - EPA approval of state rules listed in Part 70, App. A
 - State Title V rules are NOT part of the SIP!

Statutory & Regulatory Authority

- **PSD Permits**
 - Clean Air Act: Title I, Part C
 - 40 CFR 51.166, 40 CFR 52.21
- **Nonattainment NSR Permits**
 - Clean Air Act: Title I, Part D
 - 40 CFR 51.165, 40 CFR Part 51, App. S
- **Title V Permits**
 - 40 CFR Part 70, Title V of the Clean Air Act
- **Minor NSR Permits**
 - 40 CFR 51.160-164