

Time Again for NSR/PDS Reform?

David Shanks

2017 Missouri Air Compliance Seminar

March 2, 2017

Summary of Major New Source Review

Nonattainment New Source Review

- ▶ New sources and major modifications in nonattainment areas
- ▶ Lowest Achievable Emission Rate (LAER)
- ▶ Emission increase offset by decreases at same or other sources. Offset ratio set by severity of nonattainment

Prevention of Significant Deterioration

- ▶ New sources and major modifications in attainment areas
- ▶ Best Available Control Technology (BACT)
- ▶ Monitor existing air quality and model to show minimal impact

NSR Reform in 2002

George W. Bush Administration

- ▶ First proposed in 1996, the 2002 reforms focused on major modifications for existing sources:
 - ▶ Use projected future actual emissions, rather than theoretical potential to emit to calculate emissions increase
 - ▶ Allow longer baseline lookback period to determine past emissions
 - ▶ Lookback was 2 years immediately preceding the project. Revised to any 24 month period in preceding 10 years (5 years for EGUs)
 - ▶ Introduced Plantwide Applicability Limitations (PAL) permits to anticipate future changes and perhaps avoid future major NSR permitting
- ▶ Two provisions did not survive court challenge:
 - ▶ Pollution Control Projects—reductions in one pollutant cause collateral increase in another
 - ▶ Clean Unit Exemption—for modifications that had emission controls comparable to BACT/LAER

Subsequent NSR Reform Attempt

- ▶ EPA attempted a regulatory definition for exempt Routine Maintenance, Repair, or Replacement (RMRR)
 - ▶ To replace case-by-case determinations, which were often challenged in court
 - ▶ Court decisions were highly variable. Some considered 5 factors from WEBCO (Wisconsin Electric Power v. Reilly) decision, but a court in *Detroit Edison* case considered 27 sub-factors
- ▶ EPA rulemaking did not survive court challenge
 - ▶ D.C. Circuit Court of Appeals voided Equipment Replacement Rule in March 2006
- ▶ EPA and Dept. of Justice pursued electric utilities particularly, using a narrow reading of RMRR, resulting in large settlements

NSR Reform Today

Presidential Memorandum 24 Jan 2017 titled “Streamlining Permitting and Reducing Regulatory Burdens on Domestic Manufacturing”

- ▶ Secretary of Commerce (Wilbur Ross’ Senate vote this week) has 60 days to engage stakeholders on federal actions to streamline permitting and reduce regulatory burdens on domestic manufacturers
 - ▶ EPA is a key named participant. Not just air permitting.
- ▶ Secy. of Commerce has 60 additional days to submit a report to the President, setting a plan to streamline federal permitting processes for domestic manufacturing
 - ▶ May include recommendations for changes to existing regulations or statutes, as well as:
 - ▶ Policies, practices, or procedures that can be changed immediately under existing authority
- ▶ Report by late June?

Priority of NSR Reform?

- ▶ Early Presidential priorities are elimination of Clean Power Plan and “Waters of the US” definition
- ▶ However, on 24 January, President Trump met with auto industry CEO’s, saying:
 - ▶ some in industry “go many, many years and they can’t get their environmental permit over something that nobody ever heard of before, and it’s crazy”
 - ▶ the current situation is “out of control”

Drivers for NSR Reform

Scarcity/cost of offset credits in some NA areas are an impediment to growth

Houston \$150K-\$200K/ton VOC

\$80K-\$100K/ton NOx

Average cost in California:

Santa Barbara \$125K/ton NOx

South Coast \$63,014/ton NOx

Ventura \$50,938/ton VOC

San Joachin \$36,519/ton NOx

South Coast \$23,462/ton VOC

Bay Area \$14,643/ton NOx

www.arb.ca.gov/nsr/erco/erc14.pdf

- ▶ 5 year NAAQS review cycle keeps some cities in perpetual nonattainment (St. Louis)
- ▶ Lower ozone and PM_{2.5} NAAQS, along with regional and international transport reduces allowable PSD increment
- ▶ Significant variation in average processing time for natural gas EGU:
 - ▶ 7 months in Region 7 states
 - ▶ 19 months in Region 9 states

Drivers for NSR Reform

“New Source Bias”

- ▶ To the extent that existing NSR/PSD programs impose high transaction costs, delayed decisions, and uncertain outcomes, it may be more economic and less risky to continue operating old, inefficient, and higher polluting sources than to build new facilities or upgrade equipment
 - ▶ Perverse result: emission reductions are delayed

Nonattainment Designations Matter

LAER and Offsets often a higher hurdle than PSD

- ▶ States have submitted boundary recommendations for 2015 ozone NAAQS
- ▶ EPA will send states “120 day letters” in June 2017
 - ▶ Agreement, disagreement, or questions on state recommendations
 - ▶ EPA can consider 2016 ozone season ambient data
 - ▶ Expect disputes about western ozone incursions, exceptional events, rural areas receiving transported O₃
- ▶ EPA designations final in October 2017

Ideas Floated for Regulatory/Guidance Reform

PSD Air Quality Modeling—time-consuming, expensive, and often subject to federal EPA review

- ▶ Photochemical modeling for individual source secondary pollutant formation (ex. ozone and $PM_{2.5}$) is at cutting edge of atmospheric science
 - ▶ Draft EPA Modeled Emission Rates for Precursors (MERP) Guidance and Significant Impact Levels (SILs) are attempts to reduce the need for detailed source-specific modeling for smaller PSD sources. Not well settled
- ▶ Final Appendix W enhancements to Air Quality Models Guideline, published Jan. 17, 2017 is on regulatory freeze. Some revisions would address over-prediction
 - ▶ Final version did not incorporate low wind speed options as default models. These options would be subject to case-by-case review by EPA Model Clearinghouse and attendant delays. A reconsideration petition is possible, if reissued as is

Ideas Floated for Regulatory/Guidance Reform

Probabilistic Modeling (Monte Carlo)

- ▶ Rather than modeling a PSD source at maximum allowable operating conditions, with nearby sources operating likewise, all at a time when weather conditions are most conducive to ambient impacts
 - ▶ Unlikely that all of these conditions will occur simultaneously. Monte Carlo analysis makes use of probability distributions for these events.
 - ▶ Useful for short term 1 hour, 8 hour, or 24 hour NAAQS, not annuals

Ideas Floated for Regulatory/Guidance Reform

Broaden the Base of Available NNSR Offsets for Transported Pollutants

- ▶ Use long-range transport studies (CSAPR, LADCO, etc.) to support use of out-of-area offsets, rather than requiring case-by-case modeling studies to satisfy EPA that emissions from out of area contribute to NAAQS nonattainment
- ▶ State set-aside of some portion of SIP reductions to be used as offsets for economic growth, assuming RFP reductions are already satisfied
- ▶ More important where offset credits are scarce or are extraordinarily expensive
 - ▶ Plant shutdown credits in St. Louis NA area are available, despite 3% annual haircut in MO rule. Costs/ton are unknown, given lack of purchase history (NNSR avoidance within St. Louis metro area)

Ideas Floated for Regulatory/Guidance Reform

- ▶ Consistent treatment of permit applications that are pending when new NAAQS is issued (grandfathering)
 - ▶ If the NAAQS is lowered after a permit application is deemed complete, but not yet issued, must the source re-do its air quality modeling to show it will not cause or contribute to violation of the new NAAQS?
 - ▶ EPA memo issued after 2010 NO₂ NAAQS said yes
 - ▶ A state-by-state decision prior to 2010
 - ▶ EPA did not provide for grandfathering in 2010 one hour NO₂ NAAQS, but did include an explicit grandfathering provision in the 2015 ozone NAAQS.
 - ▶ Worst case: applicant prepares application for PSD, but while pending, the lower NAAQS puts the area into nonattainment. Start again with a NNSR application?

Ideas Floated for Regulatory/Guidance Reform

EPA provide implementation rules and modeling guidance at the time the NAAQS is revised

- ▶ EPA has not accomplished this in the past
 - ▶ 70 ppb ozone NAAQS issued in October 2015
 - ▶ Implementation rule proposed November 2016
 - ▶ Comment deadline Feb. 13, 2017. Disparate comments indicate likelihood of litigation on final rule
- ▶ Provides a roadmap for sources considering new construction or major modification

Statutory Reform Ideas

Emission fees in lieu of obtaining offsets

- ▶ Fees paid to state or local agency pay for or subsidize emission reductions that will most effectively lead to attainment
 - ▶ Valuation of fee/ton offset credit highly localized and precursor dependent
 - ▶ Reductions could be from mobile or area sources, not just stationary major sources. California and Texas administer clean air funds (not from NSR offset fees) that pay for engine retrofits, alternative fuel and CNG fueling stations, etc.

Statutory Reform Ideas

Emission Fees in Lieu of NSR Permitting

- ▶ Valuation calculations more difficult, but annual fees are more predictable than NSR, and drive sources to continual improvement in emission levels.

Statutory fee approaches and other NSR ideas are discussed in detail in 47 ELR 10026, Environmental Law Reporter, “EPA’s New Source Review Program: Time for Reform?” by Art Fraas, John D. Graham, and Jeff Holmstead

Chances for Revision of Clean Air Act in Near Term

- ▶ Rep. John Shimkus (R-IL), Chair of House Energy & Commerce Committee environmental panel thinks bipartisan compromise is possible on Brownfields Redevelopment, but not Clean Air Act
 - ▶ Bills introduced by other House members to expand NAAQS review cycle to 10 years, delay implementation of 2015 ozone NAAQS, allow technical feasibility to be considered in setting NAAQS, and eliminate EPA, have Senate Democrats ready to block any changes to the Clean Air Act

Comments or Questions?