

New Source Review Rulemakings & Court Decisions

The federal New Source Review (NSR) program imposes preconstruction permitting requirements on new major stationary sources and major modifications to major stationary sources. The process is intended to ensure that compliance with National Ambient Air Quality Standards (NAAQS), or progress in attaining the NAAQS, is not compromised when larger, “major” air emissions sources are modified or newly constructed. Major sources are those with the “potential to emit” certain pollutants over thresholds established in the regulations. Potential to emit means emissions at maximum plant capacity, assuming full-time operations. For example, a pulp and paper mill with the “potential to emit” over 100 tons per year of sulfur dioxide is a major stationary source for that pollutant.

The permitting requirements differ depending how the air quality in an area is classified. Prevention of Significant Deterioration (PSD) requirements apply in areas where air quality meets the NAAQS. Nonattainment area permit requirements apply in areas that do not. Most areas in the Pacific Northwest are in attainment, so major new sources and major modifications generally require PSD permits. Obtaining a PSD permit entails conducting detailed impacts modeling analyses and having to accept emission limits that can only be met by installing “best available control technology” (BACT). (Note: In Washington, new non-major sources and non-major modifications are generally also required to meet BACT).

The NSR program has gone through five roughly-drawn and overlapping phases since its inception over 25 years ago: initial legislation and regulation, EPA guidance and interpretation, federal enforcement initiatives, regulatory reform efforts, and litigation over new rulemaking and enforcement cases. In the 1970s and early 1980s, Congress and EPA issued the laws and regulations that form the basis for the NSR program. These rules, however, left many open questions. During the 1980s and 1990s, therefore, EPA issued hundreds of case-by-case determinations interpreting the rules.

In the 1990s EPA concluded that there was massive noncompliance with NSR requirements, finding that many sources had undertaken modifications without seeking permits or applicability determinations. This led to industry-specific enforcement initiatives by EPA and DOJ. After reaching settlement with wood products companies, EPA set its sights on refineries and utility companies with coal-fired power plants. Also through the 1990s, EPA and stakeholders reached general agreement that the NSR program needed revising, leading to a multiyear effort to revise the rules. This finally resulted in issuance of the NSR Reform rulemaking at the end of 2002, which was promptly challenged in court. NSR issues have kept courts busy throughout the decade, as EPA issues more NSR rule changes, resulting in more challenges, and as the utility industry enforcement cases work their way through the courts.

Initial Legislation & Regulation

1970 – Congress passes the Clean Air Act, directing EPA to promulgate New Source Performance Standards (NSPS) for new and modified sources.

December 23, 1971 – EPA issues NSPS regulations defining “modification” as any physical or operational change to a facility that results in an increase in the maximum hourly emission rate for the unit.

August 7, 1977 – Congress amends the Clean Air Act, adding the PSD and Nonattainment area (NAA) permitting programs.

August 7, 1980 – In response to a challenge to its initial PSD/NAA regulations, EPA issues revised rules, requiring permits for a “major modification.” The rules define modification for PSD purposes as “any physical change in or change in the method of operation” of a major stationary source that would result in a significant net emissions increase in emissions of a regulated pollutant (an increase over established thresholds). In contrast to the NSPS regulatory definition, in which the increase is to be based on the maximum hourly emission rate (an hourly test), PSD applicability hinges on whether actual ton per year emissions of a pollutant will increase as a result of the change (an annual test). The rule exempts, among other things, “routine maintenance repair and replacement” (RMRR), which is not considered to constitute a physical or operational change. The rules do not, however, define RMRR.

EPA Interpretation and Guidance

1980s – EPA issues hundreds of case-by-case NSR applicability determinations, creating a body of evolving, sometimes inconsistent guidance on NSR issues. Among the most important and controversial interpretations is the conclusion that companies must evaluate whether a physical or operational change results in a significant net emissions increase by comparing actual annual emissions before the change (average emissions over the two years before the change) with *potential emissions* after the change – the so-called “actual-to-potential” test. This approach increases the chances of triggering NSR by having a significant net emissions increase because it requires comparing past actual emissions, which may be well under the unit’s full capacity, with the unit’s potential to emit at maximum capacity. Copies of these determinations, including those issued through the 1990s and 2000s, are available in downloadable database from the EPA Region 7 website at: <http://www.epa.gov/Region7/programs/artd/air/nsr/nsrpg.htm>.

September 9, 1988 – EPA issues a case-by-case applicability determination for the Wisconsin Electric Power Co. (WEPCO) Port Washington facility, concluding that a life extension project at the plant cannot be excluded from NSR as routine replacement. The determination reaffirms EPA’s position that emissions increases are to be determined by comparing past actual emissions with future potential emissions, rejecting WEPCO’s claim

that EPA should instead compare representative actual emissions before the change with projected actual emissions after the renovations. WEPCO sues in response.

October 31, 1989 – First Circuit issues opinion in *Puerto Rican Cement Co. Inc. v. EPA*, 889 F.2d (1st Cir. 1989), upholding EPA’s interpretation that an emissions increase for NSR purposes is to be measured by comparing past actual emissions with future potential emissions.

January 19, 1990 – Seventh Circuit Court of Appeals decides the WEPCO case (*Wisconsin Electric Power Co. v. Reilly*, 893 F.2d 901 (7th Cir. 1990)), finding that the renovation project cannot be considered routine. While siding with EPA on the exclusion issue, the Court remands to EPA the test used to determine the scope of the emissions increase, rejecting the actual-to-potential test as EPA applied it to a utility unit.

October 1990 – EPA issues the “Draft New Source Review Workshop Manual,” (aka “The Puzzle Book”), prepared by the EPA Office of Air Quality Planning and Standards (OAQPS).

July 21, 1992 – In response to the *WEPCO* remand (and the circuit court split on the actual-to-potential test), EPA adopts a new test for utility units only: an “actual to future actual” emissions calculation methodology for determining whether non-routine physical or operational changes at utilities (other than replacing a unit or installing a new unit) trigger NSR. EPA limits the new test to utility units because they have sufficient data to make projections based on historical capacity utilization. Non-utility units are still required to use an actual-to-potential test to calculate emissions increases.

1992 - 1996 – Stakeholders participate in meetings to discuss changes to the NSR rules. In 1996 EPA issues a proposed rule to simplify NSR.

May 23, 2000 – EPA issues an applicability determination for the Detroit Edison “Dense Pack” project, setting a five factor test for determining applicability of the RMRR exclusion, weighing the nature, extent, purpose, frequency, and cost of the project to arrive at a case-by-case determination as to whether the project is excluded from NSR as routine.

Enforcement Initiatives

1993-2000 – EPA initiates and settles NSR enforcement actions against wood products companies.

Mid-1990’s – EPA begins investigating the coal-fired electric utility industry and begins its NSR Petroleum Refinery Initiative.

November 3, 1999 – DOJ files seven enforcement actions in U.S. District Courts against large utility companies, including AEP, Ohio Edison, Cinergy Corp., and Southern Indiana

Gas & Electric, alleging widespread violations of NSR, NSPS, and “minor source” permitting and pollution control requirements.

2000 – DOJ files an NSR enforcement action against Duke Energy.

Regulatory Reform Attempts

December 31, 2002 – EPA issues the NSR Reform rule, establishing four new applicability provisions for modifications at existing emission units. The most significant new provision creates an actual-to-projected-actual test for determining whether a physical or operational change will result in an emissions increase, in which sources can compare “baseline actual emissions” with projected future actual emissions, rather than future potential emissions. The rule provides further flexibility, and more opportunity to avoid NSR, by allowing sources to use average annual emissions during any consecutive 24-month period within the past 10 years as the baseline. In addition, the rule allows sources to exclude from future actual emissions projections increases due to unrelated demand growth. The rule also requires a source to track emissions for 5 or 10 years, depending on the circumstances, to confirm the future emissions projection if there is a “reasonable possibility” that the change may result in a significant net emissions increase. (Note: in Washington, the Department of Ecology requires all sources using the actual-to-projected-actual test to track future emissions). In addition to changes to existing sources, the actual-to-projected-actual test is available for a replacement unit, as long as it doesn’t significantly change the nature of the unit. Another new provision, Plantwide Applicability Limits (PALs), provides a voluntary alternative for determining NSR applicability for sources willing to take an enforceable cap on actual emissions of a pollutant for the entire source for 10 years. The remaining new provisions – the Clean Unit test and exclusion for Pollution Control Projects – are vacated in June 2005 by the D.C. Circuit Court and are no longer part of the NSR regulations.

October 27, 2003 – EPA issues Equipment Replacement Provision rule, creating a “bright-line” test for determining NSR applicability for replacing equipment. Under the test, equipment replacement is exempt as routine replacement if the cost doesn’t exceed 20% of the total replacement value of the entire process unit. This rule is later vacated by the D.C. Circuit Court.

Litigation over Rulemaking and Enforcement Cases

December 24, 2003 – D.C. Circuit Court stays the effective date of EPA’s final Equipment Replacement Provision.

December 31, 2003 – Fourteen states, led by New York, file suit in D.C. Circuit Court challenging the NSR Reform rules (8 states intervene on EPA’s behalf).

July 1, 2004 – EPA grants reconsideration of the Equipment Replacement Provision rule.

June 6, 2005 – EPA concludes that no changes to the final Equipment Replacement Provision (ERP) rule are necessary, stating that the Clean Air Act definition of “modification” is vague. On March 17, 2006 the D.C. Circuit Court rejects this interpretation and vacates the ERP.

June 15, 2005 – Fourth Circuit Court rules, in *U.S. v. Duke Energy Corp.*, on EPA’s appeal of a federal district court decision in a case brought by EPA as part of its NSR enforcement initiative. The Court upholds the lower court’s ruling that there must be an increase in the maximum emissions rate (an hourly test) for a change to potentially trigger NSR permitting. The Supreme Court reverses this decision on April 2, 2007.

June 24, 2005 – D.C. Circuit Court in *New York v. EPA*, 413 F.3d 3 (D.C. Cir. 2005) (“*New York I*”), rules on challenges to the 2002 NSR Reform Rule. The Court vacates the Clean Unit applicability test and the Pollution Control Project (PCP) exemption, but upholds the actual-to-projected-actual test to determine emissions increases, the 10-year lookback period for selecting the two-year baseline for measuring past actual emissions, the Plantwide Applicability Limitations, and excluding from future actual emissions projections increases due to unrelated demand growth. The Court remands the “reasonable possibility” recordkeeping provisions to EPA to provide an acceptable explanation or devise an appropriate alternative.

October 2005 – EPA proposes issuing a rule that would, for electric generating units (EGUs) only, substitute the NSPS test under which emissions increases are determined by comparing “maximum achievable hourly emissions” before and after a change for the “actual-to-projected-actual” emissions increase test under the 2002 rule.

March 17, 2006 – D.C. Circuit vacates EPA’s final Equipment Replacement Provision (ERP) rule, because Congress clearly intended for “any physical change” resulting in an emissions increase to be a modification, not just those valued at more than 20% of a plant’s replacement cost. *New York v. EPA*, 443 F.3d 880, 890 (D.C. Cir. 2006) (“*New York II*”). The Court finds that Congress intended the RMRR exemption to be a *de minimis* exception, but confirmed that EPA remains authorized to make case-by-case *de minimis* exceptions under the RMRR exclusion. In April 2007, the Supreme Court declines to review this decision.

August 17, 2006 – Seventh Circuit rules that the emissions increase test to apply to the 1980 NSR rules is whether there is an annual increase in actual emissions. *U.S. v. Cinergy Corp.*, 458 F.3d 705 (7th Cir. 2006). This creates a circuit split with the 4th Circuit, which, in April 2007 the Supreme Court resolves consistent with the 7th Circuit’s finding.

September 24, 2006 – EPA issues proposed rule addressing debottlenecking, aggregation, and project netting (all elements involved in evaluating whether a particular change will result in emissions increases). 71 Fed. Reg. 54235. EPA might issue a final rule in Fall 2007.

March 8, 2007 – EPA issues proposed rule on “reasonable possibility” recordkeeping in response to D.C. Circuit Court remand in *New York v. EPA*, proposing two alternative options to clarify what constitutes a “reasonable possibility” that a change might result in a net emissions increase, thus triggering the requirement to track future emissions to ensure that they do not exceed the applicable threshold for a major modification. Under the first alternative, the “percentage increase trigger,” the emissions tracking obligation would apply if the increase in a pollutant is 50% or more (or some other percentage) of the significance level. Under the second, the “potential emissions trigger,” tracking would be required if a source’s potential emissions were above the significance level. EPA prefers the first alternative.

April 2, 2007 – U.S. Supreme Court rules in *Environmental Defense v. Duke Energy Corp.*, 549 U.S. ___ (2007), that there is a “modification” if planned changes to emission sources increase annual emissions, rather than maximum hourly emissions, overruling the 4th Circuit’s holding in *U.S. v. Duke Energy Corp.* The Court rules that EPA need not interpret “modification” for PSD purposes the same way it interprets the term in the NSPS regulations, pointing out that while the “major modification” definition in the PSD regulations does not specify a rate, when a rate is mentioned, such as in the definitions of “significant” and “net emissions increase,” the rate is annual, not hourly. While the decision effectively removes this defense for utilities still litigating over NSR enforcement actions, it implies that EPA could revise the PSD regulations to provide for an hourly test (as it has proposed for electric generating units). The Court appears to accept EPA’s authority to define “modification” in the NSPS regulations to require an hourly test. This implicit acceptance that the statutory definition does not mandate an annual test indicates that the Court may uphold regulations that impose an hourly test in the PSD context. The Court also points out that Duke Energy claims that EPA has “taken inconsistent positions and is now ‘retroactively targeting 20 years of accepted practice,’” and notes that, to the extent no procedurally foreclosed, Duke may press this claim on remand. If Duke had won, the utility NSR initiative would have faded quickly, as a majority of the changes that are the subject of enforcement would not trigger NSR under the hourly test. The Duke loss, however, will likely extend the litigation, with the focus shifting to other defenses, such as fair notice, and the scope of the RMRR exemption.

April 30, 2007 – Supreme Court rejects petitions from EPA and a coalition of major power providers asking the Court to overturn the D.C. Circuit Court decision in *New York v. EPA* (“*New York II*”), which invalidated EPA’s 2002 Equipment Replacement Provision (“ERP”) rule.

May 8, 2007 – EPA issues a supplemental proposal on revising the test for determining emissions increases from electrical generating units from an annual to an hourly test. 72 Fed. Reg. 26202.

June 5, 2007 – EPA removes from the federal regulations elements of the NSR Reform Rule vacated by the D.C. Circuit Court in *New York v. EPA*.

June 18, 2007 – Federal District Court for the Southern District of Indiana finds that Cinergy had fair notice of the legal standards for the RMRR exclusion and for determining whether a significant emissions increase would result. *U.S. v. Cinergy Corp.*, Case No. 1-99-cv-1693-LJM-JMS. Granting EPA’s summary judgment motion, the Court found that none of the projects at issue in the case comes within the scope of the RMRR exclusion.

August 30, 2007 – In issuing a PSD permit for a waste coal-fired utility unit at the Bonanza Power Plant in Uintah County, Utah, EPA Region VIII rejects comments asking that the permit require CO₂ controls, stating that EPA lacks authority to regulate CO₂ through the PSD permit program. EPA reasons that PSD permits are required to limit emissions only for pollutants currently regulated under the Clean Air Act. Because EPA has not established an ambient air quality standard or otherwise regulated CO₂, it is not currently a regulated pollutant. Referencing the Supreme Court decision in *Massachusetts v. EPA*, EPA concludes that the decision gave the Agency the option of regulating CO₂ emissions from mobile sources, but did not require it to regulate CO₂ under any other provisions of the Act.

September 12, 2007 – EPA issues proposed rule on Flexible Air Permitting (72 Fed. Reg. 52206 (Sept. 12, 2007)), which would revise the Title V air operating permit rules and NSR rules. Flexible air permits will, according to EPA, encourage pollution prevention, provide increased flexibility, and enable industrial facilities to make rapid changes to respond to market demands. The proposed NSR rule revisions would allow facilities to obtain advance approvals of certain future changes under major NSR through the use of a new permit option called a “Green Group” – a collection of emissions points ducted to a common, high performing air pollution control device. Sources may make changes within the scope of a Green Group approval without further review or approval. To establish a Green Group, a source would have to go through the major NSR permitting process and obtain a permit which would limit future emissions growth over a 10-year period.