



Highlights of [GAO-12-590](#), a report to the Chairman, Subcommittee on Oversight, Committee on Environment and Public Works, U.S. Senate

Why GAO Did This Study

Electricity generating units that burn fossil fuels supply most of the nation's electricity and are major sources of air pollution. Under the Clean Air Act, such units are subject to NSR, a permitting process that applies to (1) units built after August 7, 1977, and (2) existing units that undertake a major modification. Owners of such units must obtain from the appropriate permitting agency a preconstruction permit that sets emission limits and requires the use of certain pollution control technologies. EPA oversees states' implementation of NSR, including reviewing and commenting on draft permits issued by state and local permitting agencies. GAO was asked to examine (1) what information EPA maintains on NSR permits issued to fossil fuel electricity generating units; (2) challenges, if any, that EPA, state, and local agencies face in ensuring compliance with requirements to obtain NSR permits; and (3) what available data show about compliance with requirements to obtain NSR permits. GAO reviewed relevant documentation and interviewed EPA, state, and local officials, as well as representatives from industry, research, and environmental groups.

What GAO Recommends

GAO recommends that EPA, among other actions, consider ways to develop a centralized source of data on NSR permits issued to electricity generating units. EPA expressed its commitment to filling gaps in its data systems, but disagreed with the actions GAO recommended. GAO believes that its recommendations would enhance oversight of NSR permitting and enforcement.

View [GAO-12-590](#) or key components. For more information, contact David C. Trimble at (202) 512-3841 or TrimbleD@gao.gov, or Frank Rusco at (202) 512-3841 or RuscoF@gao.gov.

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AIR POLLUTION

EPA Needs Better Information on New Source Review Permits

What GAO Found

The Environmental Protection Agency (EPA) does not maintain complete information on New Source Review (NSR) permits issued to fossil fuel electricity generating units. State and local permitting agencies track the NSR permits they issue, but EPA does not maintain complete or centralized information on permits, despite a 2006 recommendation by the National Research Council that it do so. EPA maintains several databases that compile data on draft and issued NSR permits, but these sources are incomplete and thus cannot be used to identify all of the NSR permits that have been issued nationwide. In addition, EPA has the opportunity to review and comment on every draft NSR permit issued by state and local permitting agencies, but it does not compile data on whether the permitting agencies address EPA's comments in final permits. The absence of more complete information on NSR permitting makes it difficult to know which units have obtained NSR permits or to assess how state and local permitting agencies vary from EPA in their interpretations of NSR requirements.

Officials from EPA, state, and local agencies face challenges in ensuring that owners of fossil fuel electricity generating units comply with requirements to obtain NSR permits. Many of these challenges stem from two overarching issues. First, in some cases it is difficult to determine whether an NSR permit is required. NSR applicability depends on, among other factors, whether a change to a unit qualifies as routine maintenance, repair, and replacement; and whether the change results in a significant net increase in emissions. The rules governing NSR are complex, however, and applicability is determined on a case-by-case basis. Second, it is often difficult to identify noncompliance—instances where unit owners made a major modification without first obtaining an NSR permit—partly because owners of generating units determine whether a permit is needed, and in many cases their determinations are not reviewed by permitting agencies or EPA. State permitting agencies generally issue NSR permits, but EPA typically leads enforcement efforts, since identifying instances of noncompliance involves extensive investigations that go beyond the routine inspections conducted by state and local permitting agencies. EPA identifies NSR noncompliance through a lengthy, resource-intensive process that involves reviewing large amounts of information on units' past emissions and construction activities.

Available data on compliance, although incomplete, suggest that a substantial number of generating units did not comply with requirements to obtain NSR permits. Complete NSR compliance data do not exist for two main reasons: (1) EPA has not yet investigated all generating units for compliance, and (2) NSR compliance is determined at a point in time, and in some cases federal courts have disagreed with EPA about the need for an NSR permit. Nonetheless, EPA has investigated most coal-fired generating units at least once, and has alleged noncompliance at more than half of the units it investigated. Specifically, of the 831 units EPA investigated, 467 units were ultimately issued notices of violation, had complaints filed in court, or were included in settlement agreements. In total, EPA reached 22 settlements covering 263 units, which will require affected unit owners to, among other things, install around \$12.8 billion in emissions controls. These settlements will reduce emissions of sulfur dioxide by an estimated 1.8 million tons annually, and nitrogen oxides by an estimated 596,000 tons annually.