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Report to Congressional Requesters

October 2003

# CLEAN AIR ACT

# New Source Review Revisions Could Affect Utility Enforcement Cases and Public Access to Emissions Data

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GAO-04-58

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# Highlights

Highlights of GAO-04-58, a report to the Ranking Minority Member, Committee on Environment and Public Works, U.S. Senate, and another requester

CLEAN AIR ACT

# New Source Review Revisions Could Affect Utility Enforcement Cases and Public Access to Emissions Data

## Why GAO Did This Study

Recent Environmental Protection Agency (EPA) revisions to the New Source Review (NSR) program—a key component of the federal government's plan to limit harmful industrial emissions—have been under scrutiny by the Congress, environmental groups, state and local air quality agencies, the courts, and several industry groups. The revisions more explicitly define when companies can modify their facilities without needing to obtain an NSR permit or install costly pollution controls, as NSR requires. GAO was asked to determine (1) whether EPA and the Department of Justice (DOJ) assessed the potential impact of the revisions on the ongoing enforcement cases against coal-fired utilities and, if so, what the assessments indicated; and (2) what effect, if any, the revisions might have on public access to information about facility changes and their resulting emissions.

## What GAO Recommends

To ensure monitoring of NSR compliance, GAO recommends that EPA specify (1) what constitutes a "reasonable possibility" that a facility change is subject to NSR, (2) that companies maintain data on reasonable possibility decisions, and (3) how the public can access companies' on-site information on these decisions. EPA took no position on the first two actions; it is reconsidering the reasonable possibility test through October 2003. EPA agreed with the third recommendation.

www.gao.gov/cgi-bin/getrpt?GAO-04-58.

To view the full report, including the scope and methodology, click on the link above. For more information, contact John Stephenson at stephensonj@gao.gov.

## What GAO Found

EPA staff assessed the potential impact of the NSR revisions on the utility enforcement cases and, according to current and former EPA enforcement officials, determined that some of the revisions could affect the cases. EPA staff discussed the potential effects of the revisions with DOJ. In part as a result of the assessments, EPA changed some of the revisions before issuing them as final and proposed rules in December 2002. Specifically, EPA changed the content and wording of some of the provisions included in the final rule and determined that the rule would not affect the cases. However, EPA enforcement officials were very concerned that the proposed rule—addressing when a company could consider a facility change "routine maintenance, repair, or replacement" and exempt from NSR—could have a negative impact on the cases. The concern was that proposing one specific definition for this exclusion that differed from the way the agency had applied it in the past could affect the cases' outcome. Consequently, EPA instead proposed several alternative definitions—different cost thresholds below which a company could make a change that is exempt—for public comment. Nevertheless, some of the enforcement officials and stakeholders believe that industry's knowledge that EPA could be defining the exclusion in terms more favorable to industry delayed some settlements while the rule was being developed, jeopardizing expected emissions reductions.

Subsequently, in August 2003, despite seven ongoing cases, EPA announced a final rule specifying a 20 percent cost threshold below which a company could make certain changes and consider them routine replacement and exempt from NSR. EPA and DOJ maintain that the rule will not affect the cases because it applies only to future changes. But some EPA enforcement officials and stakeholders are concerned that even if judges find companies to be in violation of the old rule, judges could be persuaded, when setting remedies, to not require the installation of pollution controls—limiting emissions benefits—because under the 20 percent threshold, most of the facility changes in dispute would now be exempt.

Certain provisions in the December 2002 final rule could limit assurance of the public's access to data about—and input on—decisions to modify facilities in ways that affect emissions. This would make it more difficult for the public to monitor local emissions, health risks, and NSR compliance. Under the rule, fewer facility changes may trigger NSR and thus the need for permits and related requirements to notify the public about changes and to solicit comments—unless state and local air quality agencies have their own permit and public outreach rules. However, the scope of these state and local rules varies widely. Also under the rule, companies will now determine whether there is a "reasonable possibility" a facility change will increase emissions enough to trigger NSR—in effect policing themselves. But EPA has not defined "reasonable possibility," required that companies keep data on all of their reasonable possibility determinations, or specified how the public can access the data companies do keep on site.

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## Abbreviations

| | |
|---|---|
| CAA | Clean Air Act |
| DOJ | Department of Justice |
| EPA | Environmental Protection Agency |
| NAPA | National Academy of Public Administration |
| NEPDG | National Energy Policy Development Group |
| NSR | New Source Review |
| PAL | Plantwide Applicability Limitations |
| PSD | Prevention of Significant Deterioration |
| TVA | Tennessee Valley Authority |
| WEPCO | Wisconsin Electric Power Company |

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**United States General Accounting Office**
**Washington, DC 20548**

October 21, 2003

The Honorable James M. Jeffords
Ranking Minority Member
Committee on Environment and Public Works
United States Senate

The Honorable Joseph I. Lieberman
United States Senate

Since its inception in 1977, the New Source Review (NSR) Program—one of the Clean Air Act's (CAA) key mechanisms for maintaining air quality to protect public health—has prevented the emission of millions of tons of harmful pollutants. It has done so by requiring newly built industrial facilities, and existing industrial facilities undergoing major modifications to equipment or operating procedures, to install modern air pollution controls.[1] The Congress allowed existing facilities to defer installation of such controls until a major modification was made with the expectation that, over time, all facilities would install such equipment, and this would lead to lower overall emissions. In recent years, the program has become increasingly controversial because of what the utility industry believes to have been inconsistent interpretation and enforcement of the program by the Environmental Protection Agency (EPA) against power plants. Some of the affected companies have agreed to settlements that will cost hundreds of millions of dollars and require emissions reductions, while other companies are in various stages of litigation. In addition, two recent rounds of changes to this program have been the subject of congressional debate and litigation and have drawn the scrutiny of environmental groups, some state attorneys general, and some state and local air quality authorities. These groups are concerned about, among other things, the potential effect of the changes on emissions, the ongoing NSR enforcement cases, or the public's ability to access information about facility changes and the emissions that result.

When created, the NSR program was intended to represent a balance between the environmental interest in improving air quality and the

[1]EPA defines a major modification as a physical or operational change that causes a significant increase in emissions.

economic interest in allowing capital improvement projects at industrial facilities. Accordingly, one of the program's objectives is to protect public health in areas that both meet and do not meet federal air quality standards. Companies that want to make changes to existing facilities that would result in emissions increases exceeding a certain threshold have to apply for a federal NSR permit and then typically install some type of pollution control.[2] According to EPA, the cost of installing controls can reach hundreds of millions of dollars for some facilities. However, companies can be exempt from the federal NSR requirements if (1) a facility change is considered "routine maintenance, repair, and replacement," (2) the company agrees not to significantly increase its emissions after making a physical or operational change, or (3) the company balances any emissions increases resulting from a change in a facility with emissions reductions elsewhere in the same facility. To implement the NSR program, the CAA requires that EPA provide permitting and enforcement authority to state and local air pollution agencies, and most of these agencies currently have this authority. Some states and localities also have their own NSR programs for governing new construction or facility changes whose emissions thresholds are lower than the federal NSR threshold.

Because of the NSR program's complexity and administrative burden, among other things, EPA began a reform process in 1992 that resulted in proposed changes to the program in 1996 and 1998, but the agency did not take final action until 2002. In the meantime, EPA referred to the Department of Justice (DOJ) a number of alleged violations of existing NSR provisions by the owners and operators of some of the largest coal-fired power plants in the country.[3] In general, EPA targeted companies that undertook projects without obtaining a permit or installing pollution controls but that EPA believed were significant facility changes that resulted in emissions increases and were therefore subject to NSR. For their part, the companies believed that their projects were not subject to NSR for various reasons, including that the projects qualified for the

[2]The thresholds for these "major" modifications vary by pollutant and the air quality status of the area in which the facility is located. For example, in areas that meet air quality standards, a 100-ton per-year increase is significant for carbon monoxide, while a 40-ton per-year increase is significant for nitrogen dioxide or sulfur dioxide.

[3]EPA also referred a number of alleged violations of the NSR provisions involving industries other than coal-fired power plants, such as the petroleum refinery industry. Generally, the defendants in those cases did not challenge EPA's interpretation of the term "routine maintenance," and many of these cases were settled.

"routine maintenance, repair, and replacement" exclusion (hereafter referred to as the "routine maintenance exclusion"). In November 1999, DOJ filed seven NSR enforcement actions in U.S. district courts, and EPA issued an administrative compliance order to the Tennessee Valley Authority (TVA). Subsequently, DOJ filed an additional six NSR enforcement actions against several other companies.[4] In many of these federal cases, states have also taken action to intervene against the power plants. As of October 2003, 7 of the 14 cases have been settled or decided.

As a result of concerns about regulatory barriers to investments in energy efficiency and pollution control projects, among other things, EPA decided to finalize some of the 1996 and 1998 NSR reform proposals. Subsequently, the agency issued final and proposed rules to revise the program in December 2002. First, the agency decided to modify certain of the proposed 1996 NSR revisions and issue them as a final rule that provided companies with options to avoid triggering NSR requirements. For example, companies could set a limit on a facility's overall emissions and then make changes within the facility without being subject to NSR, or obtain credit for controls already in place. Because EPA received a number of petitions from parties asking the agency to reconsider certain aspects of this rule, EPA took public comments on certain features of the final rule during July and August 2003. The agency is analyzing the comments to determine if it should make any changes in response. Also in December 2002, EPA issued for public comment a proposed rule to revise the criteria by which it would determine if a facility change is "routine maintenance, repair, or replacement" and therefore exempt from NSR. After reviewing the comments received on the proposed rule, in August 2003, EPA announced plans to issue a final rule defining when a facility change could be considered a replacement under the routine maintenance exclusion.

When EPA formally announced in June 2002 that it intended to revise, among other things, the routine maintenance exclusion, several environmental groups and some state attorneys general involved in the ongoing enforcement cases raised concerns that the revisions could negatively affect the cases. Among other things, these groups were concerned that industry attorneys might use the planned revisions to the

[4]Due to an adverse jurisdictional decision, Alabama Power Company was dismissed as one of the defendants from one of the seven cases that had been filed in November 1999. DOJ refiled against this company in January 2001.

routine maintenance exclusion to delay the cases by arguing that the lawsuits should be dismissed because under the rule proposal, the companies' actions would not violate the NSR requirements.

In light of the concerns about the impact of the revisions, as well as recent congressional debate on them, you asked us to determine (1) whether EPA and DOJ assessed the potential impact of the NSR revisions on enforcement cases against coal-fired utilities before issuing them as final and proposed rules in December 2002 and, if so, what the assessments indicated and (2) what effect, if any, the December 2002 final rule might have on public access to information on facility changes and the resulting emissions.[5] You also asked us to review EPA's assessment of the economic and environmental impact resulting from the December 2002 final rule, and we presented our findings to you in a report issued on August 22, 2003.[6]

To respond to these objectives, among other things, we met with EPA officials who were involved in discussions related to the potential impact of the NSR revisions on the coal-fired power plant enforcement cases, including officials from three EPA offices—Air Quality Planning and Standards, Enforcement and Compliance Assurance, and General Counsel—and DOJ's Environment and Natural Resources Division. We also spoke to former EPA officials who had been involved in these discussions. To determine how the December 2002 NSR final rule could affect public access to information about facility changes and their associated emissions, we reviewed the relevant federal NSR requirements before the revisions and compared them with those in the final rule. We also met with officials from EPA's offices of Air Quality Planning and Standards and Enforcement and Compliance Assurance, industry groups, environmental groups, and state associations to discuss their views on the effects of the final rule on public access to this information.

## Results in Brief

EPA enforcement officials assessed the potential impact of the draft NSR revisions (before they were issued as final and proposed rules in

[5]We focused on the December 2002 final rule revisions because EPA did not select the final criteria it would use to determine whether a facility change is considered a "replacement" and exempt from NSR until August 27, 2003, after we had completed most of our work.

[6]See U.S. General Accounting Office, *Clean Air Act: EPA Should Use Available Data to Monitor the Effects of Its Revisions to the New Source Review Program*, GAO-03-947 (Washington, D.C.: Aug. 22, 2003).

December 2002) on the ongoing enforcement cases against coal-fired utilities and discussed their views about the impact with DOJ officials. According to current and former EPA enforcement officials, because they determined that certain provisions could affect the cases, they changed the provisions to limit their effects. Nevertheless, the EPA officials and representatives of some environmental groups believe settlement of some cases was delayed during development of the two rules because of the possibility that the routine maintenance exclusion could be defined in terms favorable to industry, thereby jeopardizing the expected emissions reductions. According to available documentation and the EPA enforcement officials, the EPA staff during this time prepared various analyses to illustrate the draft revisions' potential impact on the cases and presented the results in briefings to senior EPA managers, including the EPA Administrator. In formulating the final rule, the agency staff determined that, after carefully making content and wording changes, the rule would not affect the integrity of the enforcement cases. However, in formulating the proposed rule, the staff determined that the revisions EPA was considering could adversely affect the cases. Specifically, EPA was considering establishing a specific cost threshold below which facility changes would be considered "routine maintenance, repair, and replacement" and thereby exempt from NSR permit and pollution control requirements; in the enforcement cases, EPA was challenging the way in which companies used this exclusion in the past. In general, the EPA enforcement officials were concerned that if the agency proposed a specific definition of the exclusion that differed from the way EPA had applied the exclusion in the past, defendants could argue that some of the facility changes under dispute should now be considered exempt. In part because of these concerns, EPA proposed several options for calculating cost thresholds to define this exclusion and solicited public comment on them.

After reviewing the comments submitted, EPA announced a final rule in August 2003 specifying that a facility change may be considered a replacement—and exempt from NSR—if the cost of the change is less than 20 percent of the cost of replacing an entire process unit, such as an electric steam-generating unit in a power plant. EPA assessments indicate that under this threshold, almost all of the facility changes at issue in the enforcement cases could now be exempt. Therefore, some of the EPA enforcement officials and key stakeholders are concerned the August rule could serve as a disincentive for utilities to settle the remaining seven cases and could affect judges' decisions on remedies in these cases, especially regarding the installation of pollution controls, affecting the expected emission reductions. Conversely, EPA and DOJ argue in the

litigation that the rule governs only prospective conduct and should not impact the liability of companies who violated the law in the past.

Overall, the final rule could result in less assurance that the public will have access to data on facility changes and the emissions they create, as well as input on decisions about undertaking these changes in the first place and controlling their emissions. Less information would make it more difficult for the public to monitor local emissions and health risks, as well as compliance with NSR. The full impact of the rule will partly depend on the extent to which state and local air quality agencies have their own regulations requiring public notice, comment, and reporting on facility changes. In particular, one provision of the final rule could increase publicly available information but decrease the public's participation in facility changes that affect emissions. Under the provision, a company may set an annual limit on emissions—good for 10 years—across an entire facility and then modify equipment or operations within the facility during this time without being subject to NSR, as long as it does not exceed its emissions limit. To initially set this limit, the company must notify the public and provide an opportunity to comment on the company's intended action. The company must also periodically report on the facility's overall emissions, individual changes made, and the emissions generated from each piece of equipment within the facility. On the other hand, because the company no longer has to obtain a permit for a major modification, it does not have to notify the public of its intended action and solicit comment. EPA maintains that most companies, for various reasons, were not obtaining federal NSR permits for these modifications anyway, even before the rules, so overall, they will not have an impact. Several industry representatives also believe that the public will still be involved in decisions and have access to information about facility changes and emissions because other federal CAA programs, or states' and localities' own programs, will require it, but according to states and other stakeholders we contacted, the scope and stringency of these other programs vary widely.

Two other provisions in the final rule—outlining how a company is to measure its historic emissions and estimate increases from a facility change—when implemented together could also limit assurance that the public will have access to information about changes and their emissions. To determine if emissions resulting from a change will be significant enough to trigger NSR requirements, a company determines its historic baseline of emissions, estimates the expected emissions after a facility change, and calculates the difference. Before the final rule, a company generally had to use the most recent 24 months of emissions as the

baseline and assume its facility would operate at full production when estimating expected emissions, even if the facility had not been operating, or did not plan to operate, at this level. Industry complained that these requirements ignored market fluctuations and a facility's actual production levels. In the final rule, EPA generally allowed companies to use any 24-month period over the prior 10 years to establish a baseline and to assume actual production levels. Some stakeholders maintain, although EPA disagrees, that these revisions will result in fewer calculations showing emissions potentially increasing enough to trigger NSR. Therefore, fewer facility changes will require a federal permit and its related public participation requirements, although some may still be subject to these requirements under state and local programs.

Moreover, if the calculation shows that emissions do not trigger NSR, the company does not have to maintain documentation of its calculations. Under the new rules, the company may determine that there is still a reasonable possibility the change will trigger NSR, and if it does, the company maintains documentation of this decision on site. However, the rule does not define what constitutes a "reasonable possibility." Therefore, companies may be inconsistent in how they make this decision and maintain records of it, and they are in effect policing their own NSR compliance. As the National Academy of Public Administration (NAPA) recently concluded, such self-policing makes it difficult for EPA, state and local agencies, and the public to verify company compliance with NSR. Furthermore, the rule does not specify how the public can access the company's on-site documentation of its reasonable possibility determinations. At the request of a number of stakeholders, EPA agreed to reconsider the "reasonable possibility" provision, among others, is assessing the comments it received, and expects to announce whether it will make any changes to the provision by the end of October. In this context, we are recommending that EPA (1) issue guidance better defining what constitutes a "reasonable possibility" that facility changes will trigger NSR, (2) require companies to maintain documentation of all "reasonable possibility" determinations, and (3) determine, with state and local air quality agencies, how to ensure public access to company's on-site information on facility changes and emissions.

## Background

Under the CAA, EPA establishes health-based air quality standards that the states must meet and regulates air pollutant emissions from various

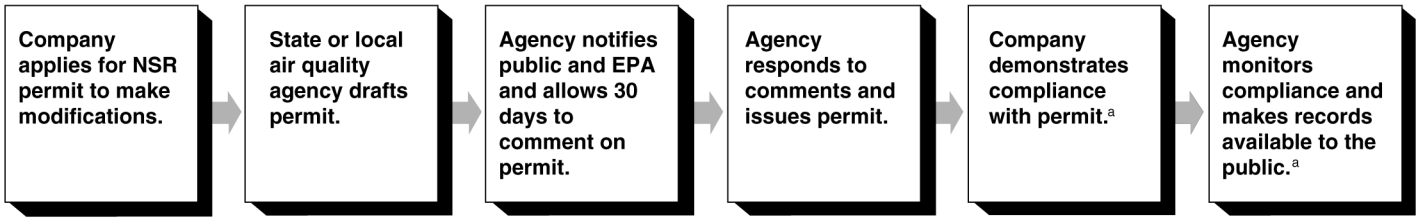
sources, including industrial facilities and mobile sources such as automobiles. EPA has issued standards for six primary pollutants—carbon monoxide, lead, nitrogen oxides, ozone,[7] particulate matter, and sulfur dioxide—that have been linked to a variety of health problems. For example, ozone can inflame lung tissue and increase susceptibility to bronchitis and pneumonia. In addition, nitrogen oxides and sulfur dioxide contribute to the formation of fine particles that have been linked to aggravated asthma, chronic bronchitis, and premature death. About 133 million Americans already live in areas with air pollution levels above health-based air quality standards, according to EPA.

The NSR program, established in 1977, is intended to ensure as new industrial facilities are built and existing ones expand that public health is protected, that the air quality in national parks and wilderness areas is maintained, and that economic growth will occur in a manner consistent with the preservation of existing clean air resources. The NSR program comprises (1) the Prevention of Significant Deterioration (PSD) program, which generally applies to pollutants in areas that meet federal air quality standards for those pollutants or for which the attainment status is unclassified, and (2) the Nonattainment NSR program, which generally applies to pollutants in areas that are not meeting the standards for those pollutants, although the term NSR usually refers to both.

The federal NSR program is primarily administered by state and local air quality agencies, with oversight by EPA. If a company plans a change to its facility and determines that it will trigger federal NSR regulations, the company must then prepare and file a permit application with the relevant state or local agency. Figure 1 illustrates this permitting process.

[7]Ozone forms when nitrogen oxides react with volatile organic compounds in the presence of heat and sunlight.

**Figure 1: New Source Review Permitting Process**




Source: GAO presentation of EPA data.

[a]While there is no federal NSR requirement specifically requiring public access to compliance information, there is such a requirement under Title V of the CAA that applies to NSR data.

The state or local permitting agency determines if the application is complete; develops a draft permit, if justified; notifies EPA and the public of the application; and solicits comments on the draft permit. The permitting agency then responds to comments and issues a final permit, if merited, which can be administratively or judicially appealed. The permitting agency must provide EPA with a copy of every permit application and draft permit; address EPA's comments, if any; and notify EPA of the final action taken. In addition, the records and reports the state or local agency collects as it monitors compliance with the permit and NSR program generally must be available for public review.[8]

Even when federal NSR requirements do not apply to a facility change, the project may still be subject to other federal, state, and local air pollution control requirements. For example, under Title V of the CAA, a company must obtain a facility operating permit that consolidates all of the company's federal obligations for controlling air pollution and complying with the act. These obligations can include meeting the requirements and standards of states' and localities' federally approved plans for improving air quality; other federal requirements to control pollution, such as those controlling hazardous air pollutants not also covered under NSR; and requirements included in any federal, state, or local NSR permits issued to the facility. EPA has now given most state and local agencies approval to implement the Title V operating permit programs that, among other things, provide for public participation in the Title V permitting process. These

[8]While there is no federal NSR requirement specifically requiring public access to compliance information, Title V of the CAA provides that emissions and compliance monitoring reports for major sources of emissions shall be available to the public.

operating permits are issued and then renewed every 5 years and can be updated at any time.

During the mid-1990s, EPA began evaluating NSR compliance for entire industry sectors that produced significant amounts of air pollution. The agency focused its inspections on industry sectors it suspected of potential NSR violations. In particular, EPA looked at industries with a decreasing number of facilities but static or increased production, industries with many years of operation and high emissions but with no record of NSR permits, and industries with new plants being constructed with no NSR permits. EPA's data suggested that facilities in some sectors might have been making major modifications to increase production or extend the life of the facilities' equipment—and therefore increasing emissions—without obtaining NSR permits or installing pollution controls. As a result, EPA targeted its NSR investigations on coal-fired power plants, petroleum refineries, steel minimills, chemical manufacturers, wood products companies, and the pulp and paper industry. In 1996, EPA began its investigation of the coal-fired utility industry. Subsequently, EPA referred to DOJ a number of alleged violations of the NSR provisions. Generally, the referrals indicated EPA's conclusion that the owners and operators of some of the largest coal-fired power plants in the country had violated the NSR provisions by making physical changes to their facilities, without obtaining a permit, that increased emissions and that the agency did not consider to be routine in nature. The companies, however, believed the changes did not violate the NSR program for a number of reasons, including that the projects were exempt under the routine maintenance exclusion. After reviewing these referrals, DOJ in November 1999 filed seven enforcement actions in U.S. district courts. That same month, EPA issued an administrative compliance order to the Tennessee Valley Authority alleging multiple NSR violations at its coal-fired power plants. Since these actions were taken, DOJ has filed an additional six enforcement actions against coal-fired utilities. As of October 2003, 7 of the 14 cases have been settled or decided.[9] Table 1 provides a summary of the seven ongoing enforcement cases and the status of each.

[9]The case involving the administrative compliance order, issued to the Tennessee Valley Authority (TVA), was upheld by EPA's Environmental Appeals Board. TVA's appeal of the Board's decision was denied by the 11th Circuit Court of Appeals. Six other cases—filed against Alcoa, PSEG Fossil, Southern Indiana Gas and Electric, Tampa Electric, Virginia Electric Power, and Wisconsin Electric Power—were settled.

**Table 1: Ongoing New Source Review Court Cases Involving Coal-Fired Power Plants, October 2003**

| Case | Court | Status | Power Plants Sued |
|---|---|---|---|
| *U.S. v. Illinois Power Co. and Dynegy Midwest Generation Inc.* | U.S. District Court, Southern District of Illinois | Liability trial held June 2003; closing argument September 29, 2003; remedy trial not set | 1 |
| *U.S. and States of Conn., N.J., and N.Y. v. Cinergy Corp.* | U.S. District Court, Southern District of Indiana | Liability trial begins June 1, 2005 | 6 |
| *U.S. and States of Conn., Mass., Md., N.J., N.H., N.Y., R.I., and Vt. v. American Electric Power Service Corp.* | U.S. District Court, Southern District of Ohio | Liability trial begins January 2005 | 11 |
| *U.S. and States of Conn., N.J., and N.Y. v. Ohio Edison Co.* | U.S. District Court, Southern District of Ohio | Liability ruling in favor of U.S. issued August 7, 2003; remedy trial April 19, 2004 | 1 |
| *U.S. v. Georgia Power Co. and Savannah Electric & Power Co.* | U.S. District Court, Northern District of Georgia | Administratively closed to await TVA decision; court notified of decision; parties have not moved to reopen | 3 |
| *U.S. v. Alabama Power Co.* | U.S. District Court, Northern District of Alabama | Stayed | 5 |
| *U.S. v. Duke Energy Corp.* | U.S. District Court, Middle District of North Carolina | Summary judgment granted in part and denied in part on August 26, 2003; liability trial date continued; remedy trial not set | 8 |

Source: Department of Justice.

Over the years since its inception, various aspects of the NSR program have been subject to litigation that resulted in court decisions affecting the program. For example, in 1990, the Seventh U.S. Circuit Court of Appeals issued a decision in Wisconsin Electric Power Co. v. Reilly.[10] EPA argued in the case that when Wisconsin Electric Power Company (WEPCO) was estimating whether a physical change would increase emissions enough to trigger NSR, the company should have assumed it would operate the modified equipment at the maximum level possible, even though WEPCO had never operated at that level. The court ruled that this requirement was inappropriate. EPA then issued a rule for electric steam-generating utilities only that allowed them to estimate their projected annual emissions after the change based on their actual emissions history for purposes of

[10]*Wisconsin Electric Power Co. v. Reilly*, 893 F.2d 901 (7th Cir. 1990) ("*WEPCO*").

preconstruction permitting, but they would have to report their actual emissions for 5 years after making the change.[11]

More recently, in January 2001, the President established a task force—the National Energy Policy Development Group (NEPDG)—chaired by the Vice President to develop a national energy policy. In its May 2001 National Energy Policy Report,[12] the group recommended to the President that EPA and the Department of Energy investigate the impact of the NSR program on investments in new utility and refinery generation capacity, on energy efficiency, and on environmental protection. The group also recommended that the Attorney General review the existing NSR enforcement actions to ensure they were consistent with the CAA and its implementing regulations. In response to the group's recommendations, DOJ issued a report in January 2002 that concluded EPA had a reasonable basis for bringing those actions against coal-fired utilities.[13]

In June 2002, also in response to the group's recommendations, EPA issued a report to the President and concurrently issued a set of recommendations for revising the NSR program.[14] EPA issued a final rule in December 2002 that contained five provisions based on its June 2002 recommendations, outlined in table 2 below.[15]

[11]57 Fed. Reg. 32314 (July 21, 1992) (codified at 4 C.F.R. Parts 51, 52, and 60).

[12]For more information on the NEPDG's report, see U.S. General Accounting Office, *Energy Task Force: Process Used to Develop the National Energy Policy*, GAO-03-894 (Washington, D.C.: Aug. 22, 2003).

[13]This report focused principally on enforcement actions against coal-fired power plants because defendants in other industries generally had not alleged that EPA's actions were inconsistent with the CAA.

[14]*New Source Review: Report to the President*, U.S. Environmental Protection Agency, June 2002.

[15]Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Baseline Emissions Determination, Actual-to-Future Actual Methodology, Plantwide Applicability Limitations, Clean Units, Pollution Control Projects, 67 Fed. Reg. 80186 (2002) (to be codified at 40 C.F.R. Pts. 51 and 52.)

**Table 2: NSR Revisions Included in the December 2002 Final Rule**

| Provision | Final Rule Requirements |
|---|---|
| Clean unit | Excludes production equipment with state-of-the-art pollution controls from NSR requirements for up to 10 years after installation provided the unit will still meet the physical or operational characteristics that formed the basis for the clean unit designation. |
| Revised method for calculating "baseline" emissions | Changes the timeframe for computing a piece of equipment's baseline emissions from the most recent 24-month period—or any other period more representative of normal operations—to any 24-month period in the past 10 years adjusted for any new emission limits added since the baseline period. No changes were made to rule for electric utilities. |
| Pollution control project | Exempts pollution prevention and control projects from NSR if they are on EPA's list of "environmentally beneficial" projects or on a case-specific basis if a non-listed project is determined to be environmentally beneficial. It also must be shown that the project will not cause or contribute to a violation of federal air quality standards or adversely impact air quality standards for a national park. |
| Plantwide emissions limit | Allows facilities to set a single emissions limit for an entire plant and then make changes within the facility without triggering NSR, provided they do not exceed the limit. |
| Revised test for calculating emissions changes | Allows a facility to calculate expected emissions after a facility change based on its projection of its future operation, rather than at full capacity. This provision extended to all other industries the same methodology for calculating expected emissions that EPA had granted to the utility sector in the early 1990s. |

Source: EPA.

Subsequently, in response to a number of requests, EPA agreed to reconsider certain aspects of the final rule, took public comment on those features during July and August 2003, and is assessing the comments to determine if the agency needs to make any changes.

Also in December 2002, EPA issued for public comment a proposed rule that would change the method for determining whether a facility change can be exempt from federal NSR requirements because it is routine maintenance, repair, or replacement.[16] EPA intended for the final version of the proposed rule to supplement its case-by-case determination of what facility changes qualify for the routine maintenance exclusion, using factors such as the nature, extent, cost, frequency, and purpose of the change. EPA proposed to determine a facility's total replacement costs and calculate a certain percentage of those costs that the agency would allow the company to spend on routine maintenance and repair without

[16]"Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review: Routine Maintenance, Repair and Replacement," 67 Fed. Reg. 80290 (2002).

triggering NSR. EPA proposed several alternative cost thresholds for routine maintenance and repair below which modifications could be considered exempt and solicited comments on the thresholds. EPA also included for comment a provision that would generally allow a facility to consider the replacement of existing equipment with identical or functionally equivalent new equipment as routine replacement, depending on the amount of costs involved. The agency announced a final rule in August 2003, specifying the cost threshold industry could use to replace equipment and exempt it from NSR. This rule will finalize one aspect of the December 2002 proposed rule and, at this time, the agency is not taking action to finalize any other aspects of this proposed rule.

The NSR revisions have recently been the subject of recent congressional debates. In 2002, Congress held hearings during which members of Congress, EPA and DOJ officials, and a number of stakeholders—including representatives of industry, states, and environmental groups—presented their positions on the NSR program revisions. For example, during a July 16, 2002, hearing before the Senate Committee on Environment and Public Works, some state attorneys general and environmental group officials testified that the revisions could seriously undercut the ongoing enforcement cases, jeopardizing the millions of tons in pollution reductions that those cases could yield. At the same hearing, EPA and industry officials generally testified that the revisions would allow companies to modify their facilities so that they are more energy efficient and, as a result, would emit less pollution. In addition, during a September 3, 2002, hearing before the Subcommittee on Public Health, Senate Committee on Health Education, Labor, and Pensions, former EPA Administrator Carol Browner testified that, among other things, she was concerned that the revisions would "eliminate the very features of the current law that provide transparency to the public—monitoring, record keeping, and reporting."

## Because EPA's Assessments Showed That Some NSR Revisions Could Affect the Enforcement Cases, the Agency Made Changes before Issuing the Final and Proposed Rules

EPA enforcement officials assessed the potential impact of the NSR revisions (before issuing them as final and proposed rules in December 2002) on the enforcement cases against coal-fired utilities and determined that some of the revisions could have an impact. These EPA officials discussed their views on the potential impact with DOJ. In part as a result of the assessments, for the revisions that were included in the final rule, EPA adjusted the content and wording of the language before issuing the rule so that they were not expected to affect the cases. For the proposed rule, the EPA enforcement staff had concerns that if EPA specifically defined what facility changes would qualify for the routine maintenance exclusion, the cases could be affected since they involved disagreements about how EPA had been applying the routine maintenance exclusion in the past. Consequently, EPA decided not to specifically define what activities qualify as routine maintenance but to propose several options for calculating cost thresholds below which modifications could be considered exempt and solicited public comment on the options. Nevertheless, during the 1½ years that the final language of the revisions was being debated, some EPA enforcement officials and key stakeholders believe that some companies were discouraged from settling their cases because of the possibility that EPA could revise the definition of the exclusion in a way that would be favorable to industry—although some companies did settle after the proposed rule was issued. Furthermore, some EPA enforcement officials and key stakeholders believe that the announcement of the August 2003 final rule, in which EPA set a specific cost threshold for routine replacement activities, could also delay settlement of some of the cases and could affect judges' decisions in the cases about what remedies to apply to companies that are found to be in violation of the old NSR rule.

### After Careful Content and Wording Changes, EPA Determined That the Final Rule Would Not Significantly Affect the Cases

EPA enforcement officials assessed the potential impact of the draft NSR revisions that were issued as a final rule in December 2002 on the enforcement cases and discussed their views about the impact with DOJ. According to current and former EPA enforcement officials, after EPA internally debated and agreed upon the language of the revisions, they were not expected to adversely affect the ongoing enforcement cases against coal-fired utilities. According to these EPA officials, in 2001 and 2002, several briefings and less formal discussions occurred during which the enforcement staff raised concerns about the revisions' potential adverse impact on the cases. Officials involved in at least one, and in some cases several, of these meetings included the EPA Administrator, the Deputy Administrator, the Assistant Administrator for Air and Radiation, the former Principal Deputy Assistant Administrator for Enforcement and

Compliance Assurance, and the Director of the Air Enforcement Division. DOJ's Deputy Assistant Attorney General for Environment and Natural Resources and other DOJ enforcement staff also discussed the potential impact of the proposed revisions on the cases with EPA's Assistant Administrator for Air and Radiation and staff in EPA's offices of the General Counsel and Enforcement and Compliance Assurance. According to EPA enforcement officials, they prepared analyses—some of which were documented in briefing papers, charts, and graphs—that were discussed internally. EPA enforcement officials said that because their main objective in raising concerns about the revisions was to maintain the cases, they urged senior agency officials to tailor the language of the revisions to address their concerns before issuing the final rule. The enforcement staff felt this would help ensure that the language finally adopted would minimize any impact on the cases.

More specifically, according to the Director of EPA's Air Enforcement Division, the staff prepared analyses indicating that three of the revisions in the rule would have no impact on the enforcement cases. These three revisions involve the exemptions for clean units, pollution control projects, and the option of setting a plantwide limit on emissions. In addition, because of the 1990 WEPCO decision, utilities already had the authority, before EPA issued the final rule, to use the revised method for estimating emission changes resulting from a facility change. Therefore, since this provision in the rule was not a significant change for the utility industry, the EPA staff did not expect this provision to affect the cases. However, the EPA enforcement officials were concerned about the provision establishing a revised method for calculating past, or baseline, emissions. Specifically, EPA considered changing the time period used to calculate baseline emissions for utilities. According to the Director of EPA's Air Enforcement Division, the enforcement staff prepared an analysis comparing the effects of using different time periods on the viability of each case. In part as a result of this analysis, the baseline calculation for utilities was not changed in the final rule.

## Because EPA's Assessments of the Draft Proposed Rule Raised Concerns That It Could Affect the Cases, EPA Changed Its Strategy and Revised the Rule before It Was Issued

During the same briefings held in 2001 and 2002, the EPA enforcement staff expressed concern that more explicitly defining what facility changes qualify for the routine maintenance exclusion, as anticipated in the December 2002 proposed rule, had the most potential to negatively affect the cases. They were concerned because the enforcement cases generally involve disagreements between EPA and the utilities on whether past facility changes made without an NSR permit qualified for the routine maintenance exclusion. In general, EPA enforcement officials were concerned that if the agency specifically proposed a definition of routine maintenance that was different from the way the agency had applied the exclusion in the past, defendants could delay the cases by arguing that some of the facility changes under dispute in the lawsuits might be able to qualify for an exemption from NSR. For example, the EPA officials were considering setting a cost threshold for an allowance for annual maintenance, repair, and replacement below which a company would not have to obtain an NSR permit. EPA enforcement officials believed that if a threshold were proposed that was higher than the costs incurred for the facility changes at issue in the cases, the cases could be adversely impacted. Specifically, the officials were concerned that judges might not order companies to install pollution controls even if they were found to be in violation of the prior NSR rule, since the facility changes in question would now be legal under the proposed rule (if adopted as proposed). The EPA enforcement staff compared the potential impact of various cost thresholds on the viability of each case. Based in part on these comparisons, EPA decided not to specifically set cost thresholds for individual industries in its December 2002 proposed rule, but rather to solicit comments on what thresholds to use.

The EPA enforcement staff had similar concerns about the other revision under consideration for the December 2002 proposed rule. It would allow companies to consider the replacement of existing equipment with identically or functionally equivalent new equipment as "routine maintenance, repair, and replacement" and be exempt from federal NSR regulations. The cost of the equipment had to be below a certain percentage of the cost to replace a process unit. A process unit for power plants is defined as an electric utility steam-generating unit (power plants can have more than one of these). The replacement equipment also had to meet certain criteria, such as maintaining the basic design parameters of the original unit. EPA enforcement officials were concerned that, depending on where the threshold was set, this revision could also affect the cases. As with the first provision, the EPA enforcement staff compared the potential impact of various replacement cost thresholds (up to 50 percent) on the viability of each case in dispute at the time and concluded

that 95 percent to 98 percent of the facility changes at issue in the utility enforcement cases would be considered routine maintenance—and thus exempt from NSR—if the new rule were applied and the threshold were set at more than about 1 percent or 2 percent of the process unit's costs. Again, EPA decided not to specify a threshold in the December 2002 proposal but instead to solicit comments on the overall approach. EPA reviewed the comments submitted on both proposed revisions and, even though seven of the enforcement cases had not yet been settled or decided by the courts, announced a final rule in August 2003 specifying a 20 percent threshold for the replacement of existing equipment, provided the replacement does not change the basic design parameters of the process unit and the process continues to meet enforceable emission and operational limitations. To illustrate the impact of this cost threshold, it costs approximately $800 million on average to replace a 1,000-megawatt electric utility steam-generating unit, excluding the costs of pollution controls, according to EPA enforcement officials. Under the new rule, an unlimited number of projects costing on average between $8 million and $160 million each (assuming cost thresholds of between 1 percent and 20 percent) could be excluded from NSR requirements. According to the Director of EPA's Air Enforcement Division, this could allow companies to make facility changes without an NSR permit that are much more substantial than any of those in dispute in the cases.

## EPA Enforcement Staff and Key Stakeholders Believe the Possibility of Revising the Routine Maintenance Exclusion Delayed Settlement of Some Cases, and the August 2003 Rule May Have Additional Negative Effects

According to former and current EPA senior enforcement officials, despite the agency's efforts to minimize the impact of the final and proposed rules on the enforcement cases, they believe the possibility that EPA could revise the routine maintenance exclusion in ways that could improve the companies' legal positions in the cases had a detrimental effect on the willingness of some companies to settle. The officials stated that EPA normally settles 90 percent to 95 percent of its enforcement cases before they go to trial, but that companies were slower to settle after EPA publicly acknowledged it was considering the revisions. For example, according to a former EPA enforcement official who had been involved in the cases, the attorneys representing some of the companies in the cases asked EPA why they should comply with an interpretation of the law that the administration was trying to change. These concerns were reinforced further when an industry attorney in a state NSR enforcement case suggested that the court delay the case because EPA was still reconsidering its interpretation of the CAA through the NSR revisions. Similarly, the current Director of EPA's Air Enforcement Division believes the most significant impact on the enforcement cases was that companies delayed settling during the year and a half the agency spent discussing

NSR program reforms before issuing the final and proposed rules. According to current and former enforcement officials, companies spent this time lobbying EPA to include language in the revisions that would help them win their cases. Similarly, the National Academy of Public Administration (NAPA) concluded in an April 2003 report on the NSR program, "The possibility that EPA would soon reform the NSR modification provisions favorably to industry may have led to [some] companies' reluctance to settle their cases."[17]

According to the Director of EPA's Office of Air Enforcement, in the months immediately following the issuance of the December 2002 final and proposed rules, settlement activity did increase. During this time, EPA and DOJ entered into settlement agreements with four companies that resulted in the annual reduction of approximately 421,000 tons of sulfur dioxide and nitrogen oxide combined.[18] See table 3 for a list of these companies.

[17] *A Breath of Fresh Air: Reviving the New Source Review Program*, a report by a panel of the National Academy of Public Administration for the U.S. Congress and the Environmental Protection Agency, April 2003.

[18] DOJ and EPA have also entered into settlement agreements with two other companies. Specifically, in October 2000, the courts approved a settlement with Tampa Electric Company that resulted in an annual reduction of approximately 190,000 tons of sulfur dioxide and nitrogen oxide combined. In July 2002, a consent decree was entered into in a case involving PSEG Fossil LLC that resulted in an annual reduction of approximately 35,940 tons of sulfur dioxide and 18,270 tons of nitrogen dioxide.

**Table 3: Judicial Settlements Entered Into with Coal-Fired Power Plants since Issuance of the December 2002 Final and Proposed NSR Rules**

| Case | Status of Negotiations | Estimated Environmental Benefit of the Settlements |
|---|---|---|
| *U.S. v. Virginia Electric Power* | Consent decree submitted for public comment on April 21, 2003 | Annual reduction of 237,000 tons of sulfur dioxide and nitrogen oxide combined |
| *U.S. v. Wisconsin Electric Power* | Consent decree submitted for public comment on April 29, 2003 | Annual reduction of 72,300 tons of sulfur dioxide and 32,600 tons of nitrogen oxide |
| *U.S. v. Alcoa* | Consent decree approved by the court on July 28, 2003 | Annual reduction of 52,900 tons of sulfur dioxide and 15,480 tons of nitrogen oxide |
| *U.S. v. Southern Indiana Gas and Electric Co.* | Settlement approved by the court on August 13, 2003 | Annual reduction of 10,600 tons of sulfur dioxide and nitrogen oxide combined |

Source: DOJ and EPA.

EPA's Director of Air Enforcement believes these settlements suggest that the December 2002 final and proposed rules, as issued, did not significantly affect companies' willingness to settle the cases. In this official's opinion, the cases were not substantially affected prior to the announcement of the August 2003 final rule because the enforcement staff was successful in negotiating and revising the language and content of the rules. However, this official stressed that to the extent EPA decided to go forward with more explicit exclusions for routine maintenance, repair, and replacement, as it has now done, companies could be less willing to settle their cases. According to the former Director of EPA's Office of Regulatory Enforcement, if EPA got agreements with companies in the remaining seven pending enforcement cases against coal-fired utilities that are equivalent to the settlements it has achieved in the past, sulfur dioxide emissions could be cut by as much as 2.9 million tons annually and substantial reductions in nitrogen oxide emissions could also be achieved.

Some EPA enforcement officials and officials from environmental groups and states have raised concerns that the announced August 2003 rule, and any subsequent rules more explicitly defining what facility changes qualify for the routine maintenance exclusion, could negatively impact the enforcement cases even further. In a September 2003 legal filing in one of the enforcement cases, DOJ stated EPA's position that the announced August 2003 rule is prospective in nature and does not affect the ongoing enforcement cases, which are based on past conduct. Officials from the New York and New Jersey Attorney General offices have said that the

charges against the companies in these cases were brought under the previous NSR program, before any of the recent revisions, and the officials are confident that the judges will make decisions based on whether the companies violated the rules that were in effect at that time. While these officials did not expect the cases to be delayed on the basis of any motions that industry may file in light of the August 2003 rule, they noted that if such motions were filed, the officials would have to spend additional time and resources to defeat them. In addition to these effects, some stakeholders are also concerned that the rule could affect the remedies imposed on companies (including fines companies must pay or actions they must take) if the courts find the companies to be in violation of the old NSR rule. Officials from environmental groups and state attorney general offices expressed concerns that industry attorneys would attempt to argue that since the modifications for which they were found liable under the old rule were now permissible under the new rule, they should not be penalized. If judges were to agree, this could mean that fines may be reduced or companies may not be required to install pollution controls and reduce emissions to the extent that they might have been before the new rule.

Indeed, on September 29, 2003, industry attorneys in the Illinois Power case asserted in their closing arguments that the new exclusion for routine maintenance in the August 2003 rule decisively undercut the critical premise of the government's case because in the new rule, EPA changed the interpretation of the Clean Air Act upon which it had based the enforcement cases. The judge had not issued a ruling in the Illinois Power case at the time GAO completed this report.

## Portions of the December 2002 Final Rule Could Limit Assurance That the Public Has Input into Company Decisions to Modify a Facility When Modifications Affect Emissions

Several provisions in the December 2002 NSR final rule could limit assurance that the public has input on changes companies make to their facilities, especially those that increase emissions, hampering the public's ability to monitor health risks and company compliance with NSR. The provisions could also limit assurance that the public has access to documents showing how companies estimated whether the changes would increase emissions enough to trigger NSR. For example, a company can now determine on its own if there is a "reasonable possibility" that a change could trigger NSR, but the rule is unclear about how companies will make this determination and how the public can access information about it. The extent of the rule's impact depends on the extent to which other federal, state, and local regulations still require that companies obtain a permit and notify the public of modifications, but the scope of these other requirements varies widely.

## Under a PAL, the Public Can Help Set a Facility's Emissions Limit but May Not Have Input into Company Decisions to Modify the Facility When Modifications Affect Emissions

The Plantwide Applicability Limit (PAL) provisions in the December 2002 final rule could impact the amount of data available on, and public input into, facility changes and emissions. On the one hand, a PAL provides new opportunities for the public to have access to facility emissions information because a company must undergo a public notice and comment process before setting a PAL. The company must also monitor and report more detailed and frequent emissions information during the life of the PAL. For example, if a company decides to pursue a PAL, it must apply to the state or local air quality agency, which in turn must notify the public of the draft PAL and give the public at least 30 days to provide comments. The application must list each piece of equipment in the plant that emits the pollutant to be regulated under the PAL, such as a boiler or paint sprayer, and the "baseline" emissions it generates. Also, during the life of the PAL, a company must report semiannually to the state or local agency the monthly emissions of some or all of the NSR "criteria pollutants" from each piece of equipment. In contrast, for a facility without a PAL, in many instances the company would have limited emissions data for the facility. Thus, both the public notice and comment process for obtaining a PAL and the semiannual reporting requirements while subject to the PAL provide the public more specific and more frequent emissions information than would be provided for a facility that does not have a PAL.

On the other hand, according to some state and local air quality agencies and environmental groups, because a company can pursue a facility change without an NSR permit under a PAL, as long as total facility emissions do not increase, the public may have fewer opportunities to provide input on a company's decision to modify a facility, assess the emissions created (including hazardous air pollutants that may not be identified for monitoring under the PAL), and consider ways to control them. For example, if a company without a PAL decided to install a piece of equipment, such as a boiler, that would increase the facility's emissions to a level that would trigger federal NSR, the company would have to submit an application to the state or local agency describing the change and the anticipated emissions.[19] The agency would have to notify the public and give it 30 days to comment on the draft federal NSR permit, and the company would have to install the best available pollution controls on the equipment when making the facility change. However, under a PAL,

[19]Prior to the final rule, a company also had the option to "net out" of, or avoid, NSR by agreeing to reduce emissions elsewhere in a facility or accepting an enforceable emissions limit that was below the threshold for triggering NSR.

the company could make the change without obtaining a federal NSR permit, soliciting public participation, or installing pollution controls, even though the change significantly increases emissions, as long as the company offsets the increase somewhere else within the facility and does not exceed the PAL.

Some industry groups have responded that other federal, state, or local regulations will still require reporting and record keeping on facility changes and installation of emission control technology, so public access and input will not change. For example, if state and local air quality agencies require that companies obtain permits for facility changes not subject to federal NSR requirements, the public may still be notified about company plans to make a change and could comment on them. However, several states, as well as the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials, note that state and local emission control regulations governing such facility changes vary widely. For example, some local air quality agencies in California require a public comment process for many facility changes not subject to the federal NSR program, while Ohio requires that the public be notified of only large or potentially controversial changes.

EPA program managers maintain that many past changes were not subject to federal NSR permits for a number of reasons, so public access will not change. For example, prior to the final rule, the managers stated that a company could make an unlimited number of changes to a facility, as long as any one change did not trigger NSR. In addition, if the emissions effects of some changes were too small to trigger NSR, a company could offset emissions increases with other emissions reductions, "netting out" of federal NSR requirements. The program managers also believe that a predominant number of states and localities would still require public notice and comment on these changes.

## Two Provisions Revising How Companies Measure Their Emissions Baseline and Estimate Future Emissions Could Limit Assurance That the Public Has Access to Data on Facility Changes

The two provisions of the December 2002 final rule revising the method for calculating past emissions and estimating emissions resulting from a facility change could affect the amount and availability of information available to the public. Companies use these provisions to determine if their changes will trigger federal NSR requirements. To make this determination, a company must estimate the emissions expected after the change and compare this with the actual historic emissions prior to the change, known as the baseline emissions level. Before the rule, a company determined the baseline for a piece of equipment or operating procedure using the average annual emissions generated during the 24-month period

prior to the change—or the company could seek to use a different period, more representative of normal operations. Under the new rule, a company will be able to choose any 24-month period in the past 10 years as the baseline. However, the company must adjust the baseline to account for any other pollution control requirements implemented during this time, such as limits on acid rain pollutants, and eliminate any time periods from consideration where facilities exceeded required emissions limits.

Also under the new rule, once a company calculates its baseline, it compares the baseline to the expected emissions after the equipment or operations are modified to determine if emissions will increase enough to trigger NSR. Prior to the final rule, when estimating expected emissions, companies other than utilities had to assume that they would operate a piece of equipment at the maximum level possible representing the maximum possible emissions, even if they had not operated at that level in the past and did not plan to do so in the future. [20] Companies have said that this approach was unfair because, among other things, it ignored market fluctuations. EPA revised the method of calculating the expected emissions in the final rule. Now, a company can project the expected activity level after the facility change and estimate the resulting emissions accordingly. Thus, under the rule, some estimates of expected emissions most likely will be smaller than in the past.

Various stakeholders involved in the NSR revisions disagree on the impact of these two changes. For example, some expect that companies will choose the time period that gives them the highest baseline, or allowable emissions, thereby giving the companies the greatest flexibility to make changes in response to economic variations without triggering NSR. On the other hand, EPA program managers and a representative of a major industry explain that this is not necessarily true because companies now have to adjust their baselines downward to account for other pollution control requirements.

In those cases where companies set higher emissions baselines and estimate smaller emissions increases, the difference between these two numbers will be smaller than in the past and will not trigger the federal NSR program and its requisite permitting, public notice, and public

[20] Again, prior to the final rule, a company could avoid NSR review by reducing emissions elsewhere in a facility and accepting an enforceable emissions limit that was below the threshold for triggering NSR.

comment requirements. These changes may still trigger state or local requirements to obtain a permit and its associated public participation rules, depending on the state or locality, but, as we have stated, the scope of these requirements varies widely. In addition, several industry representatives claim that the Title V provisions governing record keeping and reporting requirements will ensure the public continues to have emissions data to monitor compliance. But other stakeholders point out that the data are scattered across various programs, making it difficult for the public to determine if facilities made any changes and what impact, if any, this had on emissions. The public eventually may learn of a facility change because under the rule, a company must annually report if the actual emissions generated after certain changes exceeded the company's estimate. In any event, this reporting is done after the change is in place, and the public can have any input.

Also under the NSR program, when a company calculates the expected emissions after a change, if the company determines emissions will clearly exceed the federal NSR threshold, the company must obtain a permit to proceed. If the calculation does not clearly indicate that a proposed facility change triggers NSR, the company does not have to keep any records of this determination. Under the rule, a company can now determine if there is a "reasonable possibility" the change will trigger NSR requirements. If it does, the company must maintain on-site documentation of this decision, as well as emissions records for the modified equipment or process. EPA program managers maintain that as a result, more data may be available now than in the past.

However, EPA did not define what constitutes a "reasonable possibility" that emissions will trigger federal NSR requirements in the final rule, so companies might not apply this provision consistently and are, in effect, policing themselves. As several state and local representatives pointed out, this makes it difficult for EPA, state and local air quality agencies, and the public to monitor compliance with NSR, potentially leading to increased emissions and enforcement actions. Similarly, NAPA reported that such self-policing could lead to implementation problems and inadequate reporting of information and recommended that EPA carefully oversee the calculation of emissions increases resulting from facility changes and that sources not be allowed to "self-police." EPA program managers take issue with the conclusion that self-policing is inherently wrong and point out that many environmental programs provide such self-policing mechanisms.

Furthermore, the rule states that if a company determines there is a reasonable possibility a facility change could trigger NSR, it must make the record of the determination as well as the emissions records related to the change available to state or local agency officials or the public upon request. But the rule is unclear how the public will know about the changes or access the company's on-site records. According to industry representatives, some companies will keep records of all reasonable possibility determinations to limit their legal risks, and some will proactively reach out to local communities before undertaking facility changes because they want to maintain good relations in these communities. Nevertheless, this lack of clarity could potentially hinder enforcement and monitoring activities. It could also pose administrative problems for companies, should the public begin requesting information directly from them—especially if the information contains sensitive business data that the company is entitled to protect. EPA is currently considering comments it received on the reasonable possibility provision as part of its decision to reconsider portions of the final rule. The agency plans to determine whether it will make any changes by the end of October.

## Conclusions

While EPA enforcement officials assessed the potential impact of the December 2002 final and proposed rules on the enforcement cases against coal-fired utilities and made changes before announcing the rules, these officials and key stakeholders believe that settlement of some cases was delayed because of the prospect that the definition of routine maintenance could be revised in a way that would improve industry's legal position. Furthermore, the announced August 2003 rule exempting the replacement of certain equipment from NSR requirements—the fundamental basis for most of the coal-fired utility cases—also likely will discourage utilities from settling at least some of the remaining cases. The rule may also affect judges' decisions regarding whether the companies have to install pollution controls, jeopardizing the expected emissions reductions.

Overall, as a result of the final rule, the public may have less assurance that they will have notice of, and information about, company plans to modify facilities in ways that affect emissions, as well as less opportunity to provide input on these changes and verify they will not increase emissions. In some but not all cases, state or local regulations may require companies to continue to provide the public with this information and opportunities for input, or companies may do so voluntarily. However, the public will not have consistent access and input unless EPA better (1) defines the criteria companies use to determine if there is a reasonable

possibility a facility change will trigger NSR requirements and (2) explains how the agency will ensure the public can access company documentation on such decisions and the resulting emissions. Otherwise, it will be more difficult not only for the public but also for EPA and state and local air quality agencies to ensure companies are complying with the federal NSR program and not increasing emissions in ways that affect localities' air quality and public health.

## Recommendations for Executive Action

To better ensure the ability of federal, state, local, and public entities to monitor facility emissions and NSR compliance, we recommend that the EPA Administrator

- better define what constitutes a "reasonable possibility" that emissions after a facility change will trigger NSR requirements,
- require that companies maintain documentation on all "reasonable possibility" determinations, and
- determine, with state and local air quality agencies, how to ensure public access to company's on-site information on facility changes and emissions.

## Agency Comments

We provided DOJ and EPA with an opportunity to review and comment on a draft of this report. We subsequently received comments from both agencies. DOJ advised that it could not address the accuracy of, or otherwise comment on, the statements of EPA officials contained in the report. The agency did not address or comment on those portions of the report concerning public access to emissions data that GAO discussed exclusively with EPA. DOJ also advised that its position on the final and proposed regulations discussed in the report are contained in its legal filings in the power plant cases, and GAO was provided with a copy of those filings. Since EPA's December 2002 announcement of the final and proposed NSR rule changes, DOJ stated that it has continued to prosecute these cases vigorously and has also achieved settlements with four companies. DOJ also reiterated that its position as to the potential impact of the NSR rule announced in August 2003 has always been consistent and is reflected in its court filings—"that the rule only governs prospective conduct and should not impact the liability of companies who violated the law in the past."

EPA generally agreed with the report's characterization of the NSR revisions' potential impact on the ongoing enforcement cases. In terms of

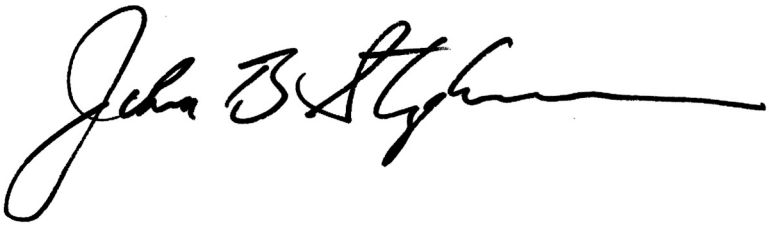
the revisions' impact on public access to information about facility modifications and emissions, however, the agency maintains the revisions, at a minimum, will not change, and most likely will increase, the amount of information available. According to EPA, before the revisions, companies were not obtaining federal NSR permits with their requisite public participation requirements for the types of changes that would be affected by the revisions, for several reasons. For example, companies could avoid federal NSR requirements for such changes by offsetting emissions increases with emissions reductions elsewhere in the facility (a process known as netting). EPA also maintains that even if these changes were not subject to federal NSR permitting requirements, they were subject to state and local permitting and public participation requirements in many cases, and that the NSR revisions would not change these underlying state and local programs. In addition, EPA said that facilities choosing to use a plantwide emissions limit have new and additional reporting requirements that could increase the information available, as we also point out in the report. Furthermore, the agency maintains that in the past, companies calculated the expected emissions from a modification and determined whether the emissions would increase enough to trigger federal NSR requirements. If the NSR requirements were not triggered, the companies did not have to keep records of the calculations. Now, companies can take the extra step of determining that even if the calculations do not show a significant enough increase, there is a "reasonable possibility" of an increase and companies must keep records on site supporting this determination.

For our work, however, we compared the federal NSR requirements before and after the revisions and determined that the changes to these requirements could limit assurance that the public has access to information on facility changes and emissions. We did not have information on, and did not try to account for, the extent to which companies were actually triggering NSR requirements before and after the rule, or the effect this had on available information. Based on discussions with a number of state agencies and the national association representing them, among other stakeholders, as to whether state and local programs will continue to require permits and public notice for changes not subject to the federal program, we determined that the extent varied considerably across states and localities. For example, two states said they did not allow netting. Furthermore, a number of states indicated that even if such changes had been subject to their programs in the past, they might not be in the future because states and localities are facing pressures to modify their programs to match the federal NSR revisions and to not have more stringent requirements.

As to GAO's recommendations, EPA did not take a formal position on either the recommendation calling for additional guidance on reasonable possibility determinations or for the maintenance of all records on these determinations. The agency is still evaluating public comments it received on these issues as part of its agreement to reconsider portions of the NSR revisions and does not expect to make a final decision on the reconsideration process until the end of October 2003. EPA did agree with our recommendation on ways to better ensure public access to information on facility changes and emissions that companies maintain on site. DOJ and EPA also recommended a number of technical changes to the report, which we incorporated, as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 10 days from the report date. At that time, we will send copies to the EPA Administrator, the Attorney General, interested congressional committees, and other interested parties. We will also make copies available to others upon request. In addition, the report will be available at no charge on GAO's Web site at http://www.gao.gov.

If you or your staffs have any questions, please call me at (202) 512-3841. Karen Keegan, Eileen Larence, Jeff Larson, and Lisa Turner made key contributions to this report. Nancy Crothers, Mike Hix, and Laura Yannayon also made important contributions.



John B. Stephenson
Director, Natural Resources
and Environment

# Appendix I: Objectives, Scope, and Methodology

Our objectives were to determine (1) whether EPA and DOJ assessed the potential impact that issuing the final and proposed rules in December 2002 would have on enforcement cases pending against coal-fired utilities and what the assessments indicated, and (2) what effect, if any, the final rule might have on public access to information on facility changes and the resulting emissions.

To respond to the first objective, we interviewed both current and former EPA officials and current DOJ officials that were involved in discussions about the impact of the revisions on the relevant enforcement cases. These officials included the former Principal Deputy Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance, the former Director of EPA's Office of Regulatory Enforcement, the current Director of EPA's Air Enforcement Division, and the DOJ Deputy Assistant Attorney General for Environment and Natural Resources. We also submitted written document requests to both agencies, asking that they provide GAO with all documents referring to, relating to, or describing the assessments of the potential impact of the NSR revisions on the pending enforcement cases and discussions between officials from EPA and attorneys from DOJ concerning these assessments.

In the case of DOJ, the agency's enforcement staff acknowledged that in July 2002, they had prepared an internal evaluation, as backup material for testimony, that summarized EPA's public announcement the previous month concerning proposed NSR rule changes the agency was considering, the content of some of the potential revisions, and the relevance of those changes to filed enforcement cases. The DOJ enforcement officials were concerned about providing us a copy of this document primarily because it could impact the ongoing litigation of the cases. In the case of EPA, the officials acknowledged that they, too, had prepared assessments, and they discussed the general content of some of them with us. They also provided us access to (but not copies of) the assessments supporting the December 2002 final rule. The officials had concerns similar to those of DOJ about (1) describing all of the details about the changes made to the rule as a result of the assessments, and (2) providing us access to the assessments concerning the December 2002 proposed rule and the August 2003 rule. We did not further pursue access to this information because we had sufficient data to respond to our objectives, and it is GAO's policy, except in limited circumstances, not to conduct work that would involve analyzing, evaluating, or commenting on specific issues that are pending before the courts.

To respond to the second objective, we analyzed the December 2002 final rule to determine what provisions could impact public access to information about facility changes and their associated emissions. We interviewed the Director of EPA's Information Transfer and Program Integration Division in the Office of Air Quality Planning and Standards, the Director of EPA's Air Enforcement Division, and attorneys in EPA's Office of General Counsel regarding the interpretation of relevant provisions of the rule and the potential effects of these provisions on public access. We also obtained the views of key stakeholders that could be affected by changes in public access to such information. To ensure we captured a wide cross section of interests, we focused on

- groups identified by EPA officials as key stakeholders,
- members of EPA's CAA Advisory Council,[1]
- national level groups that have testified before Congress on NSR and CAA issues over the last several years,
- national level groups that submitted comments to EPA in response to the agency's request for public comment on its June 2001 NSR 90-Day Review Background Paper (many of these were identified in EPA's June 2002 NSR Report to the President), and
- trade associations representing those industries EPA identified as being most affected by NSR.

Stakeholders included officials from the American Forest and Paper Association, Clean Air Trust, Georgia Pacific Company, National Petrochemical and Refiners Association, Natural Resources Defense Council, New York State Attorney General's Office, Rockefeller Family Fund's Environmental Integrity Project, and the professional association representing State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials.

[1]The council is a senior-level policy committee established in 1990 to advise EPA on issues related to implementing the CAA Amendments of 1990. Membership is approximately 60 senior managers and experts representing state and local government, environmental and public interest groups, academic institutions, unions, trade associations, utilities, and industry.

We conducted our work between August 2002 and October 2003 in accordance with generally accepted government auditing standards.

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