



Permits

Proposed Acid Rain Rule

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The U.S. Environmental Protection Agency (EPA) has proposed four rules containing the core acid rain requirements: the Permits Rule (40 CFR Part 72), the Allowances Rule (40 CFR Part 73), the Continuous Emissions Monitoring Rule (40 CFR Part 75), and the Excess Emissions Rule (40 CFR Part 77). EPA will also propose additional rules at a future date. These rules will include requirements for facilities that elect to opt in to the Acid Rain Program (40 CFR Part 74) and for the nitrogen oxide (NO_x) control program (40 CFR Part 76). This fact sheet summarizes the key components of the proposed *Permits Rule* (40 CFR Part 72).

Under Title IV of the Clean Air Act Amendments of 1990, Congress authorized the U.S. Environmental Protection Agency (EPA) to establish the Acid Rain Program. The overall goal of this program is to significantly reduce sulfur dioxide (SO₂) and nitrogen oxide (NO_x) emissions, the precursors of acid rain. To achieve this goal at the lowest cost, the program will employ both traditional and innovative, market-based approaches for controlling air pollution. In addition, the program will encourage energy conservation and promote pollution prevention.

The legislation sets as its primary goal the reduction of annual SO₂ emissions by 10 million tons below 1980 levels. To achieve these SO₂ reductions, the law requires a two-phase tightening of the restrictions placed on fossil fuel-fired power plants.

Phase I begins in 1995 and affects 110 mostly coal-burning electric utility plants located in 21 eastern and midwestern states. Phase II, which begins in the year 2000, tightens the annual emissions

limits imposed on these large higher emitting plants and also sets restrictions on smaller and cleaner plants fired by coal, oil, and gas.

All existing utility units with an output capacity of 25 megawatts or greater and all new utility units will be affected in Phase II. In addition, other sources of SO₂ (such as industrial facilities) may elect to participate in the Acid Rain SO₂ Program by opting in.

The Act also calls for a 2-million ton reduction in NO_x emissions by the year 2000. A significant portion of this reduction will be achieved by utility boilers, which will be required to install low-NO_x burner technologies and meet new emissions requirements.

These requirements will also be implemented in two phases. For Phase I, EPA will establish emissions limitations for two types of utility boilers (tangentially fired and dry bottom, wall-fired boilers). For Phase II, regulations for all other types of coal-fired boilers will be issued by 1997, and must be met beginning in the year 2000 by all units not subject to the Phase I NO_x limits. Regulations for tangentially

fired and dry bottom, wall-fired boilers not covered in Phase I may be tightened at this time.

The innovative, market-based SO₂ allowance trading component of the Acid Rain Program allows utilities to adopt the most cost-effective strategy to reduce SO₂ emissions at units in their system. The Acid Rain Program operating permit spells out the specific program requirements and compliance options chosen by each source. Affected utilities also will be required to install systems that continuously monitor emissions of SO₂, NO_x, and other related pollutants in order to track progress, ensure compliance, and provide credibility to the trading program. In any year that compliance is not achieved, excess emissions penalties will apply, and sources will be required to submit a plan to EPA that specifies how the excess SO₂ emissions will be offset.

Introduction

The Acid Rain Program is being implemented through operating permits. Each operating permit

will specify the enforceable requirements that will apply to each affected unit at a source. The acid rain permitting requirements will afford flexible planning opportunities to help minimize the costs of compliance. All affected sources must submit operating permit applications to either EPA or, during Phase II, the state permitting authority approved by EPA.

Each permit will also specify the source's basic allowance allocation and NO_x limitation. These may vary from the statutory requirements if the source elects one or more optional method of compliance in its operational plan. This plan, known as the compliance plan, describes how the source will meet the acid rain requirements. Permits must be granted before each unit's total annual allowance allocation can be determined (see the Allowance System Rule).

The proposed Permits Rule also outlines the requirements for certifying designated representatives for affected sources, the information needed to complete permit applications, schedules for submitting permit materials, permit processing procedures, duration of permit terms, permit appeal and revision procedures, and the program's periodic compliance certification reporting requirements.

What Sources Must Obtain Permits?

In general, most electric utility plants with one or more units that emit SO₂ and NO_x must obtain an acid rain permit in order to operate. Nonutility sources of emissions are not required to obtain permits unless they voluntarily opt in to the program.

Phase I permits must be obtained for each source with one or more units that:

- Are listed in Appendix A of the rule, entitled "Existing Phase I Affected Units."
- Are Phase I units that become designated as affected units during Phase I under a com-

pliance plan developed by a unit listed in Appendix A of the rule.

- Choose to opt in to the program.

Phase II permits must be obtained for each source with one or more units that:

- Are listed in Appendix A.
- Are listed in Appendix B of the rule, entitled "Existing Phase II Affected Units."
- Are new units (new units are those that began commercial operation on or after November 15, 1990, or that increased electrical generation from less than 25 megawatts to 25 megawatts or more).
- Choose to opt in to the program.

Who Represents the Sources in Permitting Matters?

The owners and operators of each regulated source must select one person to represent the source in permitting matters and may select a second person to act as an alternate for the first. These two persons are known as the designated representatives. Both the designated representative and the alternate must be identified and approved by agreement of the owners and operators of a source up front in the "certificate of representation." The owners and operators and the designated representative are fully responsible for any actions the alternate takes. From this point on in this summary, "designated representative" shall denote the person representing the owners and operators of a utility in matters with EPA, whether it be the designated representative or the alternate.

No permits will be issued to a source until its designated representative has been chosen and certified as provided by the rule. Sources that consist of more than one affected unit must still appoint only one designated repre-

sentative. Use of designated representatives ensures that EPA will not receive conflicting submissions from the same source.

The designated representative is responsible for submitting to EPA and state permitting authorities all acid rain program submissions for the source, including allowance transfers, emissions monitoring reports, compliance certifications, excess emission offset plans, permit applications, permit revisions, and any other information necessary for the implementation of the Acid Rain Program.

In addition, the designated representative must sign and certify the truth and accuracy of each submission. All submissions made by the designated representative are binding on every owner and operator of the source.

The designated representative for a source may be changed at any time by agreement of its owners and operators. All actions undertaken by the previous designated representative before EPA receives the certificate of representation for his or her replacement, however, are binding.

What Information Should Be Included in Permit Applications?

EPA has developed standardized forms that must be completed when applying for an acid rain permit. The forms request designated representative information, general source information, and specific unit information. The standardized forms should ensure national consistency in permit application requirements and help facilitate a national allowance market.

If, for example, one state required considerably more information about the source or more detailed compliance plans prior to issuing an acid rain permit than did another, the source might counter delays in obtaining permit approval, thereby adding to the

source's incremental "cost" of permitting and obtaining allowances. Standardized forms should prevent such problems from arising.

The use of standardized forms also lends itself to computerization of the application process. EPA is currently investigating the possibility of instituting a nonmandatory electronic reporting procedure for sources that would make the permitting system more efficient.

How Do Compliance Plans Work?

Each regulated source must develop a compliance plan for each affected unit describing the steps the unit will take to ensure compliance with the Acid Rain Program. The plan can be structured around one or more of the following options:

- **Standard Compliance Option:** The plan must indicate that the unit will hold enough allowances to cover its annual SO₂ emissions and will be operated in compliance with the applicable NO_x emissions limitations.

- **Phase I - Substitution Plan:** A Phase I unit may reassign all or some of its Phase I SO₂ emissions reduction requirements to one or more existing units (substitution units), which would otherwise not be regulated until Phase II, that agree to fulfill the original unit's Phase I requirements. The substitution unit consequently becomes a designated affected unit for Phase I, and as such also must meet the SO₂ and NO_x limitations of Phase I of the program. All of the units involved in a substitution plan must have the same designated representative.

- **Phase I - Extension Plan:** A Phase I affected unit (including any unit that becomes affected in Phase I under another com-

pliance plan as a designated affected unit) may apply for a 2-year extension of Phase I SO₂ limitations. Extensions will only be granted to units that use a "qualifying Phase I technology" (a technology that can be demonstrated to remove at least 90 percent of the fuel's SO₂ emissions), or that reassign their emissions reduction obligations to another unit that uses such a technology during Phase I.

Each extension unit will be given extra SO₂ emissions allowances to cover the SO₂ it emits beyond its basic Phase I allocation during 1995 and 1996. As provided by the Act, EPA will only award a limited number of allowances to cover extension plans and will process extension applications in the order that they are received.

The proposed rule specifies that the "order of receipt" will be determined by a telephone queuing procedure, but asks for comments on alternative procedures.

- **Phase I - Reduced Utilization Plan:** An affected Phase I unit may meet its emissions reduction requirements by reducing electricity generation. The unit can compensate for planned reduced output by (1) designating a non-Phase I SO₂-emitting unit or units to increase generation (compensating unit); (2) adopting verifiable energy conservation or improved unit efficiency measures; or (3) designating sulfur-free generation to compensate for the reduction. EPA will grant allowances to compensating units based on their 1985 emissions rates and their "baselines" (average annual fuel use from 1985 to 1987).

Because both the original and the compensating unit or units must hold enough allowances to cover their SO₂ emissions, allowances may be transferred

from the original unit to the compensating unit or units to cover emissions beyond their granted allowances. The units named in a Reduced Utilization Plan do not have to have the same designated representative as the original Phase I unit.

- **Phase II - Repowering Extension:** Phase II affected units may obtain a 4-year extension of the Phase II emissions reduction deadline if they repower with a qualified clean coal technology. Repowering requires replacement of an existing coal-fired boiler with (1) one of seven technologies listed in the Act; (2) a derivative of one of those technologies; or (3) a technology determined by the EPA Administrator and the Secretary of Energy to be capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction than technology commonly used in 1990.

Qualified repowering technologies include atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycles, magnetohydrodynamics, direct and indirect coal-fired turbines, and integrated gasification fuel cells. Units that want to obtain a repowering extension must submit a petition to EPA for conditional approval of their repowering technology. Moreover, a compliance plan outlining when repowering activities will occur and other information must be submitted to the permitting authority. If the unit proceeds with repowering and later determines that the prospect is infeasible, it will not be held liable for violation of the Act for failing to repower as long as it acted "in good faith."

- **NO_x Emissions Averaging Plan:** Units that are subject to NO_x

regulations during Phase I and all Phase II affected units may enter into an averaging plan if they have the same owner or operator and designated representative. The emissions averaging plan must identify all of the units involved, their combined annual NO_x emissions limitation, and the individual levels of NO_x each unit proposes to emit annually. With this option, emissions generated by individual units above the required rates can be compensated for by other units in the utility system as long as the combined emissions do not exceed the limitations.

The use of standardized forms should ensure national consistency in permit application requirements.

- **NO_x Alternative Emissions Limitations Plan:** A unit can request an alternative, less stringent NO_x emissions limitation if it can demonstrate that the otherwise applicable NO_x limitation cannot be met at the unit using the technology upon which the regulatory limitation was based. To be granted the less stringent limit, the unit must confirm that the control equipment upon which the unit was based was properly designed, installed, and operated.
- **Phase I - NO_x Compliance Deadline Extension Plan:** Units regulated under Phase I for NO_x emissions can apply for a 15-month Phase I compliance deadline extension if equipment needed to meet the NO_x requirement cannot be obtained and installed by January 1, 1995, because it is in inadequate supply.
- **Opt-in Plan:** Units that are not regulated under the Act may

wish to become affected units for SO₂ in order to participate in the allowance trading program. These units must submit applications under requirements that will be promulgated in the Opt-in Rule.

In addition, special plans are required for the following situations:

- **New Unit Plan:** New units are regulated under Phase II of the Program. Permit applications for new units must include a plan, which indicates when the unit will commence operation. Accounting for emissions at new units begins on January 1, 2000, or upon commencement of operation, whichever is later.
- **Common-Stack Plans:** In situations where a source does not independently monitor the emissions of units that share a common emissions stack, these separate units will be regulated as a single unit. (This requirement does not apply where each unit has a separate certified emissions monitor). These units must indicate that they share a common stack in their emissions and compliance plans. If emissions from common stack units exceed the combined total of the allowances held for those units, then the units will be held liable for failing to comply with the Act. If one of the units is regulated under Phase I of the program, the other units not otherwise regulated in Phase I must be designated as Phase I affected units under either a substitution plan or as opt-in units and are assigned emissions allowances.

Units may specify more than one of the compliance options in their compliance plans and may seek conditional preapproval of the options. In this manner, the unit is given flexibility to select the ap-

propriate compliance option at a later date, when more information is available. The unit's designated representative simply informs EPA of its choice, and the permit is administratively amended to include this change.

Units may specify more than one of the compliance options in their compliance plans.

Multiunit plans involving separate sources or separately owned and operated units (such as Phase I extension control unit plans and reduced utilization plans) generally may have different designated representatives (except as noted earlier). The compliance plans must be properly cross-referenced in the permit for each source and signed by each designated representative involved.

What Does the Permitting Authority Do with the Application?

When the permitting authority receives a source's permit application, the permit writer determines if the application and compliance plans are complete. If they are incomplete, the permit writer will request additional information. (Delays in submitting information can result in a denial of the application and a violation of the permit requirements.)

Once all of the necessary information has been obtained, the permit writer prepares a proposed permit and a statement describing the legal and factual basis of the permit requirements. These materials are provided to the source, and are made available to the public.

A comment period is then held during which time the public can comment on the proposed permit

and request a public hearing. After all comments are received, the permit is issued or the application is denied. This action constitutes the permitting decision and is subject to appeal by the source or the public.

During Phase I of the program, EPA's Regional Offices are responsible for issuing acid rain permits. For Phase II, states are required to develop and implement permit programs for approval by EPA pursuant to the general permitting requirements specified under Title V of the Clean Air Act.

EPA will process Phase II permit applications for sources located in those states that do not have EPA approved permit programs by July 1, 1996. In these cases, EPA will follow its Phase I permitting procedures. States with approved programs will process Phase II permit applications and submit proposed permits to EPA for review. Permits will be issued by states following the EPA review, assuming that EPA does not have any substantive objections.

When Should the Permit Materials Be Submitted?

EPA has developed a schedule that dictates when permit materials must be submitted in both Phase I and Phase II of the Acid Rain Program. During Phase I, the following deadlines apply:

- Phase I permit applications and proposed compliance plans must be submitted by February 15, 1993.
- Designated Representative Certificates of Representation for Phase I sources must be postmarked no later than the date the permit application is submitted.
- Compliance option forms can be submitted with the permit application, or can be submitted as proposed permit revisions. Sources considering a Phase I extension will be able to submit an "early ranking"

application prior to submission of the application to determine whether they will receive allowances from the reserve.

During Phase II, the following deadlines apply:

- SO₂ permit applications and proposed compliance plans must be postmarked by January 1, 1996.
- NO_x permit applications and proposed compliance plans must be submitted by January 1, 1998.
- Designated Representative Certificates of Representation must be postmarked no later than with the permit application.
- New unit plans must be submitted by January 1, 1998, or 24 months before the unit commences operation (whichever is later).
- Compliance option forms can be submitted with the permit application, or can be submitted as a permit revision.

How Long Does the Permit Last?

Each acid rain permit will be effective for 5 years. Phase I permits will be issued in 1993, but will be effective throughout Phase I, from January 1, 1995, through December 31, 1999. This delay in the Phase I permit effective date has been proposed to minimize the need for Phase I permit reapplications in 1998 (5 years after the initial permits will be issued).

States may also similarly delay the effective dates of permits they issue for Phase II, and have them begin in the year 2000. This may also be possible under the various state permit programs approved under Title V of the Clean Air Act. States are encouraged to put affected sources on a permitting cycle that coincides with the acid rain permitting cycle, when issuing permits for other air program requirements (such as State Implementation Plans).

How Can Permitting Decisions Be Appealed?

Any person challenging a permitting decision must file a petition for review with the Administrator. This petition must show that the Agency's factual findings or legal conclusions are "clearly erroneous," or that policy determinations underlying the decision are "arbitrary and capricious." The EPA Administrator will determine if the review should be granted.

Appeals of state permitting decision in Phase II of the program would be governed by the administrative and judicial review procedures specified in the approved permitting program. If the state has issued the permit, it will conduct the appeal process unless the decision being appealed was made by EPA. Decisions made by EPA include, but are not limited to (1) denial by the EPA Administrator of an acid rain permit, (2) approval or disapproval of an excess emissions offset plan, and (3) determination of whether a proposed technology constitutes a qualifying repowering technology.

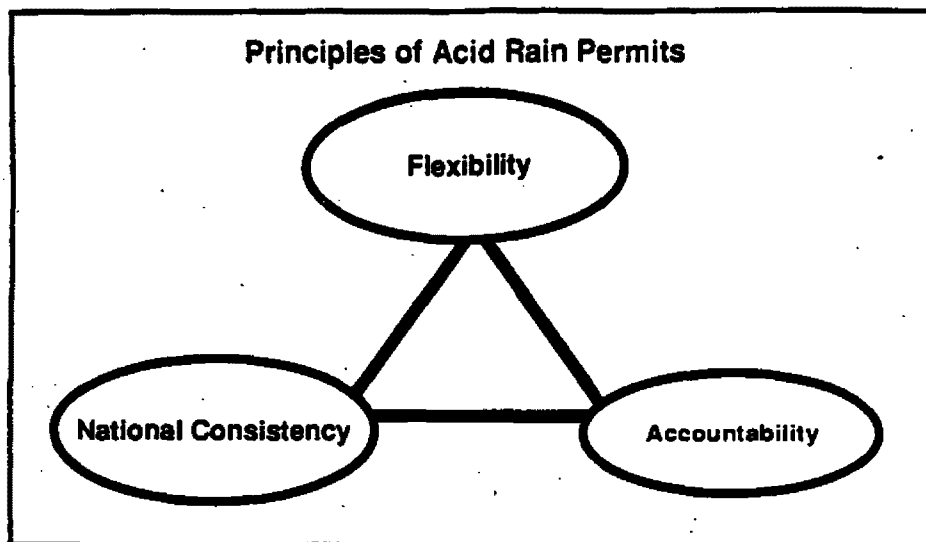
When the state conducts an appeal, it must notify EPA of the appeal as well as the decision that is reached. State permit programs must afford EPA the right to intervene in any acid rain permit administrative or judicial appeal conducted by the state.

How Can the Permit Be Revised?

In many cases, permit revisions may be necessary. Three types of permit revision procedures are specified in the proposed rule: (1) permit modifications including fast track permit modifications; (2) administrative permit amendments; and (3) automatic permit amendments.

The permit modification procedure would apply to, among other things, any proposed relaxation of a monitoring requirement; a relaxa-

Principles of Acid Rain Permits



The acid rain permitting process furnishes utilities with the flexibility to select from a number of compliance options and devise the most cost-effective compliance plan possible. The standardized permitting forms ensure consistency on a nationwide basis. Finally, the appointment of a designated representative provides the program with the requisite accountability to perform well.

tion of an approved emission offset plan; the proposed use of a new method of compliance, a change in the compliance option that results in a previously unaffected unit becoming affected; changes to a Phase I extension plan; or a decision by a state permitting authority interpreting, modifying, or voiding any permit provision. Permit modifications would involve prior public notice and comment.

EPA has proposed two fast track options. Under the first option, the designated representative for the unit involved would submit the proposed permit modification to EPA. EPA would have 30 days to rule on the revision. If EPA decides to approve the revision, it would notify members of the public that were interested in the initial permitting action (e.g., commenters on the original permit) of the proposed change. These interested persons would have 15 days to comment on the proposed modification.

If no objections were raised during this comment period, the permit modification would become effective. If objections occur, the proposed revision would have to go through the full permit modification procedure.

With the second fast track modification option, the permittee would publicize the proposed permit modification in a journal or newspaper of national and general circulation, as well as give notice to the interested parties. The public would have 30 days to comment to EPA. The permittee would submit its proposed modification to EPA, and the Agency would have 30 days after the close of the comment period to rule on the proposed modification. EPA may choose one or both approaches in its final rulemaking.

The administrative permit amendments procedure would apply to simple alterations to a permit, such as corrections of typographical errors, address or name changes.

In addition, other specific changes, such as incorporating an approved excess emissions offset plan, activation of a compliance option that was already conditionally approved in the original permitting action, and changes to the designated representative if a new certificate of representation has been filed, will be handled as administrative permit amendments for the Acid Rain Program. Administrative amendments will be

made by the permitting authority with subsequent public notice.

As provided in the Act, automatic permit amendments will occur whenever an emissions allowance transaction is properly registered with EPA on the Allowance Tracking System. Once the transaction has been recorded by EPA, the permit for a unit selling the allowances will be deemed to be automatically amended to reflect that its allowance pool and consequent SO₂ emissions limitation, has been diminished by the quantity of allowances sold.

Similarly, the permit for the unit buying the allowances will automatically be deemed to be amended to reflect the corresponding increase in allowances and SO₂ emissions limitation. The permit will not actually be rewritten to effect these automatic amendments, however. Rather the applicable SO₂ emissions limitation will have to be determined at the end of each calendar year by looking at the unit's Allowance Tracking System account.

For More Information

For more information, write to

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Fact sheets are available on the following subjects:

- Allowance System
- Continuous Emission Monitoring
- Environmental Benefits
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