



Acid Rain Program

Instructions for Phase II NO_x Compliance Plan (40 CFR 76.9)

The U.S. Environmental Protection Agency has promulgated regulations designed to substantially reduce the annual emissions of nitrogen oxides (NO_x) from coal-fired electric utilities. The NO_x Emission Reduction regulations are found at 40 CFR part 76 and apply to each existing coal-fired utility unit that is subject to sulfur dioxide (SO₂) emission reduction requirements under Sections 404, 405, or 409 of the Clean Air Act. Under 40 CFR 76.9, the owner or operator of each affected unit subject to 40 CFR part 76 must include a compliance plan for NO_x emissions in the Acid Rain permit application for that unit. The designated representatives (DRs) of Phase I and Phase II NO_x-affected units with Group 1 or Group 2 boilers must submit an initial Phase II NO_x compliance plan to the appropriate title V air permitting authority (in most cases, the State or local air permitting authority) not later than **January 1, 1998**. A Group 1 boiler is a tangentially fired boiler or a dry bottom wall-fired boiler. A Group 2 boiler is a cell burner boiler, cyclone boiler, vertically fired boiler, or a wet bottom boiler. Once the title V permitting authority receives the Phase II NO_x compliance plans, it will in turn review them and incorporate approved plans into the Phase II Acid Rain permits issued by the permitting authority to Phase II affected sources.

General Instructions

- (1) Please type or print in black ink.
 - (2) NADB is the National Allowance Data Base for the Acid Rain Program. To obtain the database on diskette, call the Acid Rain Hotline at (202) 233-9620. This data file is in dBase format for use on an IBM-compatible PC. It requires 2 megabytes of hard drive memory. If the unit is not listed in NADB, use the plant name, ORIS code, and boiler ID#(s) listed on the Certificate of Representation for the affected source.
 - (3) If more space is needed, photocopy the pertinent page. When you have completed the form, indicate the page order and total number of pages (e.g., 1 of 4, 2 of 4, etc.) in the boxes in the upper right hand corner of each page.
 - (4) Submit one complete set of all forms with **original** signatures to:
 - (a) The appropriate title V permitting authority (for NO_x Averaging Plans, a copy of the plan must be submitted to any **other** title V permitting authority with jurisdiction over any of the units in the plan).
- and
- One **copy** to:
- (b) U.S. Environmental Protection Agency
Acid Rain Program (6204J)
Attn: Phase II NO_x
401 M St., SW
Washington, DC 20460
- (5) For assistance, call the Acid Rain Hotline at (202) 233-9620.

NO_x Compliance Options

STEP 2

application is due.

General

Indicate a proposed method of compliance with the NO_x emissions requirements for each unit at the source affected for NO_x during Phase II. A Phase II NO_x compliance plan must account for each year the Phase II acid rain permit will be effective. Further, a NO_x compliance plan is in effect only through the term of the acid rain permit covering the NO_x-affected units. **A new NO_x compliance plan must be submitted when an acid rain permit renewal**

NO_x-affected Units

To determine if an affected unit subject to Acid Rain SO₂ requirements is also subject to NO_x emission limitations, see 40 CFR 76.1, the definitions at 40 CFR 76.2, and the emission limitations at 40 CFR 76.5, 76.6, and 76.7. Most existing coal-fired units that are subject to Acid Rain SO₂ requirements and that have a Group 1 or Group 2 boiler are also subject to the NO_x emission limitations under 40 CFR part 76.

Phase I Group 1 Boilers

Compliance options (a) and (b) are standard annual emission limitations, one of which may be selected for a Phase I Group 1 boiler. The limits also apply to Phase II Group 1 boilers that are covered by an early election plan previously approved by U.S. EPA.

Early Election

Compliance option (c), NO_x early election, is available only to Phase II Group 1 boilers with early election plans submitted by January 1, 1997 and approved by U.S. EPA. All such plans terminate no later than December 31, 2007. DRs with NO_x early election units must select option (c) and either (a) or (b), the Phase I Group 1 standard emissions limit specified for the unit in the plan. If the termination date of the plan will be prior to the expiration date of the acid rain permit covering an early election unit, the DR must indicate an additional NO_x compliance option that will apply to the unit beginning when the plan terminates through the date by which the acid rain permit will expire. In such cases the DR must mark option (c) and either (a) or (b), as well as the additional box(es) denoting the additional, follow-on NO_x compliance option. For early election units in a common stack, see also the instructions under Common Stacks.

Phase II Group 1 Boilers

Compliance options (d) and (e) denote standard annual emission limitations, one of which may be selected for a Phase II Group 1 boiler.

Phase II Group 2 Boilers

Compliance options (f) through (i) denote standard annual emission limitations, one of which may be selected for a Phase II Group 2 boiler.

NO_x Averaging

Compliance option (j) denotes the annual emission limitation under a NO_x averaging plan, which may be selected in lieu of a standard annual emission limit for Group 1 or Group 2 boilers with the same owner or

operator and the same DR. See instructions below and include Phase II NO_x averaging form.

Common Stacks

A unit that utilizes a common stack and is separately monitored for NO_x (i.e., has its own NO_x monitor and diluent monitor) is treated as the same as a unit that emits only through its own separate stack.

A unit (other than an early election unit) that utilizes a common stack and is not monitored separately must select one of the applicable common stack options. If the unit shares a common stack with other affected units and no non-affected units and if each of the units has a NO_x emission limitation, three options are available: comply with the most stringent NO_x emission limitation applicable

to any unit utilizing the common stack (option (k)); include the units in a NO_x averaging plan (option (l)); or use an approved method for apportioning the combined NO_x emission rate in the common stack (option (m)). If the unit shares a common stack with at least one other unit that does not have a NO_x emission limitation or with at least one non-affected unit, you must use an approved method for apportioning the combined NO_x emission rate (option (m)), unless, of course, the unit is separately monitored. An early election unit that utilizes a common stack, that is not monitored separately, and whose early election plan specifies option (k) or (m) for the unit, must select such option.

If an apportionment option is chosen, check, in addition to option (m), the box at Step 2 that indicates the applicable emission limitation and submit to U.S. EPA the documentation supporting apportionment with the monitoring plan submission.

Alternative Emissions Limitations

Compliance option (n) must be selected by a Phase II Group 1 or Group 2 boiler that is applying for an AEL demonstration period, or final AEL, starting in Phase II. Compliance option (n) must also be chosen by a boiler that is renewing for Phase II a final AEL approved by U.S. EPA (see instructions accompanying Phase II AEL Demonstration Period, Final AEL Petition, and AEL Renewal forms and include appropriate form).

Compliance option (o) must be selected by a boiler that has applied to U.S. EPA for an AEL demonstration period or final AEL which is undergoing review by U.S. EPA. If a final AEL is subsequently approved by U.S. EPA, a revised Phase II NO_x compliance plan must be submitted marking option (o) and attaching an AEL Renewal form. If an AEL demonstration period or final AEL is subsequently disapproved by U.S. EPA, a revised Phase II NO_x compliance plan must be submitted indicating which Phase II NO_x compliance option will be used by the boiler.

Repowering Extension Plans

Compliance option (p) must be selected by a boiler that is covered by either an approved repowering extension plan or a plan that is undergoing review. If a repowering extension plan undergoing review is subsequently disapproved, a revised Phase II NO_x compliance plan must be submitted indicating which Phase II NO_x compliance option will be used by the boiler. If the termination date of either the repowering extension plan undergoing review or the approved plan is prior to the expiration date of the acid rain permit covering the repowered (or replacement) boiler under the plan, the DR must indicate an additional NO_x compliance option that will apply to the boiler beginning when the plan terminates through the date by which the acid rain permit will expire. In such cases the DR must mark option (p), as well as additional box(es) denoting the additional, follow-on NO_x compliance option.

NO_x Averaging Plan

Under 40 CFR 76.11 any affected units under control of the same owner or operator and with the same designated representative may average their NO_x emission rate, rather than each unit complying on an individual-unit basis with the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7. Units with no common owner or operator may not average their emissions. You may submit an averaging plan (or a revision to an approved averaging plan) with the appropriate title V permitting authority(s) at any time up to and including January 1 of the calendar year for which the averaging plan will become effective. If the plan is restricted to units located within a single permitting authority's jurisdiction, you may submit the plan at any time up to and including July 1 of the calendar year for which the plan will become effective.

STEP 1

Each unit identified for inclusion in the averaging plan in Phase II must be a Group 1 or Group 2 boiler subject to an emission limitation under 40 CFR 76.5, 76.6, or 76.7. Enter each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7 in column (a). If a unit with an alternative emission limitation demonstration period or a final alternative emission limitation under 40 CFR 76.10 participates in an averaging plan, enter the applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7, not the interim or alternative limit, in column (a).

For units utilizing a common stack that are averaging pursuant to 40 CFR 75.17(a)(2)(i)(B), the same alternative contemporaneous emission limitation must be entered in column (b) for each unit utilizing the common stack. Different annual heat input limits may be entered for these units in column (c). Units not utilizing the common stack may also be included in the averaging plan with the common stack units.

The annual heat input limit entered at column (c) will be a minimum limit if the value in column (b) is less than the value in column (a) for that unit. It will be a maximum limit if the value in column (b) is greater than the value in column (a). The values entered for each unit at columns (b) and (c) must satisfy the formula at Step 2.

STEP 2

The entries in Step 2 must demonstrate that the Btu-weighted annual emission rate averaged over the units in the plan is less than or equal to the Btu-weighted annual average emission rate for the same units if they are each operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7. Use the equation that appears in Step 2 to demonstrate that the alternative contemporaneous annual emission limitations and annual heat input values assigned to the units in Step 1 satisfy this criterion. For units with an interim emission limitation or an alternative emission limitation, the applicable emission limitation for the equation shall equal the applicable emissions limitation under 40 CFR 76.5, 76.6, or 76.7.

STEP 3

The second option is included to avoid the need to submit identical plans each for a different year if you want each plan to be effective for only one year.

Paperwork Burden Estimate

The burden on the public for collecting and reporting of information under this request is fixed per response indicated. Send comments regarding this collection of information, including suggestions for reducing the burden, to: Chief, Information Policy Branch (PM-2136), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460; and to: Paperwork Reduction Project (OMB#2060-0258), Office of Information and Regulatory Affairs, Office of Management and Budget,

Washington, D.C. 20503. *Do not send your forms to these addresses; see paragraph (4) of the General Instructions on Page 1 for form submission information.*

<u>FORM</u>	<u>HOURS</u>	
NO _x Compliance Plan		10
NO _x Averaging Plan	200	