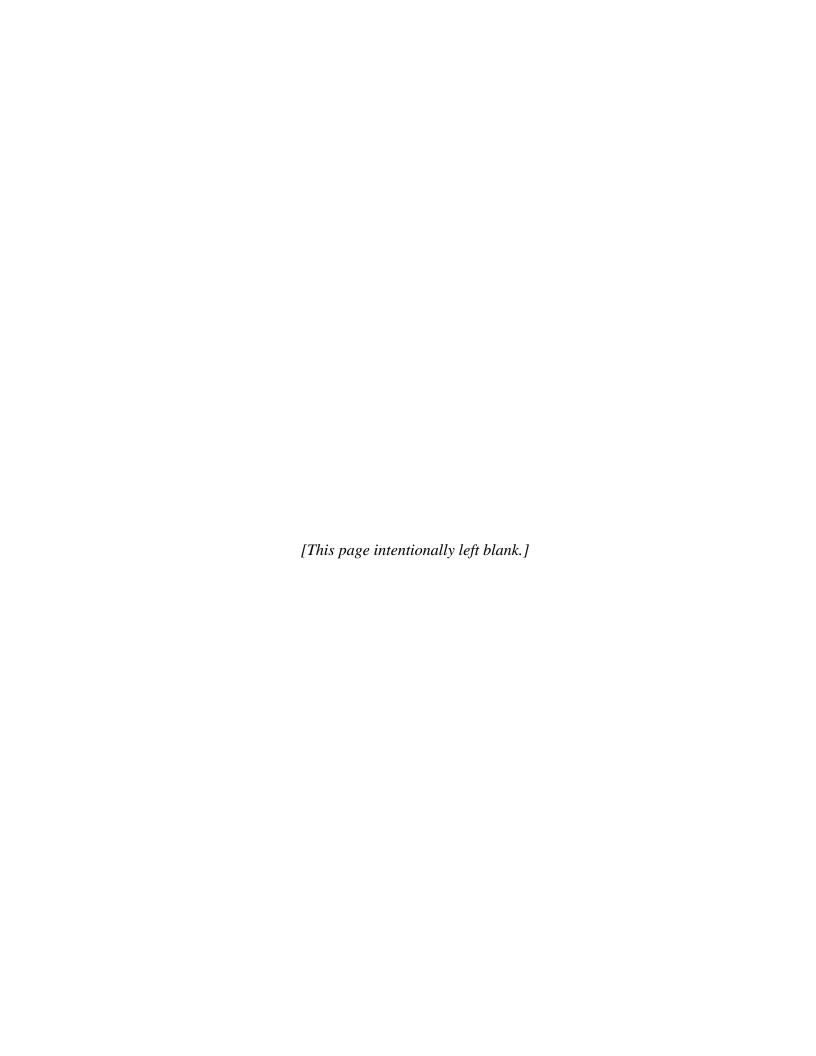


## **SMALL ENTITY COMPLIANCE GUIDE**

Federal NO<sub>x</sub> Budget Trading Program (40 CFR Part 97)





#### Disclaimer

This Guide was prepared pursuant to section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Public Law 104-121. This Guide is intended solely to help regulated entities comply with the published national regulation, "Findings of Significant Contribution and Rulemaking on Section 126 Petitions for Purposes of Reducing Interstate Ozone Transport" (*Federal Register*, Vol 65, No. 11, pages 2674-2767, January 18, 2000).

This Guide is not intended to replace the regulation and may not cover all parts of the regulation. Final authority rests solely with the regulation. However, in any civil or administrative action against a small business, small government, or small non-profit organization for a violation of the Federal NO<sub>x</sub> Budget Trading Program under 40 CFR Part 97, the content of this Guide may be considered as evidence of the reasonableness or appropriateness of proposed fines, penalties or damages.

EPA may decide to revise this guide without public notice to reflect changes in the Agency's approach to implementing the Federal NO<sub>x</sub> Budget Trading Program, or to clarify and update text. To determine whether the Agency has revised this guide and/or to obtain copies, contact EPA's Small Business Ombudsman Office at (202) 260-0490 or EPA's Clean Air Markets Division at (202) 564-9180. You can also determine whether EPA has revised or supplemented the information in this guide by accessing the document at: http://www.epa.gov/acidrain/modlrule/main.html#126.

## Acknowledgments

This document was prepared by the Clean Air Markets Division, Office of Atmospheric Programs, U.S. Environmental Protection Agency, with assistance from Perrin Quarles Associates, Inc. (under EPA Contract No. 68D70065), and approved for publication. This document was provided for review to:

- ! American Public Power Association
- ! American Portland Cement Alliance
- ! Associated Industries of Massachusetts
- ! Council of Industrial Boiler Owners
- ! National Association of Manufacturers
- ! National Business Legislative Council
- ! National Small Business United
- ! Natural Gas Supply Association
- ! Ohio Municipal Electric Association
- ! Smaller Business Association of New England
- ! SMC Business Councils

[This page intentionally left blank.]

#### **Table of Contents**

	<u>Pa</u>	<u>age</u>
Section 1:	Introduction	. 1
1.1 1.2 1.3	Who should use this guide? What does the guide cover? How do I use this guide?	. 2
Section 2:	Requirements of the Regulation	. 5
2.1 2.2	What environmental or human health issues does the trading program address?	
2.3	that burn fossil fuel?	
	<ul> <li>2.3.1 Rulemaking history</li> <li>2.3.2 Scope of the rulemaking</li> <li>2.3.3 Nature of the trading program</li> </ul>	. 8
2.4 2.5 2.6	How do I demonstrate compliance?  Compliance timetable  How does this regulation relate to other Federal, State, and local requirements?	. 9
	2.6.1 NO <sub>x</sub> SIP Call 2.6.2 OTC NO <sub>x</sub> Budget Program 2.6.3 Acid Rain Program 2.6.4 Other requirements	11 12
Section 3:	Applicability	13
3.1 3.2 3.3 3.4	Do I own or operate a large EGU?	16
3.5 3.6 3.7	Appendix A or B to Part 97?	18 22

## **Table of Contents (cont.)**

	<u>Pag</u>	e
Section 4:	Operation of the Trading Program	5
4.1 4.2 4.3 4.4	What is the basic structure of the program?	5
	4.4.1Selecting an AAR24.4.2Establishing accounts3	
4.5 4.6	How do I get my allowances?	3
4.7 4.8 4.9 4.10 4.11	compliance?3May I hold surplus allowances?3How do I transfer allowances?3What is the annual compliance certification?4May I get credit for early emission reductions?4Summary of trading program deadlines and data processing4	8 9 0 0
Section 5:	NO <sub>x</sub> Budget Permits	5
5.1 5.2	Do I need a permit?	
Section 6:	Emissions Monitoring, Reporting and Recordkeeping Requirements 4	9
6.1	Monitoring options	0
	<ul> <li>6.1.1 Do my monitoring options depend on what type of unit I have?</li></ul>	0
	monitoring options apply to my units?	
	6.1.4 What if my unit has multiple stacks or shares a stack with other units?	
	6.1.5 What if my unit is an opt-in unit?	

## **Table of Contents (cont.)**

	<u>Pa</u>	<u>ge</u>
6.2	Monitoring approval process	56
	6.2.1 Initial monitoring plan	57
	6.2.2 Certification test notice	58
	6.2.3 Certification testing	59
	6.2.4 Certification application	50
	6.2.5 EPA approval	52
6.3	Quality assurance (QA)	52
6.4	Quarterly emissions and QA reporting	58
6.5	Changes to your monitoring	72
Section 7:	Other Questions and Answers	75
7.1	How might I conduct a self-audit?	75
7.2	What are the implications of this regulation for my existing operating	76
7.3	permits?	
1.3	Are there opportunities for flexibility or waivers?	/ /
Section 8:	Compliance Assurance Process	79
8.1	How will EPA determine compliance?	79
8.2	If I discover a violation, how can I work with EPA to correct it?	
8.3	If EPA discovers a violation, what might EPA's response be?	80
8.4	What is the legal status of this guide?	81
Appendix A	: Contacts and Resources	-1
11	: Forms Information	
Appendix C	: Ouestionnaire: How Useful was this Guide?	-1

## **List of Tables**

	<u>Pa</u>	.ge
Table 2-1:	Major Compliance Deadlines	10
Table 3-1:	EGU Applicability	
Table 3-2:	Non-EGU Applicability	
Table 3-3:	Fossil Fuel-fired Applicability Test	
Table 4-1:	Typical Combustion/Post-combustion Control Options	
Table 4-2:	AAR Selection Requirements	
Table 4-3:	Account Certificate of Representation Form Requirements	
Table 4-4:	Treatment of New Units When Updating Allocations	
Table 4-5:	Assigning Allowance Accounts	
Table 4-6:	FIFO Allowance Deduction Rules	37
Table 4-7:	Allowance Transfer Forms	40
Table 4-8:	Section 126 Rule Compliance Supplement Pool	41
Table 4-9:	Trading Program Deadlines for a Typical Year	42
Table 6-1:	Part 75 Unit Type Definition	50
Table 6-2:	Part 75 Subpart H Monitoring Options	53
Table 6-3:	Moisture Monitoring Options	
Table 6-4:	Multiple/Common Stack Monitoring Options	54
Table 6-5:	Overview of Monitoring System Certification Reporting	57
Table 6-6:	Monitoring System or Methodology Certification Tests	
Table 6-7:	Certification Application Reporting	60
Table 6-8:	Low Mass Emissions Unit Certification Reporting	61
Table 6-9:	QA Requirements for Units Reporting on an Annual Basis	63
Table 6-10:	QA Requirements for Units Reporting on an Ozone Season Basis	64
Table 6-11:	Periodic Quality Assurance RATA Notification Requirements	67
Table 6-12:	EDR Record Types for NO <sub>x</sub> Mass Reporting	68
Table 6-13:	Recertification Reporting	73
Table 6-14:	Recertification Application Reporting	74
Table 7-1:	Example Self-audit Checklist	75
	List of Figures	
	Pa	ıge
	<u> </u>	
Figure 2-1:	Areas Affected Under the Section 126 Final Rule	8
Figure 3-1:	Applicability Determination Process	14
Figure 3-2:	Steps to Set a Permit Limit that Qualifies for the Exemption	20
Figure 4-1:	Trading Program Data Flow and Process	

### **Section 1: Introduction**

After reading this introduction you should know whether you need to use this Guide, what this Guide covers, and where to obtain the latest information on the regulation.

The U.S. Environmental Protection Agency (EPA) published the regulation entitled "Findings of Significant Contribution and Rulemaking on Section 126 Petitions for Purposes of Reducing Interstate Ozone Transport" (Federal Register, Vol. 65, No. 11, pages 2674 - 2767) on January 18, 2000 under authority of section 126 of the Clean Air Act (the Act). This Guide explains how to tell if you -- as the owner or operator of a stationary air pollution source -- are subject to the regulation and what to do if you are required to comply.

Eight northeastern States submitted petitions under section 126 of the Act that sought ozone-related reductions from certain sources in upwind States. EPA has made a technical finding for each of the petitions. The Agency has determined that large, fossil fuel-

Section 126 authorizes a downwind State to petition EPA for a finding that stationary source(s) in upwind States must reduce emissions because they contribute significantly to NAAQS nonattainment in the petitioning State.

fired stationary sources in certain upwind States should be required to reduce their ozone season emissions to mitigate the effect these sources have on ozone nonattainment in downwind States. The sources that are affected by this rule include large electric generating units (EGUs) and large industrial/institutional boilers or turbines (non-EGUs) that emit nitrogen oxides (NO<sub>x</sub>) from burning fossil fuels. These NO<sub>x</sub> emissions contribute to nonattainment of the National Ambient Air Quality Standard (NAAQS) for ozone in the downwind States.

The final rule implements a Federal NO<sub>x</sub> Budget Trading Program (40 CFR Part 97) as a cost-effective approach for reducing ozone season NO<sub>x</sub> emissions from the affected sources. As described below, this Guide includes information on who is affected by the rule, the requirements that apply to these sources, and the details of the trading program.

The information in this Guide was written and published in August 2000. You can determine whether EPA has published further corrections to the rule, issued a new rule to address additional section 126 petitions, or revised the information in this Guide by

TIP! Check these web sites for further regulatory information and updates:

www.epa.gov/ttnotag1 www.epa.gov/acidrain www.epa.gov/airmarkets Introduction Section 1

checking the EPA Regional Transport of Ozone (RTO) web site and Clean Air Markets Division's (CAMD -- formerly known as the Acid Rain Division) web site.

## 1.1 Who should use this guide?

If you are an owner and/or operator of a large stationary source that burns fossil fuel, then you should use this Guide to help you:

- ! Determine whether the unit(s) at your facility are subject to the section 126 rulemaking, and
- ! Understand the requirements of the Federal NO<sub>x</sub> Budget Trading Program.

The Small Business Regulatory Enforcement Fairness Act (SBREFA) requires EPA to prepare a compliance guide to help small businesses comply with the regulation. However, since the regulation has generally the same requirements for all affected sources, this Guide is helpful for both large and small businesses. See Section 2.3 for a summary of the rulemaking and Section 3 for more specific guidance on determining whether your facility or unit is subject to the requirements of the rule or is eligible for an exemption from the requirements of the rule.

## 1.2 What does the guide cover?

This Guide covers the basic requirements of the section 126 rule including the criteria that EPA used to determine who is affected by the rule (Section 3), how the trading program works (Section 4), what

See Appendix A to this Guide for a list of contacts and other resources for the Federal NO<sub>x</sub> Budget Trading Program.

permits are required (Section 5), and what monitoring, reporting and recordkeeping requirements apply (Section 6). Sections 7 and 8 cover other issues related to compliance assurance.

## 1.3 How do I use this guide?

This Guide is organized into eight major sections.

**Section 1** introduces you to this Guide and the section 126 regulation. You should be able to determine whether you could be affected by the rule and therefore, whether you need to use this Guide.

**Section 2** provides an overview of the regulatory requirements. This section first explains the environmental and health issues that the regulation addresses and then

Section 1 Introduction

provides an overview of the rulemaking history and the regulatory structure. The section also summarizes the major compliance timetables you must follow and explains how this rule relates to other Federal, State and local requirements.

**Section 3** provides a detailed description of the applicability provisions of the rule and includes step-by-step procedures for determining if you are subject to the regulation.

**Section 4** describes how you use the trading program to meet your emission limits. This section outlines what options you have to meet your reduction obligations and how the trading program works.

**Section 5** provides a brief synopsis of the permit requirements for the Federal NO<sub>x</sub> Budget Trading Program.

**Section 6** describes in some detail the emissions monitoring, reporting and recordkeeping requirements you must meet to account for all of your emissions.

**Section 7** includes information on other common questions such as conducting a self-audit to determine compliance, the overlap with existing permits, and the ability to obtain additional allowances for compliance needs.

**Section 8** includes information on the compliance assurance process. This section describes how EPA determines compliance and how violations may be corrected.

**Appendices** to the Guide include forms information (including example language for standard permit requirements), contacts and other resources, and a questionnaire about the usefulness of this Guide.

Introduction Section 1

[This page intentionally left blank.]

## **Section 2: Requirements of the Regulation**

After reading Section 2, you should understand the benefits of the Federal  $NO_x$  Budget Trading Program, the general requirements of the program, key compliance dates, and how the program relates to other Federal and State requirements.

# 2.1 What environmental or human health issues does the trading program address?

The Federal NO<sub>x</sub> Budget Trading Program requires affected sources in 13 States to prohibit specified amounts of emissions of nitrogen oxides (NO<sub>x</sub>). These reductions will help reduce NO<sub>x</sub> and ozone transport across State boundaries. NO<sub>x</sub> react with volatile

Ground-level ozone has long been recognized to have significant adverse effects on public health and also can result in agricultural crop loss and damage to forests and ecosystems.

organic compounds (VOC) in the presence of sunlight to form ground-level ozone (a primary component of smog). To protect human health and welfare, EPA has established national ambient air quality standards (NAAQS). The NAAQS are a measure of acceptable and unacceptable levels of certain pollutants across the country. More than half of the U.S. population lives or works in areas that exceed the national standards for ozone. In order to reduce national ground-level ozone levels, emissions of VOC and  $NO_x$  must be reduced.

Human exposure to ozone primarily affects the lungs. There are many ozone-induced health effects including decreased lung function, increased respiratory symptoms and inflammation of the lung. Increased ozone levels may also cause long term damage to the lungs. About one out of every three people in the U.S. is at a higher risk of experiencing ozone-related health effects. Four groups of people are particularly sensitive to ozone: children, adults who are active outdoors, people with respiratory diseases such as asthma, and people with unusual susceptibility to ozone.

Ozone's most perceptible effects on human health are acute respiratory symptoms such as coughing and painful deep breathing. These acute health effects are induced by short-term exposures to ozone (observed at concentrations as low as 0.12 parts per million), generally while individuals are engaged in moderate or heavy exertion. During activity, ozone penetrates deeper into the parts of the lungs that are more vulnerable to injury. Acute health effects also are induced by prolonged exposures to ozone (observed at concentrations as low as 0.08 ppm), typically while individuals are engaged in moderate exertion. Moderate exertion levels are more frequently experienced by individuals than heavy exertion levels.

Overview Section 2

Elevated concentrations of ozone are also associated with adverse welfare effects. Among the welfare impacts from exposure to ozone are damage to selected commercial timber species and economic losses for commercially valuable crops, such as soybeans and cotton. The typical concentration level of ozone found in rural areas is thought to depress crop yields and cause visible damage (such as premature aging and leaf loss) to other plant life.

## 2.2 Why is it important to regulate electric generating and industrial sources that burn fossil fuel?

In most States, large electric generating and industrial boilers and turbines that burn a significant amount of fossil fuel represent the largest identifiable sources of NO<sub>x</sub> emissions. Consequently, EPA and many States consider the regulation

The sources affected by the trading program release a significant portion of overall  $NO_x$  emissions in the applicable States.

of these facilities to be a crucial component of the overall approach to reducing those emissions that contribute to excess levels of ozone.

Currently, certain large utility or electric generating sources are required to control  $NO_x$  emissions under EPA's Acid Rain Program. The Program is designed to achieve significant reductions in emissions of sulfur dioxide ( $SO_2$ ) and  $NO_x$  to mitigate the effects these pollutants have on acid rain. Other programs also can require  $NO_x$  reductions or emission limitations as described below in Section 2.6. However, in order to achieve a level of  $NO_x$  emissions that would reduce ozone levels in the petitioning States, it is important to regulate sources that burn fossil fuel, have been found to be contributing significantly to ozone levels in the downwind or petitioning States, and are able to implement a cost-effective approach to reducing  $NO_x$  emissions.

In determining which sources to regulate, EPA considered whether highly cost-effective NO<sub>x</sub> control measures are available for the types of stationary sources named in the petitions. EPA has determined that controlling NO<sub>x</sub> emissions at large stationary sources is the most cost-

Regulating large sources that burn fossil fuel is the most cost-effective approach to reducing both overall  $NO_x$  levels and the amount of ground-level ozone transported to downwind States.

effective approach to reducing ground-level ozone transport into the petitioning States. See Section 3.1 for a more detailed description of the sources affected by the rule.

Section 2 Overview

#### 2.3 Summary of the rulemaking

#### 2.3.1 Rulemaking history

Section 126 of the Act authorizes a downwind State to submit a petition (or request) that EPA make a determination that existing and new major stationary sources upwind of the State emit or would emit enough to contribute significantly to elevated levels of certain regulated pollutants, and thus to nonattainment within the petitioning State.

In May 1999, EPA published a notice of final rulemaking taking action on ozone-related petitions submitted individually by eight northeastern States under section 126 of the Act. The States are Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Pennsylvania, and Vermont. The geographic scope and the sources identified vary somewhat between each of the petitions, but all petitions were made in the context of the 1-hour ozone NAAQS. Some of the petitions also requested a determination based on the recently adopted 8-hour ozone NAAQS, which is a somewhat more stringent ozone standard as compared to the original 1-hour standard.

In the May 1999 rule, EPA determined that the petitions from six of the eight States have technical merit and that certain large electric generating units (EGUs) and industrial boilers and turbines (non-EGUs) are in fact contributing significantly to ozone nonattainment in certain petitioning States. The May 1999 rule provides that controlling emissions from the affected sources would depend on the State Implementation Plan (SIP) submittals in response to the final NO<sub>x</sub> SIP Call (see 63 FR 57357, October 27, 1998). Those State submittals of emission control requirements were expected to provide an approach that would achieve NO<sub>x</sub> reductions sufficient to reduce downwind ozone levels. If States made timely submissions and EPA approved them, the controls required by the section 126 rule would not be necessary.

However, shortly after the May 1999 rule, the U.S. Court of Appeals for the District of Columbia remanded the 8-hour ozone standard, which was part of the basis for EPA's determinations under section 126, and granted a motion to stay the deadline for the SIP revisions under the NO<sub>x</sub> SIP call. Because of these court decisions, EPA issued a proposed rule in June 1999 to stay any emission reduction requirements based on the 8-hour ozone standard. The notice also proposed to remove the connection between the emission reductions required under section 126 and State actions under the NO<sub>x</sub> SIP call. Since it was uncertain when States would be required to reduce emissions, EPA proposed to go ahead and require reductions under the section 126 rule, without waiting for State actions.

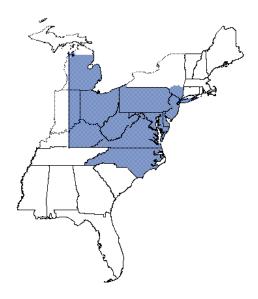
EPA then finalized the section 126 rulemaking on January 18, 2000, adopting the provisions it had proposed.

Overview Section 2

#### 2.3.2 Scope of the rulemaking

The final section 126 rule addresses units in the affected States (or portions of States) identified in Figure 2-1. In these areas, the final rule requires NO<sub>x</sub> emission reductions at all large electric generating and industrial boilers and turbines as described in Section 3. Sources are required to meet certain NO<sub>x</sub> emission limitations in the context of an emissions trading program, obtain permits, and meet the monitoring and reporting requirements as described in Sections 4 through 6 of this Guide.

Figure 2-1: Areas Affected Under the Section 126 Final Rule



#### 2.3.3 Nature of the trading program

The Federal NO<sub>x</sub> Budget Trading Program is a "cap-and-trade" program. This type of emission trading program is a proven method for achieving air quality objectives, while simultaneously providing compliance flexibility to sources. The freedom to pursue various compliance strategies (i.e., switching fuels, installing pollution control technologies, or buying authorizations to emit (allowances) from other firms) reduces the cost of compliance in a market-based program relative to costs under a command-and-control approach. Under the Federal NO<sub>x</sub> Budget Trading Program, initial allowances are distributed to all affected units based on historical heat input.

Since emitting fewer tons than the allocation results in surplus allowances that may be sold on the market, pollution prevention becomes increasingly cost-effective and innovation in control technology is encouraged. EPA will update allowance allocations every five years and will also recalculate the State budgets and reallocate the allowances to the sources accordingly. EPA will use more recent heat input data, or may propose to use recent output data for some units, to update the allowance allocations.

Section 2 Overview

#### 2.4 How do I demonstrate compliance?

Within two months after each ozone season (May 1 through September 30), the NO<sub>x</sub> Authorized Account Representative (NO<sub>x</sub> AAR or AAR) for your source will have to certify that each affected unit was in

You demonstrate compliance by holding enough allowances to cover your  $NO_x$  emissions during the ozone season.

compliance with the emissions limitation and the requirements of the trading program. If you own a source that commenced operation before May 1, 1997, you will receive an initial allowance allocation based on historical operating information. If you own a source that commenced operation on or after May 1, 1997, you are eligible to receive allowances from the new source set-aside. You will use the monitoring data you collect to account for all your emissions, and then compare your emissions to your allowances.

If the allowance allocation you receive is less than your actual ozone season emissions, you may take advantage of the flexibility provided by the allowance market to buy allowances. You have until November 30th of each year, which is two months after the end of the ozone season, to obtain sufficient allowances to cover your emissions. See Section 8 for a discussion of the penalties and other potential enforcement consequences for failing to meet the requirement to hold sufficient allowances to cover your emissions.

## 2.5 Compliance timetable

The Federal NO<sub>x</sub> Budget Trading Program establishes several major compliance milestones for permitting, monitoring, establishing your allowance trading accounts, and certifying compliance with your emission reduction obligations. The following table describes these

NOTE! You should submit your AAR account certificate of representation for each source as soon as possible -- you will not receive a permit or an allowance account until EPA receives that form.

major compliance deadlines in chronological order. In addition, there are a number of specific schedules for when you must submit various reports and other notifications. These types of timing issues are discussed in Sections 3 through 6, below.

Overview Section 2

**Table 2-1: Major Compliance Deadlines** 

Deadline	Requirement	
May 1, 2000	Install all monitoring systems in accordance with §§ 75.72 and 75.76 and	
(only for units applying for early reduction credits)	Complete all monitoring certification tests in accordance with § 97.71	
November 1, 2001	Submit a NO <sub>x</sub> Budget permit application to the permitting authority	
	Submit an Account Certificate of Representation	
	[NOTE: You may also submit your application for a general account at this time. November 1, 2001 is not an absolute deadline for the submittal of the account certificate or general account application. However, your NO <sub>x</sub> Budget permit will not be issued, and general, compliance, and overdraft accounts will not be established, until these documents have been submitted.]	
May 1, 2002	Install all monitoring systems in accordance with §§ 75.72 and 75.76 and	
	Complete all monitoring certification tests in accordance with § 97.71	
	and Begin recording, reporting, and quality assuring all monitoring data	
	[NOTE 1: If your unit first starts operating on or after January 1, 2002, your deadline is the later of: May 1, 2002, or 90 days after an EGU first operates, or 180 days after a non-EGU first operates.]	
	[NOTE 2: If you add a new stack or flue after the deadline, you will need to meet the above requirements within 90 days following the date on which emissions are released from the stack (or by May 1 of the following year if the unit only reports during the ozone season).]	
February 1, 2003	Submit requests for early reduction credits (issued from compliance supplement pool for reductions achieved in 2001 and 2002)	
May 1, 2003	First control period begins	
November 30, 2003 (and each year thereafter)	Submit a Compliance Certification Report. You must obtain allowances to cover any shortfall (e.g., if ozone season $NO_x$ emissions were greater than allocations). This November 30 "true-up" deadline applies in 2003 and every following year	
November 30, 2004	Use (or lose) early reduction credits issued from the compliance supplement pool for compliance during 2003 and 2004 control periods	

Section 2 Overview

## 2.6 How does this regulation relate to other Federal, State, and local requirements?

There are a number of other Federal and State programs or regulations that require the reduction of NO<sub>x</sub> emissions. The NO<sub>x</sub> SIP Call, Ozone Transport Commission (OTC) NO<sub>x</sub> Budget Program, Acid Rain Program, New Source

Sources affected by the Federal  $NO_x$ Budget Trading Program still must comply with other applicable Federal, State, or local  $NO_x$  requirements.

Performance Standards (NSPS), Reasonably Available Control Technology (RACT) SIP requirements, Prevention of Significant Deterioration (PSD), and other Clean Air Act regulatory programs may include requirements to reduce NO<sub>x</sub> emissions. These programs can vary between States and regions and may apply to different types of sources, but, except for the OTC NO<sub>x</sub> Budget Program and NO<sub>x</sub> SIP Call, none are directly related to the requirements under the section 126 final rule.

For sources affected under both the OTC  $NO_x$  Budget Program and the Federal  $NO_x$  Budget Trading Program, EPA is working with the affected States to ensure appropriate integration in 2003. See Section 2.6.2 below.

#### $2.6.1 \, \text{NO}_{\text{x}} \, \text{SIP Call}$

As described above in Section 2.3, under the  $NO_x$  SIP Call, States with sources subject to the section 126 rule are under an independent obligation to reduce  $NO_x$  emissions. These States may choose to obtain reductions from the same or different sources. One option for States is to adopt the  $NO_x$  Budget Trading Program (40 CFR Part 96), which is nearly identical to the Federal  $NO_x$  Budget Trading Program in the section 126 rulemaking. Both programs assume the same level of control for large EGUs and non-EGUs and require the same compliance dates.

The two programs can be integrated. Sources trading under the section 126 trading program may trade allowances freely with sources trading under the  $NO_x$  SIP Call trading program, and vice versa. However, under the  $NO_x$  SIP Call, States have the option of reducing their  $NO_x$  emissions through a mechanism other than the EPA-administered  $NO_x$  Budget Trading Program. Therefore, only sources in those States that choose to control their emissions through the  $NO_x$  Budget Trading Program can trade with sources in the Federal program.

#### 2.6.2 OTC NO<sub>x</sub> Budget Program

The Ozone Transport Commission (OTC) comprises the following jurisdictions: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Washington D.C., and the northern counties of Virginia. A subset of these participate in the OTC NO<sub>x</sub> Budget Program. This program includes sources located in Connecticut, Delaware, New Hampshire, New Jersey,

Overview Section 2

New York, Massachusetts, Pennsylvania, and Rhode Island. Sources in these areas began submitting compliance data under Phase II of the OTC program in 1999. Many are also affected under the Federal NO<sub>x</sub> Budget Trading Program. Phase III of the OTC program assumes similar control levels as the Federal NO<sub>x</sub> Budget Trading Program and the NO<sub>x</sub> Budget Trading Program under the NO<sub>x</sub> SIP Call, and is scheduled to begin in 2003. Because of these similarities, EPA is working with the affected States to ensure appropriate integration of the programs in 2003. EPA expects to propose that sources currently participating only in the OTC NO<sub>x</sub> Budget Program will be able to trade freely with those sources affected by the Federal NO<sub>x</sub> Budget Trading Program.

#### 2.6.3 Acid Rain Program

To reduce the formation of acid rain, EPA's Acid Rain Program achieves reductions in NO<sub>x</sub> and other pollutants emitted from large electric generating units. Under the Acid Rain Program, these units are required to continuously measure, record and report NO<sub>x</sub> and other emissions on a year-round basis. The monitoring requirements for sources affected by the Acid Rain Program are generally the same as those for sources affected under the section 126 rulemaking. Therefore, you will be able to satisfy most of your monitoring obligations under the Federal NO<sub>x</sub> Budget Trading Program by using your existing monitoring at Acid Rain units. See Section 6 for further information on monitoring requirements.

#### 2.6.4 Other requirements

Other programs, such as New Source Performance Standards (NSPS), State Reasonably Achievable Control Technology (RACT) requirements, or Prevention of Significant Deterioration (PSD) also can include requirements for  $NO_x$  reductions or emission limitations. The requirements under these programs are not affected by the section 126 rulemaking. Sources remain responsible for meeting all existing  $NO_x$  reduction requirements.

## **Section 3: Applicability**

After reading Section 3, you should be able to determine whether you are subject to the Federal  $NO_x$  Budget Trading Program.

The Federal NO<sub>x</sub> Budget Trading Program applies to stationary, fossil fuel-fired boilers, combustion turbines, or combined cycle systems ("units") that have been:

- ! Named by petitioning States, and
- ! Determined by EPA to be significantly contributing to non-attainment in one or more of the petitioning States.

The rule covers units in the following States (See Figure 2-1 for an illustration of the affected areas in all 13 jurisdictions):

! Delaware ! New York (only certain portions)

! District of Columbia ! North Carolina

! Indiana (only certain portions) ! Ohio

! Kentucky (only certain portions) ! Pennsylvania ! Waryland ! Virginia

! Michigan (only certain portions) ! West Virginia

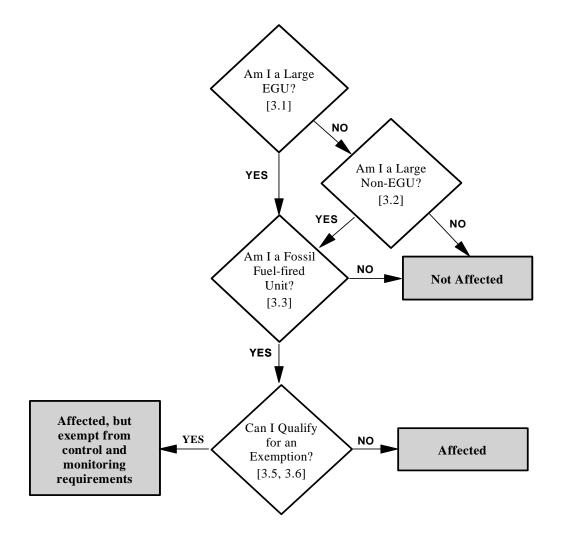
! New Jersey

To determine whether you are potentially affected as a " $NO_x$  Budget unit" under the Federal  $NO_x$  Budget Trading Program, use the guidance in this Section 3 as illustrated in Figure 3-1, below.

If your NO<sub>x</sub> Budget unit operated during 1995 or 1996, you will receive an initial allocation (even if the unit qualifies for an exemption). The allocations for EGUs and non-EGUs are listed in Part 97, Appendices A and B, respectively. If your NO<sub>x</sub> Budget unit began operations after May 1, 1997, you are considered a "new" unit. Unless you obtain an exemption for a new NO<sub>x</sub> Budget unit as a low-permit-limit unit, EPA will issue allowances to you for the unit from the new source set-aside. Allowance allocations are explained in further detail in Section 4.

Applicability Section 3

**Figure 3-1: Applicability Determination Process** 



Section 3 Applicability

### 3.1 Do I own or operate a large EGU?

The following checklist will help determine whether your unit qualifies as a large electric generating unit (EGU) under the rulemaking.

NOTE! Your EGU must also be fossil fuel-fired -- see Section 3.3.

**Table 3-1: EGU Applicability** 

If	And	Then
The unit commenced operation before January 1, 1997	During 1995 or 1996, served a generator greater than 25 MWe that produced electricity for sale under firm contract to the grid	The unit is classified as a large EGU
The unit commenced operation between January 1, 1997 and January 1, 1999	During 1997 or 1998, served a generator greater than 25 MWe that produced electricity for sale under firm contract to the grid	The unit is classified as a large EGU
The unit commenced operation on or after January 1, 1999	At any time, served a generator that has a nameplate capacity greater than 25 MWe and that produces electricity for sale	The unit is classified as a large EGU

There are two key terms you should understand to determine your applicability as a large EGU (see § 97.2 for the actual definitions):

- ! Commence operation means that the unit has begun any mechanical, chemical or electronic process, including start-up of a unit's combustion chamber. That "commence operation" date generally remains your commence operation date even if you later modify, reconstruct or repower the unit.
- ! Electricity for sale under firm contract to the grid is defined as where the capacity involved is intended to be available at all times during the period covered by the guaranteed commitment to deliver, even under adverse conditions. See Glossary of Electric Utility Terms, Edison Electric Institute, Publication No. 70-40. Generally, capacity under firm contract to the electricity grid is included on EIA form 860A (called EIA form 860 before 1998), or is reported as capacity projected for summer or winter peak periods on EIA form 411 (Item 2.1 or 2.2, line 10).

Applicability Section 3

## 3.2 Do I own or operate a large non-EGU?

The following checklist will help determine whether your unit is affected as a large non-EGU under the rulemaking.

NOTE! Your non-EGU must also be fossil fuel-fired -- see Section 3.3.

**Table 3-2: Non-EGU Applicability** 

If	And	Then
The unit commenced operation before January 1, 1997	Has a maximum design heat input greater than 250 mmBtu/hr and did NOT serve during 1995 or 1996 a generator that produced electricity for sale under a firm contract to the electric grid	The unit is classified as a large non-EGU
The unit commenced operation between January 1, 1997 and January 1, 1999	Has a maximum design heat input greater than 250 mmBtu/hr and did NOT serve during 1997 or 1998 a generator that produced electricity for sale under a firm contract to the electric grid	The unit is classified as a large non-EGU
The unit commenced operation on or after January 1, 1999	Has a maximum design heat input greater than 250 mmBtu/hr and did NOT at any time serve a generator producing electricity for sale	The unit is classified as a large non-EGU
The unit commenced operation on or after January 1, 1999	Has a maximum design heat input greater than 250 mmBtu/hr and at any time, serves a generator that is 25 MWe or less and that has the potential to use no more than 50% of the potential electrical output capacity of the unit	The unit is classified as a large non-EGU

The "**commenced operation**" term is the same for non-EGUs as EGUs. The key term for non-EGU applicability is "**potential electrical output capacity**," defined as 33% of a unit's maximum design heat input capacity. See also 40 CFR 52.34(a), 72.2, and Part 72, Appendix D.

Section 3 Applicability

## 3.3 Does my unit meet the fossil fuel-fired test?

If your unit meets the large EGU or large non-EGU criteria summarized in Sections 3.1 and 3.2, respectively, it will be an affected, NO<sub>x</sub> Budget Unit under the trading program **only** if it is also a "fossil fuel-fired" unit.

NOTE! All existing affected fossil fuelfired EGUs and non-EGUs that EPA has identified to date are listed in Part 97, Appendices A and B, respectively.

The following checklist will help determine whether your unit is affected as a fossil fuel-fired unit under the rulemaking.

Table 3-3: Fossil Fuel-fired Applicability Test

If	And	Then
The unit commenced operation before January 1, 1996	The combustion of fossil fuel accounts for greater than 50% of the annual heat input on a Btu basis during 1995 (or if no heat input in 1995, during the last year of operation prior to 1995)	The unit is classified as fossil fuel-fired
The unit commenced operation between January 1, 1996 and January 1, 1997	The combustion of fossil fuel accounts for greater than 50% of the annual heat input on a Btu basis during 1996	The unit is classified as fossil fuel-fired
The unit commenced operation on or after January 1, 1997	(1) The actual combustion of fossil fuel accounts for greater than 50% of the annual heat input on a Btu basis during any year  Or  (2) The projected combustion of fossil fuel accounts for greater than 50% of the annual heat input on a Btu basis during any year	The unit is classified as fossil fuel-fired (In Case (2), the unit is not "fossil fuel-fired" until the date (during such year) that the combustion of fossil fuel begins.)

Applicability Section 3

## 3.4 What if my determination of applicability is inconsistent with Appendix A or B to Part 97?

If you have a unit listed in Appendices A or B to Part 97 that you believe does not meet the applicability criteria for the program, please contact EPA's Clean Air Markets Division (CAMD) to discuss removing the unit from the Federal NO<sub>x</sub> Budget Trading Program.

Similarly, if you have an existing unit that is not listed in Appendices A or B to Part 97 and you believe that the unit is affected under the rule, you may contact CAMD to discuss your situation. Generally, if you have an affected  $NO_x$  Budget unit that commenced operation before January 1, 1997, and that unit has not received an allocation listed in the Appendices, you will have to purchase the necessary amount of allowances to operate your unit from other sources that are participating in the allowance market. Although your unit(s) will not receive an allocation during the initial allocation period (i.e. 2003 through 2007), they will receive an allocation as existing unit(s) under all subsequent allocation periods based on the monitoring data collected under the Federal  $NO_x$  Budget Trading Program.

## 3.5 Can I obtain an exemption for a low emitting unit?

Units with a very low, federally-enforceable permit limitation (25 tons or less of NO<sub>x</sub> per ozone season) may be exempt from most of the requirements of this program, even if they meet the basic applicability criteria outlined in Sections 3.1-3.3 of this Guide. To obtain this exemption, the unit's permit must restrict the unit's NO<sub>x</sub>

If a unit qualifies for an exemption based on a permit term limiting  $NO_x$  emissions to  $\leq 25$  tons per season, you do not have to monitor or report the unit's emissions. However, you must establish an AAR and a general account, and report ozone season operating hours.

mass emissions by limiting its operating hours to a level that, when multiplied by a conservative, default emissions rate set by EPA, results in a total of 25 tons or less of ozone season NO<sub>x</sub>. Even if a unit is exempt, you will still be required to comply with the provisions in Subpart E (NO<sub>x</sub> Allowance Allocations), Subpart F (NO<sub>x</sub> Allowance Tracking System), and Subpart G (NO<sub>x</sub> Allowance Transfers) of Part 97.

If you want to exempt a unit, you must meet all of the following:

! Have a federally-enforceable permit restricting control period operating hours to a level that ensures that when multiplied by a default emissions rate set by EPA, results in NO<sub>x</sub> emissions \( \leq 25 \) tons of NO<sub>x</sub> per ozone season.

Section 3 Applicability

! Keep on-site records to demonstrate compliance with the permit (including restrictions on operating time). All records must be maintained for at least five years.

- ! Report hours of operation during the ozone season to your permitting authority by November 1 following each ozone season.
- ! Establish a NO<sub>x</sub> Authorized Account Representative (AAR) and a general account from which EPA will deduct any allocated allowances in an amount equal to the permit limit on the unit's NO<sub>x</sub> emissions.
- ! Ensure that any allowance allocations issued for the ozone season for which you are exempt are sufficient to cover the amount that will be deducted from the general account by EPA to reflect the units' NO<sub>x</sub> emission limitation (in tons of NO<sub>x</sub>). If you sell or otherwise transfer allowances from the general account for an exempt unit, you must ensure that the unit's general account ultimately holds sufficient allowances to account for the deduction that will be made by EPA to reflect the exemption.

#### >> How do I apply for an exemption?

To apply for an exemption, you should follow the permitting authority's procedures for applying for a federally-enforceable permit, or for revising an existing federally-enforceable permit, that meets the requirements for an exemption. Before submitting an application, make sure that your unit can meet the requirements listed above, especially on an ongoing basis. You may contact your permitting authority with any further questions or to ensure that the appropriate paperwork is complete.

#### >> What will my permit limitation look like?

The permitting authority must express the limitation of 25 tons (or less) of  $NO_x$  per ozone season in terms of operating hours. The permitting authority will use the steps in Figure 3-2 to calculate the operating hour limit.

#### >> How are allowances allocated to my exempt unit?

For your initial allocation, you will receive the allocation listed in Appendix A or B, as applicable, to Part 97. For subsequent allocations, you will not receive any allowances because your heat input will be treated as zero for purposes of allocations. In that case, you will no longer be required to deduct allowances from your general account that equal your emission limitation. Instead, for those years, EPA will reduce the State's trading budget by the amount of allowances equal to the units' emission limitation. This trading program budget reduction will also apply for any exempt units that do not qualify for an initial allocation. Similarly, if you have an exempt unit that qualifies as a new unit, EPA will deduct from the new source set-aside the amount of allocations equal to the

Applicability Section 3

emission limitation for the unit. If the permit conditions are violated, you must hold sufficient allowances to cover emissions since the exemption would no longer apply and you may be subject to fines or penalties (see discussion below).

Figure 3-2: Steps to Set a Permit Limit that Qualifies for the Exemption

## STEP 1: Choose the highest applicable default $NO_x$ rate (lb/mmBtu) from the following list:

Boiler type	Fuel type	NO <sub>x</sub> emission rate
Turbine	Gas	0.7
Turbine	Oil	1.2
Boiler	Gas	1.5
Boiler	Oil	2

## STEP 2: Use the default $NO_x$ rate to determine the maximum potential hourly $NO_x$ mass emissions (lb/hr) as follows:

Maximum potential hourly  $NO_x$  mass emissions (lb/hr) =

[Unit's max. rated heat input (mmBtu/hour)] x [Highest default  $NO_x$  rate (lb/mmBtu)]

## STEP 3: Use the maximum potential hourly $NO_x$ mass emissions to determine your unit's allowable operating hours:

Allowable seasonal operating hours =  $\frac{50,000 \text{ lbs. } NO_x \text{ [or less, if applicable]}}{Maximum \text{ potential hourly } NO_x \text{ mass emissions}}$ 

Section 3 Applicability

#### >> When does the exemption take effect?

If the permit with the limitation becomes final during an ozone season and after the unit has operated during the ozone season, the effective date will be either May 1 (if the limitation applied for that entire time in the control period during which the unit operated) or October 1 (if the limitation did not apply for that entire time).

#### >> When is the exemption no longer effective?

- ! The date on which the operating hours and NO<sub>x</sub> emissions restriction is either removed from your federally-enforceable permit or is no longer applicable
- ! The date on which your unit's operating hours exceed the permit limitation
- ! The date from which you fail to prove that the unit met this permit limitation

#### >> What happens if an exemption is no longer effective for my unit?

- ! You will be subject to all requirements for affected units under the Federal NO<sub>x</sub> Budget Trading Program.
- ! For purposes of allocations and monitoring, your unit will be treated as commencing operation on the date on which the exemption is no longer effective.
- ! You will be required to comply with all applicable provisions for monitoring, allocations, permitting, reporting, and other trading program requirements for units that have just begun operating. For example, if your unit loses its exemption, you have until the earlier of either 90 days (or 180 days, depending on the type of unit), or until May 1 of the following year to certify the required monitoring system. Until you certify the required monitoring systems, you will have to report your data based on reference method data or certain maximum default values. See Section 2.5 above, for applicable deadlines.

#### >> What happens if I violate the permit condition?

! You may be subject to fines or penalties for violating your State permit.

Applicability Section 3

### 3.6 Can a retired unit qualify for an exemption?

A unit that permanently retires from service is exempt from the requirements of this program, even if the unit meets the basic applicability criteria in Sections 3.1-3.3 of this Guide. Within 30 days of permanent retirement, you must submit documentation to EPA and

If a unit qualifies for the retired unit exemption, you do not have to monitor or report the unit's emissions. However, you must establish an AAR and a general account.

the permitting authority that would otherwise be responsible for administering any  $NO_x$  Budget permit for the unit. This document should state that the unit is permanently retired and will comply with the requirements for an exemption. Even if your unit is retired, you will still be required to comply with the provisions in Subpart E ( $NO_x$  Allowance Allocations), Subpart F ( $NO_x$  Allowance Tracking System), and Subpart G ( $NO_x$  Allowance Transfers). A permanently retired unit is not eligible to be a  $NO_x$  Budget optin unit.

For your permanently retired unit, you must:

- ! Designate a NO<sub>x</sub> AAR.
- ! Submit a statement to the permitting authority otherwise responsible for administering the NO<sub>x</sub> budget permit for the unit within 30 days of retirement (with a copy to CAMD, Attn: Section 126 Retired Unit Exemption), stating that the unit is permanently retired and will comply with the requirements for the exemption. If the unit is located at a non-Title V source and no federally-enforceable State operating permit program applies, submit the statement only to EPA within the same timeframes described above.
- ! Ensure that the unit will not emit any nitrogen oxides starting on the date that the exemption takes effect.
- ! Establish a general account to record any allowances that EPA issues to the unit. The account must exist for each control period for which EPA allocates allowance(s) to the unit.
- ! Maintain records for five years demonstrating that the unit is permanently retired. This period may be extended at the discretion of the permitting authority or EPA.
- ! Comply with the requirements of the Federal NO<sub>x</sub> Budget Trading Program for any period of time during which the exemption is not in effect.

Section 3 Applicability

#### >> When does the exemption take effect?

! The exemption for a retired unit is effective the day on which the unit is permanently retired.

#### >> What if I want to resume operation at an exempt retired unit?

- ! Submit a complete NO<sub>x</sub> Budget permit application under § 97.22 (if the unit is located at a source with a Title V or non-Title V permit, or would normally be required to have a Title V or non-Title V permit if the unit were not exempt); and
- ! Submit the permit application at least 18 months prior to either May 1, 2003 or the date on which the unit resumes operation, whichever is later.

The unit will no longer be exempt at the date on which the application is submitted or is required to be submitted. Therefore, you will need to comply with all applicable provisions.

#### 3.7 Can I opt a unit into the trading program?

You may opt individual units into the trading program. These units will be subject to all of the same requirements that would apply to the core sources that meet the applicability criteria described in Sections 3.1, 3.2 and 3.3 of this Guide. You are eligible to opt one or more units into the trading program if those units are:

- ! Not already subject to the rule;
- ! Not exempted under the rule;
- ! Operating stationary sources that are fossil fuel-fired and vent all emissions to one or more stacks;
- ! Located in a State or portion of a State where a finding is made under the section 126 petitions; and
- Able to monitor NO<sub>x</sub> mass emissions according to Part 75 and Subpart H of Part 97. All opt-in units will have the opportunity to use non-CEMS or alternative monitoring methods as allowed for other smaller or lower emitting units.

Applicability Section 3

[This page intentionally left blank.]

## **Section 4: Operation of the Trading Program**

After reading Section 4, you should know how the trading program works, including what compliance options you have, what forms and other reports you must submit, how you receive and trade allowances, and how your allowances are used for compliance.

#### 4.1 What is the basic structure of the program?

The Federal NO<sub>x</sub> Budget Trading Program is a "cap-and-trade" type of program. The "cap" is in the form of an aggregation of emissions from affected sources in each State. Each State's budget is based on: (i) historical heat input and/or emissions data, (ii) a growth factor, and (iii) the desired level of emission reduction for the program. That budget is then distributed to affected units in the form of "allowances." One allowance is equal to one ton of NO<sub>x</sub> emissions and may be used to authorize NO<sub>x</sub> emissions during the ozone season for which it was allocated or for a subsequent ozone season.

Under the Federal NO<sub>x</sub> Budget Program, EPA initially distributes allowances to existing units on the basis of historical heat input data, with a portion of each State's budget withheld for a "new unit set-aside." As new units come on line, their owners or operators can apply for allowances from this set aside. EPA will then update allowance allocations every five years, and reapportion the state budgets on a heat input or other basis. Once EPA allocates the allowances, owners or operators of units are free to trade and transfer allowances between units or with general account holders (brokers, interest groups, etc.). By the NO<sub>x</sub> allowance transfer deadline (two months after the end of the ozone season), you must hold sufficient allowances for each of your units in the appropriate accounts to cover its total seasonal emissions.

#### 4.2 What emission limits must I meet?

Unlike a traditional command-and-control regulation in which emission limits are generally expressed in terms of a specific limit or percent reduction, under the Federal NO<sub>x</sub> Trading Program the reduction obligation for your

No specific numerical emission limit applies -- you demonstrate compliance by holding enough allowances to cover your  $NO_x$  emissions during the ozone season.

affected unit is expressed as a general obligation to hold sufficient allowances to cover all your ozone season emissions. As a starting point, the unit's "assumed" reduction obligation is equal to the unit's ozone season emissions minus the unit's initial allowance allocation. You can use the allocated allowances and the ability to obtain additional allowances from other market participants, together with any emission control strategies you choose, to meet your general obligation to hold allowances equal to or greater than your emissions.

Initial allowance allocations are established as follows:

- ! *Existing units*. EPA has allocated 95 percent of the statewide budgets to individual existing units based on their heat input. EPA will update NO<sub>x</sub> allowance allocations every five years for five year blocks. The unit-by-unit allowance allocations for existing units for 2003-2007 are contained in Appendices A and B to Part 97 (see 65 FR 2751-2767).
- ! *New units.* EPA has reserved five percent of each State's budget to allocate to new units. For the initial allocation cycle (2003-2007), "new units" are units that commence operation on or after May 1, 1997. Although considered "new" units for the first allocation cycle, these units will be considered "existing" units for a future allocation cycle. For example, units commencing operation between May 1, 1997 and April 30, 2003, are "existing" units for the second (2008-2012) allocation cycle. Units that come online between May 1, 2003 and May 1, 2008 will be considered "new" units for the second allocation cycle. This same switch from new to existing unit status will apply to subsequent groups of "new" units for each subsequent allowance allocation cycle. Section 4.5 of this Guide describes how the new unit set-aside will be allocated to individual new units.
- ! *Opt-in units*. If you have chosen to "opt in" to the Federal NO<sub>x</sub> Budget Trading Program, you must first receive a NO<sub>x</sub> Budget opt-in permit. For each control period that you have an approved NO<sub>x</sub> Budget opt-in permit, EPA will allocate to you NO<sub>x</sub> allowances based on your unit's heat input and NO<sub>x</sub> emission rate for the previous year. At that point, you have the same flexibility as a standard NO<sub>x</sub> Budget unit for meeting your obligation to hold allowances equal to or greater than your emissions. Section 4.5 of this Guide describes how EPA calculates these optin unit allowances.

## 4.3 What control and other compliance options do I have?

The inherent flexibility of a cap-and-trade program provides you with a number of compliance strategies. It will be up to you to determine which strategy is the least-cost option for your circumstances. Some compliance options include:

- ! Fuel switching
- ! Combustion modifications
- ! Allowance purchasing/trading
- ! Post-combustion NO<sub>x</sub> control

You can pursue any one or a combination of these strategies to ensure that you hold sufficient allowances to cover your ozone season emissions by November 30th of each year after the end of an applicable ozone season control period beginning with November 30, 2003.

The following table summarizes some of the common combustion and post-combustion control options that you may use to meet the emission limits. These control options are often combined to optimize both  $NO_x$  reduction and cost-effectiveness.

**Table 4-1: Typical Combustion/Post-combustion Control Options** 

<b>Control Option</b>	Description
Operational Modifications	This control option entails changing certain boiler operational parameters to create conditions in the furnace that will lower NO <sub>x</sub> production. Examples are burners-out-of-service, low excess air, biased firing, and optimization software. In burners-out-of-service, selected burners are removed from service by stopping fuel flow, but air flow is maintained to create staged combustion in the furnace. Low excess air involves operating at the lowest possible excess air level while maintaining good combustion, and biased firing involves injecting more fuel to some burners (typically the upper burners) to create staged combustion conditions in the furnace. Optimization software is installed to optimize the combustion process on a real time basis.
Low-NO <sub>x</sub> Burners (LNB)	LNB limits NO <sub>x</sub> formation by controlling the stoichiometric and temperature profiles of the combustion process. This control is achieved by design features that regulate the aerodynamic distribution and mixing of the fuel and air, resulting in one or more of the following conditions:  (a) reduced oxygen in the primary flame zone, which limits fuel NO <sub>x</sub> formation; (b) reduced flame temperature, which limits thermal NO <sub>x</sub> formation; and (c) reduced residence time at peak temperature, which limits thermal NO <sub>x</sub> formation.  LNB can typically achieve NO <sub>x</sub> reductions between 30 and 65 percent from uncontrolled levels.
Dry Low-NO <sub>x</sub> (DLN)	DLN chambers with variable geometry combustion systems adjust the flow of air mass to the thermal load to control the temperature of the flame. As a result of this technique, flame temperature is lowered and the production of thermal NO <sub>x</sub> is decreased without the injection of steam or water and without any flue gas treatment.

Trading Program Section 4

**Table 4-1: Typical Combustion/Post-Combustion Control Options (cont.)** 

<b>Control Option</b>	Description
Overfire Air (OFA)	OFA, also referred to as air staging, is a combustion control technology in which a fraction, 5 to 20 percent, of the total combustion air is diverted from the burners and injected through ports located downstream of the top burner level. OFA is generally used in conjunction with operating the burners at a lower-than-normal air-to-fuel ratio, which reduces NO <sub>x</sub> formation. The OFA is then added to achieve complete combustion. OFA can be used in conjunction with LNBs. The addition of OFA to LNB can increase the reductions by an additional 10 to 25 percent.
Natural Gas Reburning (NGR)	NGR is a combustion control technology in which part of the main fuel heat input is diverted to locations above the main burners, thus creating a secondary combustion zone called the reburn zone. In NGR, the secondary (or reburn) fuel, natural gas, is injected to produce a slightly fuel rich reburn zone. Completion or overfire air is added above the reburn zone to complete burnout of reburn fuel. As flue gas passes through the reburn zone, part of $NO_x$ formed in the main combustion zone is reduced by hydrocarbon fragments (free radicals) and converted to molecular nitrogen ( $N_2$ ). In general, NGR is capable of providing 50 to 60 percent $NO_x$ reduction on coal-fired boilers.
Selective Non-Catalytic Reduction (SNCR)	SNCR is a post-combustion technology in which a reagent (ammonia or urea) is injected into the furnace above the combustion zone, where it reacts with NO <sub>x</sub> to reduce it to N <sub>2</sub> and water. SNCR reactions occur in the temperature range of 900 to 1100°C. In general, SNCR is capable of providing levels of NO <sub>x</sub> reduction ranging from 30 to 60 percent.
Selective Catalytic Reduction (SCR)	SCR is a post-combustion $NO_x$ reduction technology in which ammonia is added to the flue gas, which then passes through layers of a catalyst. The ammonia and $NO_x$ react on the surface of the catalyst, forming $N_2$ and water. SCR reactions occur in a temperature range of 300 to 400°C. In general, SCR is capable of providing high levels of $NO_x$ reduction, ranging from 80 to 90 percent.

These options vary in cost, complexity, and effectiveness. For additional information on these control technologies and their relative cost-effectiveness, you may visit EPA's Acid Rain web page. You may find it helpful to use the planning tool created by CAMD to help utility boilers and other sources

NOTE! For a free EPA tool to help you analyze potential costs of different combinations of combustion and post-combustion control strategies, see:

www.epa.gov/acidrain/NOx/noxtech.htm

calculate cost and cost-effectiveness ratios for combinations of  $NO_x$  control technologies. This tool allows the user to identify specific operational characteristics to help identify the most cost-effective  $NO_x$  control strategy.

## 4.4 How do I get started?

### 4.4.1 Selecting an AAR

You must designate a NO<sub>x</sub> Authorized Account Representative (AAR) if you are participating in the NO<sub>x</sub> trading program. The AAR is the person responsible for transferring allowances and otherwise managing your accounts,

NOTE! You should submit your AAR account certificate of representation for each source as soon as possible -- you will not receive a permit or any allowance accounts until EPA receives and approves that form.

and for certifying all reports for the program (including all reports to the  $NO_x$  Allowance Tracking System (NATS) and the Emission Tracking System (ETS)).

If you have an Acid Rain source that is also a  $NO_x$  Budget source, EPA recommends that you designate the person who is the Acid Rain Designated Representative (DR) as the  $NO_x$  AAR. You may also appoint an alternate AAR and provide a procedure for the alternate AAR to act in place of the AAR.

**Table 4-2: AAR Selection Requirements** 

If you are	Then you
A source whose unit(s) are affected by the Acid Rain Program and you have an SO <sub>2</sub> DR	Must designate that person as your $NO_x$ AAR  or  Must appoint a separate $NO_x$ AAR
A source whose unit(s) are not affected by the Acid Rain Program	Must appoint an AAR

### >> What is an account certificate of representation?

Whether you choose to designate your existing Acid Rain DR as your NO<sub>x</sub> AAR or you appoint a new AAR, you must submit an Account Certificate of Representation form. If you choose

Forms and additional information may be found at http://www.epa.gov/acidrain.
Also see Appendix B to this Guide.

to appoint an alternate AAR, you must designate that person on the form. The form is used only to certify your  $NO_x$  AAR and should not be used for your DR. You should submit the form directly to EPA for review and recording in NATS.

**Table 4-3: Account Certificate of Representation Form Requirements** 

Information Required		
Complete source names and unit IDs		
State where source is located		
ORIS Code of source (or other plant ID if no ORIS code)		

Name and following contact information for the Authorized Account Representative (for alternate AAR as well, if applicable):

- --identification number
- --address
- --phone and fax numbers
- --e-mail

Name of every owner and operator of the source and each affected unit at the source

Certification language and signatures of AAR and any alternate AAR (see § 97.13(a)(4)

### » Do I use particular identifiers for my plant and unit(s) in the AAR form?

Yes. An important aspect of your AAR form, and all of your subsequent reporting and recordkeeping obligations under the Federal  $NO_x$  Budget Trading Program, is to maintain consistency throughout the program in how you identify your facility and each affected unit. There are three primary identifiers you will use:

! *Plant name*. If you are in the Acid Rain Program or OTC NO<sub>x</sub> Budget Program, EPA will use the name used for your facility under those programs. For other units, EPA will consult with your State agency and attempt to match your plant name with the name used for a Title V or FESOP permit. Although you should

maintain the same name if possible for ease of implementation, you may change your plant name if necessary (such as in the event of an ownership change) by submitting a revised Account Certificate of Representation form to EPA (see below).

! *Plant ID Number*. For Acid Rain Program plants, EPA uses as the plant ID number the Office of Regulatory Information Systems (ORIS) code assigned for reporting to the Energy Information Administration (EIA). You must use this plant ID number for the Federal NO<sub>x</sub> Budget Trading Program as well, even if you use a different number for permit or other purposes. EPA Aerometric Information Retrieval System (AIRS) or Facility Index Data System (FINDS) ID numbers, for instance, are not appropriate for this program. If you do not have an ORIS code, contact EPA's Clean Air Markets Division for guidance.

For OTC NO<sub>x</sub> Budget Program sources, you will continue to use the plant ID number assigned under that program. For sources that report to EIA, this number is the ORIS plant ID. For non-EIA reporting sources, EPA has assigned you a plant ID for OTC program purposes. In either case, you will continue to use that plant ID number.

For sources that are not subject to the Acid Rain Program or the OTC program, you must use your ORIS plant ID if you report to EIA. If you do not have an ORIS plant ID, EPA will assign you a unique plant ID for the Federal NO<sub>x</sub> Budget Trading Program. As appropriate, EPA will consult with your State agency in order to coordinate this ID assignment with your State's efforts under the NO<sub>x</sub> SIP Call. Again, contact EPA's Clean Air Markets Division for guidance.

! *Unit ID*. It is vital that the unit ID be consistent on all applications, permits, and certifications. This includes, among others, the Account Certificate of Representation, the monitoring plan, and the quarterly reports. If you are in the Acid Rain Program or the OTC NO<sub>x</sub> Budget Program, you must continue to use the unit ID number assigned under those programs. If you are not in either program, consult the EDR Version 2.1 Reporting Instructions (section c(2)(b)). You may submit a unit ID of your choice in the Account Certificate of Representation form, subject to the alphanumeric nomenclature constraints specified in the EDR instructions.

It is important that you never change the unit ID. Furthermore, you must use the unit ID number exactly as assigned -- for instance, if the number is "001," you cannot report information that identifies the unit as "1," "CT1," or some other variation of "1." Finally, never re-use a unit ID. For example, if you retire a unit with the ID of "1," do not identify a new unit with the ID of "1."

### >> May I change my AAR?

You may change your AAR or alternate AAR at any time. However, the change is not effective until EPA receives a new and complete Account Certificate of Representation form. Until this superseding form is received by EPA, your previous NO<sub>x</sub> AAR still functions as the AAR.

### >> What special requirements must my AAR meet for submitting reports?

Anything submitted by or on behalf of your source under the Federal NO<sub>x</sub> Budget Trading program must be signed and certified by your AAR. Each submission must include the following certification statement:

"I am authorized to make this submission on behalf of the owners and operators of the  $NO_x$  Budget sources or the  $NO_x$  Budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

### 4.4.2 Establishing accounts

You must have an account where your allowances will be held. To establish an account, first you must submit the Account Certificate of Representation form for your AAR. After EPA receives this form, EPA will automatically establish a compliance

account for each NO<sub>x</sub> Budget unit at your NO<sub>x</sub> Budget source (a source with one or more affected NO<sub>x</sub> Budget units). If the source has more than one NO<sub>x</sub> Budget unit, then EPA also will establish an overdraft account for the source. Opt-in units at a source are treated as NO<sub>x</sub> Budget units. The

NOTE! After receipt of the Account Certificate of Representation form, EPA will automatically establish a compliance account for each affected unit.

owners or operators of exempt units (i.e., low-permit-limit units and permanently retired units) and all other organizations and individuals who wish to purchase and trade  $NO_x$  Budget allowances must request that EPA establish a general account.

A twelve-digit number is used to identify accounts. This number incorporates the plant's ORIS code and the number of the unit with which the compliance account is affiliated. For general accounts, a "9999" designation will apply at the beginning of the account number to signify that the account is a general account.

### 4.5 How do I get my allowances?

*State trading budgets*. Appendix C to Part 97 establishes the trading budgets for each State affected by the rule. EPA uses the budgets to allocate allowances to the units in each State.

*Initial allowances to existing units*. EPA has established in Part 97 a detailed procedure for allocating allowances to units based on their historical seasonal heat input. For 2003-2007 allocations for existing units (those that commenced operation prior to May 1, 1997), EPA has already calculated the allowances using this methodology. The allocations are set out in Appendix A and B to Part 97. The basic methodology is as follows:

- ! For an EGU, multiply the unit's historical heat input by 0.15 lb/mmBtu and divide by 2,000 lb/ton. The historical heat input is the average of the two highest amounts of the unit's heat input for the ozone seasons in 1995 through 1998.
- ! For a non-EGU, multiply the unit's historical heat input by 0.17 lb/mmBtu and divide by 2,000 lb/ton. The historical heat input is equal to the 1995 ozone season heat input or, if EPA believes that reliable data for the 1996-1998 control periods are available, the average of the two highest amounts of the unit's heat input for the ozone seasons 1995 through 1998.

After calculating the allowance allocations in this manner, EPA adjusts the allocations proportionally so that the total allocations in each State equal ninety-five percent of the  $\mathrm{NO}_x$  trading program budget. The remaining five percent is set aside for new units. After EPA determines overall compliance at all existing and new units, EPA will distribute any allowances remaining in the new unit set aside to existing units.

*Updating allowance allocations*. Under the Federal NO<sub>x</sub> Budget Trading Program, EPA will allocate allowances for five year periods. The initial five year period is 2003-2007. Currently, Part 97 assumes that EPA will use the same methodology for updating the allowance allocations as for initial allocations, except that:

- ! Units that commence operations before May 1, 2003 will be treated as existing units for the first allocation update (and similar future dates apply for future updates); and
- ! The historical heat input data will be based on 2002-2004 control periods (for the 2008-2012 period) and on subsequent years for subsequent five year allocation periods.
- ! See Table 4-4 for details of how this process will work for the first three allocation cycles.

Note that EPA is considering modifications to the procedures for updating allowance allocations that would base the allocations on unit output data (generation) rather than heat input data. EPA intends to publish a formal proposal in the Federal Register. The Agency will also post relevant information at the EPA Regional Transport of Ozone (RTO) website (www.epa.gov/ttn/rto).

If you commence operation of a new unit (or modify and trigger applicability for an existing unit) before	EPA will use heat input data from the following periods	To treat the unit as an existing unit for the purpose of updating allocations in the period
May 1, 2003	2002-04	2008-12
May 1, 2008	2005-09	2013-17
May 1, 2013	2010-14	2018-22

**Table 4-4: Treatment of New Units When Updating Allocations** 

Allowances for new units. If you have a new unit that is required to participate in the  $NO_x$  trading program, you will be eligible for allowances from the five percent set aside in each State's budget. If you have a unit that is not currently subject to the  $NO_x$  trading program and you become subject to the program, then the unit will be treated as a new unit and you will be eligible to receive allowances from the new unit set aside. As noted above, you will be eligible to receive these set aside allowances until EPA conducts a subsequent allocation updating, at which time (depending on how close to the next allocation your unit actually commences operation) you will receive an allocation as an existing source.

To receive allowances from the new unit set aside, your AAR must submit a request to EPA (each year) to be allocated allowances for that year's control period. The request can be submitted no earlier than the date on which a permitting authority issued a permit to construct the unit, and no later than January 1st of the year of the control period for which allowances are requested. The allocations will be made publicly available prior to May 1st of that same year.

For a new unit, you may request allowances based on:

- ! The lesser of a NO<sub>x</sub> emission rate of 0.15 lb/mmBtu for an EGU (0.17 lb/mmBtu for a non-EGU) or the unit's most stringent permitted limit **multiplied by**,
- ! The lesser of 3,672 hours or the number of control period hours remaining from the day the unit commences (or is projected to commence) operation; and then **divided by**,
- ! 2,000 lb/ton to obtain the allowance value in tons, rounded to the nearest ton.

EPA will then review your request in order to allocate your allowances. The following steps apply to allocate the new unit set-aside allowances and return any unneeded allowances to the units affected in each State:

- **Step 1:** EPA will check to assure that your request meets the timing requirements in the rule and that you requested the appropriate amount of allowances.
- Step 2: EPA will adjust the amount you requested as appropriate based on the review in Step 1.
- **Step 3:** EPA sums all requests (as adjusted in Step 2) for new units, by State.
- Step 4: EPA sums the  $NO_x$  emission limits (in tons) for all new units that qualify for the low emission exemption ( $\leq 25$  tons  $NO_x$  per season), by State.
- Step 5: For each State, EPA subtracts the amount in Step 4 from the total new unit set-aside allowances available in that State. If the remaining amount is equal to or greater than the total amount of allowances requested in that State (Step 3), EPA proceeds to Step 7. Otherwise, EPA first conducts Step 6.
- **Step 6:** EPA uses the following equation to determine your unit's pro-rata share of the oversubscribed set-aside:

$$Requested \ Allocation \ * \left( \frac{Total \ Allowances \ in \ Set-Aside \ - \ Total \ Allowances \ Deducted \ for \ Exempt \ Units \ (Step \ 4 \ total)}{Total \ Approved \ Requested \ Allowances \ from \ Step \ 3 \ for \ your \ State} \right)$$

- Step 7: EPA allocates allowances to you consistent with your request (subject to an adjustment in Step 2 and Step 6).
- Step 8: After the control period, EPA deducts and transfers from your account allowances equal to: your unit's allowance allocation (Step 7) minus the NO<sub>x</sub> tons represented by [your actual control period heat input \* lesser of 0.15 lb/mmBtu (for an EGU) or 0.17 lb/mmBtu (for a non-EGU) or the units' most stringent State or Federal emissions limit]. If this calculation represents a zero or negative value, then no allowances are deducted from your account under this Step 8.
- Step 9: All of the allowances remaining in the new unit set-aside (including allowances transferred from new units in a State under Step 8) are then reallocated to the existing NO<sub>x</sub> Budget units in a State on a pro rata basis, using the following formula:

Each Unit's share = Total allowances from Step 8 in the Unit's State \* (the Unit's allocation ÷ State trading budget excluding the new unit set-aside)

*Allowances for opt-in units*. To calculate an allowance allocation for an opt-in unit for the control period in a given year, EPA follows these steps:

- **Step 1:** EPA requires the unit to monitor emissions and heat input for a "baseline" control period in the ozone season prior to the unit obtaining opt-in status.
- **Step 2:** EPA uses the lesser of the baseline heat input data or the heat input from the immediately preceding control period.
- Step 3: EPA uses the  $NO_x$  emission rate that is the lesser of the baseline  $NO_x$  rate or the unit's most stringent State or Federal emission limit.
- Step 4: EPA multiplies the heat input value in Step 2 by the  $NO_x$  emission rate in Step 3 to determine your opt-in unit's allocation.

Allowances for retired units. Should you retire a unit that has been allocated allowances, you will continue to receive your allocation until a subsequent allocation update. If you bring the unit back on line after the allocation update, the permit will not be considered a new unit and will not receive an allocation until a future allocation update.

Crediting your allowances to your accounts. EPA credits allocated allowances to an account designated by EPA for the use of your source or organization. The type of account depends upon the nature of your participation in the  $NO_x$  trading program. Compliance and overdraft accounts are established by EPA for all affected and opt-in sources except low-permit-limit units and permanently retired units. Owners and operators of the latter two categories of units, and other organizations and individuals who wish to purchase and trade  $NO_x$  Budget allowances, must apply for a general account.

# 4.6 How are my trading program allowances tracked and deducted for compliance?

*Your accounts*. Once EPA receives and records your AAR Certificate of Representation, EPA will automatically establish a compliance account in the NO<sub>x</sub> Allowance Tracking System (NATS)

**Access NATS information on the web at:** 

www.epa.gov/ardpublc/acidrain/otc/nats

for your source if you have a unit that is affected by the section 126 rule. If your source has more than one affected unit, EPA will also establish an overdraft account. If you are a source that is eligible to opt-in to the trading program, EPA will establish these accounts for you. Starting with the 2003 control period, your allowances will be recorded in your compliance account. However, there are some exceptions. If your unit has a federally-enforceable permit that meets the requirements for the exemption for low-permit-limit units or if it is a permanently retired unit, your allowances will be recorded in a general

account that you establish. This is because your allowance holdings will no longer be reconciled with your emissions.

Then you...

An affected or opt-in source with one unit

An affected or opt-in source with more than one unit

Will automatically be assigned a compliance account

Will automatically be assigned a compliance account and an overdraft account

Must request a general account

**Table 4-5: Assigning Allowance Accounts** 

Compliance deductions from your accounts. After a control period, EPA will deduct a number of allowances equal to the unit's  $NO_x$  emissions (in tons) in the control period. EPA may deduct any  $NO_x$  allowances that were allocated for that control period or a prior control period and that either are held in a compliance or overdraft account, or are transferred to your compliance or overdraft account by the transfer deadline for a given control period (November 30th after each ozone season). EPA will deduct first from your compliance account and then, should additional allowances be required, from your overdraft account.

If you do not indicate -- by serial number -- the order in which to deduct your allowances, EPA will use a first-in-first-out (FIFO) method of deduction. EPA first deducts the allowances allocated to your unit for the control period. Then, the Agency deducts transfer allowances allocated to other units for the control period. Then it deducts allowances allocated to your unit for previous control periods. Finally, it deducts transfer allowances allocated to other units for previous control periods (see Section 4.7 below).

**Table 4-6: FIFO Allowance Deduction Rules** 

First-In-First-Out (FIFO) Procedure for Deducting Allowances		
Deduct in this order from current control period:	<ul><li>! Allowances allocated to the unit</li><li>! Transfers in order of date recorded</li></ul>	
Then deduct in this order from prior control period:	<ul><li>! Banked allowances</li><li>! Transfers in order of date recorded</li></ul>	

Excess emission penalty deductions from your accounts. If, after EPA deducts from both your current and prior control period allowances, you have not met your emissions limitation, you will owe an automatic allowance penalty for each ton of excess emissions. EPA will deduct three allowances from the unit's compliance account for each ton of excess emissions. These allowances will be deducted from the allocation for the control period after the control period in which the unit had excess emissions. You may also be subject to additional enforcement, including monetary penalties, for your failure to hold allowances sufficient to cover your emissions (see Section 8).

Differences and coordination between NATS and ATS. The NO<sub>x</sub> Budget Allowance Tracking System (NATS) and the SO<sub>2</sub> Allowance Tracking System (ATS) are separate systems. However, some of the information entered into the NATS, such as plant and representative information, lookup and error tables, and transaction types, will be similar to information entered into the ATS. Along with information on accounts, allowances, and transactions, it will be kept separate from the ATS. With regard to shared or similar information, ATS software will be modified to automatically record changes in the NATS when new information is entered into the ATS. As with the ATS, the NATS will use a twelve-digit number (consisting of the year first usable followed by eight digits) as the serial number for allowances. Reports or file extracts should differentiate between allowances in the ATS and the NATS by using identifiers such as "S" for SO<sub>2</sub> allowances and "N" for NO<sub>x</sub> allowances.

## 4.7 May I hold surplus allowances?

Yes. One of the major benefits of the NO<sub>x</sub> trading program is that you may hold in your account allowances in excess of the number required to comply with your emission limitation under Part 97. You may "bank" any allowances received, including credits for early reductions, transferred allowances, and allowances allocated annually by EPA. These banked allowances may be used to achieve compliance or for transfer to other sources participating in the NO<sub>x</sub> trading program. EPA will designate as "banked" any allowances that remain in your compliance, overdraft, and general accounts at the end of the reconciliation period, after the Agency has made all deductions for a given control period from these accounts.

You may begin banking allowances in the 2003 control period, and these banked allowances never expire. However, beginning in 2005 (after the 2004 control period) EPA will implement "flow control," a mechanism for controlling the overuse of banked allowances for

Formula for Determining Flow Control Ratio:

(.10) x Regional NO<sub>x</sub> Trading Budget Total # of Banked Allowances in Region

any control period in the entire region. For each control period, EPA will determine whether the total number of banked allowances exceeds ten percent of the overall NO<sub>x</sub>

Budget for the following control period. If the number exceeds ten percent, EPA will apply an equal discount ratio to a certain percentage of the banked allowances of all sources. This means that you will be able to use a certain percentage of your banked allowances at the rate of 1 allowance per 1 ton of  $NO_x$  emissions. The remaining balance of banked allowances will be discounted at the rate of 2 allowances per 1 ton of  $NO_x$  emissions. See the following example for calculating the effect of flow control on the use of allowances.

### Flow Control Example

Step 1: EPA uses the flow control formula to calculate the ratio of banked allowances to the total Regional NO<sub>x</sub> budget. For example:

```
! Regional NO<sub>x</sub> budget = 290,000
! Total banked allowances = 36,500
! Ratio (0.10 x 290,000)/36,500 = 0.8
```

Step 2: EPA applies the ratio to the banked allowances of all sources. For a hypothetical budget source:

```
! Banked allowances in compliance account = 5,000
! 5,000 x 0.8 = 4,000 available at 1:1 (equivalent to 4,000 tons)
! 5,000 - 4,000 = 1,000 available at 2:1 (equivalent to 500 tons)
```

Note that only those allowances which EPA has designated as banked and which you use for compliance purposes are subject to discounting.

### 4.8 How do I transfer allowances?

You may buy, sell, or trade allowances with other sources in the Federal  $NO_x$  Budget Trading Program. In order for allowances to be properly transferred, they must be recorded in NATS. Your AAR or alternate AAR must submit to EPA a  $NO_x$  Allowance Transfer form providing the following information:

**Table 4-7: Allowance Transfer Forms** 

### **Information Required on Allowance Transfer Form**

- ! Numbers of both transferor and transferee accounts
- ! Specification by serial number of each NO<sub>x</sub> allowance to be transferred
- ! Name and signature of transferor's NO<sub>x</sub> AAR

EPA will record transfers within five business days of receipt of the  $NO_x$  Allowance Transfer form. However, if the form is received after the allowance transfer deadline to transfer allowances usable for compliance in the prior ozone season, EPA will not record the transfer until after EPA has completed compliance determinations for that ozone season. EPA will notify you within five business days after it has recorded the allowance transfer. It will notify you within ten business days if it does not record the transfer.

## 4.9 What is the annual compliance certification?

A compliance certification report must be submitted annually, by November 30. The report will need to contain unit identification information, and may include serial numbers of allowances that are to be used for compliance for each unit and, for units sharing a stack, the percentage of allowances to be deducted from each unit's compliance account. Your AAR must also certify that each NO<sub>x</sub> Budget unit was operated in compliance with the Federal NO<sub>x</sub> Budget Trading Program, including the following:

- ! Whether the unit had sufficient allowances in its compliance account to equal or exceed its NO<sub>x</sub> emissions
- ! Whether the monitoring plan is accurate and complete
- ! Whether all of the emissions were monitored or accounted for through missing data procedures, including whether conditional data were used and whether the status of all conditional data has been resolved
- ! Whether the facts underlying the basis for certification for any monitor or excepted methodology have changed, and if a change has occurred, a description of the change and information describing how emissions were determined when a change created the need to recertify a monitor

# 4.10 May I get credit for early emission reductions?

You may get credit for emission reductions in the 2001 and 2002 control periods if you follow certain procedures. During the initial two years of the  $NO_x$  trading program, EPA is making additional allowances available to sources through a compliance

supplement pool. Your source will be eligible for allowances from the compliance supplement pool if you make early reductions during the 2001 and 2002 ozone seasons.

State	Size of Pool (Tons)	State	Size of Pool (Tons)
DC	0	NJ	1,550
DE	168	NY	1,379
IN	2,454	ОН	22,301
KY	7,314	PA	15,763
MD	3,882	VA	5,504
MI	9,398	WV	16,709
NC	10,737	Total	97,159

**Table 4-8: Section 126 Rule Compliance Supplement Pool** 

### >> How do I apply for early reduction credits?

You may apply for early reduction credits by submitting a request (from the AAR) to EPA's Clean Air Markets Division. This request must be submitted in accordance with certain requirements for OTC and non-OTC sources as described below, and must be submitted using EPA's Early Reduction Credit Request form (see Appendix B of this Guide).

Non-OTC Units. You must monitor and report your NO<sub>x</sub> emissions in accordance with Part 97, including Part 75, Subpart H, starting in the 2000 control period and for each control period for

For any unit, your AAR must submit a request for early reduction credits to CAMD by February 1, 2003.

which you request early reduction credits. In addition, your unit must be in full compliance with any applicable State and Federal  $NO_x$  emission control requirements during 2000 through 2002. For each control period for which you request early reduction credits, you must reduce the  $NO_x$  emission rate of your unit to less than **both** 0.25 lb/mmBtu **and** 80% of the unit's  $NO_x$  emission rate in the 2000 control period.

**OTC Units.** Sources participating in the OTC NO<sub>x</sub> Budget Program may carry their 2001 and 2002 banked allowances over to the Federal NO<sub>x</sub> Budget Trading Program as early reduction credits, within the size constraints of the State's compliance supplement pool. You must have monitored in accordance with Part 75 (other than Subpart H) and the OTC Guidance for Implementation of Emission Monitoring Requirements for the NO<sub>x</sub> Budget Program (January 28, 1997).

### » Are there restrictions on my use of early reduction credits?

You may use early reduction credits as you would any other allowance for the purpose of compliance during the 2003 and 2004 control periods. However, EPA will retire all remaining compliance supplement pool allowances from the NATS after it completes the 2004 ozone season compliance determination process.

## 4.11 Summary of trading program deadlines and data processing

The following table provides a brief overview of the various processing deadlines critical to the operation of the trading program. Figure 4-1 provides an overview of where the data come from and how the data are processed.

Table 4-9: Trading Program Deadlines for a Typical Year

Date	Event	
May 1	Beginning of emissions reporting period	
July 30	Second quarter emissions report due to EPA	
September 30	End of 3rd quarter for emissions reporting	
October 30	3rd quarter emissions report due to EPA with cumulative seasonal total emissions	
November 30	<ul> <li>! Annual compliance certification report due to EPA, and deadline for allowance transfers to a compliance or overdraft account for current year compliance purposes (deadline is midnight of next business day if November 30th is not a business day)</li> <li>! Beginning of freeze on transfers of current and past year allowances into and out of compliance accounts</li> </ul>	
March 30 (approximate date)	<ul> <li>! EPA deducts penalty allowances from source's new allocation, if necessary</li> <li>! EPA provides compliance results, allocations and flow control ratio to AARs</li> <li>! EPA lifts transfer freeze</li> </ul>	
May 1	Beginning of new emissions reporting period	

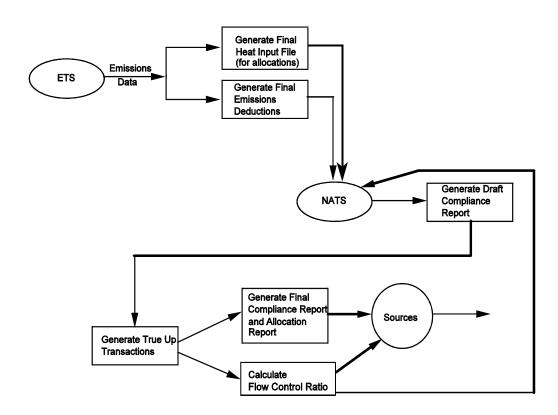


Figure 4-1: Trading Program Data Flow and Process

[This page intentionally left blank.]

# Section 5: NO<sub>x</sub> Budget Permits

NOTE! Due to inconsistencies with the permitting requirements of Title V, a  $NO_x$  Budget permit is currently <u>not</u> required for sources covered by the Federal  $NO_x$  Budget Trading Program. For administrative purposes, sources required to have a Federally-enforceable State operating permit (FESOP) are also currently <u>not</u> required to meet the permitting requirements of the rule.

To resolve this inconsistency, the current definition of "applicable requirement" in 40 CFR part 70 must be revised to include requirements under the Federal  $NO_x$  Budget Trading Program. Until EPA revises this definition, States will not have the authority to include Federal  $NO_x$  Budget Trading Program requirements in their Title V permits.

The delay in permitting will <u>not</u> affect implementation of any other requirement of the Federal NO<sub>x</sub> Budget Trading Program.

After reading Section 5, you should know if you need a  $NO_x$  Budget permit and, if so, how to obtain the appropriate permit (or permit revision).

# 5.1 Do I need a permit?

As the owner or operator of an affected source, you must apply for a NO<sub>x</sub> Budget permit if you are independently required to have a Title V permit or a federally-enforceable State operating permit (FESOP). Title V of the Act requires that all major stationary sources obtain operating permits. Therefore, most affected sources will have an existing Title V permit. However, being subject to the section 126 regulation does not by itself create the obligation to apply for a Title V operating permit. If you have a NO<sub>x</sub> Budget Unit located at a non-Title V source and that source does not have a FESOP, then you do not have to have any permit for this program. If you do have a FESOP, then the permitting requirements under the trading program will apply.

Your NO<sub>x</sub> Budget permit will include all of the applicable standard requirements of the Federal NO<sub>x</sub> Budget Trading Program (see § 97.6). The NO<sub>x</sub> Budget permit is considered to be a complete and

NOTE! See Appendix B to this Guide for an example set of standard permit conditions based on § 97.6.

independent portion of your federally-enforceable permit. The Title V or FESOP permitting authority, as applicable, will administer the NO<sub>x</sub> Budget permit.

Permits Section 5

### 5.2 How do I apply for my NO<sub>x</sub> Budget Permit?

Generally, you must submit the NO<sub>x</sub> Budget Permit application to the appropriate permitting authority. If the NO<sub>x</sub> Budget Unit is located at a Title V source, your permitting authority will be the applicable permitting authority under Part 70 or EPA under Part 71. If the source is a non-Title V source, then you will apply to the State or local agency that administers an applicable federally-enforceable State operating permit (FESOP) program. If neither Title V or a FESOP program applies to your source, then you do not have to submit any permit application for this program.

Include the following elements in your application for a NO<sub>x</sub> Budget Permit:

- ! Identification of your source, including the ORIS code assigned by EIA. If you do not have an ORIS code for reporting to EIA, use the plant ID you use for the Acid Rain Program or the OTC NO<sub>x</sub> Budget Program (if applicable), or contact the Clean Air Markets Division to obtain an appropriate plant ID to use for this trading program
- ! Identification of each NO<sub>x</sub> Budget unit at your source and whether the unit is affected as a core source or an individual opt-in unit
- ! The standard requirements regarding permitting, monitoring, NO<sub>x</sub> emissions/allowances, excess emissions, recordkeeping, reporting, liability, and effect on other authorities (see § 97.6)
- ! For opt-in units, the certification statements specified in § 97.22(d)
- ! Note that the permit automatically incorporates the definitions in § 97.2 and every allocation, transfer, or deduction of allowances (see § 97.23)

If you already have an operating permit issued under 40 CFR part 70 (i.e., a Title V permit issued by a State, local government, or Indian Tribe) or an operating permit issued under 40 CFR part 71 (issued by EPA), you do not have to submit a separate request for a permit revision to your existing permit to

Be sure to check EPA's website for updates on the permit procedures for this program -- see:

http://www.epa.gov/acidrain/modlrule/main.html#126

incorporate the requirements of this regulation. You need only submit the  $NO_x$  Budget permit application in a timely manner.

It will then be up to your permitting authority to reflect the  $NO_x$  Budget permit requirements in your Title V permit. If you have three years or less remaining in your current permit term, then the  $NO_x$  Budget permit requirements can be added at permit

Section 5 Permits

renewal. If there are more than three years remaining, then the permitting authority should reopen the permit to add these requirements.

If you have an existing non-Title V FESOP, you should follow the applicable procedures under that permit program to revise or reopen a permit (or wait for renewal) to incorporate the NO<sub>x</sub> Budget permit requirements.

Once your permit incorporates the NO<sub>x</sub> Budget permit requirements, you may revise your NO<sub>x</sub> Budget Permit as necessary. Follow the appropriate permit revision procedures under your Title V permit or FESOP program for these types of revisions.

Permits Section 5

[This page intentionally left blank.]

# Section 6: Emissions Monitoring, Reporting and Recordkeeping Requirements

After reading Section 6, you should know what monitoring options you have, how to certify and then quality assure your monitors, and how to report your monitoring data.

Because you need to account for all of a unit's  $NO_x$  emissions to reconcile your emissions with your allowances, you must monitor  $NO_x$  mass emissions for all unit operating time (including periods such as startup or shutdown). If your monitors are not working properly, you will have to use substitute emissions data based on specific missing data routines.

In addition, you must monitor for heat input to determine allowance allocations. You should note that EPA is considering changing to output-based allocations in future allocation periods. If this allocation approach applies, you will have to monitor output (that is, electrical generation or thermal generation such as steam or hot water). Before implementing any output-based monitoring requirements, EPA will have to propose regulations, receive public comments, and then issue final regulations.

Although Part 97 contains some basic explanation of what and how you must monitor and then report your emissions, most of the substantive monitoring and reporting requirements for the Federal NO<sub>x</sub> Budget Trading Program are found in

NOTE! EPA has developed a number of compliance aids to implement Part 75 monitoring requirements -- see Appendix A to this Guide for a list of resources.

40 CFR Part 75. Part 75 contains all of the monitoring requirements for the Acid Rain Program, and also contains a specific subpart (Subpart H) to address  $NO_x$  mass monitoring for  $NO_x$  trading programs.

To ensure that all participants in the trading program account for their emissions in the same manner, the Part 75 monitoring and reporting requirements are extremely detailed. In addition, EPA has developed a number of policies to retain consistent implementation; these policies are found in the Acid Rain Program Policy Manual that is available on the Clean Air Market Division's (CAMD's) web site. The following section provides a general overview of what monitoring and reporting requirements apply, but you will need to review carefully the Part 75 requirements and existing guidance materials to successfully implement your monitoring and reporting for the trading program, especially if your units are not affected under the Acid Rain Program.

This section addresses the following steps in the monitoring and reporting process:

- ! Section 6.1: Monitoring Options
- ! Section 6.2: Monitoring Approval Process
- ! Section 6.3: Quality Assurance (QA)
- ! Section 6.4: Reporting Your Emissions and QA Data
- ! Section 6.5: Changes to Your Monitoring

## **6.1 Monitoring options**

### 6.1.1 Do my monitoring options depend on what type of unit I have?

Yes. You first must determine what type of unit you have based on the fuel(s) combusted in the unit. Use the following table to classify your unit for purposes of determining the appropriate monitoring under Part 75. For further clarification, see the definitions of coal-fired, gas-fired and oil-fired in

NOTE! Do not use the following factors or the Part 72 definitions to determine whether you are a fossil fuel-fired unit for trading program applicability purposes. The Part 97 applicability criteria differ from Part 72 on how you account for nonfossil fuel consumption.

40 CFR 72.2, and the provisions for units that combust other solid fuels in § 75.71(f).

**Table 6-1: Part 75 Unit Type Definition** 

If your unit combusts	Then your unit is classified as a
Any coal, any coal-derived fuel (other than coal-derived gaseous fuel that meets a "very low sulfur fuel" definition in Part 72), or any other solid fuel	Coal-fired/Other Solid Fuel-fired Unit
Oil only	Oil-fired Unit
Natural gas/other gaseous fuel for: (i) at least 90% of average annual heat input based on a 3-year period, and (ii) at least 85% in each of the 3 years	Gas-fired Unit
A combination of oil and gas with sufficient heat input from oil so that the gas-fired unit status does not apply	Oil-fired Unit

Next, you need to consider how much you operate a unit and how much you emit from a unit. The following two special situations affect which monitoring method you may use:

- ! **Peaking Units**. An oil or gas-fired unit with an average capacity factor ≤10 percent for the previous three years and no more than 20 percent in any of those three years may qualify as a peaking unit. There are special provisions for qualifying initially based on projected capacity factors in future years. See the § 72.2 definition for a further discussion of which units qualify as peaking units.
- ! Low Mass Emissions (LME) Units. For an oil or gas-fired unit affected under the Acid Rain Program, an LME unit is one with annual SO₂ emissions ≤25 tons and annual NO₂ emissions ≤50 tons. If your oil or gas-fired unit is not subject to the Acid Rain Program, the unit may qualify so long as the annual NO₂ emissions are ≤50 tons (or if the unit is reporting only on an ozone season basis, if NO₂ emissions are ≤25 tons for the ozone season). See §§ 75.19, 75.71(e), and 75.74(c)(10) for a further discussion of how to qualify and what is required to demonstrate that a unit continues to qualify as an LME unit. Note that the criteria for LME units are not the same as (and are less stringent than) the criteria for qualifying as a low-permitlimit unit. Further, LME units are subject to the Federal NO₂ Budget Trading Program requirements, while low-permit limit units are exempt from most of the requirements.

# 6.1.2 Based on my fuels, capacity factors, and emissions, what basic monitoring options apply to my units?

For any unit, the basic monitoring approach for the Federal NO<sub>x</sub> Budget Trading Program is to use continuous emission monitoring systems (CEMS) to record and report your NO<sub>x</sub> emissions and heat input rate data. There are two basic CEMS options:

- ! Use NO<sub>x</sub>-diluent CEMS, which consists of a NO<sub>x</sub> pollutant concentration monitor and a diluent (O<sub>2</sub> or CO<sub>2</sub>) monitor, to calculate a NO<sub>x</sub> emissions rate in lb/mmBtu. Then use a flow monitor and diluent monitor to calculate heat input rate in mmBtu/hr. You determine NO<sub>x</sub> mass emissions in lb/hr by multiplying these two calculated values.
- ! A NO<sub>x</sub> concentration/flow methodology. For this option, you use a NO<sub>x</sub> pollutant concentration monitor to obtain NO<sub>x</sub> in parts per million (ppm), convert the ppm value to a lb/standard cubic foot (scf) equivalent using a known constant, and then use a flow monitor to obtain flow rate volume in scf/hr. You then multiply the converted ppm value times the flow rate to obtain NO<sub>x</sub> mass emissions in lb/hr.

Part 75 also allows you to petition EPA for approval of an alternative monitoring system that meets certain performance-based criteria (see Subpart E of Part 75). You should note, however, that since promulgating Part 75 in 1993, EPA has not approved any alternative monitoring systems under Subpart E.

One reason for the inactivity under the Subpart E alternative monitoring provisions is that Part 75 already includes other cost-effective alternatives to CEMS for particular types of units. You may be able to use one of the following additional monitoring methods depending on the characteristics of your unit:

- ! An "excepted method" for heat input used in lieu of a stack flow monitor and diluent monitor under Appendix D to Part 75 for *oil and gas-fired units*. This method allows you to monitor heat input rate based on fuel flow rates measured with fuel flowmeter(s) and fuel gross calorific value (GCV) sampling data. Note that in many cases, you can rely on GCV sampling data from your fuel supplier if you receive pipeline natural gas or other oil/gaseous fuels in discrete shipments.
- ! A second "excepted method" under Appendix E to Part 75 for *oil and gas-fired peaking units*. This method allows you to calculate NO<sub>x</sub> emission rate from curves correlating NO<sub>x</sub> emission rates and heat input rates.
- ! Simplified, conservative heat input and NO<sub>x</sub> emission rate estimates (see § 75.19) that certain *oil and gas-fired units with low mass emissions* can use to calculate NO<sub>x</sub> mass emissions.

For each monitoring option, a key component of your overall monitoring system will be a data acquisition and handling system (DAHS). The DAHS electronically records (as applicable) your measured  $NO_x$  concentrations, diluent gas concentrations and flow rates, and automatically calculates and records your  $NO_x$  emission rates, heat input rates, and  $NO_x$  mass emissions. While the DAHS for most options will require customized software, EPA has developed the Monitoring Data Checking (MDC) software, which is available free of charge. You can use one function of MDC to satisfy the DAHS requirements for the LME estimate-based methodology.

The following table summarizes the Subpart H monitoring options. Remember, you must monitor to determine  $NO_x$  mass emissions (in lb/hr) for compliance purposes and to determine heat input rate (in mmBtu/hr) for allowance allocation purposes. In most cases, you will use heat input rate monitoring as part of determining both of these values; but for the  $NO_x$  concentration/flow CEMS methodology, the  $NO_x$  mass and heat input rate monitoring will be separate.

**Table 6-2: Part 75 Subpart H Monitoring Options** 

For this type of unit	You may determine NO <sub>x</sub> mass (lb/hr) using	And determine heat input rate (mmBtu/hr) using
Any Unit  (Note: These are required methods for Coal-fired Units	<ul> <li>NO<sub>x</sub> emission rate (in lb/mmBtu from a NO<sub>x</sub> pollutant concentration monitor and an O<sub>2</sub> or CO<sub>2</sub> diluent monitor), multiplied by</li> <li>Heat input rate (in mmBtu/hr from a flow monitor and an O<sub>2</sub> or CO<sub>2</sub> diluent monitor)</li> </ul>	! Flow monitor and an O <sub>2</sub> or CO <sub>2</sub> diluent monitor for heat input rate
or any units combusting other solid fuels)	<ul> <li>NO<sub>x</sub> emission concentration (in ppm from a NO<sub>x</sub> pollutant concentration monitor), converted to lb/scf with a conversion factor, multiplied by</li> <li>Flow rate (in scf/hr from a flow monitor)</li> </ul>	! Same as above, or, if applicable (i.e., for oil and gas units), Appendix D fuel flowmeter(s) and fuel GCV sampling
Oil-fired or Gas- fired Unit	<ul> <li>! NO<sub>x</sub> emission rate (from a NO<sub>x</sub> pollutant concentration monitor and an O<sub>2</sub> or CO<sub>2</sub> diluent monitor), multiplied by</li> <li>! Heat input rate (from Appendix D fuel flowmeter(s) and fuel GCV sampling)</li> </ul>	! Appendix D fuel flowmeter(s) and fuel GCV sampling
Oil-fired or Gas- fired Peaking Unit	<ul> <li>! NO<sub>x</sub> emission rate (from Appendix E correlation curves), multiplied by</li> <li>! Heat input rate (from Appendix D fuel flowmeter(s) and fuel GCV sampling)</li> </ul>	! Appendix D fuel flowmeter(s) and fuel GCV sampling
Oil-fired or Gas- fired LME Unit	<ul> <li>! NO<sub>x</sub> emission rate (from either a generic or a fuel/unit-specific default value), multiplied by</li> <li>! Either maximum rated hourly heat input (in mmBtu) or hourly heat input calculated from a long term fuel flow method (including data on volume, specific gravity, and GCV of fuel(s) combusted)</li> </ul>	<ul> <li>! Maximum rated hourly heat input, or</li> <li>! Heat input calculated from a long term fuel flow method (including data on volume, specific gravity, and GCV of fuel(s) combusted)</li> </ul>

# 6.1.3 What is moisture monitoring and when is it necessary?

You will need to monitor for moisture if a correction is needed for the stack gas moisture content. If moisture monitoring is necessary, Part 75 provides several options for conducting the monitoring. The following table identifies when moisture monitoring is necessary and what options are allowed.

**Table 6-3: Moisture Monitoring Options** 

I	f you are measuring any of the following	Then use one of the following moisture monitoring options	
!	NO <sub>x</sub> emission rate (lb/mmBtu) using a NO <sub>x</sub> diluent CEMS and your NO <sub>x</sub> pollutant concentration monitor and your diluent monitor measure on a different moisture basis (i.e., wet O <sub>2</sub> or CO <sub>2</sub> diluent and dry NO <sub>x</sub> concentration, or vice versa)  NO <sub>x</sub> mass emissions using the concentration flow methodology and the NO <sub>x</sub> concentration is measured on a dry basis (note: flow is always measured wet)	<ol> <li>Continuous moisture sensor</li> <li>O<sub>2</sub> analyzer(s) capable of measuring on both a wet and dry basis</li> <li>Stack temperature sensor and a moisture look-up table saturated gas streams only (psychrometric chart)</li> <li>Fuel-specific default values for coal and wood fuels</li> </ol>	
!	Heat input using a flow monitor and O <sub>2</sub> or CO <sub>2</sub> diluent monitor and using Equation F-16, F-17, or F-18 in Appendix F of Part 75 (note that in F-17, the diluent monitor measures on a wet basis but moisture correction is still required)	<b>Note:</b> For each option (except for the default values), you must define a moisture monitoring system in the monitoring plan.	

# **6.1.4** What if my unit has multiple stacks or shares a stack with other units?

If your unit emits through multiple stacks or shares one or more stacks with other units (a "common stack"), you will have to meet fairly complex monitoring options. The following table outlines the various options you have in these circumstances. Note that your available alternatives for a common stack will depend on whether your unit shares a stack with units that are subject to the Federal NO<sub>x</sub> Budget Trading Program.

**Table 6-4: Multiple/Common Stack Monitoring Options** 

If you have this unit configuration	Then your monitoring options are <sup>1</sup>
Multiple stacks (i.e., a single unit that exhausts through two or more stacks)	<ul> <li>! Install a NO<sub>x</sub>-diluent and flow CEMS in each duct feeding into the stacks</li> <li>! Install a NO<sub>x</sub>-diluent and flow CEMS in each stack (<i>if another unit exhausts to the stack, follow common stack procedures</i>)</li> <li>! For an Appendix D unit, install a NO<sub>x</sub>-diluent CEMS in one duct or stack (<i>note: you must demonstrate that the monitored NO<sub>x</sub> rate is representative for the entire unit</i>) and use Appendix D for the unit's heat input rate</li> </ul>

**Table 6-4: Multiple/Common Stack Monitoring Options (cont.)** 

If you have this unit configuration	Then your monitoring options are <sup>1</sup>
Common stack with all units in the Federal NO <sub>x</sub> Budget Trading Program (i.e., one stack serving more than one unit)	<ol> <li>Install a NO<sub>x</sub>-diluent and flow CEMS in the stack <u>and</u>, for heat input rate, either apportion the common stack value to the individual units or use flow and diluent monitors at each unit</li> <li>Install NO<sub>x</sub>-diluent and flow CEMS in the stack <u>and</u>, for heat input rate, use Appendix D (if you elect to for eligible units) and flow and diluent monitors in all ducts feeding into the stack for any remaining units</li> <li>Install NO<sub>x</sub>-diluent and flow CEMS in each duct feeding into the common stack</li> <li>Install NO<sub>x</sub>-diluent CEMS in each duct feeding into the common stack <u>and</u>, for heat input rate, use Appendix D (if you elect to for eligible units) and flow CEMS in the ducts feeding into the common stack for any remaining units</li> </ol>
Common stack with some units not in the Federal NO <sub>x</sub> Budget Trading Program	<ol> <li>Install a NO<sub>x</sub>-diluent and flow CEMS in the stack, a NO<sub>x</sub>-diluent and flow CEMS in the duct from each nonaffected unit, and petition EPA to use a subtractive methodology [for eligible units, you may substitute Appendix D procedures for the flow CEMS in an unaffected unit's duct]</li> <li>Install NO<sub>x</sub>-diluent CEMS in each duct feeding from an affected unit, and, for heat input rate, use Appendix D (if you elect to for eligible, affected units) and flow CEMS in the ducts feeding from any remaining affected units</li> <li>Install a NO<sub>x</sub>-diluent CEMS in the common stack, designate all units as affected and use one of the first two options described above for a common stack with only affected units</li> <li>Install a NO<sub>x</sub>-diluent and flow CEMS in the common stack and use the combined emissions from all units as the emissions from the affected units</li> <li>Petition EPA for a method to apportion NO<sub>x</sub> mass emissions to each unit</li> </ol>

A  $NO_x$  concentration monitoring system and flow monitoring system may be used in place of a  $NO_x$ -diluent CEMS and flow monitor to determine  $NO_x$  mass emissions. However, if you choose that option, you also will have to meet the special provisions in § 75.72(e) to determine heat input.

For situations or configurations that are more complex than the above examples, you may contact EPA staff for additional guidance.

NOTE! See Appendix A to this Guide for how to find a list of CAMD and EPA Regional Office staff that you can contact with your monitoring questions.

### 6.1.5 What if my unit is an opt-in unit?

If you opt a unit into the program, you must follow the same monitoring method requirements that apply to other units. Also, in order to develop a baseline for determining allowance allocations for an opt-in unit, you must commence monitoring by the beginning of the control period (i.e., May 1st) of the year before your unit obtains opt-in status.

# **6.1.6** May I petition EPA to obtain a variance from a monitoring requirement?

You may petition EPA to apply for a variance from the monitoring requirements under the program. The requirements for such a petition are provided in § 75.66 and vary, depending on the type of variance you are seeking. For most petitions, you will need to provide identification information for the unit, an explanation of why you are seeking the variance, a detailed description of your proposed alternative, and a discussion of how your alternative will serve the purposes of the requirement.

# In general, a monitoring petition must contain:

- ! Identification of the plant and unit
- ! A detailed explanation of why you are suggesting the alternative
- ! Descriptions and diagrams of your suggested alternative
- ! A demonstration that your alternative is consistent with the purposes of the requirement
- ! Any other relevant information required

# **6.2** Monitoring approval process

Once you determine the methodologies you will use to measure emissions (see Tables 6-2 through 6-4), you will need to install and obtain approval for your monitoring. Part 75, Appendix A, Section 1, contains information on where to install each type of monitor, and installation issues are not discussed further in this document. The monitoring certification process consists of the following steps:

- ! Submit an initial monitoring plan
- ! Submit a certification test notice
- ! Conduct certification tests
- ! Submit a certification application
- ! Receive an incomplete application notice from EPA, if applicable
- ! Receive EPA approval/disapproval notice

If your unit is in the Acid Rain Program, you should continue to follow the certification process requirements of Part 75. Most Acid Rain units will not be required to implement and certify any additional monitoring in the context of this rule. However, if

you have previously filed any petitions on the subject of NO<sub>x</sub> apportionment at a common stack, you must resubmit these petitions to EPA to ensure that the approval applies in the context of the Federal NO<sub>x</sub> Trading Program. In addition, you must ensure that your DAHS has NO<sub>x</sub> mass capability and if necessary, add and verify the appropriate formulas in your monitoring plan. Also, if you install additional monitors to meet the requirements of this program, you should follow the specific Part 97 certification and recertification procedures discussed in this section.

If your unit is not subject to the Acid Rain Program, you must certify each monitoring system you use to comply with the Federal NO<sub>x</sub> Budget Trading Program. Based on the certification information you submit, EPA will determine whether to approve your monitoring system.

Submit this document/notice	By this date
Initial monitoring plan	≥ 45 days prior to beginning of testing
Certification test notice	≥45 days prior to beginning of testing
Certification application	≤45 days after testing is complete

**Table 6-5: Overview of Monitoring System Certification Reporting** 

# **6.2.1 Initial monitoring plan**

You must submit your initial monitoring plan at least 45 days before you begin certification testing. Your monitoring plan will contain sufficient information about your monitoring systems or alternatives to demonstrate that all the emissions from the unit are reported correctly. The plan includes basic unit and fuel identifying information and then explains what monitoring components you use within each monitoring system, where they are located, and what emissions formulas you use to calculate emissions. The plan also includes operating information about the unit and each monitor or monitoring system (such as normal range of unit load and details about a monitor's span and range). See § 75.53 for a complete list of monitoring plan elements.

You must submit the following monitoring plan information electronically:

- ! ORIS code and other identification for the unit
- ! Unit information (e.g., type of unit, type of controls)
- ! Description of exhaust configuration (e.g., single stack, common stack)
- ! Monitoring methodology details
- ! Program identification and information
- ! Identification/description of monitoring, hardware, and software components
- ! Formulas for each emissions parameter
- ! Physical data on the stack height and cross-sectional area of the flue exit

- ! Methods of calculation and values for each parameter monitored (for example, maximum potential concentration of a pollutant and monitor span values)
- ! Default values and parameters
- ! Load level and range of operation information

You must submit the following monitoring plan information in hardcopy or electronically:

- ! Test strategy, test protocols, and calculations for parameter values and apportionment
- ! Site location descriptions, including schematics or engineering drawings, for all monitoring components, gas handing systems, and stacks and ducts
- ! Data flow diagram
- ! Span and range calculations
- ! Required technical justifications

The detailed requirements for how to report each electronic data item in the monitoring plan are found in the *Electronic Data Reporting Version 2.1* format document (EDR v2.1). You should also consult the latest version of the *EDR Version 2.1* 

NOTE! See Appendix A for information on how to obtain the EDR v2.1, EDR v2.1 Instructions, and MDC software to assist you in preparing your monitoring plan.

Reporting Instructions. In addition, CAMD has developed the Monitoring Data Checking (MDC) software to assist you in preparing your electronic monitoring plan information. The software is available from the CAMD web site, free of charge. The EPA strongly recommends that you use the software because it will help you find many potential errors before you submit your monitoring plan and will streamline receipt and review of your monitoring plan by EPA.

EPA will review your monitoring plan and notify you of any errors that are discovered. If there are any errors, EPA will require you to resubmit the plan.

#### **6.2.2** Certification test notice

At least 45 days before you begin certification tests, submit a written notice of the dates you will be conducting initial certification testing. You must submit the notification to CAMD, the appropriate EPA Regional Office, and your State or local agency. If you need to reschedule the test, you may do so by providing written or telephone notice at least seven days before the earlier of the original or the rescheduled beginning test date. For any non-Acid Rain unit, your State or local agency can waive the requirement that you provide them notice of your certification tests (see § 97.73(b)).

### **6.2.3** Certification testing

The next step to obtain approval of your monitoring methodologies is to conduct the required certification tests for your selected approach. The test procedures that you must follow are set out in Appendix A to Part 75 for continuous emission monitoring systems, Appendix D for fuel flowmeters, Appendix E for NO<sub>x</sub>-heat input correlation testing, and § 75.19 for unit-specific default testing for low mass emissions units. In addition, § 75.20(c)(9) requires you to conduct tests of your data acquisition and handling system (DAHS) to verify proper computation of hourly emission and heat input rates and proper application of missing data substitution and bias adjustment factors. You should refer to those provisions and EPA guidance materials to determine the appropriate technical procedures for conducting the applicable tests.

The required certification tests will depend on the types of monitors and are shown in the table below.

**Table 6-6: Monitoring System or Methodology Certification Tests** 

To certify this system or methodology	You will need to perform these tests	
NO <sub>x</sub> -diluent (i.e., NO <sub>x</sub> emission rate in lb/mmBtu)	<ul> <li>! 7-day calibration error test (both component monitors)</li> <li>! Linearity check (both component monitors)</li> <li>! Relative Accuracy Test Audit (RATA) (lb/mmBtu basis)</li> <li>! Bias test</li> <li>! Cycle time test (both component monitors)</li> <li>! DAHS verification</li> </ul>	
NO <sub>x</sub> concentration (i.e., NO <sub>x</sub> in ppm)	<ul> <li>! 7-day calibration error test</li> <li>! Linearity check</li> <li>! RATA (ppm basis)</li> <li>! Bias test</li> <li>! Cycle time test</li> <li>! DAHS verification</li> </ul>	
Flow	<ul><li>! 7-day calibration error test</li><li>! RATA</li><li>! Bias test</li><li>! DAHS verification</li></ul>	
Diluent monitor used only for heat input determination	<ul> <li>! 7-day calibration error test</li> <li>! Linearity check</li> <li>! RATA</li> <li>! Cycle time test</li> <li>! DAHS verification</li> </ul>	

**Table 6-6: Monitoring System or Methodology Certification Tests (cont.)** 

To certify this system or methodology	You will need to perform these tests	
Moisture system with wet and dry basis O <sub>2</sub> analyzers(s)	<ul> <li>! 7-day calibration error test (each analyzer)</li> <li>! Linearity check (each analyzer)</li> <li>! RATA (% H<sub>2</sub>O basis)</li> <li>! Cycle time test (each analyzer)</li> <li>! DAHS verification</li> </ul>	
Continuous moisture sensor	! RATA	
Continuous moisture system consisting of a temperature sensor and a DAHS with a lookup table	! Demonstration that the DAHS applies the correct moisture value from the lookup table for each hour	
Appendix D fuel flowmeter methods for heat input	<ul><li>! Fuel flowmeter accuracy tests (some exceptions apply)</li><li>! DAHS verification</li></ul>	
Appendix E method for NO <sub>x</sub> emission rate	<ul><li>! Appendix E correlation testing</li><li>! DAHS verification</li></ul>	
Fuel-and-unit-specific default NO <sub>x</sub> emission rate for LME units	! Appendix E correlation testing, as modified by § 75.19(c)(1)(iv)(A)	

# **6.2.4** Certification application

Your certification application should contain a hardcopy application form (EPA 7610-14), an updated electronic monitoring plan, any hardcopy monitoring plan changes, and the hardcopy and electronic results of your certification testing. Submit these documents to CAMD, the EPA Regional Office, and your State agency, as follows:

**Table 6-7: Certification Application Reporting** 

Send this document	То
Hardcopy EPA Form 7610-14	CAMD, EPA Regional Office, State/local agency
Hardcopy test results	EPA Regional Office, State/local agency
Electronic test results	CAMD
Updated electronic monitoring plan	CAMD
Hardcopy monitoring plan changes	EPA Regional Office, State/local agency

### >> How do I submit certification reports for a low mass emissions unit?

Because you are not installing CEMS at a low mass emission (LME) unit, the certification process is fairly simple. Your certification application will consist primarily of an up-to-date monitoring plan. The monitoring plan for an LME unit will include historical or projected emissions data and calculations demonstrating that the unit meets the LME unit qualifications. Also, if you wish to use a fuel and unit-specific  $NO_x$  emission rate instead of the generic default rate for a unit with  $NO_x$  controls, the monitoring plan must include the parameters you will monitor (with acceptable operating ranges) to document that the controls continue to operate properly. Your certification application also should include the testing you have performed (or will perform) to determine the default  $NO_x$  emission rate.

The following table summarizes the materials you should submit to the EPA and State and local agencies:

Send this document	То	
Hardcopy form 7610-14 (with AAR signature)	CAMD, EPA Regional Office, State/local agency	
Electronic monitoring plan	CAMD	
Hardcopy monitoring plan changes	CAMD, EPA Regional Office, State/local agency	
Hardcopy test results	CAMD	
Calculations to show that the unit qualifies as an LME unit	CAMD	

**Table 6-8: Low Mass Emissions Unit Certification Reporting** 

The application to use the LME methodology may be submitted at any time. If you do not have certified monitoring equipment already installed, such as when you first certify for the program, you may use the method when you submit your certification application. If you are replacing existing monitoring equipment, you may only begin using the methodology on the first operating hour following the start of the next calendar year (or ozone season).

# >> How are my data treated while my certification (or recertification) application is pending?

EPA provides a period of provisional certification while your certification (or recertification -- see Section 6.5, below) application is pending so that you may rely on the data from your monitoring systems during this period. Your data will be considered valid quality-assured data:

- ! Beginning at the time at which you complete your certification (or recertification) tests, *and then continuing* . . .
- ! For a period not to exceed 120 days after EPA receives a complete certification (or recertification) application; *provided that* . . .
- ! You operate the monitoring system in accordance with all applicable Part 75 requirements (including QA requirements -- see Section 6.3, below); and provided further that . . .
- ! EPA does not issue a notice of disapproval of your application.

Especially for recertification, you will want to begin collecting valid data as quickly as possible to limit the use of conservative estimates to calculate emissions during the period you do not have a certified monitoring system in place. In recognition of this concern, EPA has established conditional data validation procedures so that you can start the provisional recertification period even before completing all of the necessary recertification tests. You can also use these data validation procedures during the initial certification process if necessary. You should review the specific requirements in § 75.20(b)(3) to understand these conditional data validation procedures.

### 6.2.5 EPA approval

Within 120 days of receiving a complete application, EPA will let you know if your certification application has been approved or disapproved. If EPA finds that your application is incomplete, EPA will notify you of the missing items and you will have a reasonable amount of time to submit the missing information.

# **6.3** Quality assurance (QA)

You must perform ongoing quality assurance testing on your monitors to verify that the data you report are accurate. If your unit is in the Acid Rain Program, or if you choose to report on an annual basis for a non-Acid Rain unit, you must follow all applicable Acid Rain Program (Part 75) quality assurance procedures. These are found in Appendix B of Part 75 and are summarized in the following table.

Table 6-9: QA Requirements for Units Reporting on an Annual Basis

On this equipment	Perform these QA tests	With these qualifications and exceptions
Each required CEMS	Daily calibration tests	N/A
Flow monitor	Daily interference checks	N/A
Each required gas monitor	Quarterly linearity checks	! Required only in "QA operating quarters" (≥168 unit operating hours), but no less than once a year ! 168 operating hour grace period available ! Not required if NO <sub>x</sub> span ≤ 30 ppm
Flow monitor	Quarterly flow-to-load ratio tests	Complex configurations may be exempted by petition under § 75.66
Differential pressure- type flow monitor	Quarterly leak checks	<ul><li>! Required only in QA operating quarters</li><li>! 168 operating hour grace period available</li></ul>
Fuel flowmeter	! Fuel flowmeter accuracy test every four "fuel flowmeter QA operating quarters" (fuel measured by flowmeter is combusted ≥168 unit operating hours) ! Visual inspections (if applicable) every 3 years ! Quarterly fuel flow-to-load ratio test	Fuel flow-to-load test is optional may be used to extend interval between flowmeter accuracy tests to up to 20 quarters
<ul> <li>! NO<sub>x</sub>-diluent CEMS</li> <li>! NO<sub>x</sub> concentration CEMS</li> <li>! Flow monitor</li> <li>! Moisture monitor</li> <li>! Diluent monitor used only for heat input rate</li> </ul>	<ul> <li>! Semiannual or annual relative accuracy test audit (RATA)</li> <li>! Bias test (NO<sub>x</sub> and flow systems, only)</li> </ul>	Depending on % relative accuracy obtained in previous test, a RATA is required either semiannually (every two "QA operating quarters") or annually (every four "QA operating quarters"), not to exceed 8 calendar quarters

If your unit is not an Acid Rain unit and you choose not to report on an annual basis, then you must meet the specific quality assurance procedures of Part 75 Subpart H. You will have to conduct some Subpart H quality assurance testing prior to the beginning of the ozone season (before May 1) and other testing during the ozone season (May 1 through September 30). These separate requirements are summarized in the following table.

Table 6-10: QA Requirements for Units Reporting on an Ozone Season Basis

For this equipment	Perform this QA test	At these times	With these qualifications and exceptions
Each required CEMS	Daily calibrations (outside ozone season)	From the date and hour of any RATA or linearity check passed in the "pre-ozone season period" (i.e., from 10/1 of previous year through 4/30 of current year)	N/A
	Daily calibrations (inside ozone season)	Throughout the ozone season (5/1 - 9/30)	N/A
interference and checks flow (outside ozone season) oz pe  Daily The checks and checks ozone particular properties ozone per checks ozone properties ozone per checks ozone properties ozone prop	From the date and hour of any flow RATA passed in the pre- ozone season period	N/A	
	interference checks (inside ozone	Throughout the ozone season	N/A

Table 6-10: QA Requirements for Units Reporting on an Ozone Season Basis (cont.)

For this equipment	Perform this QA test	At these times	With these qualifications and exceptions
Each required gas monitor	Linearity check (outside ozone season)	During the pre- ozone season period	If the test is not completed by 4/30, a 168 operating hour grace period is allowed if a linearity check was passed in the previous year and if unit operated for < 336 hours in last ozone season
	Linearity check (inside ozone season)	In 2 <sup>nd</sup> and 3 <sup>rd</sup> quarters	<ul><li>! The linearity check is required only in QA operating quarters</li><li>! No grace periods allowed for these checks</li></ul>
<ul> <li>! NO<sub>x</sub>-diluent CEMS</li> <li>! NO<sub>x</sub> concentration CEMS</li> <li>! Flow monitor</li> <li>! Moisture monitor</li> <li>! Diluent monitor used only for heat input rate</li> </ul>	! RATA (outside ozone season) ! Bias test (for NO <sub>x</sub> and flow systems, only) (outside ozone season)	Pre-ozone season period	! If you qualify for annual RATA frequency, you can use this RATA to QA data for entire current ozone season ! If you qualify for semiannual RATA, you can use this RATA to QA data either for entire current ozone season (if performed in the current year) or through 6/30 of current year (if performed in prior year) ! If RATA is not completed by 4/30, a 720 operating hour grace period applies if a RATA was passed in the previous year and if unit operated for < 336 hours in previous ozone season
	! RATA (inside ozone season) ! Bias test (for NO <sub>x</sub> and flow systems, only) (inside ozone season)	In 2 <sup>nd</sup> and 3 <sup>rd</sup> quarters	<ul> <li>! Required only as necessary, based on the pre-ozone season RATA status described immediately above</li> <li>! You can use this ozone season RATA to QA data in the next ozone season, if you qualify for annual RATA frequency and you perform daily calibrations (and interference checks if applicable) from 10/1 of current year through 4/30 of the next year</li> </ul>

Table 6-10: QA Requirements for Units Reporting on an Ozone Season Basis (cont.)

For this equipment	Perform this QA test	At these times	With these qualifications and exceptions
Flow monitor	Flow-to-load ratio test	In 2 <sup>nd</sup> and 3 <sup>rd</sup> quarters	Complex configurations may be exempted by petition under § 75.66
DP-type flow monitor	Leak check	In 2 <sup>nd</sup> and 3 <sup>rd</sup> quarters	Required only in "QA operating quarters" (≥168 unit operating hours)
Fuel flowmeter	Fuel flowmeter accuracy tests	Every four "fuel flowmeter QA operating quarters" (fuel measured by flowmeter is combusted ≥168 unit operating hours)	For orifice, nozzle and venturi-type flowmeters, visual inspections are also required every 3 years
Fuel flowmeter	Fuel flow-to-load ratio test	In 2 <sup>nd</sup> and 3 <sup>rd</sup> quarters	Optional test you can use to extend deadline for next flowmeter accuracy test

### » Do I have to submit notice of QA testing?

In some cases, you will need to inform CAMD, your EPA Regional Office, and your State that you will be conducting quality assurance testing. This notification is required prior to a semiannual or annual RATA (and prior to retesting

NOTE! CAMD has waived the requirement to notify the Division of QA RATA testing (see Question 14.84 in the Acid Rain Program Policy Manual)

under Appendix E section 2.2). Include in your notice the test dates for the routine RATAs required under Appendix B to Part 75. CAMD, your EPA Regional Office, and/or your State can issue a waiver from these notice requirements -- so you should confirm which office(s) actually require notice prior to submitting a notice for your unit(s).

In addition, upon request, you must submit the hardcopy results of these tests to your EPA Regional Office and your State.

Finally, when retesting is required for exceeding certain operating parameters under Section 2.3 of Appendix E, this is not considered to be routine QA testing. Follow the recertification procedures (discussed under Section 6.5 of this Guide) for that type of retesting.

**Table 6-11: Periodic Quality Assurance RATA Notification Requirements** 

If you are submitting	Then it is due	In this form	To this office	
Notice of semiannual or annual RATA, or Appendix E periodic	≥ 21 days prior to beginning of test, or	Written (mail or fax) (or e- mail with agency's consent)	CAMD, EPA Regional Office, State/local agency	
retesting	≥ 24 hours prior to beginning of rescheduled test	Same as above, plus by telephone or any other means acceptable to applicable agency		
Periodic QA RATA results	Later of ≤ 45 days after completing tests <b>or</b> ≤ 15 days after receiving request from Regional Office or State/local agency	Written hardcopy report	EPA Regional Office, State/local agency	

### » What if my monitors aren't working properly?

If your monitors are not working properly and the readings are unreliable (i.e., when the monitors fail to pass quality assurance tests), you will need to use missing data substitution procedures so that you will have values to report in your quarterly emissions report for the hours in which your monitors are providing bad data (see Section 6.4, below, for information on how to comply with the quarterly emissions reporting requirements). The missing data substitution procedures you use will depend on your monitoring data availability and how many hours for which you have data since initial certification. Complete tables on applicable missing data procedures are located in § 75.33 (see Tables 1 and 2).

## 6.4 Quarterly emissions and QA reporting

You must report the emissions for Federal  $NO_x$  Budget Trading Program units using a standard electronic data reporting (EDR) format. EDR version 2.1 contains all of the data items that must be reported electronically in your quarterly reports. In addition, the EDR Version 2.1 Reporting Instructions provide guidance for reporting in the EDR format.

The EDR format contains various "record types" that contain fields for reporting individual data elements. You must place each data field in the data file location specified in EDR v2.1. Table 6-12, below, contains a list of the record types a non-Acid Rain unit subject to the Federal NO<sub>x</sub> Budget Trading Program might be required to submit. Not all of the record types in Table 6-12 will apply to every unit in the program.

If your unit is in the Acid Rain Program, your quarterly emissions reports would need to contain the information required above, plus any other information required under the Acid Rain Program.

Table 6-12: EDR Record Types for NO<sub>x</sub> Mass Reporting

Record Type Numbers	Information Contained in the Record Type	
100, 101, 102	Facility Information	
201, 210, 211, 212, 220, 230, 231, 260, 261, 262	Monitoring Data, including:  ! Pollutant and diluent gas concentrations ! Moisture data ! Volumetric flow ! Daily quality assurance data and results and reference method backup quality assurance data	
300, 302, 303, 305, 307, 320, 323, 324, 325, 328, 360	Unit Data, including: ! Unit operating and cumulative emissions data ! NO <sub>x</sub> emissions data ! Low mass emissions unit data	
503, 504, 505, 506, 507, 508, 510, 520, 530, 531, 535, 536, 540, 550, 556, 560, 585, 586, 587	Monitoring Plan Information	

**Record Type Numbers Information Contained in the Record Type** 600, 601, 602, 603, 605, 606, 610, Certification (and Ongoing Periodic QA) Test Data and 611, 614, 615, 616, 621, 623, 624, Results, including (as applicable): 7-day calibration error, linearity, leak, flow-to-load, 627, 628, 629, 630, 640, 641, 645, 650, 651, 652, 653, 660, 695, 696, RATA/bias, and cycle time tests 697, 698, 699 RATA support information (if you use Reference Methods 2F, 2G or 2H) On-line/off-line calibration demonstration ! Miscellaneous quality assurance activities Fuel flowmeter accuracy checks and quarterly fuel flow-to-load analyses Alternative monitoring petition data Low mass emissions certification data Appendix E/unit-specific default emission rate test data Quality assurance extensions/exemptions claims

Table 6-12: EDR Record Types for NO<sub>x</sub> Mass Reporting (cont.)

You will note that the quarterly report includes compliance certification elements. These elements are different than the annual compliance certification report that you submit to reconcile emissions and allowances in your allowance accounts (see Section 4.10, above). At a minimum, the quarterly report submission will include a compliance certification that states that:

Compliance Certification Data

- ! The unit's emissions were correctly and fully monitored in accordance with applicable requirements, including quality assurance of the data
- ! For a unit with add-on NO<sub>x</sub> emission controls, the controls were operated within the appropriate parameters and that for any hours in which data substitution procedures were used, the data substitutions do not systematically underestimate NO<sub>x</sub> emissions
- ! For units reporting only on a control period basis, missing data substituted NO<sub>x</sub> values are calculated using only values from the control period and do not systematically underestimate NO<sub>x</sub> emissions

Finally, you should note that you do not have to include in your quarterly report all of the items that you must record during an applicable quarter. Items that you will continue to record every quarter but do not have to submit in your quarterly report to EPA include (see § 75.73(f)(1)(ii)):

- ! Descriptions of adjustments, corrective action, and maintenance
- ! Information incompatible with electronic reporting (such as lab analyses)

910, 920, 940, 941, 999

- ! For units with NO<sub>x</sub> add-on emission controls that do not elect to use the approved site-specific parametric monitoring procedures for calculation of substitute data, the information in § 75.58(b)(3)
- ! Causes of any missing data periods and the actions taken to cure such causes (EDR v2.1 does have a record type for this information if you want to report it)
- ! Records of polynomial coefficients, K-factors and mathematical algorithms for flow and moisture monitors
- ! Daily fuel sampling information for units using Appendix D
- ! Transmitter or transducer accuracy test information
- ! Stratification test results
- ! Data and results of relative accuracy test audits (RATAs) that are aborted or invalidated and data and results of linearity checks that are aborted or invalidated due to operational problems with the unit
- ! Supplementary RATA information for gas RATAs (and for flow RATAs if you use the standard Reference Method 2)

# » Am I required to submit a quarterly report for data outside of the ozone season?

For a unit that is subject to the Acid Rain Program, you must continue to report for each quarter of the year, and you must report the particular data elements required under Subpart H in each quarterly report. For a unit that is not in the Acid Rain Program, you can elect to

NOTE! Evaluate carefully the different QA requirements for annual versus seasonal reporting before deciding on a reporting approach -- see Section 6.3 of this Guide.

report either on a year-round or ozone season-only basis. If you elect to report on an ozone season basis for this type of unit, you will submit only the second and third quarter reports, and the second quarter report will include data only from May and June (not April).

### » How do I submit quarterly reports for my monitoring data?

You must submit your emissions reports to the Emission Tracking System (ETS) on EPA's mainframe computer. You will have to submit these reports by computer modem. EPA has developed software that you can use to facilitate this submission process. Once you

You will have to use EPA-developed software to submit your quarterly reports. You will be able to download the software from CAMD's web site; also see App. A to this Guide for further information.

begin to report under this trading program, EPA will assign you an ETS analyst that will be your point of contact for ETS submission questions.

The EDR v2.1 specifies the required format for your quarterly electronic reports, and it is important for you to ensure that all data are properly formatted in each of the applicable fields within each EDR record type. You should refer to the reporting instructions that EPA has developed for EDR v2.1 to answer specific questions you may have about formatting and preparing your electronic reports. See especially Appendix C to the instructions which provides more detailed overview guidelines for preparing EDR v2.1 submittals.

You will submit your reports during the 30-day period following each calendar quarter (e.g., you must submit January through March data by April 30th). If you are a non-Acid Rain unit and have chosen to report only for the ozone season, you will submit reports only for the second and third quarters by July 30th and October 30th, respectively.

### » Does EPA provide any verification that the Agency has received my report?

EPA will process your quarterly report through a series of rigorous quality assurance checks. These checks verify that your submitted data are both accurate and in the correct EDR v2.1 format. EPA will return a report card that contains a summary of the reported emissions values and any problems identified in the report. Sources using ETS-PC to electronically submit reports to the EPA receive "instant feedback" containing the results from EPA's automated review.

### >> Can I resubmit my file?

During the 30-day quarterly report submission period following the end of each quarterly reporting period, you can revise and resubmit your report as necessary prior to the quarterly report deadline. EPA will provide you with an immediate response in the form of a feedback report indicating whether your submission contains any errors. Most errors can be corrected within the

For EPA review and resubmissions of reports, EPA has developed the Quarterly Report Review Process guidance for the OTC NO<sub>x</sub> Budget Program and will develop comparable guidance for this trading program in the future. See:

www.epa.gov/acidrain/otc/qtrrev.htm

submission period, provided EPA receives your report prior to the end of this 30-day window. However, even if your submission is received or rejected toward the end of this period, EPA will indicate that you have 30 days from the date of the feedback report to correct and resubmit your report.

If you discover a problem after the 30-day period following a calendar quarter, you must contact your EPA assigned analyst before you attempt to resubmit a report.

# 6.5 Changes to your monitoring

Changes to your monitoring may require an update to your monitoring plan, recertification, or both.

### >> How do I update my monitoring plan?

You will have to update your monitoring plan if you make any replacement, modification or other change in your approved monitoring systems or to your flue gas handling system if the change affects information reported in your monitoring plan. For instance, because you report monitoring component serial numbers, a change to the serial numbers will require a monitoring plan update.

For electronic portions of your monitoring plan, the update will occur in your quarterly report, or, if applicable, as part of the recertification application associated with the change(s) to your monitoring or flue gas handling system. Send electronic monitoring plan updates to CAMD. If the changes also affect the hardcopy portions of your monitoring plan, then you will need to submit the revised hardcopy portions of your plan to the applicable EPA Regional Office and to your State or local agency. Submit the hardcopy update with any required recertification application, or, if no recertification application is required, within 30 days of the event that triggered the monitoring plan change.

### » How do I know if I need to recertify my monitors?

You must recertify affected monitoring systems whenever you make a replacement, modification, or other change to a monitoring system that could significantly affect the ability of the system to accurately measure or record the monitored

If you are uncertain about whether a particular change requires recertification, ask your EPA Regional Office contact listed in Appendix A to this Guide.

parameters. Also, you must recertify affected monitoring systems if you change the flue gas handling system or unit operation so that there is a significant change in the unit's flow or emission concentration profile. Examples of situations that would require recertification are:

- ! Replacement of an analyzer
- ! Replacement of a CEMS
- ! Change in location or orientation of a sampling probe or site
- ! Fuel flowmeter replacement
- ! Changes in unit configuration
- ! Exceedance of Appendix E operating parameters

### >> How do I submit recertification reports?

If you need to recertify any of your systems, you must submit a recertification test notice and subsequently a recertification application. The recertification test notification consists of notification of the dates of the recertification testing. After you have completed the recertification testing, you will need to submit a recertification application, which consists of a hardcopy application form (EPA 7610-14), an updated monitoring plan, and the recertification test results.

Within 120 days of receipt, EPA will let you know if your recertification application has been approved or disapproved. If EPA finds that your application is incomplete, you will be given notice of the missing items and you will have a reasonable amount of time to submit the missing information.

Send this document/notice	By this date
Recertification test notification	≥ 45 days prior to beginning testing (if all tests required), <b>or</b>
	≥ 7 days prior to beginning of testing (if only some tests required), <b>or</b>
	≤ 2 business days after testing is scheduled, in an emergency situation
Recertification application	≤ 45 days after testing is complete

**Table 6-13: Recertification Reporting** 

! Recertification test notification: If you need to conduct all of the same certification tests for recertification as you did for initial certification, then you must provide written notice at least 45 days in advance. If you need to reschedule the test, you may do so by providing written or telephone notice at least seven days before the earlier of the original or rescheduled beginning test date.

If only some certification tests are required for recertification, you need only provide at least seven days prior notice, in writing or by telephone. If you need to reschedule the tests, provide at least two business days notice before the earlier of the original or rescheduled beginning test date.

Finally, if you need to recertify a monitoring system because of an uncontrollable equipment failure that results in lost data, submit an "emergency" notice within two business days from when you schedule the tests.

In any case, submit the notice to CAMD, your EPA Regional Office, and your State or local agency. CAMD, your EPA Regional Office, and/or your State or local

agency can issue a waiver from this notification requirement -- so you should confirm which office(s) actually require notice prior to submitting a notice for your unit(s).

Recertification application: The recertification application should contain a hardcopy application form (EPA 7610-14), an updated monitoring plan (including any hardcopy monitoring plan changes), and the results of your recertification testing. You will need to submit these documents to CAMD, your EPA Regional Office, and your State or local agency, as follows:

**Table 6-14: Recertification Application Reporting** 

Send this document	То
Hardcopy form 7610-14	CAMD, EPA Regional Office, State/local agency
Hardcopy test results	EPA Regional Office, State/local agency
Electronic test results	CAMD
Updated electronic monitoring plan	CAMD
Hardcopy monitoring plan changes	EPA Regional Office, State/local agency

## >> How do I obtain approval to conduct only certain tests for recertification?

Section 75.66(h) contains the specific elements for a petition to conduct only certain tests for recertification of a monitoring system. The petition must include all of the following:

- ! Identification of the applicable monitoring system(s)
- ! A description of the changes to the system
- ! An explanation of why you are making the changes
- ! A description of the potential effects of the changes on the system's ability to measure, record and report emissions

# **Section 7: Other Questions and Answers**

After reading Section 7, you should know how to determine self-compliance and how the regulation affects your existing air permits.

# 7.1 How might I conduct a self-audit?

You may want to conduct a self-audit to determine your compliance status for this regulation. You will want to ensure that you have met all the reporting, recordkeeping, and permitting requirements. For sources that are subject to either the 25-ton or retired unit exemption, you will want to ensure that you are complying with the criteria for these exemptions. To assist you with this self-audit, Table 7-1 provides a checklist you may find helpful.

**Table 7-1: Example Self-audit Checklist** 

Requirement	YES	NO	N/A
Applicability: Am I subject to this regulation? (see Section 3)			
1. Do I own or operate a large EGU? (i.e. serves generator > 25 MWe)			
2. Do I own or operate a large non-EGU? (i.e. > 250 mmBtu)			
3. Is my unit a fossil-fuel fired unit? (i.e., burns > 50% fossil fuel)			
4. If I own or operate a large fossil-fuel fired EGU or non-EGU, am I considered to be an "existing" unit (i.e., began operation before May 1, 1997)?			
5. If I own or operate a large fossil-fuel fired EGU or non-EGU am I considered to be a "new" unit (i.e., began operation between May 1, 1997 and May 1, 2003)?			
Emission Limits/Allowance Allocations:			
1. Have I submitted my general account application, if needed? (see § 97.51)			
2. Have I submitted an account certificate of representation? (i.e. designation of AAR, see § 97.13)			
3. Is my control technology sufficient to reduce my ozone season NO <sub>x</sub> emissions to my allocation level?			
4. If my control technology is not sufficient to reduce my ozone season NO <sub>x</sub> emissions to my allocation level, do I have (or can I obtain) enough additional NO <sub>x</sub> allowances to ensure compliance for the control period?			

**Table 7-1: Example Self-audit Checklist (cont.)** 

Requirement	YES	NO	N/A
Monitoring: Do I have an adequate method of monitoring my NO <sub>x</sub> emissions? (see Section 6)			
1. Did I use one of the following monitoring options?			
a. Part 75 CEMS			
b. Appendix D (procedures for measuring heat input)			
c. Appendix E (procedures for measuring NO <sub>x</sub> emissions)			
d. Low Mass Emissions (LME) method			
e. Other approved alternative			
Reporting/Recordkeeping: Did I submit the required reports to EPA? (see Sections 4 and 6)			
1. Account Certificate of Representation form (for AAR)			
2. Allowance Transfer Forms (as applicable)			
3. Compliance Certification Report (by Nov. 30th after each control period)			
4. Monitoring Plan			
5. Monitoring Certification/Recertification Test			
6. Notices and Applications Petitions for monitoring alternatives/special exception (if applicable)			
7. Monitoring QA Test Notices			
8. Quarterly emission reports (for all four quarters if annual reporter or 2nd/3rd quarters if seasonal reporter)			
Permitting: Did I update the appropriate permits? (see Section 5) (i.e. Title V, FESOP, or Other)			
1. Was my NO <sub>x</sub> Budget Permit application submitted in accordance with Title V or non-Title V regulations, if applicable?			

# 7.2 What are the implications of this regulation for my existing operating permits?

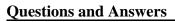
Title V of the Act requires that certain sources obtain operating permits. However, being subject to the section 126 regulation does not by itself create the obligation to apply for a Title V operating permit. Nevertheless, since this regulation covers only large EGUs and non-EGUs, most affected sources will have an existing Title V permit.

The permit requirements for this program are intended to be stand-alone, generic requirements that can easily be incorporated into existing operating permits. You will have

to submit a NO<sub>x</sub> Budget Permit application (see Section 5, above). The permitting authority can then act on that application using the appropriate procedures in the underlying permit program. For Title V sources, in some cases, this may mean reopening a Title V permit to incorporate the standard requirements for this program, while in other Title V cases, the permitting authority may simply wait to incorporate those requirements at permit renewal.

# 7.3 Are there opportunities for flexibility or waivers?

The cap-and-trade program by its nature is inherently flexible and encourages sources on a regionwide basis to pursue least cost compliance planning. Because of this inherent flexibility, there are no other true "hardship" type of provisions based on economic or technical flexibility concerns. However, EPA has provided exemptions for retired units and units with low permit emission limits. These exemptions will avoid unnecessary impacts upon low (or zero) emitters. In addition, the compliance supplement pool (see Section 4.10) has been incorporated into the regulation to provide some flexibility for those sources that are able to reduce their emissions before the May 1, 2003 deadline, which will generate additional allowances that could be purchased by other facilities that need extra time to comply.



**Section 7** 

[This page intentionally left blank.]

# **Section 8: Compliance Assurance Process**

After reading Section 8, you should know how EPA will determine compliance, what happens if you or the EPA discovers noncompliance, and what is the legal status of this Guide.

# 8.1 How will EPA determine compliance?

The EPA employs several approaches to monitor compliance with its environmental regulations, including both methods initiated by EPA and by facilities.

- ! *Inspections*. The EPA may conduct periodic inspections at facilities subject to this regulation. Inspections may be initiated by disclosures to EPA, random selection, or by a variety of targeting methods. Inspections may be used to evaluate operations, records, or other information at a facility. For the Federal NO<sub>x</sub> Budget Trading Program, monitoring system inspection audits are an important component of assuring that all sources monitor and account for emissions in a consistent manner.
- ! *Reporting*. The EPA will monitor reports submitted by the facility including quarterly emission reports and compliance certification reports. EPA will also monitor the NO<sub>x</sub> allowances held by all facilities in the general, compliance, and overdraft accounts within the NATS. Because you will document compliance with the Federal NO<sub>x</sub> Budget Trading Program primarily by accounting for allowances and emissions, the self-reporting process is the key means by which EPA will evaluate your compliance.
- ! Self Disclosure. You have the primary responsibility for ensuring that your unit(s) remain in continuous compliance. The EPA encourages you to take advantage of EPA's self disclosure policies or small business policy. As one tool to help you determine whether a unit is in compliance, Section 7.1 of this Guide includes a self-audit checklist.

# 8.2 If I discover a violation, how can I work with EPA to correct it?

The EPA encourages self-disclosure of violations and has implemented two policies to meet this goal. These policies meet the objectives of Section 223 of the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), which provides for the

Check the web for further information on the Small Business and Audit Policies:

http://es.epa.gov/oeca/smbusi.html http://es.epa.gov/oeca/auditpol.html reduction, and, under some appropriate circumstances, the complete waiver of civil penalties for certain environmental violations. The policies are:

- ! Small Business Policy. The "Policy on Compliance Incentives for Small Businesses" applies to companies with 100 or fewer employees and provides penalty waivers or penalty reductions as incentives to participate in an on-site compliance assistance program and to conduct self-audits to discover and correct violations.
- ! *Audit Policy*. The "Incentives for Self-Policing: Disclosure, Correction and Prevention of Violations" policy applies to businesses of all sizes that meet the applicability criteria and promptly disclose and correct violations.

# 8.3 If EPA discovers a violation, what might EPA's response be?

To maximize compliance, EPA implements a balanced program of compliance assistance, compliance incentives, and traditional law enforcement. The EPA knows that small businesses that must comply with complicated new statutes or regulations often want to do the right thing, but may lack the requisite knowledge, resources, or skills. Compliance assistance information and technical advice helps small businesses to understand and meet their environmental obligations. Compliance incentives, such as our Small Business Policy, encourage persons to voluntarily discover, disclose, and correct violations before they are identified by the government. The EPA's strong law enforcement program protects all of us by targeting persons who neither comply nor cooperate to address their problems.

The EPA uses a variety of methods to determine whether businesses are complying, including inspecting facilities, review records and reports, and responding to citizen complaints. However, the primary method of determining compliance for those sources subject to the section 126 rule will be reviewing the compliance certification reports and monitoring the number of allowances in the general, overdraft and compliance accounts as established in the National Allowance Tracking System.

If EPA learns a person is violating the law, EPA may file an enforcement action seeking penalties of up to \$27,500 per violation, per day. The proposed penalty in a given case will depend on many factors, including the number, length, and severity of the violations, the economic benefit obtained by the

EPA has publicly-available policies in place to ensure penalties are calculated fairly. Any company charged with a violation has the right to contest EPA's allegations and proposed penalty before an impartial judge or jury.

violator, and its ability to pay. Under the Federal NO<sub>x</sub> Budget Trading Program, owners/operators of a unit that has more emissions than allowances after the "true-up"

period following each ozone season will, at a minimum, be subject to the 3:1 allowance surrender for each ton of excess emissions at that unit. These specific allowance penalties are in addition to any penalties that may apply under EPA's general enforcement authority.

In summary, EPA recognizes that it can achieve the greatest possible environmental protection by encouraging small businesses to work with us to discover, disclose, and correct violations. That is why EPA has issued self-disclosure, small business, and small community policies to eliminate or reduce penalties for small and large entities which cooperate with EPA to address compliance problems. In addition, we've established compliance assistance centers to serve over a million small businesses. For more information on these and other EPA programs for small businesses, please contact EPA's Small Business Ombudsman, Karen Brown, at (202) 260-1390.

# 8.4 What is the legal status of this guide?

In this Guide, we have tried to make clear what you must do to comply with the applicable law and regulation, as required by SBREFA. We hope you find this presentation of regulatory requirements useful and the additional information helpful in reaching and maintaining compliance.

Following the steps set forth in this Guide generally should result in compliance with those aspects of the regulation that it covers. The EPA does not make any guarantee or assume any liability with respect to the use of any information or recommendations contained in this document. The final word with which you must comply is in EPA's regulations. Regulated entities requiring additional information or advice should consult a qualified professional.

The guidance in this document does not constitute rulemaking by the EPA, and may not be relied on to create a substantive or procedural right or benefit enforceable, at law or in equity, by any person. The EPA may take action at variance with this guidance and its internal procedures.

Compliance Assurance Process	Section 8
	1
[This page intentionally left blank.]	

# **Appendix A: Contacts and Resources**

# **General Information**

There are a number of web site resources for obtaining general information about the Federal  $\mathrm{NO_x}$  Budget Trading Program, related trading programs, and general EPA policies. The following table identifies some of the main resources you may find helpful.

**Table A-1: General Resource Information** 

Resource	Web Address	Description
CAMD Web Site	http://www.epa.gov/acidrain (will change to www.epa.gov/airmarkets in the future)	Variety of information on the programs for which the Clean Air Markets Division is responsible, including SO <sub>2</sub> and NO <sub>x</sub> trading programs. Includes data, publications, and links to related sites.
Federal NO <sub>x</sub> Budget Trading Program	http://www.epa.gov/acidrain/modlrule/main.html#126	General information on EPA's NO <sub>x</sub> Budget Trading Program in the context of both the SIP Call and the section 126 rule. Includes links to the proposed and final rules including information on allocations, fact sheets, guidance documents, response to comment documents and other analyses and information.
Regional Transport of Ozone Web Site	http://www.epa.gov/ttn/rto/ 126/index.html	This is the main site for accessing the section 126 proposed and final rules, fact sheets, and links to other related documents and data.
Federal Register Online via GPO Access	http://www.access.gpo.gov/ su_docs/aces/aces140.html	Official Federal Register documents, including the published section 126 regulation (January 18, 2000).
CFR, List of Sections Affected Online via GPO Access	http://www.access.gpo.gov/ nara/lsa/browslsa.html	This site lists CFR sections that have been affected by rules promulgated in the Federal Register since the last official CFR release
EPA Clean Air Technology Center	(919) 541-0800	Resources on emerging and existing air pollution prevention and control technologies

Contacts and Resources Appendix A

**Table A-1: General Resource Information (cont.)** 

Resource	Web Address	Description
EPA Small Business Assistance Program (SBAP)	http://www.epa.gov/ttn/sbap	State and local SBAP contacts, SBAP materials, related web sites, meetings and conferences.
EPA Office of Enforcement and Compliance Assurance: Policy on Compliance Incentives for Small Businesses	http://es.epa.gov/oeca/ smbusi.html	Applicability of EPA's policy to promote environmental compliance among small businesses. Criteria for civil penalty mitigation.
EPA Office of Enforcement and Compliance Assurance: Audit Policy: Incentives for Self-Policing	http://es.epa.gov/oeca/ auditpol.html	Applicability of EPA's policy to enhance protection of human health and the environment by encouraging regulated entities to voluntarily discover, and disclose and correct, violations of environmental requirements.
EPA Office of Enforcement and Compliance Assurance: Audit Policy Interpretive Guidance	http://es.epa.gov/oeca/ apolguid.html	Questions and answers on self-disclosure
EPA Air Enforcement Division General Clean Air Act Stationary Source Policies and Guidance	http://es.epa.gov/oeca/ore/aed/comp/bcomp	Clean Air Act Stationary Source Policies and Guidance

You may also contact EPA regional or headquarters staff directly regarding specific issues. Use the following list of phone numbers to contact the office that may be able to help you answer specific questions regarding the trading program, monitoring, or other general issues that apply within the EPA Region in which your source is located. You may reach Region I at (888) 372-7341, Region II at (212) 637-3000, Region III at (215) 814-2100, Region IV at (404) 562-9077, and Region V at (312) 353-2212. You may also contact EPA's CAMD staff at (202) 564-9180.

# **Monitoring/Emissions Reporting Information**

EPA has developed a number of implementation assistance resources for the monitoring and emissions reporting requirements you will have to meet. The following table identifies some specific resources that are available on the CAMD web site. For additional resources, see the main web site page for Part 75 monitoring and reporting at: <a href="http://www.epa.gov/acidrain/so2emis.html">http://www.epa.gov/acidrain/so2emis.html</a>.

**Table A-2: Monitoring and Emissions Reporting Resources** 

Resource	Web Address	Description
Acid Rain Program Policy Manual	http://www.epa.gov/acidrain /cems/polman/polman.html	Includes answers to hundreds of questions on a range of Part 75 topics. EPA updates the manual on a periodic basis.
EDR Version 2.1 Formats and Instructions	http://www.epa.gov/acidrain/so2emis.html	Access the formats for reporting all electronic data, and detailed instructions on how to format your data correctly. As a starting point, see especially Appendix C to the EDR instructions, which provides additional summary-level information on how to submit your electronic reports.
Monitoring Data Checking (MDC) Software	http://www.epa.gov/acidrain/cems/mdc/mdc.htm	MDC allows regulated sources and regulatory agencies to enter, analyze, print, and export electronic monitoring plan, certification, and quality assurance data. MDC is an important tool for checking these data elements for errors and inconsistencies.
Emission Tracking System (ETS)	http://www.epa.gov/acidrain/so2emis.html	EPA posts all ETS-related information at this site, including ETS user bulletins, EPA-developed report submission software, and procedures for reviewing and processing quarterly reports.
Acid Rain CEM Contact List	http://www.epa.gov/acidrain/cems/contact.html	This list is arranged by State within each EPA Region, and includes the EPA Headquarters, EPA Regional Office, State agency and, if applicable, local agency contact for any Part 75 monitoring questions you have.

**Contacts and Resources** Appendix A [This page intentionally left blank.]

# **Appendix B: Forms Information**

There are a variety of forms that will be used by affected sources to comply with the section 126 regulation and to participate in the trading program. At the time this guidance document was published, most of the necessary forms for this program were not available for distribution. However, prior to program implementation, the necessary forms will be posted on EPA's web page at <a href="http://www.epa.gov/acidrain/forms.html">http://www.epa.gov/acidrain/forms.html</a>. The forms fall into the following major program areas:

- ! Allowance trading
- ! Monitoring and emissions reporting
- ! Permitting

# **Allowance Trading**

The trading forms that you will be using for the section 126 program will be similar to those currently on the web page for the OTC NO<sub>x</sub> Budget Trading Program. These include the Annual Reconciliation Form (for compliance certification), the Account Certificate of Representation Form (to designate an AAR), the General Account Form, the Allowance Transfer Form, and the ERC Request Form. You can download these forms in a WordPerfect or Adobe Acrobat (.pdf) file format from: <a href="http://www.epa.gov/acidrain/forms.html">http://www.epa.gov/acidrain/forms.html</a>.

## **Monitoring and Emissions Reporting Forms**

You will use the same monitoring and emission reporting forms already established under Part 75 and used for the Acid Rain Program and the OTC NO<sub>x</sub> Budget Program. Use the EDR v2.1 reporting format for most of your monitoring/emissions reports, including most (or all) of your monitoring plan, much of your certification/recertification application, and your quarterly reports. You can download the EDR v2.1 reporting formats and accompanying instructions from: *http://www.epa.gov/acidrain/so2emis.html*.

In addition to the EDR formats, EPA has developed forms for certain other monitoring-related reports:

- ! *Certification/recertification applications*. The required hardcopy form (7610-14) for these applications is available on the CAMD web site. In addition, remember that much of this information will be included in your EDR submittal.
- ! *Test notices.* Although there is no required form for a test notice, EPA has developed an optional form that is available as part of the existing Monitoring Plan file.

Forms Information Appendix B

# **Permitting Forms**

You will use the permit application and other permit forms of your underlying Title V or federally-enforceable, State operating permit (FESOP) program, so generally there are no permit forms specific to this trading program.

Also, as stated in Section 5 of this Guide, your  $NO_x$  Budget permit should include all the applicable standard requirements in  $\S$  97.6 of the Federal  $NO_x$  Budget Trading Program. To incorporate the standard requirements, you can use the language on the following pages as an addendum to your permit application.

Appendix B Forms Information

### Standard Requirements/Certification for a NO<sub>x</sub> Budget Permit Application

### Permit Requirements

- (1) The NO<sub>x</sub> authorized account representative of each NO<sub>x</sub> Budget source required to have a federally enforceable permit and each NO<sub>x</sub> Budget unit required to have a federally enforceable permit at the source shall:
- (i) Submit to the permitting authority a complete  $NO_x$  Budget permit application under 40 CFR 97.22 in accordance with the deadlines specified in 40 CFR 97.21(b) and (c); and
- (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a  $NO_x$  Budget permit application and issue or deny a  $NO_x$  Budget permit.
- (2) The owners and operators of each  $NO_x$  Budget source required to have a federally enforceable permit and each  $NO_x$  Budget unit required to have a federally enforceable permit at the source shall have a  $NO_x$  Budget permit issued by the permitting authority and operate the unit in compliance with such  $NO_x$  Budget permit.

### **Monitoring Requirements**

- (1) The owners and operators and, to the extent applicable, the  $NO_x$  authorized account representative of each  $NO_x$  Budget source and each  $NO_x$  Budget unit at the source shall comply with the monitoring requirements of subpart H of 40 CFR Part 97.
- (2) The emissions measurements recorded and reported in accordance with subpart H of 40 CFR Part 97 shall be used to determine compliance by the unit with the NO<sub>x</sub> Budget emissions limitation under the Nitrogen Oxides Requirements section.

#### Nitrogen Oxides Requirements

- (1) The owners and operators of each  $NO_x$  Budget source and each  $NO_x$  Budget unit at the source shall hold  $NO_x$  allowances available for compliance deductions under 40 CFR 97.54(a), (b), (e), or (f), as of the  $NO_x$  allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total  $NO_x$  emissions for the control period from the unit, as determined in accordance with subpart H of 40 CFR Part 97, plus any amount necessary to account for actual heat input under 40 CFR 97.42(e) for the control period or to account for excess emissions for a prior control period under 40 CFR 97.54(d) or to account for withdrawal from the  $NO_x$  Budget Trading Program, or a change in regulatory status, of a  $NO_x$  Budget opt-in unit under 40 CFR 97.86 or 40 CFR 97.87.
- (2) Each ton of nitrogen oxides emitted in excess of the NO<sub>x</sub> Budget emissions limitation shall constitute a separate violation of 40 CFR Part 97, the Clean Air Act, and applicable State law.
- (3) A NO<sub>x</sub> Budget unit shall be subject to the requirements under paragraph (1) of this Nitrogen Oxides Requirements section starting on the later of May 1, 2003 or the date on which the unit commences operation.
- (4) NO<sub>x</sub> allowances shall be held in, deducted from, or transferred among NO<sub>x</sub> Allowance Tracking System accounts in accordance with subparts E, F, G, and I of 40 CFR Part 97.
- (5) A NO<sub>x</sub> allowance shall not be deducted, in order to comply with the requirements under paragraph (1) of this Nitrogen Oxides Requirements section, for a control period in a year prior to the year for which the NO<sub>x</sub> allowance was allocated.

Forms Information Appendix B

### Standard Requirements/Certification for a NO<sub>x</sub> Budget Permit Application (cont.)

- (6) A NO<sub>x</sub> allowance allocated by the Administrator under the NO<sub>x</sub> Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO<sub>x</sub> Budget Trading Program. No provision of the NO<sub>x</sub> Budget Trading Program, the NO<sub>x</sub> Budget permit application, the NO<sub>x</sub> Budget permit, or an exemption under 40 CFR 97.4(b) or 40 CFR 97.5 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.
- (7) A NO<sub>x</sub> allowance allocated by the Administrator under the NO<sub>x</sub> Budget Trading Program does not constitute a property right.
- (8) Upon recordation by the Administrator under subpart F or G of 40 CFR part 97, every allocation, transfer, or deduction of a  $NO_x$  allowance to or from a  $NO_x$  Budget unit's compliance account or the overdraft account of the source where the unit is located is incorporated automatically in any  $NO_x$  Budget permit of the  $NO_x$  Budget unit.

### **Excess Emissions Requirements**

- (1) The owners and operators of a NO<sub>x</sub> Budget unit that has excess emissions in any control period shall:
  - (i) Surrender the NO<sub>x</sub> allowances required for deduction under 40 CFR 97.54(d)(1); and
- (ii) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 40 CFR 97.54(d)(3).

### Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the  $NO_x$  Budget source and each  $NO_x$  Budget unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the permitting authority or the Administrator.
- (i) The account certificate of representation for the  $NO_x$  authorized account representative for the source and each  $NO_x$  Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new account certificate of representation under 40 CFR 97.13 changing the  $NO_x$  authorized account representative.
- (ii) All emissions monitoring information, in accordance with subpart H of 40 CFR part 97; provided that to the extent that subpart H of 40 CFR part 97 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the  $\mathrm{NO}_{\mathrm{x}}$  Budget Trading Program.
- (iv) Copies of all documents used to complete a NO<sub>x</sub> Budget permit application and any other submission under the NO<sub>x</sub> Budget Trading Program or to demonstrate compliance with the requirements of the NO<sub>x</sub> Budget Trading Program.
- (2) The  $NO_x$  authorized account representative of a  $NO_x$  Budget source and each  $NO_x$  Budget unit at the source shall submit the reports and compliance certifications required under the  $NO_x$  Budget Trading Program, including those under subparts D, H, or I of 40 CFR part 97.

Appendix B Forms Information

### Standard Requirements/Certification for a NO<sub>x</sub> Budget Permit Application (cont.)

### Liability

(1) Any person who knowingly violates any requirement or prohibition of the NO<sub>x</sub> Budget Trading Program, a NO<sub>x</sub> Budget permit, or an exemption under 40 CFR 97.4(b) or 40 CFR 97.5 shall be subject to enforcement pursuant to applicable State or Federal law.

- (2) Any person who knowingly makes a false material statement in any record, submission, or report under the  $NO_x$  Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.
- (3) No permit revision shall excuse any violation of the requirements of the  $NO_x$  Budget Trading Program that occurs prior to the date that the revision takes effect.
- (4) Each  $NO_x$  Budget source and each  $NO_x$  Budget unit shall meet the requirements of the  $NO_x$  Budget Trading Program.
- (5) Any provision of the  $NO_x$  Budget Trading Program that applies to a  $NO_x$  Budget source or the  $NO_x$  authorized account representative of a  $NO_x$  Budget source shall also apply to the owners and operators of such source and of the  $NO_x$  Budget units at the source.
- (6) Any provision of the  $NO_x$  Budget Trading Program that applies to a  $NO_x$  Budget unit or the  $NO_x$  authorized account representative of a  $NO_x$  Budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under subpart H of 40 CFR part 97, the owners and operators and the  $NO_x$  authorized account representative of one  $NO_x$  Budget unit shall not be liable for any violation by any other  $NO_x$  Budget unit of which they are not owners or operators or the  $NO_x$  authorized account representative and that is located at a source of which they are not owners or operators or the  $NO_x$  authorized account representative.

### Effect on Other Authorities

No provision of the  $NO_x$  Budget Trading Program, a  $NO_x$  Budget permit application, a  $NO_x$  Budget permit, or an exemption under 40 CFR 97.4(b) or 40 CFR 97.5 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the  $NO_x$  authorized account representative of a  $NO_x$  Budget source or  $NO_x$  Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

#### Certification

I am authorized to make this submission on behalf of the owners and operators of the  $NO_x$  Budget sources or the  $NO_x$  Budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name:	 Signature:	
Date:		

**Forms Information** Appendix B [This page intentionally left blank.]

# **APPENDIX C: Questionnaire: How Useful Was this Guide?**

The EPA is including this brief questionnaire to solicit feedback from users as to the usefulness, readability, and improvements needed for this Guide. Please complete this information and return it to the EPA at the following address:

Mail Code 2136A 1200 Pennsylvania Ave., NW Washington, DC 20460 *Date:*\_\_\_\_\_ Small Entity Compliance Guide: *Title of Regulation or Program:* Federal NO, Budget Trading Program (40 CFR Part 97) EPA 430/R-00-008 Name of Commenter (optional):\_\_\_\_\_ Please take a moment to let us know if you found this Guide useful by answering the following questions. Thank you! Your feedback is important to us. 1. Could you easily understand what requirements you must *meet?\_\_\_\_\_* Is the guide written in understandable language?\_\_\_\_\_\_ 2. Did the guide help you understand the steps you must take to comply with the 3. regulation?\_\_\_\_\_ If you have suggestions to improve the guide, please indicate below: 4.

U.S. EPA

Office of Policy, Economics, and Innovation

Regulatory Management Staff

