



Implementation Strategy For The Clean Air Act Amendments Of 1990

Update, 1993

INTRODUCTION

The Environmental Protection Agency is committed to implementing the Clean Air Act (CAA) Amendments of 1990 in a manner which will protect health and the environment, minimize costs, and encourage pollution prevention and innovative technologies.

The implementation of the Amendments is based on a two-year strategy developed and continually updated to inform Congress and the public on the status of CAA implementation activities.

Since Congress passed the Amendments, EPA has issued over 150 proposed and final rules and guidance documents. When fully implemented in the year 2005, the CAA will remove an estimated 57 billion pounds of pollution from the air. To date EPA has proposed or promulgated rules that will account for 85 percent of those 57 billion pounds. Figure 1 shows emission reductions

addressed to date and the number of actions included in the revised two-year implementation strategy.

CAA REGULATORY/IMPLEMENTATION HIGHLIGHTS

Under the Clinton Administration, EPA has taken a number of steps to accelerate our rapid implementation pace and enforce the CAA. Highlights of our accomplishments from January through October 1993 are as follows:

Title I (Non-Attainment)

Final Rules

- New source performance standards for SO₂ for existing sources
- Guidelines for air quality models for SIPs
- PM-10 increments for PSD program
- Decision on ozone NAAQS
- Enhanced ozone monitoring

Emissions Reductions To Date
(in Billions of Pounds per year)

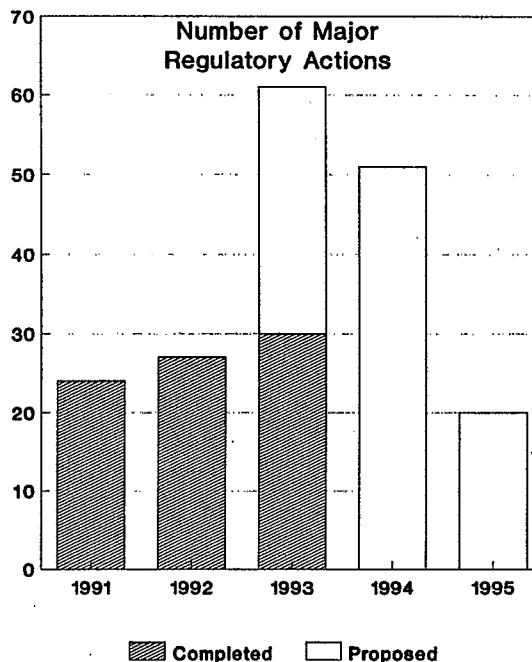
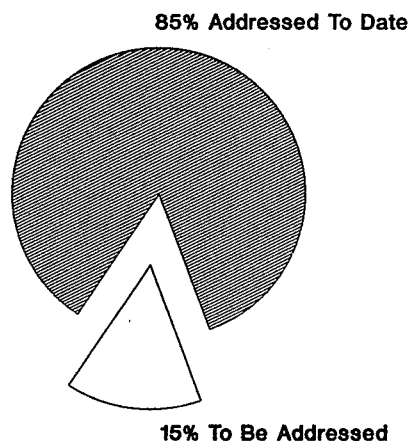


Figure 1

Proposed Rules

- General conformity criteria for federal agencies
- Order of sanctions
- Economic Incentives Program

Title II (Mobile Sources)

Final Rules

- Urban bus PM standards
- Urban bus retrofit standards
- NO_x standards for 1998 model year and later heavy duty engines

Proposed Rules

- Emission standards for non-road engines >50 hp
- Clean fuel fleet vehicle standards
- Credit programs for heavy duty vehicles
- California Pilot test program
- Clean fuel vehicle standards for passenger cars and light duty truck
- On-board vehicle diagnostics

Title III (Air Toxics)

Final rules

- Dry Cleaners MACT standards
- Coke Ovens

Proposed Rules

- Procedures for approving state air toxic programs
- Case by case MACT determinations under section 112(j) -- (MACT hammer)
- General provisions for MACT standards
- MACT standards for Chromium from Industrial Cooling Towers

Title IV (Acid Rain)

Final rules

- Phase II utility allowance allocations

Proposed Rules

- Opt-in regulation for combustor sources

Title VI (Stratospheric Ozone Protection)

Final rules

- Section 608 refrigerant recycling program

Proposed Rules

- Federal procurement regulations for ozone depleting chemicals
- Accelerated phase out of CFCs and listing of methyl bromide as a Phase I ozone-depleting substance
- Class II non-essential products ban
- Significant new alternatives program (SNAP)

Title VII (Enforcement)

Proposed Rules

- Enhanced Monitoring requirements from air pollution sources

Studies, Reports and Guidance

- Report to Congress on Air Toxics Efforts [Section 112(s)]
- 185B NO_x/VOC Study
- Joint EPA/DOT report to Congress: Clean Air Through Transportation
- Guidance to states on writing emission inventories, ozone non-attainment, and Title V permits

Other Significant Accomplishments

- Enhanced I/M legislation - the following eleven states have passed enhanced I/M legislation since January, 1993: Colorado, Connecticut, Louisiana, Maine, Nevada, New Hampshire, New York, Ohio, Rhode Island, Texas, Virginia.
- Operating Permits Legislation - 48 states have enacted operating permits legislation. EPA has to determine whether all the legislation meets the standards.
- EPA is working with the Small Business Administration on an MOU implementing Section 507, the Small Business Assistance Program.
- EPA settled an \$11.1 million enforcement action against Louisiana Pacific Corporation. This is the largest penalty EPA has collected ever under the Clean Air Act and the second largest civil penalty under any environmental statute. The settlement also resulted in industry agreement to install new state-of-the-art controls built by American workers that will result in

about 22,000 tons of reductions of volatile organic compounds, particulate matter, and carbon monoxide from 11 wood panel facilities nationwide.

• Voluntary Emission Reduction Programs - The Office of Air and Radiation (OAR) initiated innovative voluntary programs that reduce emissions of greenhouse gases, including carbon dioxide and methane, and other air pollutants. Three of these non-regulatory "Green Programs" promote use of energy-efficient lighting, building energy systems and computers. Other programs will encourage reduction in emissions from natural gas transmission and distribution; assist in the profitable capture of methane from coal beds during and prior to mining; and encourage steps to prevent water and air pollution from feedlot waste stored in lagoons. In each program, emissions reductions are achieved through private-public partnerships with businesses and other organizations. The Green Programs are an example of how we are working cooperatively with the private sector to arrive at economically attractive ways to protect the environment while improving productivity and competitiveness.

• Market-Based Programs - The Clean Air Act has stimulated demand for pollution prevention and control technologies, and in the process has created new business opportunities and jobs in the billion-dollar air pollution control industry. We are working with the Department of Commerce and the business community to identify these business opportunities. OAR has established a database to document the vast array of technological advances and new business and export ventures that have arisen since passage of the Amendments. OAR is also developing regulations that give sources flexibility on ways to comply and encourage prevention and innovative technologies. OAR will encourage market-based solutions, such as those that the Congress wrote into the acid rain provisions of the Clean Air Act. The emissions trading market under the program is now developing; we expect this market will provide a model for future market-based systems.

IMPLEMENTATION GOALS

As we move forward to fulfill our obligations under the Clean Air Act there are four major principles that will guide our efforts:

I. Enhance EPA's partnerships to work with state and local governments.

As more rulemaking occurs, state and local governments bear ever greater responsibility for implementing requirements ranging from the new operating permit program to enhanced vehicle inspection-and-maintenance programs. We need to build true partnerships with state and local governments.

II. Seek to eliminate the adversarial nature of the rulemaking and regulatory process.

An important part of public outreach effort is to encourage consensus through broad public consultation with outside parties. We must reach out to all who have an interest in and are affected by our rules and regulations.

III. Encourage pollution prevention and innovative technologies for reducing pollution.

Where possible we will encourage solutions such as our proposed industrial process cooling tower rule that eliminates chromium emissions through a change in feedstocks, not through end-of-pipe controls.

IV. Examine the environmental justice questions associated with implementing the Clean Air Act.

We will initiate projects to identify and reduce air pollution that is disproportionately affecting the poor and people of color. Earlier in the year OAR held a public meeting in Baton Rouge, Louisiana, to discuss our proposed toxic rule on the chemical manufacturing industry (HON) with the local communities affected by air pollution and to provide them with an opportunity to express their concerns about the proposed rule.

IMPLEMENTATION STRATEGY

The implementation of the CAA is based on a strategy which outlines the regulatory agenda that will serve to guide our activities in the most effective manner for the forthcoming two year period. The strategy document (Attachment A) contains a chart showing OAR's schedule for carrying out the law through December 1995, as well as those actions already completed.

The chart is reprinted below with changes to bring it up-to-date. For each entry, the chart shows the following information:

- ◆ whether or not the action has been completed, and if so, when
- ◆ the Agency's current target date for completion of planned actions
- ◆ the statutory deadline for the action, if one exists

The chart contains most but not all significant actions needed to carry out the 1990 Amendments through December 1995. The chart does not include, for example, some of the requirements implemented by EPA offices other than the Office of Air and Radiation, such as the Office of Research and Development. Target dates for future actions are subject to change based on new risk assessments, court decisions, changes in available resources and other factors.

The remainder of this report will focus on the Agency's communication/outreach efforts.

OAR OUTREACH TOOLS/PUBLICATIONS

One of OAR's primary goals in implementing the Clean Air Act is to reach out to all affected parties and help them understand the implications of the Amendments. OAR has developed and distributed a series of learning tools that can be used to understand the complexities of the amendments. These include brochures, citizen guides, slide presentations, telephone hotlines, interactive computer bulletin boards, and a number of public service announcements. A partial list highlighting current OAR's communication tools follows. The listing is part of an OAR publication entitled

"OAR Outreach/Communication Tools" which can be obtained by contacting Jeanette Brandon at (202) 260-7400.

GENERAL INFORMATION -- WRITTEN MATERIALS (October 1993)

The Plain English Guide to the Clean Air Act -

Published April 1993. Explains in non-technical, straightforward language the provisions of the Clean Air Act of 1990 and how they will clean the air. [Contact NCEPI (513) 891-6561].

What You Can Do To Reduce Air Pollution --

Published October 1992. A citizen's guide to what individuals can do to help meet the goals of the Clean Air Act Amendments of 1990. Also outlines the causes and effects of air pollution. [Contact NCEPI (513) 891-6561].

The Clean Air Act of 1990: An Introductory Guide to Smart Implementation --

Published by the Clean Air Act Advisory Committee in May 1992. A concise five page guide, written in layperson's terms, which covers the background, benefits, and philosophy of the new Clean Air Act.

The Clean Air Act of 1990: A Primer on Consensus-Building --

Published summer 1992. Outlines collaborative decision-making processes to assist agencies, organizations, and individuals embarking on consensus-building activities in the implementation of the Clean Air Act.

The Clean Air Act of 1990: A Guide to Public Financing Options --

Published November 1992. Outlines ways for state and local governments to meet the funding obligations of the Clean Air Act of 1990, both within current air program financing arrangements and within the provisions of the Act.

The Clean Air Marketplace --

First issue published in June 1993. Periodic newsletter on business opportunities created by the Clean Air Act Amendments of 1990. [Contact: Steve Harper (202) 260-5580]

Clean Air Act Amendments of 1990: Detailed Summary of Titles --

Published in 1990. A highly detailed and relatively technical treatment of Titles I through XI of the Clean Air Act. [Contact NCEPI (513) 891-6561].

The Clean Air Act Amendments of 1990: Overview Summary Materials --

Published on November 15, 1990. Contains an overview of the Clean Air Act Amendments of 1990, one page summaries of the key titles, a glossary of terms, and a legislative chronology. This document can serve as useful background, but has not been recently updated.

Clean Air Update --

A 2-3 page document, published monthly, with information on upcoming public meetings, upcoming regulatory actions, reports, and major Federal Register notices. [Contact: Heidi Farber (202) 260-2632]

Implementation Strategy for the Clean Air Act Amendments of 1990 --

Published on January 15, 1991. Summarizes plans to implement the Clean Air Act Amendments of 1990 within the timeframes set by Congress. Multi-year document. [Contact: Heidi Farber (202) 260-2632]

Update of Implementation Strategy for the Clean Air Act Amendments of 1990 --

Published July 1992.

EPA Journal, "The New Clean Air Act: What it Means to You" (Vol. 17, No. 1) --

Published in January/February 1991 by the Office of Communications, Education and Public Affairs. The entire edition of the Journal is devoted to discussions of various issues concerning the new Clean Air Act. [Contact NCEPI (513) 891-6561].

The Clean Air Act Amendments of 1990: A Guide for Small Businesses --

Published September 1992. Explains how the various parts of the Clean Air Act Amendments can affect small businesses and how small businesses can obtain information and assistance. [Contact NCEPI (513) 891-6561].

GENERAL INFORMATION -- OTHER FORMATS

Technology Transfer Network (TTN): Clean Air Act Computer Bulletin Board --

A system of integrated electronic bulletin boards. The Bulletin Board is run by the Office of Air Quality Planning and Standards and contains general documents, rules, and guidance documents that can be accessed electronically by the public. The system allows users to call in from anywhere in the world and download information on air quality models, air inventories, recently signed rules, and extensive information on operating permits, including model permits -- all for the price of a phone call. A one page instruction sheet on how to access the bulletin board is available. [Bulletin Board Number (919) 541-5742 (8 bits, no parity, 1 stop bit, VT100 emulation) Contact: Jerry Mersch (919) 541-5635]

Slide Presentation - The Clean Air Marketplace --

"The Clean Air Act: Spurring Innovation, Jobs, and Exports". Slides and talking points

on the relationships between clean air and the economy. [Contact: Steve Harper (202) 260-5580]

Videotapes --

PBS Teleconference on the Clean Air Act

The Legal Winds of Change: Business and the New Clean Air Act, broadcast on November 28, 1990. Tape of a videoconference in which panelists explain provisions of the 1990 Clean Air Act and their implications for business and the environment. (Limited quantities available.) [Contact NCEPI (513) 891-6561].

**Air and Waste Management
Association/American Bar Association
Teleconferences on the Clean Air Act --**

Update: Implementing the Clean Air Act - EPA Speaks, broadcast in February 1991, 1992, and 1993. Satellite seminars in which four panels address different aspects of the 1990 Clean Air Act. Each panel features key decision makers from EPA, as well as representatives from industry, state governments, and the major environmental groups. [Contact: The American Bar Association, Division for Professional Education; one copy available for loan from Heidi Farber (202) 260-2632]

The Clean Air Act Implementation Strategy *
(Revised October 1993)

Date	Title	Activity	Compltd.	Stat. Deadline
Dec-90	Title I - Nonattainment			
		Issue "Getting Started" letter to Governors	Y	
		States submit request/justification for 5 % classification adjustments	Y	Dec-90
Jan-91		Publish two-year implementation strategy	Y	
	Title I - Nonattainment			
		Publish notice of initial PM-10 moderate nonattainment areas	Y	
		Initiate additional PM-10, SO ₂ , lead designation process	Y	
	Title VI - CFCs			
		Listing of depleting substances	Y	Jan-91
Feb-91	Title I - Nonattainment			
		Act on 5% classification adjustment requests	Y	Feb-91
Mar-91	Title I - Nonattainment			
		States submit nonattainment area designations	Y	Mar-91
	Title VI - CFCs			
		Direct final 1991 production limits	Y	
Apr-91	Title I - Nonattainment			
		States submit PM-10 areas unable to attain by 1994	Y	
		States respond to list of PM-10, SO ₂ , lead nonattainment areas	Y	
May-91	Title I - Nonattainment			
		States deadline for RACT corrections	Partial	
		Notify States of intent to modify suggested boundaries	Y	May-91
	Title I - Nonattainment			
		Convene NE ozone transport commission	Y	May-91
	Title II - Mobile Sources			
		Finalize gasoline Reid Vapor Pressure regulations	Y	May-91
		Finalize Tier I car and truck standards	Y	May-91
		Propose reformulated gasoline requirements	Y	
		Propose clean fuels fleet and CA pilot credit programs	Y	
		Propose urban bus regulations	Y	
		Propose emission control diagnostic rule	Y	

* These dates are subject to change based on new risk assessments, court decisions, and changes in available resources.

The Clean Air Act Implementation Strategy
(Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
May-91	Title IV - Acid Rain			
		Propose regulations for auctions and sales	Y	
	Title V - Permit			
		Propose State permit regulations		
Jun-91	Title III - Air Toxics			
		Publish draft list of source categories	Y	
		Propose list of high risk pollutants, 90/95% early reductions guidance	Y	Jul-91
		Propose early reductions rulemaking	Y	
Jul-91	Title II - Mobile Sources			
		Propose lead substitute gasoline additives	Y	
	Title VII - Enforcement			
		Propose administrative penalties rules of practice	Y	
Sep-91	Title VI - CFCs			
		Propose CFC phase-out regulations	Y	
		Propose mobile air conditioning recycling regulations	Y	
Oct-91	Title I - Nonattainment			
		Publish VOC and CO emission inventory guidance	Y	
	Title II - Mobile Sources			
		Publish study on non-road engines	Y	Nov-91
Nov-91	Title I - Nonattainment			
		Publish guidance on control cost-effectiveness	Y	Nov-91
		States submit PM-10 SIPs	Partial	Nov-91
		Publish air quality and emission trends report	Y	
		Establish Grand Canyon visibility transport commission	Y	Nov-91
		Propose PM-10 area reclassifications	Y	Jun-91
		Finalize ozone, CO, PM-10, and lead nonattainment boundaries	Y	Jul-91
	Title III - Air Toxics			
		Propose MACT for dry cleaners (per court order)	Y	
Dec-91	Title I - Nonattainment			
		Propose outer continental shelf rule	Y	

The Clean Air Act Implementation Strategy
(Revised October 1993)

Date	Title	Activity	Compl.	Stat. Deadline
Dec-91	Title IV - Acid Rain			
		Finalize regulations for auctions and sales	Y	Nov-91
		Propose allowance trading system	Y	
		Propose acid rain permit program	Y	
		Propose continuous emission monitor requirements	Y	
		Propose excess emissions rules	Y	
		Propose conservation and renewable incentives	Y	
Jan-92	Title V - Permits			
		Publish guidance on State programs to assist small businesses	Y	
	Title VI - CFCs			
		Propose ban on non-essential products	Y	
Feb-92	Title VII - Enforcement			
		Finalize administrative penalties rules of practice	Y	
Mar-92	Title II - Mobile Sources			
		Finalize onboard controls regulatory decision	Y	Nov-91
Apr-92	Title I - Nonattainment			
		Publish Title I General Preamble	Y	
		Propose rules for ozone, NO _x , and VOC monitoring	Y	
	Title II - Mobile Sources			
		Propose rule on reformulated gasoline SNPRM (supplemental notice of proposed rulemaking)	Y	Nov-91
May-92	Title I - Nonattainment			
		Publish guidance on TCM's (transportation control measures)	Y	Nov-91
	Title II - Mobile Sources			
		Finalize cold temperature CO standards	Y	Nov-91
	Title VI - CFCs			
		Propose CFC labeling regulations	Y	
Jun-92	Title VI - CFCs			
		Finalize mobile air conditioning recycling regulations	Y	Nov-91

The Clean Air Act Implementation Strategy (Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Jul-92		Revise two-year implementation strategy	Y	
	Title I - Nonattainment			
		States submit SIPs for initial SO ₂ nonattainment areas	Partial	May-92
	Title II - Mobile Sources			
		Propose enhanced I/M regulation	Y	
	Title III - Air Toxics			
		Publish final list of source categories	Y	Nov-91
	Title IV - Acid Rain			
		Propose list of Phase II utility allowances	Y	Dec-91
	Title V - Permits			
		Finalize State permit regulations	Y	Nov-91
	Title VI - CFCs			
		Finalize CFC phase-out regulation	Y	Sept-91
Aug-92	Title I - Nonattainment			
		Finalize guidance on transportation air quality planning	Y	Aug-91
Sep-92	Title I - Nonattainment			
		Propose additional PM-10 nonattainment areas	Y	
		Propose discretionary sanction rules	Y	
		Finalize outer continental shelf rules	Y	Nov-91
	Title III - Air Toxics			
		Propose regulatory schedule for all source categories	Y	
Oct-92	Title I - Nonattainment			
		Publish 1991 air quality data and emission trends report	Y	
	Title II - Mobile Sources			
		Finalize oxygenated fuel credit guideline	Y	Aug-91
	Title III - Air Toxics			
		Propose MACT for hazardous organic chemical manufacturing	Y	
Nov-92	Title I - Nonattainment			
		States submit RACT catch-up rules, NSR rules, CO attainment demonstration and contingency measures	Partial	Nov-92

The Clean Air Act Implementation Strategy
(Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Nov-92	Title I - Nonattainment			
		States submit small business assistance programs	Partial	Nov-92
		States submit base ozone, CO emission inventories	Partial	Nov-92
		Finalize PM-10 BACM technical guidance	Y	May-92
		Publish Title I NO _x guidance	Y	
	Title II - Mobile Sources			
		Finalize enhanced I/M regulation	Y	Nov-91
	Title IV - Acid Rain			
		Propose NO _x requirements for Group 1 utility boilers	Y	
Dec-92	Title I - Nonattainment			
		Publish alternative control technology document for VOCs from bakeries	Y	Nov-93
	Title II - Mobile Sources			
		Propose revisions to motor vehicle certification procedures (certification short test)	Y	
		Finalize California pilot credit program	Y	Nov-91
	Title III - Air Toxics			
		Propose MACT for coke ovens	Y	
		Finalize early reductions rulemaking	Y	
	Title VI - CFCs			
		Propose emission reduction program	Y	Jan-92
Jan-93	Title I - Nonattainment			
		Approve/disapprove first PM-10 SIPs	Partial	Jan-93
		Finalize PM-10 area reclassifications	Y	Dec-91
	Title II - Mobile Sources			
		Finalize vehicle evaporative emissions regulations	Y	Aug-93
		Finalize emission control diagnostic rule	Y	May-92
		Publish draft mobile source air toxics study	Y	
		Propose reformulated gasoline complex model		
		Finalize clean fuels fleet (TCM's)	Y	Nov-91

The Clean Air Act Implementation Strategy (Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Jan-93	Title III - Air Toxics			
		Propose list of substances for accidental releases prevention program	Y	
	Title IV - Acid Rain			
		Finalize excess emission requirements	Y	May-92
		Finalize allowance trading system	Y	May-92
		Finalize continuous emission monitoring requirements	Y	May-92
		Finalize conservation and renewable incentives	Y	May-92
		Finalize acid rain permit program	Y	May-92
	Title VI - CFCs			
		Finalize ban nonessential products	Y	Nov-91
Feb-93	Title I - Nonattainment			
		Finalize rules for ozone, NO _x , VOC enhanced monitoring		May-92
		Propose economic incentive rules	Y	
		Propose transportation conformity criteria	Y	
	Title II - Mobile Sources			
		Finalize urban bus 94+ (PM standard)	Y	Jan-92
		Finalize procedures of enforcement for urban bus standards	Y	May-92
	Title IV - Acid Rain			
		Sources submit Phase I permit applications and proposed compliance plans	Y	Feb-93
	Title VI - CFCs			
		Finalize CFC labeling regulations	Y	May-92
	Title VII - Enforcement			
		Propose rules for citizen suits	Y	
Mar-93	Title I - Nonattainment			
		Issue draft 185B report	Y	
		Propose general conformity criteria	Y	
	Title II - Mobile Sources			
		Finalize urban bus retrofit	Y	Nov-91
		Finalize procedures of enforcement for urban bus standards	Y	May-92

The Clean Air Act Implementation Strategy
(Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Mar-93	Title IV - Acid Rain			
		Initiate auctions and sales of allowances	Y	Mar-93
		Finalize list of Phase II utility allowances	Y	Dec-92
		Raking by lottery of Phase I extension applications		
	Title VI - CFCs			
		Propose procurement regulations	Y	May-92
		Propose accelerated CFC phase-out	Y	
Apr-93	Title I - Nonattainment			
		States submit lead SIPs (18 months from designation)	Partial	Jul-93
		Publish alternative control technology document for VOCs from pesticide applications	Y	Nov-93
	Title II - Mobile Sources			
		Publish final mobile source related air toxics study	Y	May-92
		Propose non-road emission standards > 50 hpr.	Y	Nov-92
	Title III - Air Toxics			
		Propose guidance for State air toxics program 112(l)	Y	
	Title VI - CFCs			
		Finalize emission reduction program (Section 608)	Y	Jan-92
May-93	Title I - Nonattainment			
		PM-10 PSD increments (11/92 court agreement)	Y	
	Title II - Mobile Sources			
		Propose clean fuel fleet vehicle standards, conversions and general provisions	Y	Nov-92
	Title VI - CFCs			
		Propose safe alternatives		Nov-92
Jun-93	Title II - Mobile Sources			
		Propose California pilot, clean vehicle standards, and opt-in provisions	Y	
	Title III - Air Toxics			
		Propose rule on case-by-case MACT determination 112(j)	Y	
		Propose rules for risk management plans and prevention programs (OSWER)		

The Clean Air Act Implementation Strategy
(Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Jun-93	Title VI - CFCs			
		Propose Class II Non-essential ban		Nov-91
Jul-93	Title I - Nonattainment			
		Publish 185B NO _x /VOC study	Y	Feb-92
	Title III - Air Toxics			
		Complete study of the hazards of hydrofluoric acid (OSWER)		Nov-92
	Title IV - Acid Rain			
		Begin submission of applications for Energy Conservation & Renewable Reserve	Y	
Aug-93	Title I - Nonattainment			
		Publish SOCM I distillation processes CTG		Nov-93
		Publish SOCM I reactor processes CTG		Nov-93
		Publish SOCM I batch processes CTG		Nov-93
	Title II - Mobile Sources			
		Submit transportation systems report to Congress	Y	
	Title III - Air Toxics			
		Propose general provisions for MACT standards	Y	
		Propose MACT for industrial cooling towers	Y	
		Section 112(s) Report		
	Title IV - Acid Rain			
		Draft acid rain permits issued for public comment	Y	
Sep-93	Title I - Nonattainment			
		Propose Certification Program for solid waste and fossil-fuel combustor operators (OSWER)		
	Title III - Air Toxics			
		Finalize MACT for dry cleaners	Y	Nov-92
		Propose permits for early reduction sources		
	Title IV - Acid Rain			
		Propose opt-in regulations -- combustion sources		
	Title VII - Enforcement			
		Propose rules for enhanced monitoring		

The Clean Air Act Implementation Strategy

(Revised October 1993)

Date	Title	Activity	Compl.	Stat. Deadline
Oct-93	Title I - Nonattainment			
		Publish air quality and emission trends report		
		Finalize additional PM-10 and SO ₂ nonattainment areas		
	Title II - Mobile Sources			
		Finalize revisions to motor vehicle certification procedures (I/M short test)	Y	Nov-91
		Finalize testing protocols for fuels and additives		
	Title III - Air Toxics			
		Propose MACT for pulp and paper		
		Publish study of hydrogen sulfide emissions from extracting natural gas and oil	Y	Nov-92
		Finalize MACT for coke ovens	Y	Dec-92
	Title IV - Acid Rain			
		Finalize NO _x requirements for utility boilers		May-92
		Begin issuing allowances to small diesel refineries		Oct-93
	Title VI - CFCs			
		Finalize procurement regulation		May-92
	Title VIII - Miscellaneous			
		Section 811 Report (International Competitiveness)		May-92
Nov-93	Title I - Nonattainment			
		States receive emission source statements		Nov-93
		Publish alternative control technology documents for NO _x sources		Nov-93
		States submit selected SIP provisions for moderate and above ozone areas		Nov-93
		Finalize general conformity criteria		
	Title II - Mobile Sources			
		Propose detergent additive regulations		
	Title III - Air Toxics			
		Submit Great Lakes study report to Congress		Nov-93
		Issue urban area strategy - research report		Nov-93
		Finalize rules for risk management plans and prevention programs		Nov-93

The Clean Air Act Implementation Strategy
(Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Nov-93	Title III - Air Toxics			
		Publish guidance for state air toxics programs 112(l)		Nov-91
		Propose MACT for chromium electroplating		
		Finalize list of substances for accidental releases prevention program		Nov-92
		Finalize regulatory schedule for all source categories		Nov-92
		Propose Degreasing MACT		
	Title IV - Acid Rain			
		States submit acid rain permit program proposals		Nov-93
		Promulgate SO ₂ new source performance standards (NSPS) for new fossil fuel utility units		Nov-93
		EPA action on final Phase I permits		Aug-93
	Title V - Permits			
		States submit operating permit programs		Nov-93
	Title VI - CFCs			
		Finalize CFC phase-out		
		Finalize Class II Non-essential Ban		Nov-91
	Title VII - Enforcement			
		Propose rules for field citation		
	Title VIII - Miscellaneous			
		Issue report on the impact of the 1990 CAA Amendments on visibility		
Dec-93	Title I - Nonattainment			
		Propose Part C & D new source review requirements		
		Finalize economic incentives rules		Nov-92
		Finalize discretionary sanctions rules		
	Title II - Mobile Sources			
		Finalize reformulated gasoline regulations		
		Finalize reformulated gasoline complex model		Nov-91
		Finalize CNG/LPG vehicle standards		
	Title III - Air Toxics			
		Propose guidance for modification provisions		

The Clean Air Act Implementation Strategy (Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Dec-93	Title VII - Enforcement			
		Propose rule for contractor listing		
		Propose rule for monetary awards		
Jan-94	Title I - Nonattainment			
		Promulgate sanctions for States failing to submit PM-10 SIPs (18 months from findings)		Jun-93
		Approve/disapprove ozone & CO submittals due 11/92		Jan-94
	Title II - Mobile Sources			
		Finalize on-board refueling vapor recovery regulations		
	Title III - Air Toxics			
		Deliver program-specialized inspection training course at three regional locations (radionuclides)		
		Develop inspection manual and training materials for coke ovens		Nov-93
		Issue HAP list petition procedure guidance		
		Propose standards for large MWC's		Nov-91
		Propose standards for small MWC's		Nov-92
		Propose Stage I gasoline marketing MACT		
	Title IV - Acid Rain			
		Promulgate NO _x NSPS for fossil fuel-fired boilers (utility and nonutility units)		Jan-94
	Title VI - CFCs			
		Enhance regional compliance components		Nov-92
		Finalize safe alternatives program		
	Title VII - Enforcement			
		Prepare clarification guidance for EPA supplementary environmental project for air		
Feb-94	Title III - Air Toxics			
		Propose MACT for solid waste TSDF		
		Propose MACT for commercial sterilizers		
		Finalize MACT for hazardous organic chemical manufacturing		Nov-92
		Propose MACT for magnetic tape coating		
		Finalize general provisions for MACT standards		

The Clean Air Act Implementation Strategy (Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Mar-94	Title I - Nonattainment			
		Publish web offset lithography CTG		Nov-93
		Submit consumer/commercial products study report to Congress		Nov-93
	Title II - Mobile Sources			
		Propose revision for federal test procedures		
	Title IV - Acid Rain			
		Conduct second allowance auction		Mar-94
Apr-94	Title I - Nonattainment			
		Publish petroleum/industrial wastewater CTG		Nov-93
		Publish plastic parts coating CTG		Nov-93
		Publish storage tanks CTG		Nov-93
		Propose tank vessel rule		
		Publish results of ozone design value study		Nov-93
	Title II - Mobile Sources			
		Propose non-road emission standards <25 HP - Phase I		Nov-92
		Finalize clean fuel fleet vehicle standards, conversions, and general provisions		
		Finalize California pilot, clean vehicle standards, and opt-in provisions		
	Title III - Air Toxics			
		Propose MACT for polymers and resins II		Nov-94
		Final permits for early reduction sources		
		Finalize case-by-case MACT determinations 112(j)		
	Title IV - Acid Rain			
		Certify continuous emissions monitors for Phase I units		
		Begin issuing allowances to small diesel refineries		
	Title VII - Enforcement			
		Finalize rules for citizen suits		
May-94	Title I - Nonattainment			
		Reclassify marginal ozone areas failing to attain by 11/93		May-94
		Propose NSR Simplification rule		

The Clean Air Act Implementation Strategy
(Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
May-94	Title II - Mobile Sources			
		Finalize non-road emissions standards for >50 HP diesel engines		
	Title III - Air Toxics			
		Publish draft risk assessment and management commission report		May-94
		Propose MACT for secondary lead smelters		
		Submit NAS study to Congress		May-93
	Title IV - Acid Rain			
		Propose NO _x NSPS for new fossil fuel utility units [407(c)]		
	Title V - Permits			
		Propose Federal operating permit regulations		
Jun-94	Title I - Nonattainment			
		Approve/disapprove lead SIPs due 4/93		Jun-94
		States implement Phase II of the enhanced ozone monitoring network		
	Title II - Mobile Sources			
		Report to Congress on the Cal. low-emissions vehicle		Jun-94
		Propose locomotive emissions standards		
		Finalize lead substitute gasoline additives		Nov-91
		Proposed mobile source air toxics regulation		
	Title III - Air Toxics			
		Develop inspection manual and training materials for medical waste incinerators		
		Propose medical waste incinerator rule		
		Propose MACT for Petroleum refineries		
	Title IV - Acid Rain			
		Prepare implementation guidance for Phase II - affected units		
Jul-94	Title III - Air Toxics			
		Propose MACT for aerospace industry		
		Promulgate industrial cooling towers standards		
		Propose MACT for shipbuilding (surface coating)		
		Propose MACT for printing/publishing industry		
		Propose asbestos MACT		

The Clean Air Act Implementation Strategy (Revised October, 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Aug-94	Title I - Nonattainment			
		Publish surface coal mining study		Nov-93
Sep-94	Title I - Nonattainment			
		Produce inspection and compliance checklists for new CTGs completed in FY 1993		
	Title II - Mobile Sources			
		Propose non-road emission standards for marine engines		Nov-92
	Title III - Air Toxics			
		Final certification program for solid waste and fossil-fuel combustor operators		
		Develop inspection manual and training materials for dry cleaners		
	Title IV - Acid Rain			
		Finalize Opt-In Regulation - Combustion Sources		May-92
	Title VII - Enforcement			
		Finalize rules for enhanced monitoring		Nov-92
		Finalize rules for monetary awards		
Oct-94	Title I - Nonattainment			
		Publish air quality and emission trends report		
	Title II - Mobile Sources			
		Finalize detergent additive regulations		
	Title III - Air Toxics			
		Finalize guidance for modifications provisions		May-92
	Title IV - Acid Rain			
		Propose opt-in regulations -- process sources		
		Publish final acid deposition standards study		Nov-93
Nov-94	Title I - Nonattainment			
		Publish wood furniture CTG		Nov-93
		States submit ozone SIP's demonstrating attainment		
	Title III - Air Toxics			
		Promulgate MACT chromium electroplating		Nov-92

The Clean Air Act Implementation Strategy
(Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
Nov-94		Submit mercury study to Congress		
		Submit risk assessment and management commission report to Congress		Nov-94
		Promulgate MACT for 25% of source category list (includes about 30 categories)		Nov-94
		Promulgate MACT for commercial sterilizers		
		Promulgate degreasing MACT		Nov-94
		Promulgate Stage I gasoline marketing MACT		Nov-94
		Finalize MACT for magnetic tape coatings		Nov-94
	Title V - Permits			
		Finalize Federal operating permit program		
	Title VII - Enforcement			
		Finalize guidance/rule for field citations		
		Issue enhanced monitoring reference document		
Dec-94	Title I - Nonattainment			
		Finalize Part C & D new source review requirements		
Jan-95	Title VII - Enforcement			
		Finalize rule for contractor listing		
Feb-95	Title III - Air Toxics			
		Finalize MACT for polymers and resins II		Nov-94
Mar-95	Title I - Nonattainment			
		Propose auto body refinishing		
	Title IV - Acid Rain			
		Conduct third allowance auction		Mar-95
Apr-95	Title I - Nonattainment			
		Finalize tank vessel rule		
	Title IV - Acid Rain			
		Finalize NO _x NSPS for new fossil fuel utility units [407(c)]		
May-95	Title I - Nonattainment			
		Final NSR Simplification rule		

The Clean Air Act Implementation Strategy

(Revised October 1993)

Date	Title	Activity	Complt.	Stat. Deadline
May-95	Title II - Mobile Sources			
		Finalize non-road emission standards for <25 HP SI engines		
		Finalize mobile source air toxics regulations		
	Title III - Air Toxics			
		Promulgate asbestos MACT		
		Final MACT for secondary lead smelters		Nov-94
	Title IV - Acid Rain			
		Certify continuous emissions monitors for Phase II units		
Jun-95	Title III - Air Toxics			
		Promulgate medical waste incineration standards		Nov-94
		Finalize MACT for petroleum refineries		
	Title VII - Enforcement			
		Update enhanced monitoring referencing document		
Jul-95	Title III - Air Toxics			
		Final MACT for aerospace industry		
		Final MACT for printing/publishing industry		Nov-94
		Final MACT for shipbuilding (surface coatings)		Nov-94
	Title IV - Acid Rain			
		Propose NO _x requirements for Group 2 utility boilers		Jan-95
Aug-95	Title III - Air Toxics			
		State must submit plans for implementing MWC standards		Nov-94
		Develop inspection manual and training materials for Stage I vapor recovery systems		
		Develop inspection manual and training materials for industrial cooling		
Sep-95	Title III - Air Toxics			
		Promulgate paper & pulp MACT		Nov-94
Oct-95	Title I - Nonattainment			
		Publish air quality and emission trends report		
	Title IV - Acid Rain			
		Finalize opt-in regulations -- process sources		

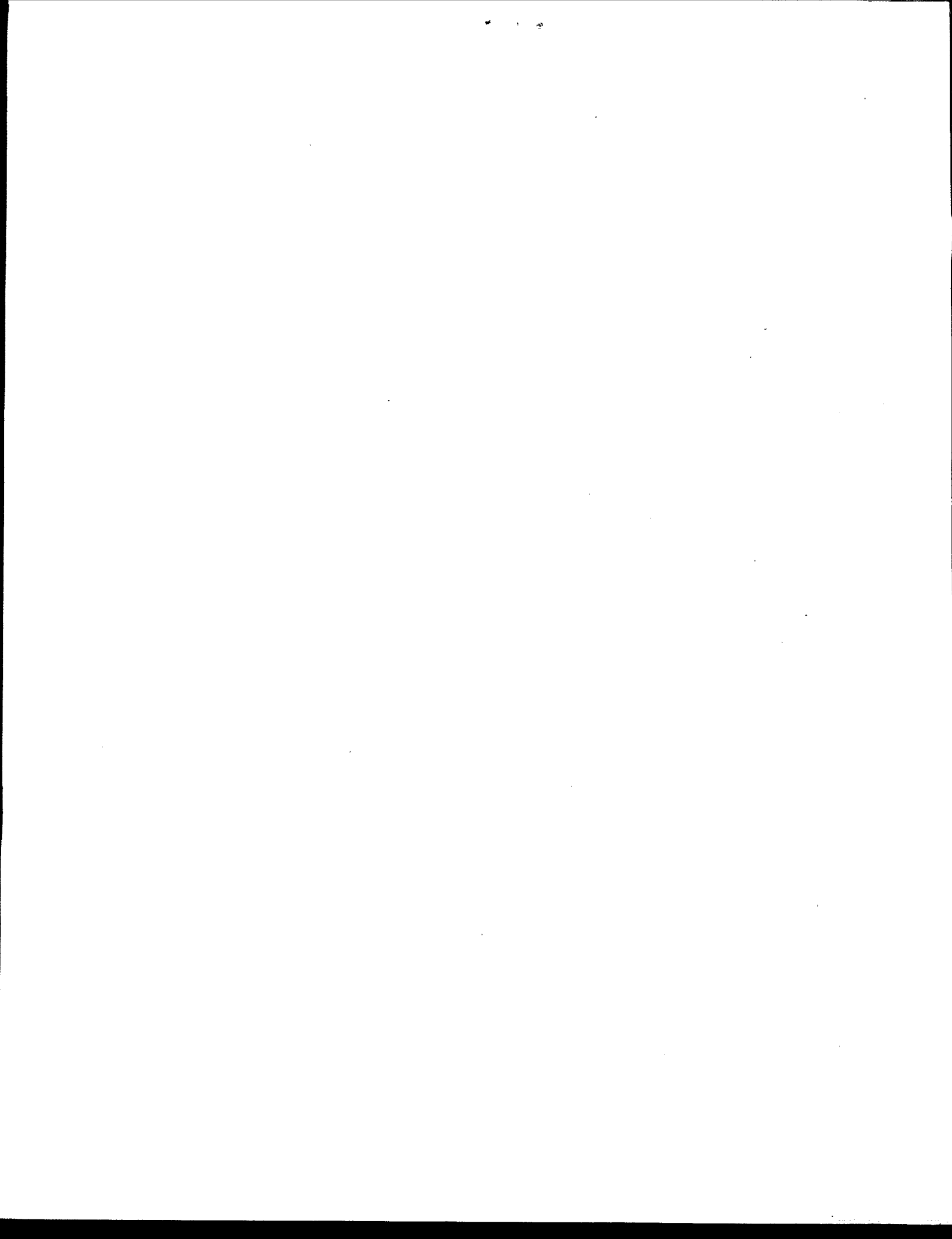
ERRATA

(November 1993)

These proposed and final rule dates were incorrectly listed in the Implementation Strategy.

Title	Date*	Activity	Statutory Deadline
Title II - Mobile Sources	4/94	Finalize testing protocols for fuels additives	--
Title III - Air Toxics	11/94	Propose standards for large MWC's	Nov-91
Title III - Air Toxics	11/94	Propose standards for small MWC's	Nov-92
Title III - Air Toxics	5/95	Propose medical waste incinerator rule	--
Title IV - Acid Rain	2/94	Finalize NO _x requirements for utility boilers	May-92
Title IV - Acid Rain	Delete 1/94	Promulgate NO _x NSPS for fossil fuel-fired boilers (utility & nonutility units) - Listed twice; current date is 5/94	Jan-94
Title IV - Acid Rain	Schedule under review	Promulgate SO ₂ new source performance standards (NSPS) for new fossil fuel utility units - Listed as 11/93	Nov-93
Title VI - CFCs	2/94	Finalize safe alternatives program	Nov-92
Title VI - CFCs	1/94	Finalize Class II Non-essential Ban	Nov-91

* These dates are subject to change based on new risk assessments, court decisions, and changes in available resources.



The Clean Air Act Implementation Strategy

(Revised October 1993)

[illegible]

