

Clean Air Act Compliance Guide

Handbook AS-551

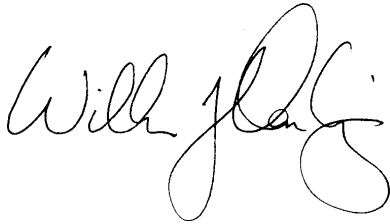
March 1999

- A. Purpose.** The Postal Service is committed to a nationwide environmental policy designed to establish and sustain the Postal Service as a leader in environmental protection and enhancement. We will achieve this through proactive environmental program management and by meeting or exceeding all applicable environmental laws and regulations in a cost-effective manner. A major component of the Postal Service environmental program is compliance with the Clean Air Act and its amendments, and with the implementing standards established by state and local air quality management agencies.
- B. Disclaimer.** Handbook AS-551, *Clean Air Act Compliance Guide*, is intended only to enhance the internal management of the Postal Service and is not intended to, nor does it, create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by any party against the United States Postal Service. This handbook is not a Postal Service regulation; it concerns internal procedures and practices that do not affect individual rights and obligations, and it does not create any right to judicial review involving compliance or noncompliance with the procedures established by this handbook.
- C. Contents.** This handbook provides guidance on complying with local and regional air quality regulations that specifically address the Clean Air Act Amendments of 1990. Because compliance plans will vary by locality, only general guidance is presented. Resources within and outside the Postal Service are presented to provide additional assistance. The handbook addresses postal operations (including vehicle fleets), facilities, and human resources.
- D. Revisions.** This handbook is a complete revision of the April 1992 handbook. It will be revised to incorporate additional policies and strategies as needed to reflect new legislation and regulations.
- E. Distribution.**
- 1. Initial.** This document is being distributed to all Headquarters offices and district and area general managers and/or postmasters.
 - 2. Additional Copies.** Organizations not included in the initial distribution or those requiring additional copies should order copies from their material distribution center (MDC) using Form 7380, *MDC Supply Requisition*. The handbook is also available on the Postal Service's web sites at <http://blue.usps.gov/environmental> and <http://www.usps.com/environ>.

F. Comments and Questions. If you need further clarification of the policies and procedures outlined in this handbook, send your request to:

MANAGER
ENVIRONMENTAL MANAGEMENT POLICY
UNITED STATES POSTAL SERVICE
475 L'ENFANT PLAZA SW ROOM 1P830
WASHINGTON DC 20260-2810
(202) 268-5595

G. Effective Date. These instructions are effective immediately.



William J. Dowling
Vice President
Engineering



Originally printed
on recycled paper



Contents

1	Introduction	1-1
1-1	General	1-1
1-1.1	Purpose	1-1
1-1.2	Policy	1-1
1-1.3	Scope	1-3
1-1.4	Handbook Organization	1-3
1-2	Background of the Amendments	1-3
1-2.1	Applicability to Postal Service Operations	1-4
1-2.2	Compliance Time Frames	1-4
1-2.3	Waiver of Sovereign Immunity	1-4
1-3	Federal Regulations	1-5
1-3.1	Title I — Provisions for Attainment and Maintenance of the NAAQS	1-5
1-3.2	Title II — Provisions Relating to Mobile Sources	1-6
1-3.3	Title III — Hazardous Air Pollutants	1-6
1-3.4	Title IV — Acid Deposition Control	1-6
1-3.5	Title V — Permits	1-6
1-3.6	Title VI — Stratospheric Ozone Protection	1-6
1-3.7	Title VII — Provisions Relating to Enforcement	1-6
1-4	State and Local Regulations	1-7
1-4.1	State Implementation Plans	1-7
1-4.2	Inspections and Enforcement	1-7
1-4.3	Air Quality Districts	1-7
1-5	General Responsibilities	1-7
1-5.1	Headquarters	1-11
1-5.2	Areas	1-13
1-5.3	Districts	1-13
2	Postal Operations	2-1
2-1	General	2-1
2-2	Delivery Services	2-1
2-2.1	Restrictions on Vehicle Movement	2-1
2-2.2	Guidelines	2-1
2-3	Vehicle Fleet	2-2
2-3.1	Vehicle Emissions Requirements	2-2
2-3.2	Clean Fuel Fleet Requirements	2-3

2-3.3	Reformulated Fuels.....	2-5
2-3.4	Inspection and Maintenance Program.....	2-6
2-3.5	Refueling Controls.....	2-7
2-3.6	Vehicle Refrigerant Recovery.....	2-8
2-4	Business Mail Delivery to Postal Facilities.....	2-9
2-5	Siting of Retail Services.....	2-9
2-6	Accounting.....	2-10
3	Postal Facilities.....	3-1
3-1	General.....	3-1
3-2	Stationary Sources.....	3-1
3-2.1	General Requirements.....	3-1
3-2.2	Permits.....	3-1
3-2.3	Air Emissions Inventories.....	3-2
3-2.4	Actual Emissions and Potential to Emit.....	3-3
3-2.5	Clean Fuel Requirements.....	3-3
3-2.6	Guidelines.....	3-3
3-3	Ozone-Depleting Substances.....	3-4
3-3.1	General.....	3-4
3-3.2	CFCs and Refrigerants in Existing Buildings.....	3-5
3-3.3	HVAC Systems in New Buildings.....	3-6
3-3.4	Acquisition and Disposal of Existing Facilities.....	3-7
3-3.5	Halons.....	3-7
3-3.6	Other Class I and II Chemicals.....	3-7
3-4	Facility Design.....	3-7
3-4.1	General.....	3-7
3-4.2	Parking.....	3-8
3-4.3	Access to Public Transportation.....	3-8
3-4.4	Drive-up Windows.....	3-8
3-4.5	Gasoline Dispensing Systems.....	3-8
3-4.6	Stationary Source Permits.....	3-9
3-4.7	Conformity.....	3-9
3-5	Indoor Air Quality.....	3-9
3-5.1	General.....	3-9
3-5.2	Asbestos Program.....	3-10
3-5.3	VOCs.....	3-10
3-5.4	Radon.....	3-10
3-5.5	Other Indoor Air Pollutants.....	3-10

- 3-6 Coordinating CAA and Energy Conservation Requirements3-11
 - 3-6.1 General3-11
 - 3-6.2 Facility Energy Management Program3-11
 - 3-6.3 Converting to Clean Fuel and Renewable Energy3-12
- 4 Human Resources4-1**
 - 4-1 General.....4-1
 - 4-2 Employee Trip Reduction Programs4-1
 - 4-2.1 General4-1
 - 4-2.2 ETRP Applicability and General Requirements4-1
 - 4-2.3 Postal Service Experience With Trip Reduction4-2
 - 4-2.4 General Guidelines for Trip Reduction Programs.....4-2
 - 4-2.5 Considerations During Trip Reduction Plan Development4-2
 - 4-2.6 Trip Reduction Transit and Commuter Incentives4-3
 - 4-3 Alternative Commuting Modes.....4-4
 - 4-3.1 General Requirements4-4
 - 4-3.2 Carpooling and Vanpooling.....4-4
 - 4-3.3 Buspooling4-5
 - 4-3.4 Public Mass Transit4-5
 - 4-3.5 Bicycling and Walking4-5
 - 4-3.6 Transportation Allowances4-5
 - 4-4 Parking Management4-6
 - 4-4.1 General Considerations4-6
 - 4-4.2 Preferential Parking.....4-6
 - 4-4.3 Parking Fees4-7

Appendices

- A Overview of Titles I Through VII of the Clean Air Act Amendments of 1990 A-1
- B Nonattainment Areas for Ozone Listed by State, County, and Municipality B-1
- C Nonattainment Areas for Carbon Monoxide Listed by State, County, and Municipality C-1
- D Nonattainment Areas for Particulate Matter Listed by State, County, and Municipality D-1
- E Federal Contacts E-1
- F Acronyms and Abbreviations..... F-1
- G Glossary G-1

Exhibits

- 1-1.2 Statement of Postal Service Environmental Policy.....1-2
- 1-3.1 State Attainment Deadlines for Ozone, Carbon Monoxide, and Particulate Matter for Various Nonattainment Categories1-5
- 1-5a Organizational Chart of Postal Service Staff Responsible for the CAA Program1-8
- 1-5b Postal Service Staff Responsibilities for CAA Compliance1-9
- 2-3.2a Nonattainment Areas That Must Begin Fleet Clean Fuel Vehicle Purchasing by 19982-3
- 2-3.2b Fleet Clean Fuel Vehicle Purchasing Requirements2-4
- 2-3.3 Areas That Must Have Reformulated Gasoline With a 2-Percent Oxygen Content.....2-6
- 3-3.1 Ozone Depletion Potential Values of Refrigerants Used by the Postal Service3-5
- 3-3.2 Guidance for Selecting Alternative Refrigerants.....3-6

1 Introduction

1-1 General

1-1.1 Purpose

An effective clean air program offers many benefits that contribute directly to the goals of *CustomerPerfect!* Reducing emissions from stationary sources will improve our compliance posture and reduce liability (Voice of Business), and will simultaneously provide a cleaner, healthier working environment for our employees (Voice of the Employee). Other program initiatives, such as continued development of the alternative fuel vehicle fleet, will enable us to address legal mandates and customer needs while furthering our public image as an environmentally responsible organization (Voice of the Customer). The clean air program and the environmental management system which guides it are integral components of the *CustomerPerfect!* business management process. Ultimately, the success of the program will depend on our ability to effectively plan, execute, review, and direct clean air operations and activities to meet daily challenges while striving for continuous improvement.

This guide provides guidance on complying with applicable federal, state, local, and regional air quality regulations that address the Clean Air Act (CAA) Amendments of 1990 (42 *United States Code* (U.S.C.) Section 7401 et seq.) (hereafter, the Amendments). The guide is written primarily for the area environmental compliance coordinators (AECCs) and the district managers and postmasters who have primary responsibility for ensuring compliance with the Amendments; and the district environmental compliance coordinators (DECCs), who are responsible for registering emissions sources, permit requirements, emissions testing, and the development of air pollution compliance plans. Since compliance plans will vary by locality, this guide can only present general guidance. The guide identifies additional resources and contacts within and outside the Postal Service that are available to provide more detailed assistance.

1-1.2 Policy

Postal Service policy is to comply with all applicable aspects of the Amendments, including implementing requirements imposed by state, regional, and local air quality management agencies. (See *Administrative Support Manual* 55, Environmental Management, and Management Instruction (MI) AS-550-95-18, *Clean Air Act Compliance*.) Exhibit 1-1.2 is a statement of the Postal Service's overall environmental policy.

Policy

Postal Service policy is to comply with all applicable aspects of the Clean Air Act Amendments of 1990, including implementing requirements imposed by state, regional, and local air quality management agencies.

Exhibit 1-1.2, Statement of Postal Service Environmental Policy



UNITED STATES POSTAL SERVICE POLICY FOR ENVIRONMENTAL PROTECTION

POLICY

The United States Postal Service is committed to provide employees and customers with a safe and healthy environment. Environmental protection is the responsible thing to do, and makes for sound business practices.

GUIDING PRINCIPLES

- *We will meet or exceed all applicable environmental laws and regulations in a cost-effective manner.*
- *We will incorporate environmental considerations into our business planning processes.*
- *We will foster the sustainable use of natural resources by promoting pollution prevention, reducing waste, recycling, and reusing materials.*
- *We will expect every employee to take ownership and responsibility for our environmental objectives.*
- *We will work with customers to address mutual environmental concerns.*
- *We will measure our progress in protecting the environment.*
- *We will encourage suppliers, vendors, and contractors to comply with similar environmental protection policies.*

A handwritten signature in black ink that reads "Marvin Runyon".

*Marvin Runyon
Postmaster General*

September 1995

1-1.3 Scope

The policies and guidelines in this guide apply to all Postal Service employees, programs, products, services, and contractors.

1-1.4 Handbook Organization

This guide is divided into chapters corresponding to the affected functional areas — postal operations (Chapter 2), postal facilities (Chapter 3), and human resources (Chapter 4). Each chapter explores the range of impacts on these areas and provides guidance for addressing issues within these areas with respect to local compliance plans. The appendices provide additional background information — specifically, an overview and details of the Amendments that may affect the Postal Service; nonattainment area listings for ozone, carbon monoxide, and particulate matter 2.5 microns or less in diameter; and pertinent federal agency addresses and phone numbers.

Additional materials (including those referenced throughout the guide) may be found in the *Environmental Resources Guidebook* (ERG), March 1997, and on the Environmental Management Policy (EMP) web sites at <http://blue.usps.gov/environmental> and <http://www.usps.com/environ>.

1-2 Background of the Amendments

The original CAA was signed into law in 1955 and then replaced by the Air Quality Act of 1967, which was considered the first modern environmental law. However, it was the CAA of 1970, reviewed and amended by Congress in 1977, that formed the basis of the federal air pollution control program that is administered by the United States Environmental Protection Agency (EPA).

Health-based national ambient air quality standards formed the basis of this clean air program. Because most air pollution comes from either stationary sources (such as boilers) or mobile sources (such as cars and trucks), such sources were to meet standards through applying technological controls that would reduce emissions, resulting in improved air quality. All requirements were on a national level to ensure that no entity could have a competitive edge by locating in areas with less stringent controls. The CAA of 1970 prescribed stringent automotive standards, mandated new technology for stationary sources, and established the National Ambient Air Quality Standards (NAAQS), which are maximum acceptable levels of pollutants in outdoor air to protect human health. This law also provided for EPA to delegate responsibility to state and local governments to control air pollution at its source.

The CAA Amendments of 1977 built upon the 1970 Act by adding:

- Performance standards for new stationary sources.
- Nonattainment area requirements (for areas where the NAAQS are being exceeded).
- Prevention of significant deterioration (PSD) provisions (for areas where NAAQS are met).
- Tighter automotive emission standards.

Note

The latest Amendments were signed into law on November 15, 1990. With its many far-reaching provisions aimed at improving air quality, this law has some impact on the way the Postal Service conducts operations.

1-2.1 Applicability to Postal Service Operations

The latest Amendments were signed into law on November 15, 1990. With its many far-reaching provisions aimed at improving air quality, this law has some impacts on the way the Postal Service conducts operations. The Postal Service operates a fleet of over 208,000 vehicles, including light delivery vehicles, intermediate-size collection vehicles, cargo vans, tractor-trailers, and administrative vehicles (sedans and vans). There are more than 800,000 postal employees, many of whom commute to large mail processing centers with 24-hour operations located in urban areas. Numerous support operations, such as vehicle fueling, maintenance, and repair, are undertaken at postal facilities. In addition, the Postal Service operates approximately 40,000 buildings, many of which have stationary sources (boilers) and heating, ventilation, and air-conditioning (HVAC) systems currently using chlorofluorocarbons (CFCs). They must comply with standards established under the Amendments.

1-2.2 Compliance Time Frames

The Postal Service strategy for compliance with the Amendments is to act within two time frames: the near term and long term. The near term calls for stopgap measures to comply with air quality management plans, while the long term demands strategic planning to consider, for example, the most appropriate vehicles, facilities, and HVAC systems that meet the objectives of the Amendments. Although the time frames established in the Amendments extend into the future, the severity of air pollution in areas such as southern California and the Northeast Corridor has forced some state and regional air quality management agencies to accelerate their implementation schedules to ensure consistency with the federal statute.

Note

The state implementation plan is the primary mechanism used by each state to ensure compliance with the Amendments.

1-2.3 Waiver of Sovereign Immunity

Because the Amendments waive sovereign immunity for federal agencies, the Postal Service must comply with all applicable state, regional, and local air pollution compliance plans. The state implementation plan (SIP), for example, is the primary mechanism

used by each state to ensure compliance with the Amendments within its boundary lines.

1-3 Federal Regulations

The 1990 Amendments established distinct milestones to attain compliance. There are eleven sections, referred to as “titles”; the first seven titles are more pertinent to the Postal Service and are briefly described below and in greater depth in Appendix A.

1-3.1 Title I — Provisions for Attainment and Maintenance of the NAAQS

EPA regulates six indicator pollutants for the primary protection of human health: ozone (O₃), carbon monoxide (CO), particulate matter 10 microns or less in diameter (PM₁₀), sulfur oxides (SO_x), nitrogen oxides (NO_x), and lead (Pb). (See section A-1.) The Amendments further classify severity of ozone nonattainment by establishing five subclasses of ozone violations (marginal, moderate, serious, severe, and extreme) and two subclasses (moderate and serious) for CO and particulates. Each classification has its own compliance deadline and control requirements, which are shown in Exhibit 1-3.1. Areas with more severe pollution are given more time to comply, but they must adopt more stringent controls. Ozone, CO, and PM₁₀ are the three pollutants of most concern to the Postal Service.

Exhibit 1-3.1, State Attainment Deadlines for Ozone, Carbon Monoxide, and Particulate Matter for Various Nonattainment Categories

Nonattainment Category	Attainment Year ^a
Ozone	
Marginal	1993
Moderate	1996
Serious	1999
Severe	2005–2007
Extreme	2010
Carbon Monoxide	
Moderate	1995
Serious	2000
Particulate Matter (PM₁₀)	
Moderate	1994
Serious	2001

^a Compliance with the Amendments must be obtained by November 15 of the year shown for ozone, and by December 31 for carbon monoxide and PM₁₀. States have the authority to accelerate the compliance dates.

Policy

Title II requires centrally fueled fleets of 10 or more vehicles to burn only clean fuels in areas with CO levels above 16 ppm or in non-attainment areas designated as serious, severe, or extreme for ozone.

1-3.2 Title II — Provisions Relating to Mobile Sources

Title II defines pollution reduction requirements for motor vehicles and therefore is very significant to the Postal Service because of our large vehicle fleet. Title II requires centrally fueled fleets of 10 or more vehicles to burn only clean fuels (clean fuels include reformulated gasoline, clean diesel, and alternative fuels, i.e., methanol, ethanol, propane, hydrogen, coal-derived liquids, biological materials, electricity, and natural gas) in areas with CO levels above 16 parts per million (ppm) or in nonattainment areas designated as serious, severe, or extreme for ozone (see 2-3.1). Appendix B lists the nonattainment areas for ozone; Appendix C for CO; and Appendix D for PM₁₀.

1-3.3 Title III — Hazardous Air Pollutants

Hazardous air pollutants are those that are hazardous to human health or the environment but are not specifically covered under other portions of the CAA. Title III includes a list of 189 hazardous air pollutants (also called air toxics) whose emissions must be controlled to meet CAA new technology standards.

1-3.4 Title IV — Acid Deposition Control

Title IV addresses the control of acid deposition (in the United States, most of it comes from burning fossil fuels) through a system of allowances on power plant emissions of sulfur dioxide (SO₂) and NO_x. These provisions do not directly relate to the Postal Service, although the cost of electricity may be affected.

1-3.5 Title V — Permits

By requiring all major sources of air pollution to obtain operating permits, Title V will extend emissions controls to thousands of sources in many areas that until now have remained unregulated. This directly affects Postal Service facilities.

Note

By requiring all major sources of air pollution to obtain operating permits, Title V will extend emissions controls to thousands of sources that have until now remained unregulated. This directly affects Postal Service facilities.

1-3.6 Title VI — Stratospheric Ozone Protection

Title VI requires a complete phaseout of the production and sale of ozone-depleting chemicals (especially CFCs and halons). This affects Postal Service HVAC systems and some fire suppression and control systems and equipment.

1-3.7 Title VII — Provisions Relating to Enforcement

The Amendments contain a broad array of provisions to make the law more readily enforceable, thus bringing it up to date with the other major environmental statutes.

1-4 State and Local Regulations

1-4.1 State Implementation Plans

The Amendments waive the sovereign immunity of federal agencies and also empower the states to implement the statute. The primary vehicle used by the states to accomplish this is the SIP. Under these plans, state, local, and regional air quality management districts have responsibility for issuing permits, monitoring compliance, and enforcing regulations. The Postal Service must comply with all applicable state, regional, and local air emission control rules promulgated to implement the SIPs pursuant to the CAA or any of its amendments. State and/or local air quality management districts (or the equivalent) can provide more detailed information on SIP requirements. Appendix E provides addresses and phone numbers for EPA regional air program coordinating offices.

1-4.2 Inspections and Enforcement

Local, regional, and state environmental officials acting in accordance with the state implementation plan are entitled to enter postal facilities to ensure compliance. They also have the authority to enforce the provisions of the Amendments, which includes assessment of civil and criminal penalties.

1-4.3 Air Quality Districts

All states have their own authorities (agencies or departments) responsible for air pollution control. In some cases, state or local air quality management districts (SLAQMDs) are formed by the respective regulatory agencies for the purpose of managing pollutants being emitted from a specific geographical area. The SLAQMD's geographic area of control may have been based on political boundaries or other factors.

1-5 General Responsibilities

Exhibit 1-5a is an organizational chart depicting the key Postal Service staff offices involved in air quality management. Exhibit 1-5b provides a more detailed breakdown of Postal Service staff responsibilities for CAA compliance. The following paragraphs summarize general responsibilities within functional areas.

Exhibit 1-5a, Organizational Chart of Postal Service Staff Responsible for the CAA Program

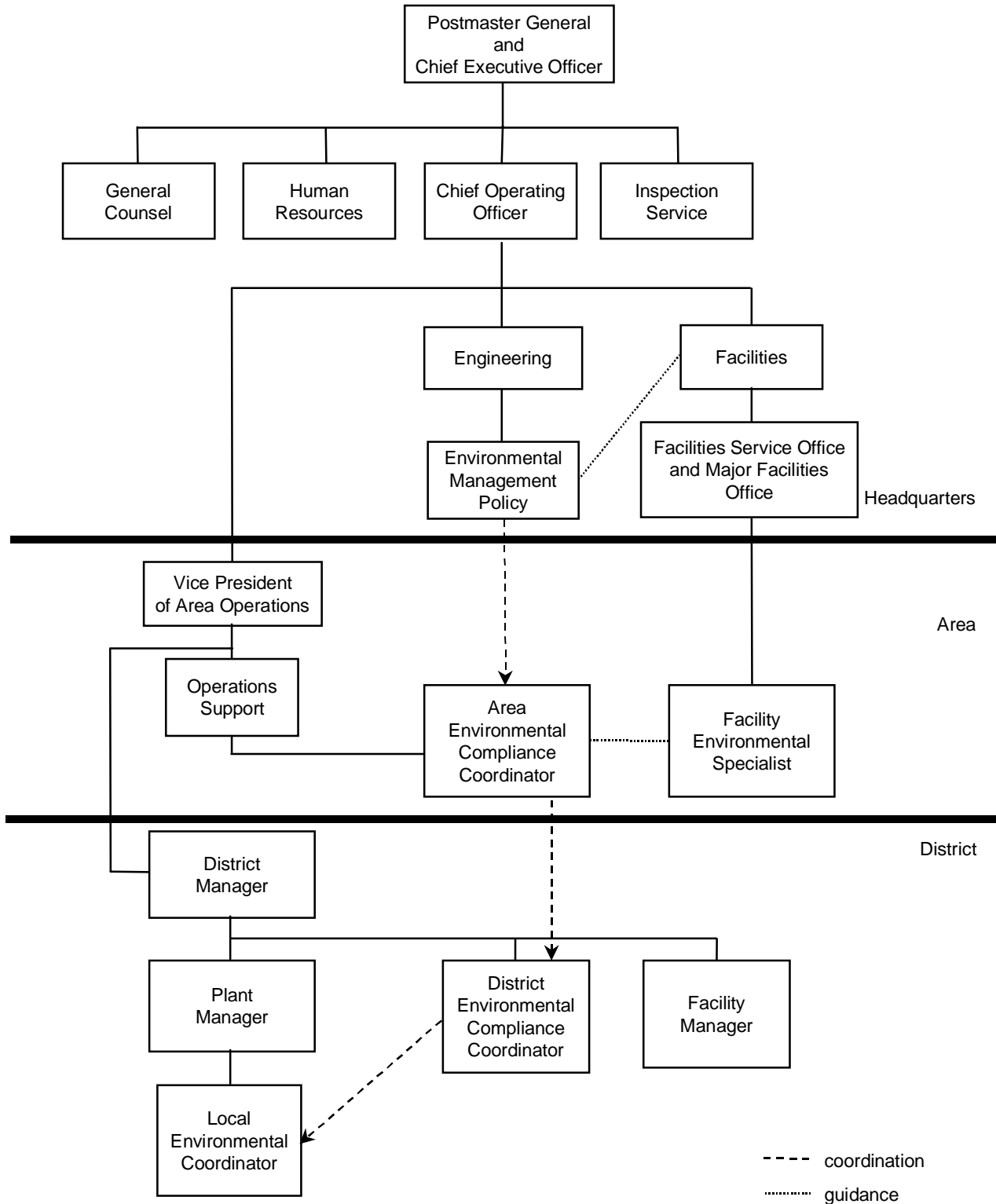


Exhibit 1-5b, Postal Service Staff Responsibilities for CAA Compliance

Role	Responsibility
Headquarters	
Engineering	<ul style="list-style-type: none"> ■ Serves as coordinator to assist in implementation of Engineering Tactical Action Plans in the Environmental Strategic Plan. ■ Researches environmental impacts of Postal Service operations.
Environmental Management Policy	<ul style="list-style-type: none"> ■ Develops policies and methods for compliance with Title V. ■ Coordinates with Operations Support to ensure that national operations, policies, and methods are not adversely affected. ■ Maintains liaison with federal environmental agencies.
Facilities	<ul style="list-style-type: none"> ■ Evaluates environmental risks and likely impacts as they relate to facility construction, modification, and/or repair and alteration, and communicates those risks and impacts to senior executives. ■ Determines whether new facility design and construction meet environmental specifications associated with the National Environmental Policy Act process (Handbook RE-6).
Facilities Service Office or Major Facilities Office	<ul style="list-style-type: none"> ■ Assists in the development of mass transit and carpooling options. ■ Ensures that HVAC systems comply with ozone-depleting substances standards. ■ Assesses potential project impacts on air quality management attainment goals.
General Counsel	<ul style="list-style-type: none"> ■ Serves as legal advisor. ■ Supports Headquarters and field environmental personnel with legal research, legal opinions, and interpretation of environmental laws. ■ Monitors and reviews new federal environmental laws and regulations and informs affected postal organizations of the impact of their activities.
Human Resources	<ul style="list-style-type: none"> ■ Ensures that policies enacted to facilitate compliance also comply with Postal Service and labor union contracts.
Inspection Service	<ul style="list-style-type: none"> ■ Conducts internal audits and surveys to ensure that postal facilities, operations, and programs comply with environmental requirements.
Area	
Area Operations	<ul style="list-style-type: none"> ■ Ensures that the area complies with all CAA requirements. ■ Budgets adequate resources to execute air quality programs. ■ Supports program implementation.
Operations Support	<ul style="list-style-type: none"> ■ Ensures that the postal vehicle fleet complies with Title V Amendments.

Exhibit 1-5b, Postal Service Staff Responsibilities for CAA Compliance (continued)

Role	Responsibility
Area Environmental Compliance Coordinator	<ul style="list-style-type: none"> ■ Serves as environmental focal point for Title V compliance. ■ Provides guidance, oversight, and awareness for the area. ■ Coordinates with DECCs and facility managers to identify and implement air emission pollution prevention methods. ■ Coordinates with DECCs and SLAQMD offices to identify area facilities that require permits under Title V, and which ones may qualify for synthetic minor, minor, or exempt status. ■ Ensures that area facility managers prepare and submit Title V permit applications in a timely manner. ■ Maintains liaison with federal, state, and local environmental regulatory agencies.
Facility Environmental Specialist	<ul style="list-style-type: none"> ■ Assists in the implementation of air quality laws, regulations, and postal policy.
District	
District Manager	<ul style="list-style-type: none"> ■ Ensures that the district complies with all CAA requirements.
Facility and Plant Managers	<ul style="list-style-type: none"> ■ Complies with Postal Service air quality program policies and procedures. ■ Participates in air quality program reviews and audits and takes appropriate follow-up action. ■ Maintains accurate and complete air quality program records. ■ Conducts thorough inventories of existing air pollutants and their emission sources and determines whether permits are required.
District Environmental Compliance Coordinator	<ul style="list-style-type: none"> ■ Conducts air emissions inventories when needed to determine a facility's Title V source and/or permit status. ■ Verifies major source status when facility design or operation is altered that adversely affects the potential to emit. ■ Monitors Title V compliance activities, including agency inspections, in the district. ■ Assists with the preparation of Title V permit applications, renewals, exemption requests, and other documents when required. ■ Works with AECCs and facility managers to identify and implement air emission pollution prevention methods. ■ Ensures that all plants and vehicle maintenance facilities are covered by the SLAQMD's rules for limiting potential to emit and/or synthetic minor status. ■ Coordinates with SLAQMD offices to identify area facilities that require permits under Title V. ■ Confirms that all facilities comply with recordkeeping requirements. ■ Maintains liaison with federal, state, and local environmental agencies.

Exhibit 1-5b, Postal Service Staff Responsibilities for CAA Compliance (continued)

Role	Responsibility
Local Environmental Coordinator	<ul style="list-style-type: none"> ■ Coordinates with DECCs to determine which facilities require Title V operating permits or synthetic minor, minor, or exempt status. ■ Prepares and submits Title V operating permit applications, renewals, exemption requests, etc. ■ Complies with Title V operating permit requirements. ■ Works with DECCs and facility personnel to identify and implement air emission pollution prevention methods and conducts air emissions inventories. ■ Complies with recordkeeping requirements. ■ Provides major source emission documentation if requested by a regulatory agency.

1-5.1 Headquarters

Vice President, Engineering

As the chief environmental officer for the Postal Service, the vice president of Engineering is responsible for the overall development of policies for the implementation of environmental management programs, including air quality management.

Environmental Management Policy

EMP serves as the environmental focal point for the entire postal organization, and is responsible for integrating environmental management strategies into all business activities. This includes ensuring compliance with CAA requirements for reducing source emissions and for increasing the use of alternative fuels.

Engineering

Engineering assists in the implementation of the Environmental Strategic Plan by assuming lead responsibility for planning, initiating, and maintaining Engineering Tactical Action Plans. Engineering also assesses the financial and operational impacts of using environmentally sound equipment. This assessment includes evaluating vehicles, carrier routes, scheduling, and transportation networks for energy conservation and pollution reduction opportunities; identifying, assessing, and managing the environmental risks associated with new or modified processes and vehicles; and evaluating the implications of air pollution control laws when selecting vehicles and for the distribution system. Engineering is also

responsible for reducing and/or eliminating the number of paint spray operations.

Facilities

Facilities is responsible for determining appropriate scopes of work and providing technical oversight of facility-related studies, such as environmental assessments and conformity analyses required by the National Environmental Policy Act (NEPA). Facilities is also responsible for providing early warning to Headquarters, facilities service office (FSO), and major facilities office (MFO) management concerning pending or enacted federal, state, or local environmental laws and regulations that affect facility projects. In addition, Facilities provides guidance to area and local managers regarding environmental issues originating during acquisition, construction, and/or repair and alteration projects. This guidance may include permit monitoring and air emissions reporting.

General Counsel

General Counsel supports Headquarters and field environmental personnel with legal research, opinions, and interpretations of environmental laws in response to specific questions and issues. This support includes monitoring and reviewing new federal environmental laws and regulations and informing affected postal organizations of impacts on their activities. In addition, General Counsel is responsible for meeting with federal or state officials to resolve disputes and identify issues related to pending regulations that may have a significant impact on the Postal Service.

Human Resources

Human Resources is responsible for ensuring that environmental policies, enacted to facilitate Amendments compliance, that affect employee working conditions, safety, and health comply with the legal requirements governing the Postal Service and union labor contracts in effect at the time.

Inspection Service

The Inspection Service is responsible for conducting internal audits and surveys to ensure that postal facilities, operations, and programs comply with CAA requirements. In addition, it ensures that postal inspectors are properly trained to evaluate these areas.

1-5.2 Areas

Vice President, Area Operations

The vice president of Area Operations has overall responsibility for implementation and maintenance of an effective CAA program that supports Postal Service strategic goals and objectives.

Operations Support

Operations Support is responsible for ensuring that the Postal Service vehicle fleet complies with the provisions of the Amendments, including requirements related to tailpipe emissions, the use of clean fuels, and other areas described in Chapter 2 of this guide.

Area Environmental Compliance Coordinator

The AECC serves as the environmental focal point for Title V compliance and provides general guidance and oversight for the area. The AECCs are responsible for establishing, where necessary, an inventory of all air emissions, water pollutants, and wastes. The AECCs are also responsible for monitoring the environmental performance of postal equipment and processes that emit air pollutants. In addition, AECCs assign responsibility to specific persons to ensure that the Postal Service complies with Title V permit requirements, including the preparation of applications and the monitoring of existing permits. This responsibility involves establishing policy and developing guidance for retaining and maintaining environmental records and files in compliance with environmental laws and regulations.

Facility Environmental Specialist

The facility environmental specialist (FES) is responsible for maintaining close coordination with the DECC on all CAA issues.

1-5.3 Districts

District Manager

The district manager is responsible for ensuring that the entire district complies with all applicable CAA requirements and related Postal Service implementing policies and procedures. In addition, the district manager is responsible for maintaining close coordination with the DECCs with regard to CAA operations and activities.

Policy

The AECC serves as the environmental focal point for Title V compliance and provides general guidance and oversight for the area.

Facility and Plant Managers

Facility and plant managers are responsible for complying with Postal Service air quality program policies and procedures. Compliance includes participating in air quality reviews and audits, maintaining environmental records, and conducting air emissions inventories to determine when permits are necessary.

District Environmental Compliance Coordinator

The DECC works with the AECCs and facility managers to identify and implement air emission pollution prevention methods. In addition, DECCs must coordinate with other DECCs and SLAQMD offices to identify Title V regulated facilities; assist with the preparation of Title V permit applications, renewals, and exemption requests; and monitor Title V compliance. DECCs are also responsible for ensuring that all facilities comply with recordkeeping requirements and for maintaining liaison with federal, state, and local environmental agencies.

Local Environmental Coordinator

The local environmental coordinator (LEC) may be an individual, such as the facility manager or vehicle maintenance facility (VMF) manager, or may consist of a committee of people. In the district, the LEC is responsible for monitoring Title V compliance activities, including inspections by air quality control agencies. In addition, the LEC maintains liaison with federal, state, and local environmental regulatory agencies.

2 Postal Operations

2-1 General

The Headquarters environmental strategic plan committee, the AECCs, and the DECCs must work together to monitor compliance strategies and communicate violations to appropriate postal units. Their communication with state and local air quality control agencies that are developing clean air regulations should help such agencies become aware of Postal Service needs in our business operations. This chapter provides guidelines for addressing potential postal operation problems that may result from implementation of state and local air pollution compliance plans. Operations that may be affected include delivery services, the vehicle fleet, business mail delivery to postal facilities, retail services, and accounting.

2-2 Delivery Services

2-2.1 Restrictions on Vehicle Movement

The basis of Postal Service operations is the organization's ability to deliver mail to the American public. Even when in full compliance with emissions standards, vehicles contribute heavily to ozone formation and generate 90 percent of the CO pollution. Because of this, many cities and regions with ozone and CO problems may attempt to restrict vehicle movements, especially during peak periods, including the morning (generally between 6:00 and 9:00 a.m.) and afternoon (generally between 4:00 and 7:00 p.m.). In addition, there may be efforts to curtail vehicle movement during smog alerts. More specifically, attempts have been made to eliminate truck traffic during peak periods to facilitate traffic flow and, consequently, reduce mobile source emissions.

2-2.2 Guidelines

All DECCs should monitor the efforts of local, regional, or state air quality management agencies that limit the Postal Service's ability to move the mail, especially efforts to limit truck traffic. All information obtained should be forwarded immediately to the respective AECC. The DECC should identify a point of contact at each air quality control agency to expedite communications between the agency and the Postal Service. Specific information about postal vehicle movements and contracted routes (time of operation, vehicle type, origin and destination of travel) can be obtained by consulting transportation management service centers, which may have access to internal transportation databases, such as the postal vehicle service (PVS)

Note

Operations that may be affected by the implementation of state and local air pollution compliance plans include delivery services, the vehicle fleet, business mail delivery to postal facilities, retail services, and accounting.

system and the transportation information management evaluation system (TIMES).

2-3 Vehicle Fleet

Note

The Amendments establish standards and requirements for tailpipe emissions; clean fuels, including reformulated gasoline volatility; new vehicle warranties; inspection and maintenance programs; refueling controls; and reduction of vehicle trips.

The CAA of 1970 gave special attention to motor vehicles because they have been the primary sources of hydrocarbon, CO, and NO_x emissions to the atmosphere. Even though progress had been made in controlling these emissions, they were again the focus of special attention in the Amendments of 1990, primarily because 50 million more cars were on U.S. highways in 1991 than in 1970. Because of this and the failure of most large urban areas to meet the ambient air standards for ozone and/or CO, the Amendments establish standards and requirements for tailpipe emissions; clean fuels, including reformulated gasoline and oxygenated fuels; gasoline volatility; new vehicle warranties; inspection and maintenance programs; refueling controls; and reduction of vehicle trips.

Even though not specifically addressed in the Amendments as a federal mandate, zero emissions vehicle (ZEV) procurement requirements will likely have an increasing impact on Postal Service operations. For example, a 1990 California law originally required that, by 2003, 10 percent of new cars sold in the state by major manufacturers must be ZEVs (which essentially means electric cars). The law required a gradual increase by specified percentages in ZEV production each year beginning in 1998 until the 10 percent goal was reached. California relaxed the law in 1996, allowing auto makers to voluntarily introduce electric vehicles until 2003 (at which time the original requirement for 10 percent availability of ZEVs will take effect).

The Ozone Transportation Commission, or OTC (the 12 states from Virginia to Maine plus the District of Columbia), formally petitioned the EPA to require the California rules throughout the Northeast. As an alternative to this, auto makers proposed to manufacture a national low emission vehicle (NLEV) that would be 70 percent cleaner than cars currently on the road. This vehicle would enable them to meet or exceed the air quality improvement that the states could achieve by mandating the sale of ZEVs. The EPA endorsed the auto makers' plan and finalized the legal framework to implement it. It is up to the states to decide whether or not to participate in the NLEV program.

2-3.1 Vehicle Emissions Requirements

The Amendments establish stricter pollution standards than the 1970 Act for emissions from automobiles and trucks. These standards reduce tailpipe emissions of hydrocarbons, CO, and NO_x. Beginning in 1994, new vehicles purchased by the Postal Service (cars and light-duty trucks up to 8,500 pounds) had to have stricter emission controls to meet the new standards. This requirement affects fleet management

because the new emissions standards will have to be maintained for nonmethane hydrocarbons, CO, and NO_x.

2-3.2 Clean Fuel Fleet Requirements

The Amendments require that all serious, severe, and extreme ozone nonattainment areas with a 1980 population of 250,000 or more and all serious CO nonattainment areas (those at or above 16.5 ppm) with a population of more than 250,000 adopt a clean fuel fleet program (a “fleet” means ten or more vehicles). The Amendments also require that a percentage of new vehicles purchased for fleets in the covered areas be clean fuel vehicles, beginning in vehicle model year 1998 (however, EPA has delayed implementation until 1999). These vehicles must use clean fuels when operating in the covered (nonattainment) area. This requirement applies to the Postal Service in the areas listed in Exhibit 2-3.2a. Note, however, that of the 22 areas that were originally covered by this requirement, a total of 16 elected to “opt out” and use other methods to achieve their air quality objectives. Fleet clean fuel vehicle purchasing requirements for specific vehicle model years are shown in Exhibit 2-3.2b.

Policy

The Amendments require that all serious, severe, and extreme ozone nonattainment areas with a 1980 population of 250,000 or more and all serious CO nonattainment areas with a population of more than 250,000 adopt a clean fuel fleet program.

Exhibit 2-3.2a, Nonattainment Areas That Must Begin Fleet Clean Fuel Vehicle Purchasing by 1998

The following nonattainment areas are required to establish fleet clean fuel vehicle purchasing programs beginning with vehicle model year 1998. However, only six (shown with an asterisk) have not opted out in favor of other methods (although Baton Rouge, LA, and Washington, DC, may opt out in the near future).	
Atlanta, Georgia*	Greater Connecticut
Bakersfield, California	Houston-Galveston-Brazoria, Texas
Baltimore, Maryland	Los Angeles-Anaheim-Riverside, California
Baton Rouge, Louisiana*	Milwaukee-Racine, Wisconsin*
Beaumont-Port Arthur, Texas	New York City-Northern New Jersey-Long Island, New York and New Jersey
Boston-Lawrence-Salem, Massachusetts	Philadelphia-Wilmington-Trenton, Pennsylvania, Delaware, and New Jersey
Chicago-Lake County, Illinois*	Providence-Pawtucket, Rhode Island
Denver-Boulder, Colorado*	Sacramento, California
El Paso, Texas	San Diego, California
Fresno, California	Springfield, Massachusetts
Gary, Indiana	Washington, DC*

Exhibit 2-3.2b, Fleet Clean Fuel Vehicle Purchasing Requirements

Vehicle Type	Percent of New Vehicle Purchases for Model Year:		
	1999	2000	2001+
Light-duty trucks and vehicles up to 8500 lb gvwr	30	50	70
Heavy-duty trucks 8500–26000 lb gvwr	50	50	50

Note: lb gvwr — pounds gross vehicle weight rating.

Note

Vehicle Maintenance has tested a number of alternative fuels, including hydrogen, methanol and ethanol blends, and compressed natural gas.

Clean Fuel Credits Program for Fleets

The Amendments mandate that the states administer a clean fuel fleet credit program once EPA promulgates regulations for such a program. The purpose of issuing credits is to assist fleet operators in complying with the clean fuel fleet program without sacrificing the program's air quality benefit in each nonattainment area. Credits may be used to demonstrate compliance with the fleet program requirements, or they may be held, traded, or sold for use by any other person to demonstrate compliance within the same nonattainment area.

For those six areas that have not opted out, fleet operators will receive credits for the purchase of (a) more clean fuel vehicles than required, (b) clean fuel vehicles that meet more stringent standards than those established by EPA (such as ultra-low emission and zero emission vehicles), and (c) vehicles in categories not covered in the fleet program but meeting ultra-low emission and zero emission vehicle standards.

Acceptable Clean Fuels

The manager of Vehicle Maintenance has the responsibility for determining acceptable alternative fuels. Vehicle Maintenance has tested a number of alternative fuels, including hydrogen, methanol and ethanol blends, and compressed natural gas (CNG); they are available to help establish programs where required (as shown in Exhibit 2-3.2a). The Amendments establish strict emissions performance requirements for light-duty trucks and allow the use of vehicles converted to CNG operation as a means of compliance. CNG provides an operationally proven alternative. Further guidance in this area is the responsibility of the manager of Vehicle Maintenance.

Implementation of a Clean Fuels Program

The manager of Vehicle Maintenance also has the responsibility for implementing the clean fuels program. The Amendments provide that if federal facilities are supplied with alternative fuels on-site, such fuels must be offered for sale to the public for use in other vehicles, unless such fuels are commercially available in the vicinity of the federal facility or if offering it for sale would disturb postal operations. Selling such fuels to the public would require careful postal planning and management, and may include the negotiation of leases to allow the physical siting of commercially owned and/or operated fueling stations on Postal Service property. When this occurs, the managers of Acquisition Management, Delivery and Customer Service Equipment (D&CSE), and Maintenance Policies and Programs, Engineering; and the manager of Headquarters Purchasing, Purchasing and Materials, will jointly negotiate final agreements with local utilities for on-site refueling.

Exemption From Transportation Control Measures

Clean fuel postal fleet vehicles must be exempt from transportation control measures (TCMs) or other commuting controls (such as driving during nonpeak hours) that restrict vehicle usage in cities with pollution violations, unless the TCM is safety-related. State and local authorities should be consulted if further information is needed.

2-3.3 Reformulated Fuels

Reformulated Gasoline Requirement

Reformulated gasoline with at least a 2-percent oxygen content is required in the areas listed in Exhibit 2-3.3. This “oxygenated” fuel is currently being sold as gasoline containing 10 percent ethanol or 15 percent methyl tertiary butyl ether (MTBE) as additives, and will not jeopardize vehicle warranties. Agencies in other ozone nonattainment areas (see Appendix B) may choose to require use of these fuels as a state option.

Other Vehicle Fuel Requirements

Several requirements will force the Postal Service to use cleaner fuels, thus improving the performance and reducing the maintenance of postal fleet vehicles. Postal officials involved in the procurement of vehicle fuels must be aware of the following requirements (also see Appendix A):

Policy

If federal facilities are supplied with alternative fuels on-site, such fuels must also be offered for sale to the public for use in other vehicles, unless such fuels are already commercially available in the vicinity of the federal facility or if offering it for sale would disturb postal operations.

Exhibit 2-3.3, Areas That Must Have Reformulated Gasoline With a 2-Percent Oxygen Content

Baltimore, Maryland	Los Angeles-Anaheim-Riverside, California
Chicago-Lake County, Illinois	Milwaukee-Racine, Wisconsin
Gary, Indiana	New York City-Northern New Jersey-Long Island, New York and New Jersey
Greater Hartford, Connecticut	Philadelphia-Wilmington-Trenton, Pennsylvania, Delaware, and New Jersey
Houston-Galveston-Brazoria, Texas	San Diego, California

- Gasoline in certain CO nonattainment areas during certain times of the year (typically the winter season) must have a 2.7-percent minimum oxygen content.
- Gasoline volatility during the high ozone season (summer) must be reduced to 9 pounds per square inch (psi). EPA can set lower levels in nonattainment areas, but it cannot require any standard below 9 psi in attainment areas.
- The sulfur content of motor vehicle diesel fuel may not exceed 0.05 percent by weight, and it must meet a minimum cetane index of 40. (The cetane index for diesel fuel is comparable to the octane number rating for gasoline.)
- All gasoline sold nationwide must contain detergent additives to prevent the accumulation of deposits in engines and fuel supply systems.
- It is unlawful to sell, supply, dispense, transport, introduce into commerce, or use gasoline that contains lead or lead additives for highway use.

Definition

I&M is a CAA program requiring periodic inspections of vehicles to ensure that emissions of specified pollutants are not exceeding established limits.

2-3.4 Inspection and Maintenance Program

Inspection and maintenance (I&M) is a program (mandated by the CAA) that requires periodic inspections of vehicles to ensure that emissions of specified pollutants are not exceeding established limitations. The Amendments require that all ozone and CO nonattainment areas in the United States have an I&M program. Annual inspection programs are required unless a state can demonstrate that a biennial program is just as effective.

Types of I&M Programs

I&M programs fall into two categories — basic and enhanced. The basic program, which applies to moderate ozone and CO nonattainment areas, allows:

- Test-and-repair or test-only stations.
- Either idle or 2-speed testing.
- Fleet self-certification.

The enhanced program, which applies to serious or extreme nonattainment areas, requires:

- Test-only stations.
- Both IM240 *and* evaporative testing.
- No fleet self-certification.

DECCs should coordinate directly with their supporting SLAQMD to determine specific requirements by locality.

Inspection Certification

District managers of Vehicle Maintenance must ensure that postal vehicles in CO and ozone nonattainment areas meet the state I&M requirements. Although states and local air quality control agencies have certified VMFs to perform these inspections in the past, this may not continue in the future (especially in those areas with enhanced programs).

2-3.5 Refueling Controls

Gasoline pumps in the ozone nonattainment areas (see Appendix B) are required to install gasoline vapor recovery systems (known as “stage II”). However, the Amendments also require phasing in new on-board refueling emissions control systems in vehicles and provide that the requirement for vapor recovery on gasoline pumps does not apply in moderate ozone nonattainment areas. Furthermore, EPA has discretion to exempt serious, severe, and extreme nonattainment areas if it judges that on-board systems are in widespread use. Unless exempted, many sites where postal vehicle fueling takes place must have stage II systems, essentially requiring that new dispensing equipment be installed. Where possible, this work should be coordinated with the ongoing underground tank management program (see 3-4.5). To minimize requirements, facility managers should seriously consider removing underground tanks and associated dispensing equipment (where economically feasible) and, instead, procure fuel commercially.

Note

Freon (R-12), the refrigerant used in most vehicle air-conditioners, is one of the compounds that contribute to stratospheric ozone depletion and global warming.

2-3.6 Vehicle Refrigerant Recovery

Title VI of the Amendments created a program to protect the stratospheric ozone layer by phasing out production and use of chlorofluorocarbons that deplete stratospheric ozone, thus contributing to global warming. Freon or R-12 (a CFC compound), the refrigerant used in vehicle air-conditioners, is one of the compounds affected by this. Vehicle Maintenance developed a CFC recycling policy that is promulgated in Fleet Management Bulletin V-17-91, *Chlorofluorocarbons Recycling Policy*, which requires the following: use of recovery and recycling equipment, recovery and recycling testing, use of refrigerant containers, and maintenance of refrigerant records. The district manager of Vehicle Maintenance is responsible for ensuring compliance. Since most Postal Service vehicles do not have air-conditioning, current Postal Service policy is to contract out vehicle refrigerant management tasks to the extent practical.

Recovery and Recycling Equipment

Vehicle maintenance facilities performing installation, service, or repair of vehicle air-conditioners, any other related repair of air-conditioners, or salvage of vehicles equipped with air-conditioners must obtain and use refrigerant recovery and recycling equipment that has a certificate of approval issued by Underwriters Laboratories or any other independent testing organization that attests that the equipment meets or exceeds the applicable Society of Automotive Engineers' standards of performance. Postal Service employees will not install, service, modify, or dispose of any vehicle air-conditioner or perform repairs or modifications that may release refrigerants unless they recover or recycle all the refrigerants with approved recovery or recycling equipment, employ procedures for the use of the equipment as specified by the manufacturer, and do not dispose of the refrigerants. Before operating recovery, recycling, or charging equipment, employees must receive a certificate of training from the equipment manufacturer or from an equivalent training program.

Equipment Testing

The recovery, recycling, or charging equipment must be tested for leaks using an electronic halogen leak detector at least every 6 months. A leak detected in recovery, recycling, or charging equipment must be repaired within 2 business days after the leak is first detected, unless the equipment does not leak when retested or if its use is discontinued. Refrigerants must not be added to a vehicle unless the system has been tested with a halogen leak detector, or fluorescent tracer dye and ultraviolet lamp, and has been found to have no leaks.

Refrigerant Containers

It is prohibited to purchase or use any refrigerants in containers with a capacity of less than 20 pounds.

Refrigerant Records

Records of the following information must be maintained for at least 2 years by the manager of Vehicle Maintenance at the repair facility:

- Pounds of refrigerants purchased, used, recovered, recycled, and stored per calendar year.
- Semiannual maintenance records for the recovery, recycling, or charging equipment, including the name of the person performing the maintenance, the dates the maintenance was performed, the results of leak tests, and the records of what equipment was checked, modified, serviced, or replaced.
- Annual documentation of the training of all personnel performing or supervising refrigerant recovery, recycling, or charging.
- Annual documentation, by receipt or other verification, for a refrigerant that is shipped off-site, if recycling or charging is not done on the premises.

Note

The Amendments may influence the ability of businesses to bring mail to postal facilities in much the same way that they affect postal delivery services.

2-4 Business Mail Delivery to Postal Facilities

The Amendments may influence the ability of businesses to bring mail to postal facilities in much the same way that they affect postal delivery services (see section 2-2). If this happens, the DECC should coordinate with the account representatives to share information about proposed truck operation reduction ordinances with business mailers. Managers of Operations Support should also be prepared to accommodate alternative delivery times for large shipments of business mail in communities that have enacted truck reduction ordinances in which no exemption has been provided for the movement of mail.

2-5 Siting of Retail Services

When undergoing the site review process for new facilities, Facilities, Operations Support, and Vehicle Maintenance should consider possible restrictions on vehicle use in ozone and CO nonattainment areas and customer access to alternative transportation, such as public transit and pedestrian and bicycle access. Alternative services, such as stamps on consignment, contract postal units, stamps by mail, stamps by phone, stamp vending machines, and stamps in automated teller

machines, may become more popular service arrangements in these areas. The district manager of Operations Program Support is responsible for decisions about using such services and should be advised by the DECC about how local air quality regulations may affect traditional services.

2-6 Accounting

Projections of annual costs associated with compliance with the Amendments should be undertaken by the districts, reported to the area manager of Finance, and shared with the environmental coordinators. All facility and vehicle compliance costs associated with clean air compliance other than employee transit incentives should be charged to account 56501. Employee transit incentives should be charged to account 56503.

3 Postal Facilities

3-1 General

The Amendments affect the numerous facilities operated by the Postal Service in various ways, such as:

- Regulation of stationary sources (e.g., boilers, cogeneration facilities, direct-fired absorption equipment, auto body and paint shops, etc.).
- Regulation of mobile sources (e.g., cars, trucks, vehicle fleets, etc.) using fixed Postal Service facilities (see section 2-3).
- Phaseout of the use of ozone-depleting substances (ODSs), including refrigerants used in heating and cooling systems, fire suppressants, and solvents.
- Implications for the future design and location of facilities and stationary equipment.

3-2 Stationary Sources

3-2.1 General Requirements

A stationary source of air pollution is an immobile piece of equipment, such as a boiler, paint spray booth, solvent cleaning area, and so forth, that has the capability to release pollutants into the atmosphere. The DECC should review district records to identify which facilities are currently regulated and should then check with the SLAQMD to determine if additional facility equipment and sources are subject to regulation. Information on the emissions limits should also be obtained while making these checks. The equipment and/or source is regulated if it must have a permit to construct and/or a permit to operate, or if it has the potential to emit certain types and volumes of pollutants specified in federal, state, or local regulations. The control of emissions is often more stringent if a source is located in a nonattainment area for the pollutant being regulated.

3-2.2 Permits

Regulations promulgated under Title V of the Amendments require operating permits for stationary sources to ensure their compliance with the CAA and all state regulations that are federally enforceable under the Act. Permits are only required for facilities whose potential to emit pollutants exceeds certain threshold levels, depending on the

Note

The DECC should review district records to identify which facilities are currently regulated and should then check with the SLAQMD to determine if additional facility equipment and sources are subject to regulation.

Note

It is anticipated that, by strictly implementing air emissions pollution prevention programs and/or enforceable operating restrictions, all postal facilities will fall below specified Title V major source permit thresholds, and thus be exempt from the Title V permit application program.

Policy

Facility managers who believe actual emissions may exceed 50 percent of a major source threshold should arrange for a supporting contractor to complete an air emissions inventory, determine emissions source status, and determine Title V permit applicability.

pollutants involved and the nonattainment status of the facility's location. Only one permit is required per facility, even if it has multiple sources. Permit programs are administered by the states (or local districts in some cases), and application forms, deadlines, etc., differ considerably from state to state. The DECC should determine details from state authorities and work to ensure that facility managers adhere to all requirements and schedules for permit acquisition. Permits will have a fixed term of up to 5 years. Title V also establishes permit fees, as discussed in 3-2.6.

It is anticipated that, by strictly implementing air emissions pollution prevention programs and/or enforceable operating restrictions, all postal facilities will fall below specified Title V major source permit thresholds and thus be exempt from the Title V permit application program. However, certain state or local requirements may mandate that certain facilities obtain an operating permit. Detailed procedures for determining the applicability of Title V permit requirements are covered in MI AS-550-95-18.

3-2.3 Air Emissions Inventories

Titles I through VII of the Amendments contain several mandates to compile an emissions inventory. Some mandates are explicit such as the Title I requirements to inventory volatile organic compound (VOC) and oxides of nitrogen sources in nonattainment areas. Some mandates are implied as evidenced by the hazardous air pollutant control requirements in Title III and the permitting requirements of Title V. In each case, the intent is that "source owners" make periodic, comprehensive assessments of their air pollutant emissions.

As stated in MI AS-550-95-18, DECCs are required to contact appropriate SLAQMDs to determine if facilities have been included in the office's Title V universe. If included, facilities must first verify that emission thresholds have been exceeded. This can be accomplished through open dialog with the regulator and/or contractor support.

In those instances where SLAQMDs have not or cannot make this determination and facility managers believe actual emissions may exceed 50 percent of a major source threshold (e.g., a plant with a VMF located in a nonattainment area), facility managers should arrange for a supporting contractor to:

- Complete an air emissions inventory.
- Perform the calculations needed to determine emissions source status.
- Determine Title V permit applicability in accordance with state and local requirements.

3-2.4 Actual Emissions and Potential to Emit

Actual emissions are emissions produced only as a direct result of source operation. For example, if a vehicle refueling station emits 10 pounds (lb) of VOCs per hour (hr) and operates for 2,000 hours each year, its actual emission rate would be 20,000 pounds of VOCs per year.

Potential to emit refers to the emission rate associated with maximum unrestricted operation of the emission source. Using the same example, the potential emission rate for the vehicle refueling station would have to be evaluated by considering 24 hours per day, 365 days per year of operation. Under these conditions, its potential emission rate would be 87,600 pounds of VOCs per year (10 lb/hr x 24 hr/day x 365 days/year). However, physical and operational limitations may be considered when determining potential to emit.

Fugitive emissions must also be included when determining potential hazardous air pollutant (HAP) emissions for all sources. They must also be included when determining potential non-HAP emissions for certain source categories that do not include the Postal Service or its typical operations.

3-2.5 Clean Fuel Requirements

Although not required by the Amendments, conversion of boilers from heating oil to cleaner burning fuels (such as natural gas) may be required in some urban areas, especially those with high SO₂ pollution levels. Therefore, the DECC should keep in contact with the SLAQMD to be able to plan for such changes. Such conversions should also be coordinated with the underground storage tank coordinators.

The Headquarters facility at L'Enfant Plaza supports local clean fuel conversion programs by burning natural gas as its primary fuel. Under current Postal Service policy, the facility must use only Number 2 fuel oil with a sulfur content of 0.3 percent or less by weight when the primary fuel of natural gas is not available.

3-2.6 Guidelines

Stationary sources with permits may be required to monitor and measure their emissions to ensure compliance with the permit conditions. The monitoring and analysis must be performed in compliance with the permit and EPA- or state-approved methods. Environmental contractors may assist in this activity. The facility manager is responsible for the operation of stationary sources (including obtaining permits). Permits must be kept on file, along with records of all modifications or repairs made to the stationary source. Modifications that would affect a source's potential to emit

Policy

The Headquarters facility at L'Enfant Plaza supports the clean fuel conversion program by burning natural gas as its primary fuel.

Note

Stationary sources with permits may be required to monitor and measure their emissions to ensure compliance with the permit conditions.

Policy

Permit deadlines and conditions must be met at all times. Failure to do so may result in enforcement action.

hydrocarbons will probably require a new permitting action, and the DECC should be consulted first. If repairs to the stationary source are needed to keep it in compliance with the permit, they must be made in a timely manner. Permit deadlines and conditions **must be met at all times**. Failure to do so may result in enforcement action. The Postal Service must pay permit fees, just as companies and nongovernmental entities are subject to comparable fees, to fund operation of state air pollution programs. The source of all fees will be the operating budget of the affected facility and/or field district.

3-3 Ozone-Depleting Substances

3-3.1 General

Refrigerants

Chlorofluorocarbons are chemical compounds widely used as refrigerants in air-conditioning and refrigeration systems. There are many different compounds in the CFC family. (Two different chemical families are related to the CFC family and are used as refrigerants — hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs).) The primary CFC-based refrigerants used in HVAC applications are R-11 (also known as CFC-11), R-12, R-113, and R-500 (series) for centrifugal chillers and R-22 for reciprocating, helical rotary compressors and high-tonnage centrifugal chillers. Because of the adverse effects of CFCs on the ozone layer, production of them has been phased out as of January 1, 1996.

Note

Because of the adverse effects of CFCs on the ozone layer, production of them was phased out as of January 1, 1996.

Ozone Depletion Potential

The potential for a compound to deplete ozone is determined by its “ozone depletion potential” (ODP), a numerical value ranging from 0 (no ozone depletion potential) to 1.0 (greatest potential). Exhibit 3-3.1 ranks the ODP values for common refrigerants. The ODP should be considered when selecting refrigeration compounds.

Other Substances

Halons, carbon tetrachloride, and methyl chloroform (classified as Class I substances) also damage ozone. Methyl chloroform, also known as 1,1,1-trichloroethane, was a principal cleaner and solvent used to maintain postal automated equipment. However, its production for most uses was phased out at the end of 1995. Therefore, alternatives that are cost- and performance-effective and do not deplete ozone must be used instead.

**Exhibit 3-3.1, Ozone Depletion Potential Values
of Refrigerants Used by the Postal Service**

Refrigerant	Ozone Depletion Potential
R-11 (CFC)	1.0
R-12 (CFC)	1.0
R-113 (CFC)	0.8
R-500 and R-502 (CFC)	0.74
R-22 (HCFC)	0.05
R-123 (HCFC)	0.02
R-134a (HFC)	0

Source: CAA Amendments of 1990, section 602(e). The figures for R-500 and R-502 are from the March 1989 issue of "CFC Update," published by Trane™.

Clean Air Requirements

The Amendments specified requirements for the use, purchase, sale, and disposal of CFCs, including provisions for the mandatory phaseout of CFC production and use to avoid the long-term health risks posed by the depletion of the ozone layer. All substances identified as Class I were to be phased out from production by the year 2000 (2002 for methyl chloroform), but these phaseouts were all accelerated and all were complete by January 1, 1996. All Class II substances will be phased out from production by 2030.

3-3.2 CFCs and Refrigerants in Existing Buildings

Alternative Refrigerants

For most air-conditioning and refrigeration applications, HCFCs and HFCs are currently the only viable options for replacing CFCs. Exhibit 3-3.2 provides guidance for the selection of alternative refrigerants.

Recovery and Recycling

Facility managers are responsible for ensuring the recovery and recycling of CFCs and HCFCs in existing systems to prevent their release and ensure reuse. The release of CFCs and HCFCs was prohibited effective June 14, 1993. The facility manager is also responsible for ensuring that recovery and recycling policies are observed by contractors.

Exhibit 3-3.2, Guidance for Selecting Alternative Refrigerants

Use	Former or Current Refrigerant	ODP	Acceptable Substitute	ODP
Unitary Air-Conditioners	R-22 (HCFC)	0.05	Continue use	0.05
Chillers	R-11 (CFC) ^a	1.0	R-123 (HCFC)	0.02
	R-12 (CFC) ^a	1.0	R-134a (HFC)	0
	R-113 (CFC) ^a	0.08	R-22 (HCFC)	0.05
	R-22 (HCFC)	0.05	Continue use	0.05
Commercial and Industrial	R-12 (CFC) ^a	1.0	R-134a (HFC)	0
Refrigeration	R-502 (CFC)	0.74	R-22 (HCFC)	0.05
	R-22 (HCFC)	0.05	Ammonia	N/A
	Ammonia	N/A	New blends	N/A

^a Production and use now phased out by EPA regulation.

Repair and Maintenance

Maintenance Policies and Programs, Engineering, Headquarters, provides technical information to the field regarding use of refrigerants in existing equipment and appropriate testing, repair, alteration, and maintenance procedures as they become available. Operations Program Support units in each district and Maintenance Policies and Programs must develop repair, maintenance, and disposal programs for CFC-containing building systems that comply with the Amendments. All alternatives to and new procurements for HVAC systems must use acceptable alternatives. Safety and health considerations of new refrigerants must be coordinated with Safety and Workplace Assistance, Human Resources, Headquarters.

3-3.3 HVAC Systems in New Buildings

Design and Construction, Facilities Program Management, Facilities, Headquarters, provides technical information to the field regarding HVAC systems for new construction. It is the policy of Design and Construction to ensure that new facilities are designed with heating and air-conditioning equipment and systems that use Class II substances (having an ODP of 0.05 or less) or substances that are compatible with Class II substances until other alternatives are available. Systems that can be converted to environmentally safe refrigerants, systems that contain the most viable and environmentally safe refrigerants currently available, and the types of replacement refrigerants available in the future must be considered in new construction.

3-3.4 Acquisition and Disposal of Existing Facilities

The Real Estate unit in each FSO and MFO must ensure that all “due diligence” investigations (environmental and hazardous material audits) conducted at existing facilities proposed to be used for Postal Service purposes include an evaluation of the HVAC systems for the presence of CFCs. Similarly, all environmental audits of real estate being considered for disposal should disclose the presence of HVAC systems containing CFC refrigerants.

3-3.5 Halons

The Amendments classify the halogenated fire extinguishing agents Halon-1211 and Halon-1301 as Class I substances. Production and consumption of these substances were phased out in 1994. Current Postal Service policy is to remove and replace existing halon systems as soon as practical, and to properly capture and transfer halons to the Defense Logistics Agency for future use by the military components of the Department of Defense (DOD). Design and Construction is currently recommending water sprinkler systems as the environmentally and occupationally safe alternative, pending the development of other alternative substances.

Since halons have been phased out of production, no new halon systems may be installed. The district manager of Operations Program Support must ensure that existing halon systems are maintained to be leakproof. Maintenance Policies and Programs is to develop and provide further guidance for the testing, repair, alteration, and maintenance of existing halon systems, as well as the long-term strategy for their ultimate replacement by the year 2003. See Maintenance Management Order (MMO)-021-95, *Halon Handling Procedures*, for additional information and guidance.

3-3.6 Other Class I and II Chemicals

The district manager of Operations Program Support, in strict compliance with postal procurement policy and procedures and postal environmental policy, must consider the procurement of alternatives to Class I and II substances whenever possible.

3-4 Facility Design

3-4.1 General

Due to the Amendments, the planning and siting of future postal facilities must consider activities that can reduce automotive emissions, such as parking arrangements, access to public transportation, restrictions on use of drive-up windows, and vapor

Note

The planning and siting of future postal facilities must consider activities that can reduce automotive emissions, such as parking arrangements, access to public transportation, elimination of drive-up windows, and vapor recovery for gasoline dispensing systems.

recovery for gasoline dispensing systems. In addition, the need for permits for stationary sources must be addressed. The environmental planning process should identify all air quality issues. Handbook RE-6, *Facilities Environmental Guide*, contains guidance on the environmental planning process, including NEPA and regulatory compliance procedures. Procedures for resolving air quality issues identified during environmental planning will depend on local regulations, such as state implementation plans.

3-4.2 Parking

In the most significant (serious, severe, and extreme) CO and ozone nonattainment areas, vehicle trips may be reduced by the implementation of trip reduction programs (see section 4-2). These programs will affect employee commuting patterns and may reduce the number of parking spaces at new postal facilities. Facility managers should consider providing secure lockers for bicycles, vanpools and buspools, and parking spaces that are closer to the buildings.

3-4.3 Access to Public Transportation

The manager of Facilities Services should emphasize access to public transportation in new facility siting in nonattainment areas. Where public transportation is not available, the Postal Service should consider shuttle buses or similar transportation in nonattainment areas. The FSOs and MFOs can play an instrumental role in the development of mass transit and carpooling options during the environmental planning process.

3-4.4 Drive-up Windows

Drive-up windows may be banned in some ozone nonattainment areas. The design project manager and/or architect-engineer must carefully consider this factor in cases where drive-up windows are being planned.

3-4.5 Gasoline Dispensing Systems

In order to minimize CAA compliance requirements (and where operationally and economically feasible), Postal Service facility managers should minimize on-site refueling. Off-site fueling options should be pursued. In those circumstances where off-site fueling is not readily available, a detailed economic justification for new on-site fueling will be considered. Future installations of gasoline dispensing units in moderate, serious, severe, and extreme ozone nonattainment areas (see Appendix B) are required to have stage II vapor recovery systems. Refer to Handbook AS-503, *Standard Design Criteria*, or

contact the underground storage tank coordinator at the nearest FSO or MFO for further information. (See also 2-3.5.)

3-4.6 Stationary Source Permits

When required, permits for stationary sources must be obtained early in the design process for new facilities. This function is to be coordinated between Facilities and the design architect-engineering firm. All air permit requirements identified, applied for, or obtained during construction must be included in the Environmental Transfer Package (ETP) as indicated in MI AS-510-97-6, *Environmental Integration in the New Construction Process*. The ETP is a compilation of all permits and applicable project information to be transferred from Facilities to Operations Support upon project completion.

3-4.7 Conformity

The Conformity Rule states that no federal entity may approve a project or any activity that does not conform to a state implementation plan. The Conformity Rule applies to federal actions that take place in areas designated as “nonattainment” or “maintenance” for specified national ambient air quality standards. Air pollutants affected by the Conformity Rule include O₃, NO_x, SO_x, CO, Pb, and PM₁₀.

The rule requires the quantification of potential emissions from direct and indirect sources from the proposed project, and a comparison to a threshold (*de minimis* level). If the potential emissions will exceed the *de minimis* levels, the rule requires a **conformity determination**. The determination requires a federal entity to identify mitigation measures to reduce emissions; coordinate with and obtain permits if required by the applicable air quality management agency; and comply with public noticing and participation requirements. A conformity determination is not necessary if potential project emissions are below the *de minimis* levels.

The FSOs and MFOs are responsible for ensuring that potential emissions from a proposed project are assessed before the project is authorized.

3-5 Indoor Air Quality

3-5.1 General

Although indoor air pollution is not addressed in the Amendments, indoor pollutants that may be or are discharged into the ambient air are regulated. The most notable of these are friable asbestos and VOCs (see below).

Policy

Future installations of gasoline dispensing units in moderate, serious, severe, and extreme ozone nonattainment areas are required to have stage II vapor recovery systems.

Policy

FSOs and MFOs are responsible for ensuring that potential emissions from a proposed project are assessed before the project is authorized.

Note

Indoor air pollutants that may be discharged into the atmosphere (such as asbestos and volatile organics) are also regulated.

3-5.2 Asbestos Program

Policy and procedures related to the Postal Service asbestos program are published in MI EL-810-98-1, *Asbestos-Containing Building Materials Control Program*, and in Handbook AS-556, *Asbestos Management Guide*. For further information, contact the district asbestos program coordinator (DAPC), who oversees district asbestos programs, and the manager of Administrative Support, who manages asbestos abatement and repair activities. Certain asbestos-related information and assistance may also be obtained from senior district and plant safety and health specialists and medical personnel.

3-5.3 VOCs

VOCs, including isopropyl alcohol, kerosene, methanol, and chlorinated solvents such as xylenes, toluenes, ketones, and aliphatics, are used inside some postal facilities. The most common sources of VOCs in the Postal Service are paint spray booths (which are closely regulated), parts washers, and custodial products. In facilities where VOCs are used, it is important that adequate ventilation and/or appropriate VOC-control equipment is provided.

3-5.4 Radon

Policies concerning the Postal Service radon program are published in the policy statement, *Radon Management Program*, and other related documents. For further information, contact the AECC, who oversees the radon testing program, and the DECC, who coordinates the development of facility Radon Control Action Plans if initial testing meets Postal Service action levels. Additional radon-related information is contained in a Postal Service pamphlet entitled *Is Radon in Your Workplace?*, which may be obtained from safety and health personnel.

3-5.5 Other Indoor Air Pollutants

The Occupational Safety and Health Administration (OSHA) is primarily responsible for developing regulations to maintain the safety of the work environment, including clean air within the workplace. In the future, OSHA may develop regulations for “nontraditional” occupational contaminants, including chemical agents, bioaerosols, and passive tobacco smoke. Contact Safety and Workplace Assistance at Headquarters, area human resource analysts, or district and plant safety specialists for further information on this subject.

OSHA has identified the following five sources of indoor air pollution:

- Sources of pollution outside of building — contaminated ambient air and radon.

- Nearby sources of pollution — vehicle garages, loading platforms, and nearby roads.
- Building equipment — contaminated HVAC systems and office equipment (such as copying equipment and laser printers). This may also include contaminants resulting from equipment operation, such as paper dust.
- Human activities — smoking, housekeeping and maintenance activities, and pest control.
- Building components and furnishings — off-gassing from new furniture and carpets.

3-6 Coordinating CAA and Energy Conservation Requirements

3-6.1 General

The process of converting fossil fuel energy into electrical power is a major source of air pollution. Burning fossil fuels in boilers generates CO, SO_x, NO_x, and PM₁₀, which are stationary emissions regulated under the Title V permit program. A major benefit of energy conservation is a reduction in air emissions, since less power needs to be generated. Although the Amendments do not mandate energy conservation efforts, the Energy Policy Act of 1992 and Executive Order (EO) 12902, *Energy Efficiency and Water Conservation at Federal Facilities*, establish specific goals to reduce energy consumption.

3-6.2 Facility Energy Management Program

The purpose of the postal facility energy management program is to make all its facilities as energy-efficient as possible and reduce total operating costs. To achieve this goal and to reduce energy operating costs, the Postal Service must develop appropriate programs to reduce utility costs; procure energy-efficient products; construct, operate, and maintain energy-efficient facilities; and promote efficient use of energy among employees. Policies and procedures related to the Postal Service facility energy management program are published in Management Instruction AS-550-97-4, *Facility Energy Management Program*, and Handbook AS-558, *Facility Energy Management Guide*.

Postal facilities may implement their energy management programs during a conformity determination (see 3-4.7). During a determination, facilities can identify energy conservation efforts that will result in a reduction of air emissions. Implementation of measures resulting from the determination will reduce air emissions and increase energy conservation.

Note

A major benefit of energy conservation is a reduction in air emissions, since less power needs to be generated.

Note

The Postal Service must develop appropriate programs to reduce utility costs; procure energy-efficient products; construct, operate, and maintain energy-efficient facilities; and promote efficient use of energy among employees.

3-6.3 Converting to Clean Fuel and Renewable Energy

The Energy Policy Act and EO 12902 encourage the Postal Service to consider clean fuel or renewable energy to meet its energy needs whenever practical. Renewable energy is energy produced from solar, geothermal, and wind technologies. One major drawback of renewable technologies is that the applications are often not cost-effective because of the high equipment and operations and maintenance costs. However, limited opportunities do exist where it is practical to apply renewable technologies.

4 Human Resources

4-1 General

The potential effects of the Amendments on postal employees depend to a large degree on the general air quality attainment status of the areas in which they live and work. Many state air quality management districts are located in federally designated nonattainment areas for ozone and carbon monoxide. Because of this, the Postal Service may be required to implement programs to reduce employee vehicle trips to work (i.e., trip reduction programs). These plans cannot work without substantial employee participation.

The issues related to trip reduction must be provided to the appropriate local labor management committee before any plan is submitted to the controlling air quality management district (AQMD).

4-2 Employee Trip Reduction Programs

4-2.1 General

To control ozone and CO, many air quality management districts have implemented or are beginning to implement strategies to limit the number of vehicles on roadways, especially during the morning and afternoon peak periods (i.e., rush hour). For locations with extreme or severe ozone or serious CO nonattainment status, some states and supporting AQMDs require employers of 100 or more employees to implement work trip reduction plans. An employee trip reduction program (ETRP) is intended to increase the average vehicle ridership (AVR) of work trips and reduce the number of work-related vehicle trips and miles traveled, thereby helping to comply with transportation performance and ambient air quality standards. Average vehicle ridership is defined as the ratio of the number of employees arriving at the worksite to the number of vehicles arriving at the worksite (a typical AVR target is 1.5 employees per vehicle arriving at the workplace).

4-2.2 ETRP Applicability and General Requirements

AECCs and DECCs should contact supporting state AQMDs to confirm the requirement to establish a formal ETRP. If so required, employers must normally submit a compliance plan within 2 years of the state's submission of the revised SIP. The employer's compliance plan must convincingly demonstrate that compliance with this provision will be attained within 4 years of the state's submission of the revised SIP. Detailed information regarding ETRP compliance plan development

Note

To control ozone and CO, many air quality management districts have implemented or are beginning to implement strategies to limit the number of vehicles on roadways, especially during the morning and afternoon peak periods.

Note

In many areas and districts, facilities have been able to meet target AVRs with little difficulty and in a cost-effective manner. Others have met with the opposite result.

procedures, format, and content; employee surveys; and related issues can be obtained directly from the supporting AQMD.

4-2.3 Postal Service Experience With Trip Reduction

The Postal Service's experience with ETRP to date has been mixed. In many areas and districts, facilities have been able to meet target AVRs with little difficulty and in a cost-effective manner. Others have met with the opposite result. For example, the Pacific Area Office analyzed its ETRP for over a 4- year period, during which it succeeded in eliminating some 8.4 million employee-driven vehicle miles. However, it found that the same net reduction of air pollutants realized after spending \$5.8 million on the ETRP could have also been achieved by investing only \$1.25 million to convert fleet gasoline-powered long-life vehicles (LLVs) to CNG (a saving of 78 percent). In this instance, vehicle conversion to CNG represented a viable alternative to achieve significant air pollutant reductions at substantial cost savings.

4-2.4 General Guidelines for Trip Reduction Programs

Before implementing ETRPs, area and district offices should thoroughly investigate available alternatives from both an economic and a pollution reduction perspective. Many states are now allowing employers to select from several alternatives that provide equal or greater environmental benefit at equal or reduced cost. Alternatives to work trip reduction plans that are currently under consideration include old vehicle scrapping, remote sensing of vehicle emissions, non-peak period work-related trip reduction, cash payments to an air quality investment program, and emission reduction equivalency credits given for the purchase of low or zero emission vehicles and the retrofit of fleet vehicles (e.g., CNG conversion).

Note

Before implementing ETRPs, area and district offices should thoroughly investigate alternatives from both an economic and a pollution reduction perspective.

4-2.5 Considerations During Trip Reduction Plan Development

Trip reduction plans affect many organizational activities as well as individual employees. Accordingly, the following factors must be considered in the development of any plans: labor and employee relations, postal operations, and vehicle fleet operations.

Labor and Employee Relations

Because of the potential impact on labor relations and Local Memoranda of Understanding (LMOUs), the area manager of Human Resources is responsible for coordinating the clearance of all trip reduction plans. The area manager of Human Resources must submit these trip reduction plans to the appropriate local labor management committees for review and comment before they are submitted to the controlling AQMD.

Postal Operations

From the postal operations perspective, trip reduction plans must be coordinated with the area manager of Operations Support.

Vehicle Fleet Operations

Fleet vehicles are not normally subject to trip reduction or traffic control management rules and regulations. Site managers should claim exemption from local regulations on the basis of the Postal Service's being an "essential public service" agency. Issues that arise in this regard should be coordinated with Delivery Policies and Programs, Delivery, Field Operations Support, Operations, Headquarters, for resolution.

4-2.6 Trip Reduction Transit and Commuter Incentives

The Postal Service policy is to provide trip reduction transit and commuter incentives to employees only if they will help achieve trip reduction goals in a cost-effective manner. Frequently, the laws are written to say that measures to reduce the number of trips **may** include a number of items, one of which may be direct financial incentives and disincentives. Unless the law specifically requires financial incentives, the ETRP should not incorporate them unless it is necessary to use them to get approval from the state. If area and district offices believe that state law does require the Postal Service to pay direct financial incentives, they should obtain concurrence from the field environmental legal counsel before including them in the plan.

Acceptable transit and commuter incentives that can be included in ETRPs include the following:

- Changes to scheduled reporting times ("flex time").
- Parking management plans including preferred parking.
- Promotion of ridesharing and mass transit.
- Guaranteed ride home.
- Facility improvements that encourage bicycling or walking to work.
- Ridesharing and transit information and a matching service.
- On-site special events to promote commuting options and on-site sale of transit passes.
- On-site facilities such as cafeterias to reduce the need for midday trips.
- Promotion of the use of clean fuel vehicles for commuting.

Note

Fleet vehicles are not normally subject to trip reduction or traffic control management rules and regulations. Site managers should claim exemption from local regulations on the basis of being an "essential public service" agency.

- Dissemination of general information to employees on the environmental, financial, and other benefits of alternative means of commuting.
- Provision of worksite amenities that promote the use of alternative ways to commute.
- Survey of employees to determine what incentives and disincentives they think are most likely to make it easier to meet the target average passenger occupancy rate.

ETRPs need not include all of the measures available. Those measures that are most likely to allow the facility to reach its AVR goal in a cost-effective manner should be tried first.

Measures such as direct financial incentives or subsidies should be included in the plan only if the plan cannot gain approval without them. Other measures may have contractual requirements and must be approved by the area office. These include telecommuting; compressed or flexible work schedules; Postal Service-owned buses, vans, or shuttles; daycare facilities; and paid parking.

4-3 Alternative Commuting Modes

4-3.1 General Requirements

In all likelihood, automobile use will continue to be discouraged for the foreseeable future, especially single-occupant vehicles used for morning and afternoon peak period commuting. Even though formal trip reduction programs may not be mandated in all locations, Postal Service area, district, and facility managers should encourage the use of alternative commuting modes wherever practical. Alternative modes include carpooling, vanpooling, buspooling, public transit, bicycling, and walking. Some localities may want employers to offer financial incentives and/or disincentives to encourage the use of these alternate modes of commuting. It is important to realize that local regulators are often reluctant to mandate particular alternate commuting options; they prefer to recommend a menu of options that provides the employer with flexibility in compliance.

Note

Postal Service area, district, and facility managers should encourage the use of alternative commuting modes wherever practical.

4-3.2 Carpooling and Vanpooling

Carpooling and vanpooling can make an important contribution toward achieving trip reduction goals. In most cases, carpooling consists of two or more persons sharing a ride to or from work. Vanpooling is seven or more persons commuting to work in a van. Preferential parking for carpool or vanpool participants is an effective strategy to encourage ridesharing. The AECC and transportation coordinator are

to develop other such strategies. The district manager of Human Resources must also be involved in these initiatives.

4-3.3 Buspooling

Buspooling is an option that may be considered if a large number of employees commute long distances (usually 30 miles or more each way) from the same general home area or along the same route. In a buspool, 16 to 45 riders (typical bus capacities) travel to a common destination aboard a privately arranged and independently operated commuter bus. Strategies to promote buspooling include marketing the programs to the appropriate audiences and establishing convenient, remote “park-and-ride” lots.

4-3.4 Public Mass Transit

Public mass transit systems, such as commuter rail and express bus services, usually attract commuters who live long distances from their workplace. To encourage mass transit usage, Postal Service managers could arrange to provide transit information centers, bus shelters, or the on-site sale of transit passes. Groups of employers could also pool together to provide a shuttle bus to a nearby commuter rail station or transit center.

4-3.5 Bicycling and Walking

For employees who live within a reasonable distance from their workplace, bicycling and walking are options. Both add little to traffic congestion and do not pollute the air. The concept can be promoted effectively with multiple purposes — both energy and environmental benefits as well as the health of employees.

4-3.6 Transportation Allowances

In many facilities, employees who drive to work receive a financial benefit in the form of free parking; employees who do not drive often do not receive a benefit of equal value. An employee transportation allowance enables employees to choose how they wish to get to the workplace; in effect, they realize a cash incentive for driving less. All employees would be given a dollar amount that they can use, whether they choose to drive alone, carpool, take public transit, or bicycle. Driving alone would become a poor economic choice to more and more commuters when they see that less expensive commuting options are open to them.

4-4 Parking Management

4-4.1 General Considerations

The AECC and transportation coordinator must coordinate all air pollution compliance plans involving changes in existing postal parking plans with the district manager of Human Resources, the affected facility manager, and any parties involved in the compliance plan process. Additionally, LMOUs may address the assignment of employee parking spaces. Therefore, any changes that affect LMOU provisions should be fully coordinated with union representatives through the local negotiation process. Communities with significant ozone and CO problems will eventually restrict the free parking spaces available for employees. Possible approaches to parking management that may exist in various communities include:

- Decreasing the number of parking spaces for offices and industrial buildings.
- Locating parking away from congested areas in more remote areas that promote shared modes of transportation — for example, park-and-ride facilities.
- Using shared parking schemes at facilities that support several organizations to ensure better management of all parking resources.
- Developing park-and-ride lots that promote the transfer from solo driving to shared modes of transportation and employing site designs that will attract commuters to use the lots.

Policy

The AECC and transportation coordinator must coordinate all air pollution compliance plans involving changes in existing postal parking plans with the district manager of Human Resources, the affected facility manager, and any parties involved in the compliance plan process.

4-4.2 Preferential Parking

General

Preferential parking for carpools and vanpools is based on the premise that people prefer convenient parking and will rideshare to get it. Preferential parking gives ridesharers a qualitative advantage over solo drivers by assigning them more desirable parking spaces.

When to Use Preferential Parking

Preferential parking works best when sufficient parking spaces and convenient building access are not available. Many worksites have large parking lots that require employees to take as much as 5 to 15 minutes to walk from their cars to the office. In these cases, preferential parking that reduces this time can be effective in encouraging them to rideshare.

How to Use Preferential Parking

Preferential parking can take many forms. Overall, it is any technique that enhances the appeal of ridesharing to obtain better workplace parking, such as locating rideshare parking spaces near building entrances, providing ridesharers with priority or exclusive access and egress to a garage or lot, offering ridesharers priority position on waiting lists, putting ridesharer names on parking spaces, and providing ridesharers with assigned spaces (while letting others fend for themselves). Such preferential treatment could be extended to include desirable parking areas for bicycles. Safe and conveniently located bicycle parking can be an incentive to employees considering bicycling to work.

4-4.3 Parking Fees

Free and abundant parking is an invitation to drive alone. As various parking management policies are considered, facility managers should evaluate the use of parking fees as a deterrent to lone ridership. Note, however, that parking fees directly impact overall employee compensation and will be closely scrutinized by local labor unions. Because of this, the involvement of Headquarters Human Resources is mandatory before reaching any decision regarding the use of parking fees.

A Overview of Titles I Through VII of the Clean Air Act Amendments of 1990

A-1 Title I — Provisions for Attainment and Maintenance of National Ambient Air Quality Standards

The Environmental Protection Agency regulates six indicator pollutants: ozone, carbon monoxide, particulate matter 10 microns or less in diameter, sulfur oxides, nitrogen oxides, and lead. Exhibit A-1 shows the primary (based on protecting human health) and secondary (based on protecting the environment) standards that have been established for each pollutant. The Amendments treat nonattainment areas with minor violations quite differently from those with major compliance problems. They establish five classes of ozone violations (marginal, moderate, serious, severe, and extreme) and two categories (moderate and serious) for CO and particulates. Each category has its own deadline for complying with attainment (see Exhibit 1-3.1) and control requirements. Areas with more severe pollution are given more time to comply, but they must adopt more stringent controls.

A-1.1 Ozone

Ozone presents by far the biggest problem; about 70 major areas do not comply with National Ambient Air Quality Standards because of excessive amounts of ozone (see Appendix B). Although many of these areas are only slightly over the hourly limit of 0.12 ppm, others far exceed it. Ozone is difficult to control because the mechanism by which it is formed is complex and depends on two different pollutants. It forms in the atmosphere, primarily in the late morning and early afternoon, when NO_x combines with any of several types of hydrocarbons known as photochemical oxidants. Because the complex chemical reactions that produce ozone are triggered in part by the sun's energy, the problem is worse in areas with large numbers of motor vehicles and hot, sunny climates and may vary seasonally. Exhibit A-1.1 lists the requirements to control ozone in nonattainment areas.

Exhibit A-1, Summary of the National Ambient Air Quality Standards

Pollutant	Averaging Time	NAAQS ^a (ppm ^b)	
		Primary	Secondary
Carbon monoxide	8-hour	9.0	None
	1-hour	35.0	None
Lead	Calendar quarter	1.5 (µg/m ³) ^c	Same as primary
Nitrogen dioxide	Annual	0.053	Same as primary
Ozone ^{d,e}	1-hour	0.12	Same as primary
PM ₁₀ ^e	Annual	50.0 (µg/m ³)	Same as primary
	24-hour	150.0 (µg/m ³)	
Sulfur dioxide	Annual	0.03	None
	24-hour	0.14	None
	3-hour	None	0.5

Source: Code of Federal Regulations, 40 CFR 50.4–50.12.

^aNational standards, other than those based on annual averages, are not to be exceeded more than once a year (except where noted).

^bppm stands for parts per million.

^cµg/m³ stands for micrograms per cubic meter.

^dThe ozone standard is attained when the expected number of days per calendar year in which the maximum hourly average concentration is above the standard is equal to or less than 1.

^eChanges to the ozone and particulate standards have been proposed. See A-1.3.

Lead in Gasoline

- Lead is banned from use in motor vehicle fuel.
- EPA, in conjunction with the U.S. Department of Agriculture, is required to develop procedures for testing the effectiveness of lead substitute additives for use in gasoline.
- It is unlawful to manufacture or sell new motor vehicle engines and nonroad engines that require the use of leaded gasoline.

A-1.2 Other Indicator Pollutants

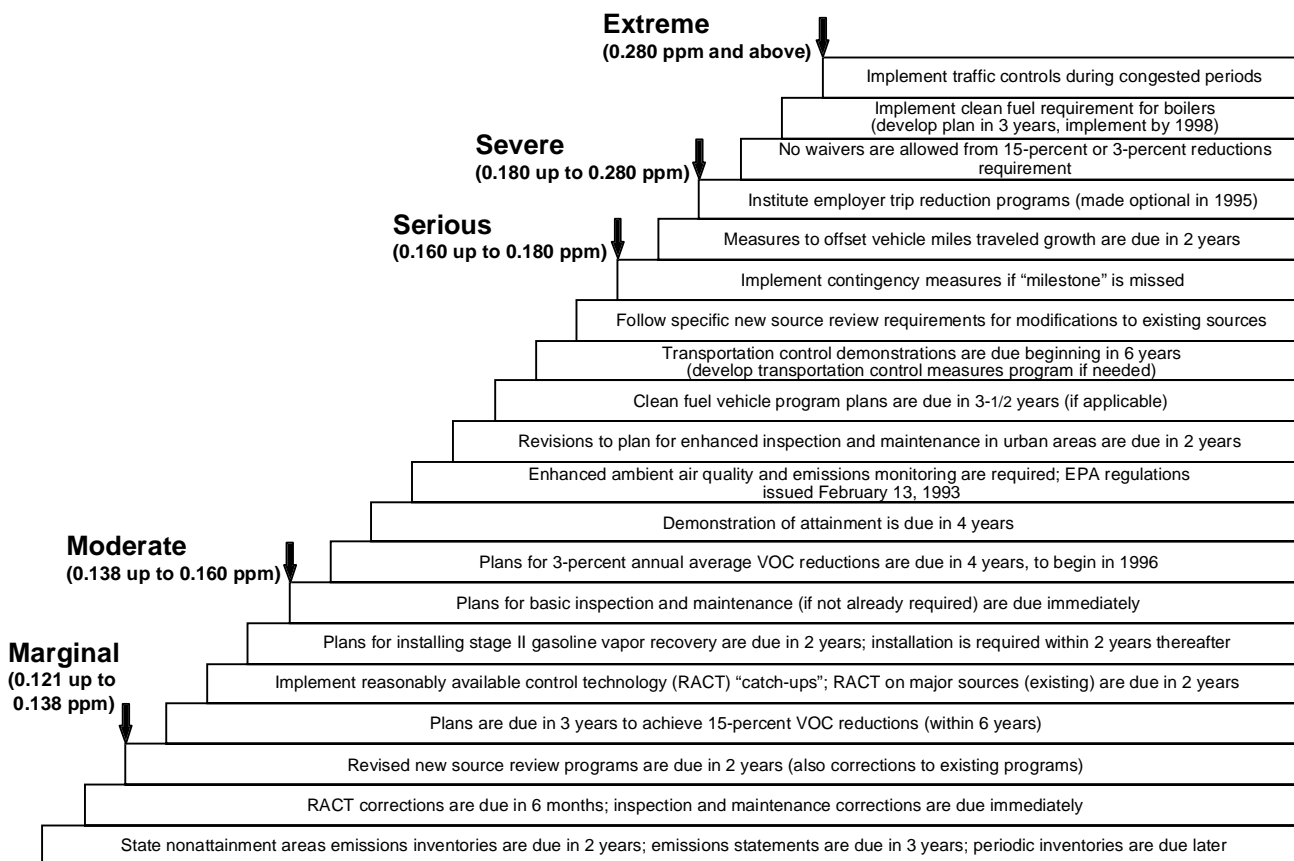
Although CO and PM₁₀ pose lesser health and environmental problems than ozone, 37 areas are not in compliance with the CO limit (see Appendix C) and 81 areas are not in compliance with the limit for particulates (see Appendix D). Exhibit A-1.2 lists the requirements to control CO in nonattainment areas. Listings for lead and sulfur dioxide nonattainment areas may be found in the November 6, 1991, issue of the *Federal Register* (56 FR 56694). See the boxes in the sidebars for more information about lead and SO₂.

A-1.3 Proposed Changes to NAAQS

In July 1997, EPA issued more stringent NAAQS for ozone and particulate matter, based on studies which imply that the existing standards for these pollutants did not sufficiently protect human health. The Environmental Protection Agency concedes that these tighter standards will result in new nonattainment areas. The new NAAQS lower the allowable ambient ozone concentrations from 0.12 ppm to 0.08 ppm and extend the averaging time over which this standard applies from 1 hour to 8 hours.

Exhibit A-1.1, Requirements to Control Ozone in Nonattainment Areas

(Timing shown is from enactment of CAA Amendments on November 15, 1990.)



The existing NAAQS that apply to PM₁₀ have been supplemented by an additional standard for even smaller particulates of less than 2.5 microns in diameter (PM_{2.5}). PM_{2.5} concentrations are limited to a 24-hour average of 65 micrograms per cubic meter (µg/m³) and an annual average of 15 µg/m³.

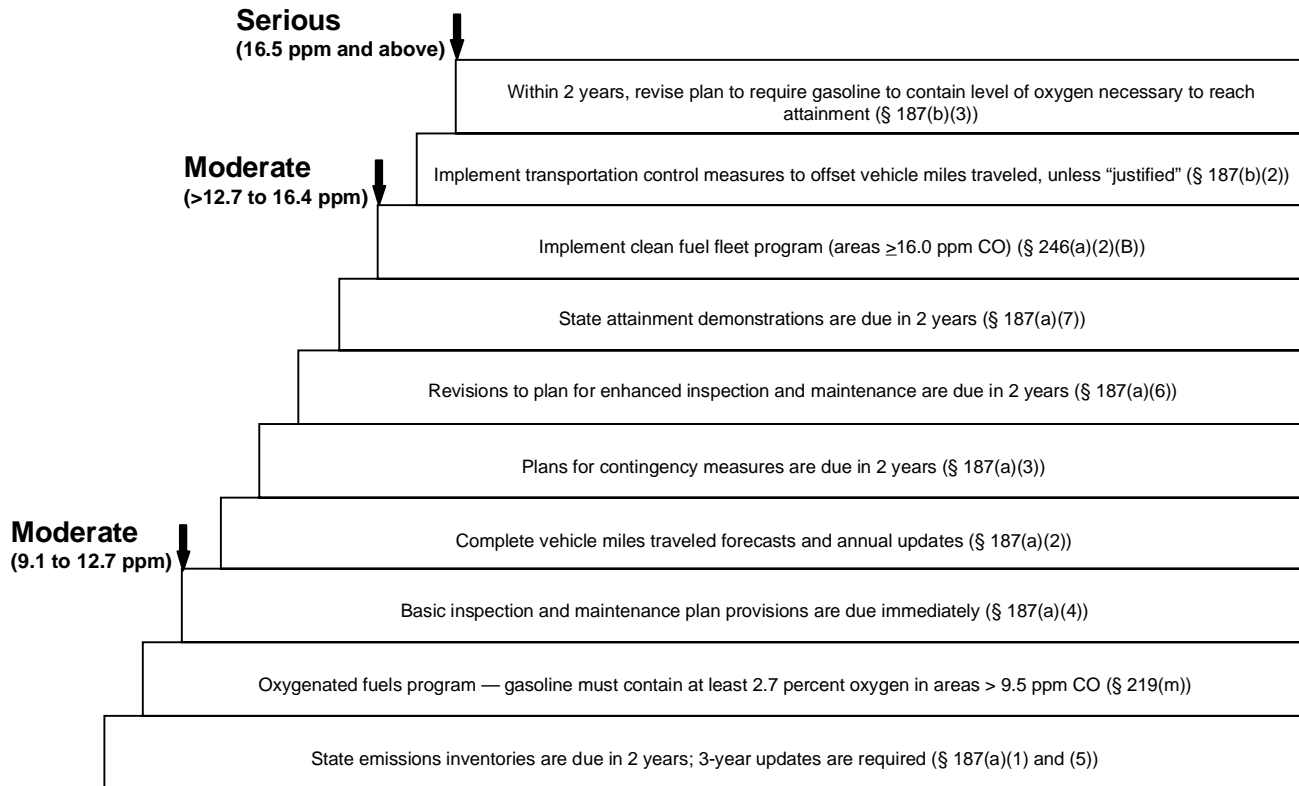
EPA will designate new ozone nonattainment areas in 2000, and revised SIPs for ozone are due in 2003. EPA will begin designating PM_{2.5} nonattainment areas in 2002, and SIPs will be required within 3 years of that designation. The deadlines for facilities to comply with these requirements will be several years later, and current control requirements remain in effect until new SIPs are approved.

Sulfur Dioxide (SO₂) Emission Reductions

- Two-phase reduction program will eliminate 10 million tons from 1980 levels:
 - 1995: Phase I requirements will reduce emissions from large high-emitting coal-fired utility plants.
 - 2000: Phase II requirements will reduce emissions from smaller lower-emitting utility plants.
- The cap on utility emissions of SO₂ is set at approximately 8.9 million tons per year in the year 2000.

Exhibit A-1.2, Requirements to Control Carbon Monoxide in Nonattainment Areas

(Timing shown is from enactment of CAA Amendments on November 15, 1990.)



Note: All regulatory citations refer to sections of the CAA.

Oxygenated Fuels Carbon Monoxide Program

- All gasoline in CO nonattainment areas must be oxygenated during the winter months.
- All such gasoline must have a minimum oxygen level of 2.7%.
- EPA can delay the start of the program by up to 2 years for insufficient domestic supply and distribution capacity reasons.

A-1.4 Nonattainment Areas

The most current listings (as of the date of publication) of the nonattainment areas for ozone, CO, and PM₁₀ are in Appendices B, C, and D, respectively. However, attainment or nonattainment status is often revised by EPA. Therefore, it is important for postal employees involved in clean air compliance issues to keep in contact with the appropriate federal, state, and local contacts in order to stay up to date on current attainment status of their areas.

A-2 Title II — Provisions Relating to Mobile Sources

Title II of the Amendments defines pollution reduction requirements for motor vehicles. The motor vehicle industry has made significant progress in controlling pollutants, with the average 1990 car emitting 90 percent less pollution than its 1970 counterpart. Nonetheless, cars,

trucks, buses, and other motor vehicles continue to cause 33 percent of all emissions of hydrocarbons, an essential ingredient for ozone formation. Vehicles also emit other pollutants, such as CO, NO_x (another key ingredient for ozone formation), and PM₁₀. The principal causes of this problem are the rapid growth in the number of vehicles on the roadways and the total miles driven. This growth has offset a large portion of the emission reductions gained from motor vehicle emission controls.

Title II requires centrally fueled fleets to use only clean fuels in areas with CO levels of 16.5 ppm and above or in serious, severe, or extreme ozone nonattainment areas (see 2-3.2). The Amendments define clean fuels as any fuel such as methanol, ethanol, or other alcohols, including any mixture thereof, that contains 85 percent or more by volume of such alcohol combined with gasoline or other fuels (reformulated gasoline, natural gas, liquefied petroleum gas, and hydrogen) or power source (including electricity). Also, new federally mandated programs require cleaner, reformulated gasoline to be sold in the 9 worst ozone nonattainment areas (Los Angeles, Baltimore, Chicago, Houston, Milwaukee, New York City, Philadelphia, San Diego, and Hartford). Other cities can “opt in” to the reformulated gasoline program (see box in sidebar for more information). Higher oxygen content (2.7 percent) fuels must be produced and sold during the winter months in areas that exceed the federal standard for CO (see box in sidebar on previous page). The standards will become stricter if attainment is not reached in a serious nonattainment area by the deadline.

Furthermore, the country’s serious nonattainment areas for CO and serious, severe, or extreme nonattainment areas for ozone must adopt a program limiting emissions from centrally fueled fleets of 10 or more vehicles beginning as early as 1998.

A-3 Title III — Hazardous Air Pollutants

Hazardous air pollutants are those that are hazardous to human health or the environment but are not specifically covered under other portions of the Clean Air Act. These pollutants include carcinogens, mutagens, and teratogens. The law includes a list of 189 toxic air pollutants for which emissions must be reduced. By law, EPA must publish a list of source categories of facilities that emit certain quantities of these pollutants. The list must include (a) “major sources” emitting 10 tons per year of any single pollutant or 25 tons per year of any combination of those pollutants and (b) area sources (smaller sources). The list was issued in July 1992. Among the categories of possible impact on the Postal Service are institutional and commercial boilers and stationary internal combustion engines. As a subsequent step, Title III creates a complex rulemaking process to determine maximum available control technology (MACT) requirements for

Reformulated Gasoline Program Requirements

- All gasoline sold in the nine worst ozone cities (based on 1987–1989) must be reformulated gasoline. This represents 20% of total motor fuel use in the U.S.
- Reformulated gasoline with 2.0% minimum oxygen content, averaging allowed, is to be provided during the winter months.
- VOCs and toxic emissions must be reduced in reformulated gasoline by 15% compared with 1990 baseline fuel.
- Reformulated gasoline is to contain no more than 1.0% benzene, averaging allowed.
- Aromatics in reformulated gasoline must be reduced to 25% maximum to meet toxics standard.
- In the year 2000, VOCs and toxics must be reduced in reformulated gasoline by 25% (if not feasible, EPA can set this limit at 20%).
- Nitrogen oxides in reformulated gasoline cannot be increased.
- The program has provisions against dumping gas.
- Any ozone nonattainment area can “opt in” to the program.
- Antideposit detergents must be added to all gasoline nationwide.

limiting toxic emissions from sources. Information on any such rules affecting the Postal Service will be forwarded to the Headquarters and area environmental steering committees when it becomes available. Exhibit A-3 depicts the EPA review process and its role in regulating HAPs under Title III.

A-4 Title IV — Acid Deposition Control

Acid deposition occurs when SO₂ and NO_x emissions combine with moisture in the atmosphere and return to the earth as sulfuric and nitric acids in the form of acid rain, fog, or snow. Approximately 20 million tons of SO₂ are emitted annually in the United States, mostly from the burning of fossil fuels. Title IV regulates large power plant sources and does not directly affect the Postal Service, although it may cause the cost of electricity to be raised.

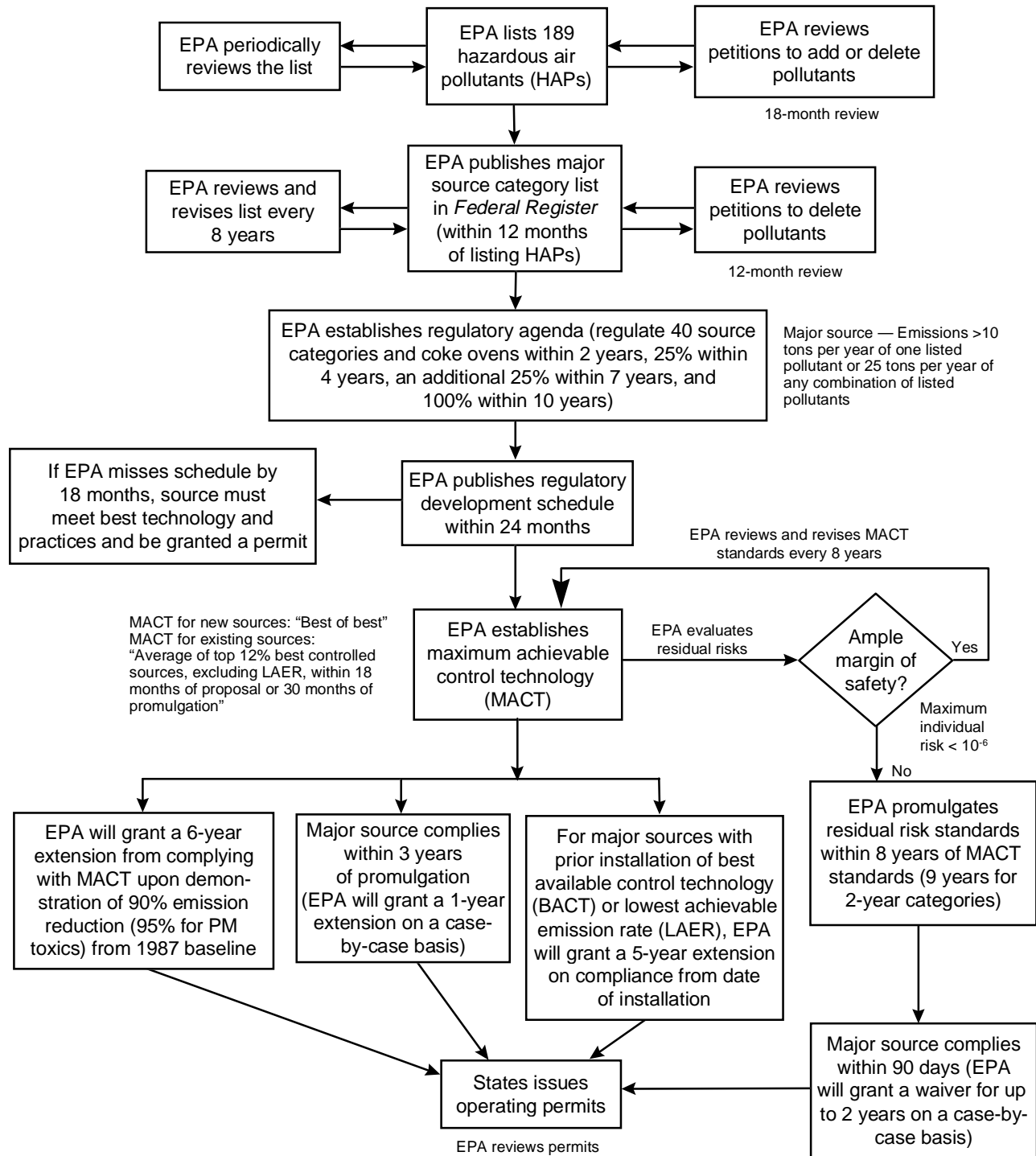
A-5 Title V — Permits

By requiring all major sources of air pollution to obtain permits, Title V will extend emissions controls to thousands of sources in many areas that until now have remained unregulated. Major sources include any entity that has the potential to emit more than 100 tons per year of any of the six indicator pollutants (CO, lead, NO_x, ozone, particulates, and SO_x) or that has the potential to emit more than 10 tons of one hazardous air pollutant or 25 tons per year of any combination of hazardous air pollutants. The Amendments allow states to set permit fees of at least \$25 for each ton of annual emissions, up to 4,000 tons, and empower states with permit programs approved by EPA to enforce the permits and fine violators up to \$10,000 per day. Exhibit A-5 shows Title V's relationship to other titles of the act and to state programs.

A-6 Title VI — Stratospheric Ozone Protection

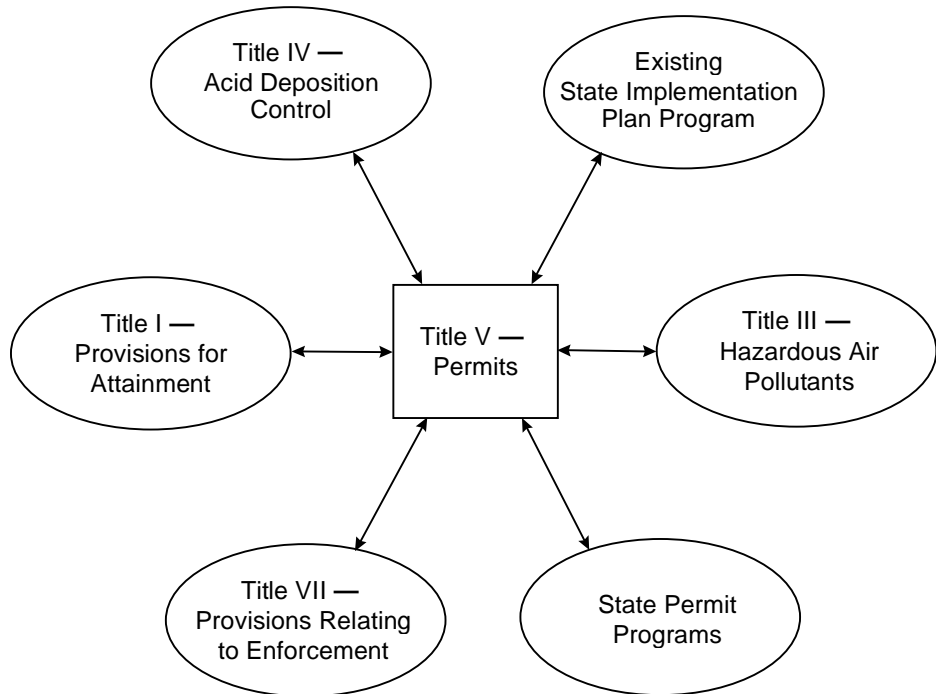
Title VI requires a complete phaseout on the production and sale of ozone-depleting chemicals (CFCs, halons, and others), along with interim reductions. It also requires controls on various CFC-containing products. It goes beyond restrictions included in the Montreal Protocol on ozone-depleting substances, which was an international agreement to control such chemicals. Under Title VI provisions, EPA must list all regulated substances, along with their ozone depletion potential, atmospheric lifetimes, and global warming potential; the first phase of this activity was promulgated on March 6, 1991, in *Federal Register* 56 FR 9518.

Exhibit A-3, EPA's Review Process Concerning Hazardous Air Pollutants



Source: U.S. Environmental Protection Agency

Exhibit A-5, The Relationship of Title V (Permits) to Other Titles of the CAA and to State Programs



Source: U.S. Environmental Protection Agency

EPA was also required to ensure that production and use of Class I chemicals is phased out on the following schedule: CFCs, halons, and carbon tetrachloride by the year 2000 and methyl chloroform by 2002. However, due to pressure for a faster timetable, these phaseouts were accelerated and all were completed by January 1, 1996. Production of Class II chemicals (HCFCs) is to be phased out by 2030.

The Amendments require nonessential products releasing Class I chemicals to be banned within 2 years of enactment. A ban went into effect in 1994 on production of aerosols and noninsulating foams using Class II chemicals, with exemptions for certain fire extinguishing and solvent purposes.

A-7 Title VII — Provisions Relating to Enforcement

The Amendments contain a broad array of provisions to make the law more readily enforceable, thus bringing it up to date with other major environmental statutes. An example is that the burden of proof is on the defendant for purposes of determining penalty liability once it has been shown that a violation has occurred.

EPA has new provisions to issue administrative penalty orders up to \$25,000 per day and \$200,000 maximum and field citations up to \$5,000 for lesser infractions. Civil judicial penalties have also been increased. Criminal penalties for knowing violations have been upgraded from misdemeanors to felonies, and new criminal provisions for endangerment have been established (for example, releases of hazardous air pollutants, failure to pay fees, violation of a permit, release of pollutants above the lawful limit, filing false statements, or failure to install required monitoring devices). It is important to note that provisions have been established that eliminate special treatment normally afforded nonmanagement employees in cases of “knowing” and “willful” violations. Knowing violations are those in which individuals or parties have knowledge of the law but willfully ignore it. A person who knows that he or she is being ordered to commit an act that violates the law cannot avoid criminal liability. The government needs only to prove that the defendant knew he or she was committing an unlawful act.

Sources must certify their compliance, and EPA has the authority to issue administrative subpoenas for data that demonstrates compliance. EPA will also be authorized to issue orders to comply with regulations requiring specific actions to reach compliance with schedules of up to 1 year. **Falsifying records can result in imprisonment.**

Finally, the role of citizens in ensuring compliance with the Clean Air Act has been strengthened by the Amendments. Citizens can bring suits against a major source operator to enforce the requirement to obtain a permit, the conditions of permits, and the requirements contained in state implementation plans. In addition, citizens can bring suits against source operators with respect to past violations if there is evidence that any violation has been repeated. Because of these strengthened provisions, citizen suits should be taken seriously.

In addition, EPA is given the authority to pay a “bounty” of up to \$10,000 to anyone who provides information that leads to a civil penalty or criminal connection.

B Nonattainment Areas for Ozone Listed by State, County, and Municipality

Alabama

Birmingham (Marginal)
Jefferson County
Shelby County

Arizona

Phoenix (Moderate)
Maricopa County^a
Maricopa Association of Governments
Urban Planning Area

California

Chico Area (Transitional^d)
Butte County
Imperial Country (Transitional^d)
Los-Angeles-South Coast Air Basin (Extreme)
Los Angeles County^{a, b}
Orange County
Riverside County
San Bernardino County^{a, b}

Monterey Bay (Moderate)
Monterey County
San Benito County^c
Santa Cruz County^c
Sacramento Metro (Serious)
El Dorado County^a
All of county up to Lake Tahoe^b
Placer County^d
All of county up to Lake Tahoe^b
Sacramento County
Solano County^a
Northeastern portion^b
Sutter County^a
Southern portion^b
Yolo County
San Diego (Serious)
San Diego County
San Joaquin Valley (Serious)
Fresno County
Kern County
Kings County
Madera County
Merced County

^a A portion of the county is located within the area and is designated nonattainment.

^b For a description of the geographic boundary, see the *Federal Register* (56 FR 56694, November 6, 1991).

^c The counties (or cities or townships) are either (1) part of the previous planning area but not part of the Standard Metropolitan Statistical Area (SMSA) or Metropolitan Statistical Area (MSA) or (2) counties adjacent to the SMSA (or MSA) and measuring violations.

^d Transitional areas are those determined to be nonattainment for ozone prior to the enactment of the Clean Air Act Amendments of 1990 (1987 to 1989); EPA is responsible for determining the status of these areas by June 30, 1992 — that is, whether the area attained the NAAQS by December 31, 1991.

^e “(New)” means that the entire area was designated “unclassified and/or attainment” on November 15, 1990 (that is, no part was attainment). The area has a designation date of January 6, 1992, indicated in the *Federal Register* (November 6, 1991).

^f Incomplete data indicates certain ozone areas designated nonattainment prior to the enactment of the Amendments that do not have sufficient air quality monitoring data to determine whether they are or are not violating the NAAQS. Under these circumstances, EPA does not believe sufficient data (75 percent completeness for each year) exists to warrant a classification for the area.

San Joaquin County
 Stanislaus County
 Tulare County
 Santa Barbara-Santa Maria-Lompoc (Moderate)
 Santa Barbara County
 Southeast Desert Modified Air Quality
 Maintenance Area (AQMA) (Severe-17)
 Modified AQMA^a
 Los Angeles County
 Northeastern portion^b
 Riverside County
 Eastern portion^b
 San Bernardino County
 Northeastern portion^b
 Ventura County (Severe-15)
 Yuba City (Transitional^d)
 Sutter County^a
 Northern portion^b
 Yuba County

Colorado

Denver-Boulder (Transitional^d)
 Adams County^a
 Arapahoe County^a
 Boulder County^a
 Denver County
 Douglas County
 Jefferson County

Connecticut

Greater Connecticut (Serious)
 Fairfield County^a
 City of Shelton
 Hartford County
 Litchfield County^a
 All cities and townships except
 Bridgewater and New Milford
 Middlesex County
 New Haven County
 New London County
 Tolland County
 Windham County
 New York-Northern New Jersey-Long Island
 (Severe-17)
 Fairfield County^a
 All cities and townships except Shelton
 Litchfield County^a
 Bridgewater and New Milford

Delaware

Philadelphia-Wilmington-Trenton (Severe-15)
 Kent County^c
 New Castle County
 Sussex County (Marginal) (New^o)

District of Columbia

Washington (Serious)
 Entire area

Georgia

Atlanta (Serious)
 Cherokee County
 Clayton County
 Cobb County
 Coweta County
 De Kalb County
 Douglas County
 Fayette County
 Forsyth County
 Fulton County
 Gwinnett County
 Henry County
 Paulding County
 Rockdale County

Illinois

Chicago-Gary-Lake County (Severe-17)
 Cook County
 Du Page County
 Grundy County^a
 Aux Sable
 Goose Lake
 Kane County
 Kendall County^a
 Oswego
 Lake County
 McHenry County
 Will County
 St. Louis (Moderate)
 Madison County
 Monroe County
 St. Clair County

Indiana

Chicago-Gary-Lake County (Severe-17)
 Lake County
 Porter County
 Evansville (Marginal) (New^o)
 Vanderburgh County
 Louisville (Moderate)

Clark County
Floyd County
South Bend-Elkhart (Marginal)
Elkhart County^c
St. Joseph County

Kansas

Kansas City (Submarginal)
Johnson County
Wyandotte County

Kentucky

Cincinnati-Hamilton (Moderate)
Boone County
Campbell County
Kenton County
Edmonson County (Rural Transport-Marginal)
(New^a)
Louisville (Moderate)
Bullitt County^{a, b}
Jefferson County
Oldham County^{a, b}

Louisiana

Baton Rouge (Serious)
Ascension Parish
East Baton Rouge Parish
Iberville Parish^c
Pointe Coupee Parish^c
Livingston Parish
West Baton Rouge Parish
Lake Charles (Marginal)
Calcasieu Parish

Maine

Franklin County^{a, b} (Incomplete data^f)
Hancock and Waldo Counties (Marginal)
Knox and Lincoln Counties (Moderate)
Lewiston-Auburn (Moderate)
Androscoggin County
Kennebec County^c
Oxford County^{a, b} (Incomplete data^f)
Portland (Moderate)
Cumberland County
Sagadahoc County
York County
Somerset County^{a, b} (Incomplete data^f)

Maryland

Baltimore (Severe-15)
Anne Arundel County
Baltimore County

Carroll County
City of Baltimore
Harford County
Howard County
Kent and Queen Anne's Counties (Marginal)
(New^a)
Philadelphia-Wilmington-Trenton (Severe-15)
Cecil County
Washington (Serious)
Calvert County
Charles County
Frederick County
Montgomery County
Prince George's County

Massachusetts

Boston-Lawrence-Worcester (eastern
Massachusetts) (Serious)
Barnstable County
Bristol County
Dukes County
Essex County
Middlesex County
Nantucket County
Norfolk County
Plymouth County
Suffolk County
Worcester County
Springfield (western Massachusetts) (Serious)
Berkshire County
Franklin County
Hampden County
Hampshire County

Michigan

Allegan County (Incomplete Data^f)
Flint (Transitional^d)
Genesee County
Muskegon (Moderate)
Muskegon County
The state requested time to study the boundaries under section 107(d)(4)(A)(iv). The boundaries of the Muskegon area will be determined based on an evaluation of that study by EPA. Any changes in the boundary may result in a change in the classification for part of the county.
Saginaw-Bay City-Midland (Incomplete data^f)
Bay County
Midland County
Saginaw County

Missouri

St. Louis (Moderate)
 Franklin County
 Jefferson County
 St. Charles County
 St. Louis (City)
 St. Louis County

Nevada

Reno (Marginal) (New^e)
 Washoe County

New Hampshire

Belknap County (Incomplete Data)¹
 Boston-Lawrence-Worcester (Serious)
 Hillsborough County^a
 Amherst, Brookline, Hollis, Hudson,
 Litchfield, Merrimack, Milford, Mount Vernon,
 Nashua, Pelham, and Wilton
 Rockingham County^a
 Atkinson, Brentwood, Danville, Derry, E.
 Kingston, Hampstead, Hampton Falls,
 Kensington, Kingston, Londonderry, Newton,
 Plaistow, Salem, Sandown, Seabrook, South
 Hampton, and Windham
 Cheshire County (Incomplete data)¹
 Manchester (Marginal)
 Hillsborough County^a
 Antrim, Bedford, Bennington, Deering,
 Francestown, Goffstown, Greenfield,
 Greenville, Hancock, Hillsborough,
 Lyndeborough, Manchester, Mason,
 New Boston, New Ipswich,
 Peterborough, Sharon, Temple, Weare,
 and Windsor
 Merrimack County
 Rockingham County^a
 Auburn, Candia, Chester, Deerfield,
 Epping, Fremont, Northwood,
 Nottingham, and Raymond
 Portsmouth-Dover-Rochester (Serious)
 Rockingham County^a
 Exeter, Greenland, Hampton, New
 Castle, Newfields, Newington,
 Newmarket, North Hampton,
 Portsmouth, Rye, and Stratham
 Strafford County
 Sullivan County (Incomplete data)¹

New Jersey

Atlantic City (Moderate)
 Atlantic County
 Cape May County

New York-Northern New Jersey-Long Island
 New York-Northern New Jersey-Long Island
 (Severe-17)

Bergen County
 Essex County
 Hudson County
 Hunterdon County
 Middlesex County
 Monmouth County
 Morris County
 Ocean County
 Passaic County
 Somerset County
 Sussex County
 Union County

Philadelphia-Wilmington-Trenton (Severe-15)

Burlington County
 Camden County
 Cumberland County
 Gloucester County
 Mercer County
 Salem County

New York

New York-Northern New Jersey-Long Island
 (Severe-17)

Bronx County
 Kings County
 Nassau County
 New York County (Manhattan)
 Orange County
 Putnam County

The state requested time to study the boundaries and classification under section 107(d)(4)(A)(iv). The boundaries and classification of Orange and Putnam counties will be determined based on an evaluation of that study by EPA.

Queens County
 Richmond County
 Rockland County
 Suffolk County
 Westchester County
 Poughkeepsie (Moderate)
 Dutchess County

Ohio

Cincinnati-Hamilton (Moderate)
 Butler County
 Clermont County
 Hamilton County
 Warren County

Oregon

Portland-Vancouver AQMA (Marginal)
 Clackamas County^a
 Multnomah County^a
 Washington County^a
Salem (Incomplete data)^f
 Marion County^a
 Polk County^a

Pennsylvania

Altoona (Marginal) (New^e)
 Blair County
Crawford County (Incomplete data)^f
Erie (Marginal)
 Erie County
Franklin County (Incomplete data)^f
Greene County (Incomplete data)^f
Harrisburg-Lebanon-Carlisle (Marginal)
 Cumberland County
 Dauphin County
 Lebanon County
 Perry County
Johnstown (Marginal) (New^e)
 Cambria County
 Somerset County
Juniata County (Incomplete data)^f
Lancaster (Marginal)
 Lancaster County
Lawrence County (Incomplete data)^f
Northumberland County (Incomplete data)^f
Philadelphia-Wilmington-Trenton (Severe-15)
 Bucks County
 Chester County
 Delaware County
 Montgomery County
 Philadelphia County
Pike County (Incomplete data)^f
Pittsburgh-Beaver Valley (Moderate)
 Allegheny County
 Armstrong County^c
 Beaver County
 Butler County^c
 Fayette County
 Washington County
 Westmoreland County
Reading (Moderate)
 Berks County
Schuylkill County (Incomplete data)^f
Scranton-Wilkes-Barre (Marginal)
 Columbia County
 Lackawanna County
 Luzerne County

Monroe County
Wyoming County
Snyder County (Incomplete data)^f
Susquehanna County (Incomplete data)^f
Warren County (Incomplete data)^f
Wayne County (Incomplete data)^f
York (Marginal)
 Adams County
 York County
Youngstown-Warren-Sharon (Marginal)
 Mercer County

Rhode Island

Providence (all of Rhode Island) (Serious)
 Bristol County
 Kent County
 Newport County
 Providence County
 Washington County

Texas

Beaumont-Port Arthur (Moderate)
 Hardin County
 Jefferson County
 Orange County
Dallas-Ft. Worth (Moderate)
 Collin County
 Dallas County
 Denton County
 Tarrant County
El Paso (Serious)
 El Paso County
Houston-Galveston-Brazoria (Severe-17)
 Brazoria County
 Chambers County^c
 Fort Bend County
 Galveston County
 Harris County
 Liberty County
 Montgomery County
 Waller County

Utah

Salt Lake City (Moderate)
 Davis County
 Salt Lake County

Virginia

Norfolk-Virginia Beach-Newport News (Marginal)
(New^e)
 James City County
 Chesapeake

Hampton
Newport News
Norfolk
Poquoson
Portsmouth
Suffolk
Virginia Beach
Williamsburg
York County
Richmond-Petersburg (Moderate)
Charles City County
Chesterfield County
Colonial Heights
Hanover County
Henrico County
Hopewell
Richmond
Smyth County^a (Rural Transport-Marginal)
(New^a)
The portion of White Top Mountain above
4,500-foot elevation in Smyth county.
Washington (Serious)
Alexandria
Arlington County
Fairfax (City)

Fairfax County
Falls Church
Loudoun County
Manassas
Manassas Park
Prince William County
Stafford County

Washington

Portland-Vancouver AQMA (Marginal)
Clark County^a

Wisconsin

Door County (Rural Transport-Marginal) (New^a)
Manitowoc County (Moderate) (New^a)
Milwaukee-Racine (Severe-15)
Kenosha County
Milwaukee County
Ozaukee County
Racine County
Washington County
Waukesha County

C Nonattainment Areas for Carbon Monoxide Listed by State, County, and Municipality

Alaska

Anchorage (Moderate)
 Anchorage Borough^a
 Portion of Anchorage urban area^b
 Fairbanks (Moderate)
 Fairbanks North Star Borough^a
 Portion of Fairbanks urban area^b

Arizona

Phoenix (Moderate)
 Maricopa County^a
 Maricopa Association of Governments
 Urban Planning Area^b

California

Chico (Moderate)
 Butte County^a
 Chico urbanized area (Census Bureau urbanized part — 5/16/84, 49 FR 20651)
 Fresno (Moderate)
 Fresno County^a
 Fresno urbanized area (see 11/20/85, 50 FR 47735)
 Lake Tahoe South Shore (Moderate)
 El Dorado County^a
 Lake Tahoe area^b
 Los Angeles South Coast Air Basin (Serious)
 Los Angeles County^{a, b}
 Orange County
 Riverside County^{a, b}
 San Bernardino County^{a, b}

Modesto (Moderate)
 Stanislaus County^a
 Modesto urbanized area (Census Bureau urbanized area — 3/29/85, 50 FR 12540)
 Sacramento (Moderate)
 Census Bureau urbanized areas
 Placer County^a
 Sacramento County^a
 Yolo County^a
 San Diego (Moderate)
 San Diego County^a
 Western part of county^b
 San Francisco-Oakland-San Jose (Moderate)
 Urbanized areas (described in the Technical Support Document from 3/29/85, 50 FR 12540)
 Alameda County^a
 Contra Costa County^a
 Marin County^a
 Napa County^a
 San Francisco County
 San Mateo County^a
 Santa Clara County^a
 Solano County^a
 Sonoma County^a
 Stockton (Moderate)
 San Joaquin County^a
 Stockton urbanized area (see 5/16/84, 49 FR 20651)

^a A portion of the county is located within the area and is designated nonattainment.

^b For a description of the geographic boundary, see the *Federal Register* (56 FR 56694, November 6, 1991).

^c “(New)” means that the entire area was designated “unclassified and/or attainment” on November 15, 1990 (that is, no part was attainment). The area has a designation date of January 6, 1992, indicated in the *Federal Register* (November 6, 1991).

Colorado

Colorado Springs (Moderate)
 Urban Transportation Planning Study
 Area as defined in 1989^b
 El Paso County^a
 Teller County^a
 Denver-Boulder (Moderate)
 Denver Metro Area^b
 Adams County^a
 Arapahoe County^a
 Boulder County^a
 Denver County^a
 Douglas County^a
 Jefferson County^a
 Fort Collins (Moderate)
 Larimer County^a
 Fort Collins Urban Growth Area boundary as
 adopted by the City of Fort Collins and the
 Larimer County Commissioners and in effect
 as of July 30, 1991
 Longmont (Moderate) (New^c)
 Portion of Longmont^b
 Boulder County^a
 Weld County^a

Connecticut

Hartford-New Britain-Middletown (Moderate)
 Hartford County^a
 Avon, Berlin, Bloomfield, Bristol,
 Burlington, Canton, E. Granby, E.
 Hartford, E. Windsor, Enfield,
 Farmington, Glastonbury, Granby,
 Hartford, Manchester, Marlborough,
 New Britain, Newington, Plainville,
 Rocky Hill, Simsbury, Southington, S.
 Windsor, Suffield, W. Hartford,
 Wethersfield, Windsor, and Windsor
 Locks
 Litchfield County^a
 Plymouth
 Middlesex County^a
 Cromwell, Durham, E. Haddam, E.
 Hampton, Haddam, Middlefield,
 Middleton, and Portland
 Tolland County^a
 Andover, Bolton, Ellington, Hebron,
 Somers, Tolland, and Vernon
 New York-Northern New Jersey-Long Island
 (Moderate)
 Fairfield County^a

All cities and townships except Shelton
 Litchfield County^a
 Bridgewater and New Milford

District of Columbia

Washington (Moderate)
 Entire Area

Maryland

Baltimore (Moderate)
 Baltimore City^a
 Regional Planning District No. 118
 (generally corresponding to the Central
 Business District)
 Washington (Moderate)
 Montgomery County^a
 Election districts 4, 7, and 13
 Prince George's County^a
 Election districts 2, 6, 12, 16, 17, and 18

Massachusetts

Boston (Moderate)
 Middlesex County^a
 Cambridge, Everett, Malden, Medford, and
 Somerville
 Norfolk County^a
 Quincy
 Suffolk County^a
 Boston, Chelsea, and Revere

Minnesota

Minneapolis-St. Paul (Moderate)
 Anoka County^a
 Carver County^a
 Carver, Chanhassen, Chaska, Hamburg,
 Norwood, Victoria, Waconia, Watertown,
 Young America, Chaska township,
 Laketown township, Waconia township,
 Watertown township, and Young
 America township
 Dakota County^a
 Apply Valley, Burnsville, Eagan,
 Farmington, Hastings, Inver Grove
 Heights, Rosemount, South St. Paul,
 Sunfish Lake, and West St. Paul
 Hennepin County^a
 Ramsey County^a
 Scott County^a
 Belle Plaine, Elko, New Market, New
 Prague, Prior Lake, Savage, Shakopee,
 Credit River township, Jackson
 township, Louisville township, New

Market township, and Spring Lake township

Washington County^a

All cities and townships except Denmark township

Wright County^a

Albertville, Annandale, Buffalo, Clearwater, Cokato, Delano, Hanover, Monticello, Montrose, Rockford, St. Michael, South Haven, Waverly, Dayton (Wright County part), Buffalo township, Chatham township, Clearwater township, Cokato township, Corinna township, Frankfort township, Franklin township, Maple Lake township, Marysville township, Monticello township, Ostego township, Rockford township, Silver Creek township, and Southside township.

Montana

Missoula (Moderate)

Missoula County^a

Missoula and vicinity^b

Nevada

Las Vegas (Moderate)

Clark County^a

Las Vegas Valley Hydrographic Area
212

Reno (Moderate)

Washoe County^a

Truckee Meadows Hydrographic Area
87

New Jersey

New York-Northern New Jersey-Long Island (Moderate)

Bergen County

Essex County

Hudson County

Passaic County^a

Clifton, Passaic, and Paterson

Union County

Philadelphia-Camden County (Moderate)

Camden County

New Mexico

Albuquerque (Moderate)

Bernalillo County

New York

New York-Northern New Jersey-Long Island (Moderate)

Bronx County

Kings County

Nassau County

New York County (Manhattan)

Queens County

Richmond County

Westchester County

North Carolina

Raleigh-Durham (Moderate) (New^c)

Durham County

Wake County

Oregon

Grants Pass (Moderate)

Josephine County^a

Central Business District

Klamath Falls (Moderate) (New^c)

Klamath County^a

Urban Growth Boundary

Medford (Moderate)

Jackson County^a

Medford-Ashland Urban Growth
Boundary

Portland-Vancouver (Moderate)

Portland Metro Service District Boundary

Clackamas County^a

Multnomah County^a

Washington County^a

Pennsylvania

Philadelphia-Camden County (Moderate)

Philadelphia County^a

Philadelphia — high-traffic areas within
the Central Business District and certain
other high-traffic density areas

Texas

El Paso (Moderate)

El Paso County^a

Portion of the city limits of El Paso^b

Utah

Ogden (Moderate)

Weber County^a

City of Ogden

Provo (Moderate)
Utah County^a
City of Provo

Virginia

Washington (Moderate)
City of Alexandria and Arlington County

Washington

Portland-Vancouver (Moderate)
Clark County^a
Air Quality Maintenance Area

Seattle-Tacoma (Moderate)
Seattle-Tacoma urban area (as defined by
the Washington Department of
Transportation urban area maps)^b
King County^a
Pierce County^a
Snohomish County^a
Spokane (Moderate)
Spokane County^a
Spokane urban area (as defined by the
Washington Department of Transportation
urban area maps)

D Nonattainment Areas for Particulate Matter Listed by State, County, and Municipality

Alaska

Anchorage
Eagle River
Juneau
Mendenhall Valley Area

Arizona

Cochise County^a
Paul Spur/Douglas planning area^b
Gila County^a
Hayden-Miami planning area^b
Maricopa County (Serious)^a
Phoenix planning area^b
Pima County^a
Rillito planning area^b
Ajo planning area^b
Pinal County^a
Phoenix planning area^b
Hayden-Miami planning area^b
Santa Cruz County^a
Nogales planning area^b
Yuma County^a
Yuma planning area^b

California

Fresno County
San Joaquin Valley planning area (Serious)
Imperial County
Imperial Valley planning area
Inyo County
Owens Valley planning area (Serious)
Hydrologic Unit #18090103
Searles Valley planning area
Hydrologic Unit #18090205

Kern County
San Joaquin Valley planning unit
Searles Valley planning area
Hydrologic Unit #18090205
Kings County
San Joaquin Valley planning area
Los Angeles County
South Coast Air Basin (Serious)
Madera County
San Joaquin Valley planning area
Mono County
Mammoth Lake planning area^b
Orange County
South Coast Air Basin (Serious)
Riverside County
Coachella Valley planning area (Serious)
South Coast Air Basin (Serious)
San Bernardino County
Searles Valley planning area
Hydrologic Unit #18090205
South Coast Air Basin (Serious)
San Joaquin County
San Joaquin Valley planning area (Serious)
Stanislaus County
San Joaquin Valley planning area (Serious)
Tulare County
San Joaquin Valley planning area (Serious)

Note: All PM₁₀ nonattainment areas are classified as moderate, except as noted.

^a A portion of the county is located within the area and is designated nonattainment.

^b For a description of the geographic boundary, see the *Federal Register* (56 FR 56694, November 6, 1991).

Colorado

Adams County
 Denver Metro Area^b
 Archeluta County
 Pagosa Springs
 Boulder County
 Denver Metro Area^b
 Denver County
 Denver Metro Area^b
 Douglas County
 Denver Metro Area^b
 Fremont County
 Canon City
 Jefferson County
 Denver Metro Area^b
 Pitkin County
 Aspen
 Prowers County
 Lamar
 Routt County
 Steamboat Springs
 San Miguel County
 Telluride

Connecticut

New Haven County
 New Haven

Idaho

Ada County^a
 Boise^b
 Bannock County^a
 Pocatello^b
 Bonner County^a
 Sandpoint Area^b
 Power County^a
 Pocatello^b
 Shoshone County
 Pinehurst

Illinois

Cook County^a
 Lyons Township-McCook
 Southeastern Chicago^b
 LaSalle County^a
 Oglesby^b
 Madison County^a
 Granite City
 Nameoki

Indiana

Lake County^a
 East Chicago, Hammond, Gary, and Whiting
 Vermillion County^a
 Clinton^b

Maine

Aroostock County^a
 Presque Isle

Michigan

Wayne County^{a,b}
 Detroit (part)

Minnesota

Ramsey County^a
 St. Paul^b

Montana

Flathead County^{a,b}
 Columbia Falls and vicinity^b
 Kalispell
 Lake County
 Polson
 Ronan
 Lincoln County
 Libby and vicinity^b
 Missoula County
 Missoula and vicinity^b
 Rosebud County
 Lame Deer
 Sanders County
 Thompson Falls
 Silver Bow County^a
 Butte^b

Nevada

Clark County
 Las Vegas planning area (Serious)
 Hydrographic Area 212
 Washoe County
 Reno planning area
 Hydrographic Area 87

New Mexico

Dona Ana County^a
 Anthony^b

New York

New York County

Ohio

Cuyahoga County

Jefferson County^{a,b}

Steubenville areas

Oregon

Jackson County^a

Medford-Ashland AQMA (including White City)

Josephine County^a

Grants Pass

The area within the urban growth boundary

Klamath County^a

Klamath Falls

The area within the urban growth boundary

Lake County

Lakeview

Lane County^a

Springfield-Eugene

The area within the urban growth boundary

Union County^a

LaGrand

The area within the urban growth boundary

Pennsylvania

Allegheny County^a

Clairton, Glassport, Liberty, Lincoln, and Port Vue

Puerto Rico

Guaynabo County

Texas

El Paso County

El Paso

Utah

Salt Lake County

Utah County

Weber County

City of Ogden

Washington

King County^a

Kent^b

Seattle^b

Pierce County^a

Tacoma^b

Spokane County^a

Spokane^b

Thurston County^a

Olympia-Tunwater-Lacey

Walla Walla County^a

Walla Walla

Yakima County^a

Yakima^b

West Virginia

Brooke County^a

Follansbee^b

City of Weirton

Wyoming

Sheridan County^a

Sheridan

E Federal Contacts

E-1 U.S. Postal Service

ALLEGHENY AREA
5315 CAMPBELLS RUN ROAD
PITTSBURGH PA 15277-7060
(412) 494-2523

CAPITAL METRO AREA
900 BRENTWOOD ROAD NE
WASHINGTON DC 20066-7000
(202) 636-2013

GREAT LAKES AREA
244 KNOLLWOOD 3RD FLOOR
BLOOMINGDALE IL 60117-5060
(630) 539-5565

MID-ATLANTIC AREA
1601-D MCCORMICK DRIVE
LANDOVER MD 20774-5308
(301) 925-1740

MIDWEST AREA
PO BOX 6603
ST LOUIS MO 63166-6603
(314) 692-5427

NEW YORK METRO AREA
142-02 20TH AVENUE
NEW YORK NY 11351-0100
(718) 321-5791

NORTHEAST AREA
6 GRIFFIN ROAD
NORTH WINDSOR CT 06006-7030
(860) 285-7254

PACIFIC AREA
400 OYSTER POINT BOULEVARD
SOUTH SAN FRANCISCO CA 94099-4210
(650) 635-3292

SOUTHEAST AREA
225 NORTH HUMPHREYS BOULEVARD
MEMPHIS TN 38166-0860
(901) 747-7484

SOUTHWEST AREA
PO BOX 225428
DALLAS TX 75222-5248
(214) 819-8646

WESTERN AREA
1745 STOUT STREET SUITE 700
DENVER CO 80299-1000
(303) 313-5011

E-2 EPA Regional Offices

Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)

EPA — NEW ENGLAND REGION
ONE CONGRESS STREET SUITE 1100
BOSTON MA 02114-2023
(617) 918-1111

Air Policy
(617) 918-1521

Air Permit Programs
(617) 918-1650

Air Quality Programming
(617) 918-1660

Region II (New Jersey, New York, Puerto Rico, and U.S. Virgin Islands)

290 BROADWAY 16TH FLOOR
NEW YORK NY 10007-1866
(212) 637-5000

Air Programs
(212) 637-4249

Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia)

1650 ARCH STREET
PHILADELPHIA PA 19103-2029
(215) 814-5000

Air, Water, Toxics, and General Law
(215) 814-2691

Air Protection
(215) 814-2100

Air Programs
(215) 814-2120

Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee)

ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW
ATLANTA GA 30303-3104
(404) 562-9900

Air, Pesticides, and Toxics Management Division
(404) 562-9077

Air and Radiation Technology Branch
(404) 562-9105

Radiation and Indoor Air Section
(404) 562-9100

Preconstruction — Hazardous Air Pollution Section
(404) 562-9098

Operating Permits Section
(404) 562-9099

Air Planning Branch
(404) 562-9055

Regulatory Planning Section
(404) 562-9026

Mobile Source and Community Planning
(404) 562-9027

Air Enforcement Section
(404) 562-9168

Region V (Illinois, Indiana, Michigan,
Minnesota, Ohio, and Wisconsin)

77 WEST JACKSON BOULEVARD
CHICAGO IL 60604-3507
(312) 353-2000

Air and Radiation Division

(312) 353-2212

Air Programs Branch

(312) 353-2211

Air Enforcement and Compliance

Assurance Branch

(312) 353-2088

Region VI (Arkansas, Louisiana, New
Mexico, Oklahoma, and Texas)

EPA REGION 6 MAIN OFFICE
1445 ROSS AVENUE SUITE 1200
DALLAS TX 75202-2733
(214) 665-2200

Air Quality Analysis

(214) 665-2290

Air Permits

(214) 665-7250

Air Planning

(214) 665-7214

Region VII (Iowa, Kansas, Missouri, and
Nebraska)

726 MINNESOTA AVENUE
KANSAS CITY KS 66101-2728
(913) 551-7003

Air, RCRA and Toxics Division

(913) 551-7020

Air Permitting and Compliance

(913) 551-7020

Air Planning and Development

(913) 551-7020

Region VIII (Colorado, Montana, North
Dakota, South Dakota, Utah, and
Wyoming)

999 18TH STREET SUITE 500
DENVER CO 80202-2466
(303) 312-6312

Air Programs

(303) 312-6005

Air Program Technical Team

(303) 312-6007

Air State Support Unit

(303) 312-6007

Region IX (Arizona, California, Guam,
Hawaii, Nevada, American Samoa, The
Commonwealth of Northern Mariana
Islands, The Republic of Palau,
Federated States of Micronesia, and
Marshall Islands)

75 HAWTHORNE STREET
SAN FRANCISCO CA 94105
(415) 744-1305

Air Division

(415) 744-1219

Region X (Alaska, Idaho, Oregon, and
Washington)

1200 SIXTH AVENUE
SEATTLE WA 98101
(206) 553-1200

Office of Air Quality

(206) 553-1505

F Acronyms and Abbreviations

$\mu\text{g}/\text{m}^3$	—	micrograms per cubic meter
AECC	—	area environmental compliance coordinator
AQMA	—	Air Quality Maintenance Area
AQMD	—	air quality management district
AVR	—	average vehicle ridership
BACT	—	best available control technology
CAA	—	Clean Air Act
CFC	—	chlorofluorocarbon
CFR	—	<i>Code of Federal Regulations</i>
CNG	—	compressed natural gas
CO	—	carbon monoxide
D&CSE	—	Delivery and Customer Service Equipment
DAPC	—	district asbestos program coordinator
DECC	—	district environmental compliance coordinator
DOD	—	Department of Defense
EMP	—	Environmental Management Policy
EO	—	Executive Order
EPA	—	Environmental Protection Agency
ERG	—	<i>Environmental Resources Guidebook</i>
et seq.	—	(Latin) and the following
ETP	—	Environmental Transfer Package
ETRP	—	employee trip reduction program
FES	—	facilities environmental specialist

FR	—	<i>Federal Register</i>
FSO	—	facilities service office
gvwr	—	gross vehicle weight rating
HAP	—	hazardous air pollutant
HCFC	—	hydrochlorofluorocarbons
HFC	—	hydrofluorocarbons
hr	—	hour
HVAC	—	heating, ventilation, and air-conditioning
I&M	—	inspection and maintenance
LAER	—	lowest available emission rate
lb	—	pound
LEC	—	local environmental specialist
LLV	—	long-life vehicle
LMOU	—	Local Memorandum of Understanding
MACT	—	maximum available control technology
MFO	—	major facilities office
MI	—	management instruction
MMO	—	maintenance management order
MSA	—	Metropolitan Statistical Area
MTBE	—	methyl tertiary butyl ether
N/A	—	not applicable
NAAQS	—	National Ambient Air Quality Standards
NEPA	—	National Environmental Protection Act
NLEV	—	national low emission vehicle
NO _x	—	nitrogen oxides
O ₃	—	ozone

ODP	—	ozone depletion potential
ODS	—	ozone depleting substance
OSHA	—	Occupational Safety and Health Administration
OTC	—	Ozone Transportation Commission
Pb	—	lead
PM ₁₀	—	particulate matter 10 microns or less in diameter
PM _{2.5}	—	particulate matter 2.5 microns or less in diameter
ppm	—	parts per million
PSD	—	prevention of significant deterioration
psi	—	pounds per square inch
PVS	—	postal vehicle service
RACT	—	reasonably available control technology
SIP	—	state implementation plan
SLAQMD	—	state or local air quality management district
SMSA	—	Standard Metropolitan Statistical Area
SO ₂	—	sulfur dioxide
SO _x	—	sulfur oxides
TCM	—	transportation control measure
TIMES	—	transportation information management evaluation system
U.S.C.	—	<i>United States Code</i>
VMF	—	vehicle maintenance facility
VOC	—	volatile organic compound
ZEV	—	zero emissions vehicle

G Glossary

acid deposition (“acid rain”)	A complex chemical and atmospheric phenomenon that occurs when emissions of sulfur and nitrogen compounds and other substances are transformed by chemical processes in the atmosphere, often far from the original sources, and then deposited on earth in either a wet or a dry form. The wet forms, popularly called “acid rain,” can fall as rain, snow, or fog. The dry forms are acidic gases or particulates.
air toxics	Any air pollutant for which a National Ambient Air Quality Standard (NAAQS) does not exist (that is, excluding ozone, carbon monoxide, particulate matter of 10 microns or less in diameter, sulfur oxides, nitrogen oxides, and lead) that may reasonably be anticipated to cause cancer, developmental effects, reproductive dysfunctions, neurological disorders, heritable gene mutations, or other serious or irreversible chronic or acute health effects in humans.
allowance	An authorization used to control SO ₂ emissions under the acid rain program (one allowance authorizes a facility to emit one ton of SO ₂); also, a sum granted for employee transportation expenses.
aromatics	A type of hydrocarbon, such as benzene or toluene, added to gasoline to increase octane. Some aromatics are toxic.
attainment area	An area considered to have air quality as good as or better than the National Ambient Air Quality Standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a nonattainment area for others.
best available control technology	An emission limitation based on the maximum degree of emission reduction that is achievable through application of production processes and available methods, systems, and techniques.
CAA new technology standards	Standards encompassed in best available control technology, clean coal technology, maximum achievable control technology, reasonably available control measures, and reasonably available control technology.
carbon monoxide	A colorless, odorless gas that is toxic because of its tendency to reduce the oxygen-carrying capacity of the blood.
CFCs (chlorofluorocarbons)	A family of inert, nontoxic, and easily liquefied chemicals used in refrigeration, air-conditioning, packaging, or insulation or as solvents or aerosol propellants. Because CFCs are not destroyed in the lower atmosphere, they drift into the upper atmosphere, where the chlorine is released and destroys the ozone.

Class I substances	Ozone depleting chemical compounds whose production and use were phased out in 1996. Class I substances primarily include CFCs, halons, carbon tetrachloride, and methyl chloroform.
Class II substances	Ozone depleting chemical compounds whose production and use will be phased out by the year 2030. Class II substances primarily include HCFCs.
clean coal technology	Any technology not in widespread use as of the date of enactment of the Clean Air Act Amendments that will achieve significant reductions in pollutants associated with the burning of coal.
clean fuels	Blends and/or substitutes for gasoline fuels, including compressed natural gas, ethanol, methanol, and others.
coke oven	An industrial process that converts coal into coke, which is one of the basic materials used in blast furnaces for the conversion of iron ore into iron.
cold temperature CO	A standard for automobile emissions of carbon monoxide (CO) to be met at a low temperature (that is, 20°F). Conventional catalytic converters are less efficient upon startup at low temperatures.
Control Techniques Guidelines	Guidance documents issued by EPA that define reasonably available control technology (RACT) to be applied to existing facilities that emit certain threshold quantities of air pollutants. They contain information on the economic and technological feasibility of available techniques.
emission control diagnostics	Computerized devices placed on vehicles to detect the malfunction of emissions controls and to notify the owner of the need for repair.
emission source	A unit process or point source releasing air emissions.
enhanced inspection and maintenance (enhanced I&M)	An improved automobile inspection and maintenance program that includes, as a minimum, expanded coverage of vehicle types and model years, tighter stringency of inspections, and improved management practices to ensure more effectiveness. This may also include annual, computerized, or centralized inspections; under-the-hood inspections to detect tampering with pollution-control equipment; and increase in the types and models of vehicles that are required to be inspected. The purpose of enhanced I&M is to reduce automobile emissions by ensuring that cars are running properly.
Federal Implementation Plan	Under current law, a federally implemented plan, used when a state is unable to develop an adequate plan, to achieve attainment of an air quality standard.
friable asbestos	Asbestos that can easily be crumbled or powdered.

halons	A family of compounds containing bromine used in fighting fires, whose breakdown in the atmosphere depletes stratospheric ozone.
hazardous air pollutant	An air pollutant to which no ambient air quality standard is applicable and which, in the judgment of the EPA, causes or contributes to air pollution which may reasonably be expected to result in increased mortality, or an increase in serious, irreversible, or incapacitating illness.
HCFCs (hydrochloroflouro- carbons)	Chlorofluorocarbons that have been chemically altered by the addition of hydrogen and that are significantly less damaging to stratospheric ozone than other CFCs.
HFCs (hydroflourocarbons)	A family of inert chemicals used as substitutes for CFCs and HCFCs in refrigeration, air-conditioning, and aerosol propellants. HFCs do not deplete the ozone layer.
hydrocarbons (photo- chemical oxidants)	Compounds of hydrogen and carbon that react in the lower atmosphere to contribute to ozone formation.
inspection and maintenance	A program providing for periodic inspections of motor vehicles to ensure that emissions of specified pollutants do not exceed established limitations (see “enhanced I&M”).
lead	A gasoline additive used to control engine knocking.
low NO _x burners	One of several combustion technologies used to reduce emissions of nitrogen oxides (NO _x).
lowest achievable emission rate	The strictest possible limits on emissions from new or existing major stationary sources in nonattainment areas.
major source	Any stationary facility or source of air pollution that emits, or has the potential to emit, 100 tons per year (tpy) of any pollutant; 10 tpy of any individual HAP; or 25 tpy of any combination of HAPs.
maximum achievable control technology	Emissions limitations, based on the best demonstrated control technology or practices in similar sources, to be applied to major sources emitting one or more of the listed toxic pollutants.
mobile sources	Regulated sources that include various forms of transportation (e.g., cars, trucks, and motorcycles) and non-road vehicles (e.g., locomotives and lawnmowers).

Montreal Protocol	An international environmental agreement to control chemicals that deplete the ozone layer. The protocol, which was renegotiated in June 1990, calls for a phaseout of CFCs, halons, and carbon tetrachloride by the year 2000 and a phaseout of chloroform by 2005. It provides financial assistance to help developing countries make the transition from ozone-depleting substances.
MTBE (methyl tertiary butyl ether)	An ether made from methanol and iso-butylene that is widely used in reformulated and oxygenated gasolines.
National Environmental Policy Act	A law passed in 1969 that declared a national policy to encourage productive and enjoyable harmony between humans and the environment, to promote efforts that will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humans, to enrich the understanding of the ecological systems and natural resources important to the nation, and to establish the Council on Environmental Quality.
nitrogen oxides (NO _x)	Chemical compounds containing nitrogen and oxygen that react with volatile organic compounds in the presence of heat and sunlight to form ozone. They are also a major precursor to acid rain. Nationwide, approximately 45 percent of NO _x emissions come from mobile sources, 35 percent from electric utilities, and 15 percent from industrial fuel combustion.
nonattainment area	An area in which one or more of the National Ambient Air Quality Standards is not met.
onboard controls	Devices placed on vehicles to capture gasoline vapors during refueling and then route the vapors to the engine when the vehicle is started so that they can be efficiently burned.
oxygenated fuel	Gasoline that has been blended with alcohols or ethers that contain oxygen to reduce CO and other emissions.
ozone (O ₃)	A compound consisting of three oxygen atoms that is the primary constituent of smog. It is formed through chemical reactions in the atmosphere involving volatile organic compounds, nitrogen oxides, and sunlight. Ozone can initiate damage to the lungs and to trees, crops, and materials. There is a natural layer of ozone in the upper atmosphere that shields the Earth from harmful ultraviolet radiation.
ozone depleting substance	Any substance having the potential to destroy stratospheric ozone (i.e., ozone depletion potential > 0).

ozone depletion potential	A measure of a substance's potential to destroy stratospheric ozone. ODP is measured on a scale from 0 to 1 (with 1 being the highest potential).
PM ₁₀ (particulate matter 10 microns in diameter)	A new standard for measuring the amount of solid or liquid matter suspended in the atmosphere ("particulate matter"). Refers to the amount of particulate matter less than or equal to 10 microns in diameter. The smaller PM ₁₀ particles penetrate to the deeper portions of the lung, affecting sensitive population groups such as children and people with respiratory diseases.
prevention of significant deterioration	An EPA program in which state and/or federal permits are required to restrict emissions for new or modified sources in places where air quality is already better than required to meet primary and secondary ambient air quality standards.
R-12	A chlorofluorocarbon with a trademark name of Freon, commonly used in refrigeration and automobile air-conditioning.
reasonably available control measures	A broadly defined term referring to technologies (including RACT) and other measures that can be used to control pollution. In the case of PM ₁₀ , this refers to approaches for controlling small or dispersed source categories, such as road dust, wood stoves, and open container burning.
reasonably available control technology	An emission limitation on existing sources in nonattainment areas, defined by EPA in a Control Techniques Guidelines and adopted and implemented by states.
reformulated gasoline	Gasoline with a different composition from conventional gasoline (for example, lower aromatic content) that results in the production of lower levels of air pollutants.
repowering	The replacement of an existing coal-fired boiler with one or more clean coal technologies in order to achieve significantly greater emission reduction relative to the performance of technologies in widespread use at the time of enactment of the Clean Air Act Amendments of 1990.
residual risk	The quantity of health risk remaining after application of the maximum achievable control technology.
sanctions	Actions taken against a state or local government by the federal government for failure to plan or implement a state implementation plan. Examples include the withholding of highway funds and a ban on construction of new emission sources.
sovereign immunity	A legal doctrine that protects a government from lawsuits unless it consents to be sued.

stage II controls (vapor recovery)	Systems placed on service station gasoline pumps to control and capture gasoline vapors during automobile refueling.
state implementation plan	A document prepared by a state and submitted to EPA for approval that identifies actions and programs to be undertaken by the state and its subdivisions to implement their responsibilities under the Clean Air Act Amendments of 1990.
stationary source	Any building, structure, facility, or installation that emits or may emit any pollutant and that contains any one or combination of the following: (a) affected facilities; (b) existing facilities; and (c) facilities of the type for which no standards have been promulgated.
sulfur dioxide (SO ₂)	A heavy, pungent, colorless air pollutant formed primarily by the combustion of fossil fuels. It is a respiratory irritant, especially for asthmatics, and is the major precursor to the formation of acid rain.
sulfur oxides (SO _x)	Compounds of sulfur and oxygen formed during fossil fuel combustion. They are a major precursor to acid rain.
transportation control measures	Steps taken by a locality to adjust traffic patterns (for example, bus lanes, right turn on red) or to reduce vehicle use (ridesharing, high-occupancy-vehicle lanes) in order to reduce vehicular emissions of air pollutants.
vehicle miles traveled	A measure of both the volume and the extent of motor vehicle operation; the total number of vehicle miles traveled within a specified geographical area (whether the entire country or a smaller area) over a given period of time.
VOCs (volatile organic compounds)	A group of chemicals that react in the atmosphere in the presence of heat and sunlight to form ozone. These do not include methane or other compounds determined by EPA to have negligible photochemical reactivity. Examples of VOCs include gasoline fumes (or vapors) and oil-based paints.
volatility	The tendency or ability of a liquid (such as gasoline) to vaporize.