implications for federalism to warrant the preparation of a Federalism Assessment.

Unfunded Mandates

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) [Pub. L. 104-4, 109 Stat. 48] requires Federal agencies to assess the effects of certain regulatory actions on State, local, and tribal governments, and the private sector. UMRA requires a written statement of economic and regulatory alternatives for rules that contain Federal mandates. A "Federal mandate" is a new or additional enforceable duty imposed on any state, local, or tribal government, or the private sector. If any Federal mandate causes those entities to spend, in the aggregate, \$100 million or more in any one year, the UMRA analysis is required. This proposed rule does not impose Federal mandates on any State, local, or tribal governments, or the private sector.

Environment

The Coast Guard has considered the environmental impact of this proposal and concluded that under figure 2–1, paragraph 34(g), of Commandant Instruction M16475.1C, this proposal is categorically excluded from further environmental documentation. A written Categorical Exclusion Determination is available in the docket for inspection or copying where indicated under ADDRESSES.

Other Executive Orders on the Regulatory Process

In addition to the statutes and Executive Orders already addressed in this preamble, the Coast Guard considered the following executive orders in developing this proposed rule and reached the following conclusions:

E.O. 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights. This proposed rule will not effect a taking of private property or otherwise have taking implications under this Order.

E.O. 12875, Enhancing the Intergovernmental Partnership. This proposed rule will not impose, on any State, local, or tribal government, a mandate that is not required by statute and that is not funded by the Federal Government.

E.O. 12988, Civil Justice Reform. This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of this Order to minimize litigation, eliminate ambiguity, and reduce burden.

E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks. This proposed rule is not an economically significant rule and does not concern an environmental risk to safety disproportionately affecting children.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reports and recordkeeping requirements, Security measures, Waterways.

Proposed Regulation

For the reasons set out in the preamble, the Coast Guard proposes to amend 33 CFR part 165 as follows:

PART 165—[AMENDED]

1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; 50 U.S.C. 191; 33 CFR 1.05–1(g), 6.04–6, 160.5; 49 CFR 1.46. Section 165.100 is also issued under authority of Sec. 311, Pub. L. 105–383.

2. Add temporary § 165.T01–060 to read as follows:

§ 165.T01-060 Safety Zone: Perth Amboy Fireworks, Raritan River, New Jersey.

- (a) Location. The following area is a safety zone: All waters of the Raritan River within a 360-yard radius of the fireworks barge in approximate position 40°29′49″N 074°16′25″W (NAD 1983), approximately 575 yards northwest of Raritan River Cutoff Channel Buoy 6 (LLNR) 36605).
- (b) Effective period. This section is effective from 8:50 p.m. until 10:20 p.m. on July 10, 1999. If the event is cancelled due to inclement weather, then this section is effective from 8:50 p.m. until 10:20 p.m. on July 11, 1999.
- (c) *Regulations*. (1) The general regulations contained in 33 CFR 165.23 apply.
- (2) All persons and vessels shall comply with the instructions of the Coast Guard Captain of the Port or the designated on-scene-patrol personnel. These personnel comprise commissioned, warrant, and petty officers of the Coast Guard. Upon being hailed by a U.S. Coast Guard vessel by siren, radio, flashing light, or other means, the operator of a vessel shall proceed as directed.

Dated: May 21, 1999.

R. E. Bennis,

Captain, U.S. Coast Guard, Captain of the Port, New York.

[FR Doc. 99–14286 Filed 6–4–99; 8:45 am]

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

36 CFR Part 1228

RIN 3095-AA81

Agency Records Centers; public meeting and extension of comment period.

AGENCY: National Archives and Records Administration (NARA).

ACTION: Proposed rule; notice of public meeting; extension of comment period.

SUMMARY: NARA published a notice of proposed rulemaking to update the standards that records center storage facilities must meet to store Federal records in the April 30, 1999, Federal Register beginning at page 23504. We will hold a public meeting for all interested parties on June 18, 1999, to answer questions about the proposed rule. We will take notes of the discussion, and place the notes in the record for this rule making.

We are also extending the comment period by one week to ensure that parties attending the meeting have sufficient time after the meeting to submit their comments.

DATES: The public meeting will be held on June 18, 1999, from 10 a.m. to noon.

Comments must be received by July 7, 1999.

ADDRESSES: The public meeting will be held in the Auditorium of the National Archives at College Park, 8601 Adelphi Road, College Park, MD 20740–6001.

Comments must be sent to Regulation Comment Desk (NPOL), National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740–6001. Comments may be faxed to 301–713–7270.

FOR FURTHER INFORMATION CONTACT: Nancy Allard at (301) 713–7360, ext. 226.

Dated: June 2, 1999.

John W. Carlin,

Archivist of the United States.
[FR Doc. 99–14381 Filed 6–4–99; 8:45 am]
BILLING CODE 7515–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[CA-227-151; FRL-6355-9]

Approval and Promulgation of State Implementation Plans; California—South Coast

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is concluding the Public Consultative Process (PCP) on mobile source emission reductions needed for attainment of the 1-hour ozone national ambient air quality standard (NAAQS) in the Los Angeles-South Coast Air Basin Area (South Coast). EPA is proposing to approve the State's update to the state implementation plan (SIP) for ozone in the South Coast to reflect the outcome of this process and the implementation status of some of the control measures. EPA is also proposing to approve the State's joint commitment with EPA to issue regulations to eliminate the remaining SIP shortfall as determined appropriate for each agency. EPA is proposing these actions under provisions of the Clean Air Act (CAA) regarding EPA action on SIP submittals, SIPs for NAAQS, and plan requirements for nonattainment areas.

DATES: Written comments must be received by June 21, 1999. On June 9, 1999, from 1 pm to 4 pm, EPA will hold a public meeting in Los Angeles to discuss the Public Consultative Process, continuing Federal and State mobile source responsibilities and commitments, and future revisions to the ozone SIP.

ADDRESSES: Comments should be sent to Dave Jesson, Air Planning Office (AIR–2), Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105–3901, or jesson.david@epa.gov.

The public meeting to discuss this proposed action will be held in the Roybal Conference Room (Room 286) of the Roybal Federal Building, 255 East Temple Street, Los Angeles, CA.

The rulemaking docket for this notice is available for public inspection at EPA's Region IX office during normal business hours. A reasonable fee may be charged for copying parts of the docket.

Electronic availability: This document is also available as an electronic file on EPA's Region 9 Web Page at http://www.epa.gov/region09.

Copies of related materials are also available for inspection at the following location: California Air Resources Board, 2020 L Street, Sacramento, California.

FOR FURTHER INFORMATION CONTACT: Dave Jesson (415) 744–1288 or jesson.david@epa.gov.

SUPPLEMENTARY INFORMATION:

I. Background

A. 1994 Ozone SIP

This proposed action relates to the 1994 ozone SIP for the South Coast Air

Basin ("South Coast") in California. In 1998, the South Coast recorded 1-hour levels at or above the NAAQS for ozone on 62 days, with a peak concentration of 0.244 parts per million (ppm), twice the NAAQS. The area continues to have by far the worst smog problem in the country.

EPA approved the 1994 ozone SIP for the South Coast on January 8, 1997 (62 FR 1150–1187).⁴ In addition to aggressive State and local control measures, the State's plan included seven "Federal measures," which the State believed EPA should adopt to control national mobile sources. The State attributed to these measures the following emission reductions in the South Coast in the year 2010: 109 tons per day (tpd) of NO_X and 47 tpd of

¹ For a description of the boundaries of the Los Angeles-South Coast Air Basin, see 40 CFR 81.305. The nonattainment area includes all of Orange County and the more populated portions of Los Angeles, San Bernardino, and Riverside Counties.

 $^2 The~1\text{-}hour~NAAQS~for~ozone~is~0.12~ppm.$ Ground-level ozone is formed when nitrogen oxides (NOx), volatile organic compounds (VOCs), and oxygen react in the presence of sunlight, generally at elevated temperatures. Strategies for reducing smog typically require reductions in both VOC and NOx emissions.

Ozone causes serious health problems by damaging lung tissue and sensitizing the lungs to other irritants. When inhaled, even at very low levels, ozone can cause acute respiratory problems; aggravate asthma; cause temporary decreases in lung capacity of 15 to 20 percent in healthy adults, cause inflammation of lung tissue; lead to hospital admissions and emergency room visits; and impair the body's immune system defenses, making people more susceptible to respiratory illnesses, including bronchitis and pneumonia. Children are most at risk from exposure to ozone because they breathe more air per pound of body weight than adults; their respiratory systems are still developing and thus more susceptible to environmental threats; and children exercise outdoors more than adults in the high-ozone months of summer

Direct exposure to $NO_{\rm X}$ and VOCs also has adverse public health consequences. Exposure to elevated $NO_{\rm X}$ concentrations can reduce breathing efficiency, increase lung and airway irritation, and exacerbate symptoms of respiratory illness, lung congestion, wheeze, and increased bronchitis in children. VOCs include many toxic compounds (such as (benzene), which can cause respiratory, immunological, neurological, reproductive, developmental, and mutagenic problems. Some VOCs have been identified as probable or known human carcinogens.

³According to preliminary information from EPA's AIRS database, the areas with the highest peak 1-hour ozone concentration for 1998 are: South Coast .244 ppm, Houston .230 ppm, Southeast Desert (the area immediately to the east of the South Coast) .202 ppm, Ventura County .174 ppm, San Joaquin Valley .169 ppm, San Diego County .164 ppm.

⁴The 1994 ozone SIP for the South Coast consists of two plans: *California's* 1994 State Implementation Plan for Ozone, which deals with the State's control measures, and the South Coast Air Quality Management District's 1994 Air Quality Management Plan, which includes all of the local control measures and other plan elements. The State's plan is available electronically at the California Air Resources Board's web site at www.arb.ca.gov/sip/sip.htm.

VOC.⁵ CARB calculated very much smaller emission reductions from the "Federal measures" in other ozone nonattainment areas of the State (Ventura, Sacramento, Southeast Desert, San Joaquin, and San Diego).

EPA did not agree that states have the authority to make these SIP assignments, but the Agency agreed that the Federal government should voluntarily help achieve emission reductions from sources beyond the regulatory authority of the State, in view of the unique reduction needs of the South Coast, the only ozone nonattainment area classified as "extreme" under the 1990 CAA Amendments. With the assistance of the State, EPA established a Public Consultative Process (PCP) to identify future mobile source strategies to provide the remaining reductions needed for attainment.

Both EPA and the California Air Resources Board (CARB) made enforceable commitments to adopt additional controls to achieve emission reductions determined to be appropriate at the end of the PCP. 40 CFR 52.238 and 40 CFR 52.220(c)(235)(I)(A)(I). EPA's final approval of the 1994 ozone SIP for the South Coast included a projected schedule for the PCP, with an initial meeting in July 1996 and a final meeting in June 1997 (62 FR 1186).

- B. Accomplishments in Reducing Emissions From Mobile Sources
- 1. Benefits of More Stringent Mobile Source Controls

After California adopted and submitted the South Coast 1994 ozone SIP, CARB and EPA have undertaken stringent new controls for most mobile source categories. It is important to note that these new mobile source measures will bring multiple benefits not only to the South Coast, but also to other areas of California and the nation.

First, the controls contribute emission reductions needed for attainment of the Federal health-based NAAQS for ozone. Despite significant progress over the past four decades, the South Coast continues to have by far the worst ozone problem in the country. South Coast's challenge in attaining the ozone NAAQS derives from the area's meteorology and topography, on the one hand, and the area's large population and industrial/commercial activity, on the other. As a result, attainment of the ozone NAAQS in the South Coast requires stringent

⁵The South Coast plan sometimes substitutes the term Reactive Organic Gases (ROG) for VOC. These terms are essentially synonymous and are used interchangeably throughout this document.

emissions reductions from every pollution source.

Second, the new mobile source standards also contribute reductions of particulate matter (PM, or soot), both by reducing (in many cases) emissions of primary particulate and by reducing gaseous PM precursors. In the South Coast, NO_X is one of the largest sources of PM, and emissions of VOC and sulfur oxides also contribute to formation of PM. The South Coast has one of the worst PM problems of urban areas in the country.

Third, mobile sources are a contributor to urban air toxics levels. For example, a number of adverse health effects have been associated with exposure to diesel exhaust levels found in the ambient air.

Fourth, the new mobile source controls discussed below help achieve parity of control, since many of the mobile source categories were previously uncontrolled or undercontrolled compared to requirements imposed on stationary industrial and commercial sources of pollution.

2. Overview of Federal Measures

The discussion below gives a brief overview of the State's "assignments" to EPA, followed by a description of promulgated or pending Federal controls. Additional information on EPA's national controls may be found at EPA's mobile source homepage (www.epa.gov/omswww). More details on California's own mobile source programs may be found in section I.E.1, and at CARB's homepage (www.arb.ca.gov/msprog).

a. Heavy-Duty Onroad Vehicles.

Measure M6 of California's 1994 ozone SIP calls for adoption by EPA of a national standard for heavy-duty diesel vehicles. CARB assumed that the NO_X standard would be 2.0 grams per brake horsepower-hour (g/bhp-hr) and would be implemented starting in 2004.

Both EPA and CARB have issued a 2.4 g/bhp–hr combined emission standard for NO_X and nonmethane hydrocarbons (NMHC) for model year 2004 and later heavy-duty diesel engines used in trucks and buses.⁷ The new standards represent a 50 percent reduction in NO_X from the 1998 and later model year NO_X standard. EPA and CARB settlement

agreements with manufacturers of heavy-duty vehicles and engines require early introduction of the 2004 engines beginning in October 2002. This settlement is discussed in section I.B.2.h, below. Finally, for the remaining heavy-duty on-road categories (i.e., the otto-cycle engines), EPA currently intends to propose within the next 60 days a stringent $\rm NO_{\rm X}$ plus NMHC emission standard effective in the 2004 model year. EPA expects to take final action on this proposal by the end of 1999.

b. Diesel Nonroad Engines. California's Measure M10 calls for adoption by EPA of a national standard for off-road diesel equipment. CARB proposed that the NO_X emission standard would be 2.5 g/bhp-hr and would be implemented starting in 2005.

From 1994 through 1998, EPA has issued standards for most categories of nonroad diesel engines, covering diverse equipment applications including farm tractors, bulldozers, road graders, excavators, forklifts, logging equipment, and portable generators. The standards are progressively phased in over the period 1996 through 2008, depending on engine type and size and the stringency of the standard. The new controls will reduce emissions by as much as two-thirds.

c. Industrial Equipment. Measure M12 provides for adoption by EPA of a national standard for off-road equipment rated between 25 and 175 horsepower (hp), and fueled with gasoline or liquid petroleum gas (LPG). CARB proposed that the standard would reduce NO_X emissions by at least 50 percent and hydrocarbon (HC) emissions by 75 percent.

In October 1998, CARB adopted new emission standards for spark-ignition engines above 25 hp. These engines are used in forklifts, airport ground service equipment, sweepers, generators, compressors, and other industrial applications, as well as recreational equipment, such as go-carts, all-terrain vehicles, and snowmobiles. The CARB controls will reduce NO_X and HC emissions by over 65 percent from all spark-ignition engines in 2010.

On February 8, 1999, EPA issued a proposed finding under CAA section 213(a) that large spark-ignition engines cause or contribute to air pollution. If EPA finalizes this determination, EPA must propose regulations for such engines by September 28, 2000, and EPA must issue final regulations by September 28, 2001, in order to comply with a consent decree. While it is not

possible to estimate with precision the emission reduction benefits from this rulemaking, the standards might be comparable to CARB's, although the compliance schedules may be different.

d. Marine Vessels. Measure M13 assumes adoption of national and international standards that will reduce NO_X emissions from new ocean-going marine engines by 30 percent. CARB assumed some ambient air quality contributions from movement of the shipping channel further from shore. Finally, M13 also assigns to EPA responsibility for issuing standards for new marine diesel engines used in vessels operating primarily in domestic waters, to reduce NO_X emissions by at least 65 percent.

On October 23, 1998, EPA issued final regulations for marine diesel engines rated less than 37 kilowatts (50 hp). EPA issued proposed regulations for new compression ignition (CI) marine engines rated at or above 37 kilowatts on December 11, 1998. Under the terms of a consent decree, EPA must issue the final regulations by November 23, 1999.9 These regulations will apply to new engines used for propulsion and auxiliary power on commercial vessels in a variety of marine applications, including fishing boats, tug and towboats, dredgers, coastal cargo vessels, and ocean-going vessels. The proposed regulations, if finalized, would apply NO_X limits that will reduce emissions nationally by approximately one-third.10

In addition, the International Maritime Organization (IMO) has adopted emission limits for all marine diesel engines rated above 130 kilowatts (kw) ocean-going vessels. These limits are contained in Regulation 13 of Annex VI of the International Convention on the Prevention of Pollution from Ships (MARPOL), which was adopted at Diplomatic Conference on September 26, 1997. The Annex will enter into

⁶Although EPA determined that the Federal assignments were not an approvable portion of the 1994 ozone SIP, EPA has nevertheless taken action to regulate most of these sources under the authority provided in the CAA.

 $^{^7}$ The standard also allows manufacturers the option of certifying to a 2.5 g/bhp-hr $\rm NO_X$ plus NMHC standard, with a limit of 0.5 g/bhp-hr on NMHC.

 $^{^8}$ Under a June 9, 1998 modification to the September 23, 1993 Partial Consent Decree in Sierra

Club v. Browner (D.D.C., No. 93-0124 (NHJ)), EPA has until September 29, 2000 to make a final determination that large gasoline engines do cause or contribute to air pollution within the meaning of CAA section 213(a)(3).

⁹Under an October 6, 1997 modification to the September 23, 1993 Partial Consent Decree in *Sierra Club v. Browner* (D.D.C., No. 93–0124 (NHJ)), EPA has until November 23, 1999, to take final action on the EPA's marine vessel regulations, proposed in August 29, 1997 and supplemented with a December 11, 1998 proposal. Under a November 30, 1998 modification to the same consent decree, EPA has until November 23, 1999 to issue a supplemental proposal for recreational dieselfueled marine engines and until October 31, 2000 to take final action on this supplemental proposal.

¹⁰ The long life span of these engines delays the full benefits of the regulations. EPA's estimate of national emission inventory impacts is a 10 percent decrease in 2010, 28 percent in 2020, and 34 percent in 2030.

force, and the NO_X limits will be enforceable, twelve months after fifteen countries, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant shipping, have ratified it. Because this may take several years, Regulation 13 was designed to ensure that benefits associated with the NO_x limits begin to accrue as early as possible. Specifically, the Annex VI NO_X limits will apply to any new marine diesel engines installed on a ship constructed on or after January 1, 2000, and to any marine diesel engine that undergoes a major conversion 11 on or after January 1, 2000. By ensuring that the NO_X limits will be enforceable back to these engines and vessels once the Annex goes into force, ship owners and engine manufacturers are expected to comply with the requirements beginning January 1, 2000. Nevertheless, due to the very long lives of these engines, the full benefits of the MARPOL standards may not be realized until 2030. For this reason, and because many vessels serving the Ports of Long Beach and Los Angeles already meet the Annex VI standards, EPA and CARB expect that the MARPOL Annex VI NOX limits will only contribute minimal SIP reductions in the South Coast by 2010. More meaningful reductions would be achieved by a further strengthening of the MARPOL NO_X limits, and the 1997 Conference adopted a resolution that would permit review of those limits at five year intervals after the entry into force of the Annex. This may not happen for several years, however, and it may be necessary to find a way to encourage the IMO to review these important emission limits before that

Under the PCP, EPA has held a series of stakeholder meetings to discuss strategies to reduce pollution associated with the marine vessel sector. Three workgroups were formed to focus on deep sea vessels, harborcraft, and port infrastructure.

Because of questions regarding the costs and the benefits of moving the shipping channel, members of the deep sea vessel workgroup signed an MOA to fund a \$400,000 tracer study in 1997 to compare onshore emissions under the current and proposed alternative shipping channel. Participants include EPA, CARB, SCAQMD, Navy, the shipping industry, and the ports. This complex study has not yet been finalized. The working group is also

reviewing draft results from a study contracted by EPA to assess the benefits of future emission standards and alternative strategies, including strategies to reduce ship speed and, as a consequence, NO_X emissions from the vessels. Finally, CARB is leading a technical workgroup tasked with evaluating technical issues associated with two alternative operational strategies for ocean-going vessels, and issuing a report by the end of 1999.

The harborcraft workgroup has explored the possibility of an MOU, under which the major tug operators might agree to a voluntary 20 percent reduction in NO_X emissions. In 1997 EPA provided \$350,000 to the SCAQMD to help fund a tug retrofit demonstration project. The project demonstrated the feasibility of a low-NO_X diesel engine capable of emitting at or below 5.5 g/ bhp-hr. Retrofits such as this may be subsidized under the Carl Moyer Memorial Air Quality Standards Attainment Program, a \$25 million clean air measure enacted by the State of California in 1998. The State also will receive \$20 million in fines as a result of the settlement with heavy-duty engine manufacturers for excess (offcycle) emissions; some of these funds may also be directed toward subsidies for cleaner engines.

The Ports of Los Angeles and Long Beach have recently completed a draft MOU on emission reductions from transportation infrastructure improvements at the ports. These improvements have been accomplished in recent years or will be completed over the next several years, and they were generally not assumed in the 1994 ozone SIP. The port modernizations will typically reduce truck emissions following extension of the rail lines to the docks. Other infrastructure improvements include road/rail grade separation projects, improved navigational channels, and the Alameda Transportation Corridor Project.

e. Locomotives. Measure M14 assumes a two-thirds reduction in locomotive NO_X emissions by 2010 from the combination of national locomotive standards and a clean locomotive fleet program in the South Coast.

On April 16, 1998, EPA issued regulations for new and remanufactured locomotives originally manufactured after 1972. The regulations take effect in 2000 and will be fully phased in by 2005. When full benefits from the standards are realized, the new standards are expected to reduce NO_X emissions by two-thirds and HC and PM emissions by 50 percent. In order to accelerate benefits and thereby achieve the SIP's 2010 emission reduction

targets, California and Class I freight railroads operating in the South Coast (i.e., Union Pacific and Burlington Northern/Santa Fe) entered into an agreement for a railroad fleet average emissions program (Memorandum of Mutual Understandings and Agreements, South Coast Locomotive Fleet Average Emissions Program, July 1998). In a Statement of Principles jointly signed with CARB and the Class I railroads on May 14, 1997, EPA has reserved its authority, in the event that the agreement fails to attain its identified emission reductions, to assure that the reductions called for in the agreement are achieved from the railroad sector and/or, if necessary, from other national transportation sources.

f. Aircraft. Measure M15 calls for EPA to adopt commercial aircraft engine standards that are 30 percent more stringent than existing standards for VOC and NO_X emissions.

(1) Emission Standards

Due to the international nature of the aviation industry, the International Civil Aviation Organization (ICAO) has been the forum for establishing international commercial aircraft engine standards. On May 8, 1997, EPA issued regulations reflecting the most recent standards adopted by the ICAO's Committee on **Aviation Environmental Protection** (CAEP). While these standards represent a 20 percent reduction from the previous ICAO limits for NO_X issued in 1981, no additional emission reductions are anticipated, since virtually all new commercial aircraft already are equipped with engines meeting the ICAO standards. ICAO is not expected to issue new standards until early 2001.

(2) Voluntary Agreement To Reduce Emissions From Ground Service Equipment (GSE)

EPA, CARB, SCAQMD, the Air Transport Association (ATA) and its member airlines, the Federal Aviation Administration (FAA), local commercial airports, environmental groups, and other stakeholders have met during the Public Consultative Process to identify ways to achieve additional reductions from the commercial aviation community. ATA is drafting an MOU to achieve these reductions at the five major commercial airports in the South Coast through use of cleaner GSE than otherwise required by applicable emission standards. When implemented, the MOU would yield small but important emission reductions through options including increased fleet turnover, greater use of engines employing alternative fuels, and electrification.

¹¹ "Major conversion" is defined in Regulation 13 of Annex VI as meaning an engine that is replaced by a new engine built on or after January 1, 2000; is substantially modified; or whose maximum continuous rating is increased by more than 10%.

(3) Other Voluntary Initiatives

On March 24, 1998, EPA and FAA signed an agreement to coordinate environmental matters regarding aviation. Among other measures, EPA and FAA agreed to develop a voluntary engine emission kit retrofit program and encourage the adoption of the voluntary program by the aviation community. Since the execution of the agreement, the focus of the voluntary process has broadened to consider a wider range of possible options for emission reductions from aircraft and at airports. The EPA-FAA agreement includes the following provision: "If the voluntary program is not successful, the parties agree to consider other mechanisms within the authorities of the respective agencies to achieve implementation of retrofit technologies in its fleet.'

ICAO's CAEP has also established an Emissions Technical Issues Working Group with subgroups to develop: (1) best operating practices to reduce emissions from aircraft, GSE, and auxiliary power units (APUs); (2) market-based options (caps, charges, etc.) to provide incentives for further reductions; and (3) approaches to secure air quality benefits from improved air traffic management and airport planning.

Beginning in 1998, EPA, FAA, and Department of Defense have been working with industry and environmental groups in this country to reduce pollution levels by means of advanced air traffic management systems and related technologies.

EPA, SCAQMD, and the City of Los Angeles have worked with the Budget rental car agency to establish at LAX in December 1998 the first electric vehicle rental options in the country. Through cooperative efforts with the SCAQMD and clean-fuel stakeholders, LAX and other airports in the area have established other important programs for use of clean alternative fuels in shuttles and delivery vehicles.

EPA has provided grants to support the Clean Airport Partnership. Among other activities, the partnership holds national airport summit meetings to find ways to reconcile airport growth and environmental progress.

(4) Research to Develop Cleaner Aircraft Engines

In the fall of 1998, EPA and the National Aeronautics and Space Administration (NASA) signed an MOA to formalize working agreements on aeronautical research and technology. NASA is continuing to explore the potential for additional emission reductions that could be achieved from technological improvements in the design of new and rebuilt commercial aircraft engines.

g. Marine Pleasurecraft. Measure M16 assumes that EPA will issue national standards to reduce HC emissions from marine pleasurecraft by 75 percent.

EPA has issued standards for recreational marine 2-stroke outboard engines and personal watercraft (such as jet skis), effective July 1996. The standards are phased in over a 9-year period to achieve a 75 percent reduction in HC. EPA has begun rulemaking to set emission limits for recreational 4-stroke sterndrive and inboard engines. These rules, if finalized, would establish standards for both gasoline and diesel recreational marine engines. However, the final implementation schedule for any such standards may not allow for rapid enough fleet turnover to accomplish all of the remaining 2 tpd of ROG emission reductions targeted by M16.

h. Additional Reductions beyond the Federal Assignments.

(1) Heavy-Duty Diesel Off-Cycle Settlement

In late 1998, EPA and CARB announced settlements of enforcement cases against manufacturers of heavyduty diesel engines. ¹² Among the settlement provisions were agreements by the manufacturers to introduce nationwide in October 2002, rather than 2004, engines meeting the 2.4 g/bhp-hr

combined NO_X and NMHC standard, discussed in section I.B.2.a., above. CARB assumes that 25 percent of vehicle miles traveled (VMT) by heavyduty diesel vehicles in the South Coast in 2010 will be from out-of-state vehicles. As a result, the early introduction of trucks meeting the new national standard will contribute emission reductions toward attainment of the ozone standard.

(2) National Tier 2 Motor Vehicle Standards

In November 1998, CARB adopted more stringent standards for light-duty cars and trucks and medium-duty vehicles up to 14,000 lbs. gross vehicle weight, as part of California's Low-Emission Vehicle (LEV) regulations. These standards, known as LEV II, were primarily intended to reduce NO_X emissions, especially from sport utility vehicles and light trucks. EPA is initiating rulemaking to promulgate new "Tier 2" national vehicle standards that are comparable to California's LEV II program. If finalized, EPA's standards would provide benefits in the South Coast not anticipated in the 1994 ozone SIP, by reducing the emissions of vehicles that have migrated into the area from out of the state.13 The ozone SIP assumes that 230,000 vehicles in the categories affected by the Tier 2 standards will travel 7.8 million miles in the South Coast in 2010.

C. Remaining Shortfall

As shown in Table 1 below, CARB and EPA currently estimate that final or pending Federal measures will achieve approximately the following emission reductions in the South Coast in 2010: 94 tpd NO_X and 39 tpd VOC. This leaves a projected shortfall of approximately 15 tpd NO_X and 8 tpd VOC in the attainment demonstration for the South Coast, based on emission factors, models, and inventories consistent with those used in the 1994 ozone SIP.

STATUS OF FEDERAL MEASURES [Tons per Day in the South Coast in 2010]

Measure	Assignment		Achieved/pending	
Wedsule	NO_X	ROG	NO_X	ROG
M6—HD Diesel Onroad Vehicles	16	2	16	2

¹²On October 22, 1998, EPA and CARB announced settlement of enforcement cases brought against Caterpillar, Cummins, Detroit Diesel, Volvo, Mack Trucks/Renault and Navistar. These manufacturers had equipped their engines with defeat devices that advanced the fuel injection timing when vehicles were driven at steady

highway speeds, thereby improving fuel economy at the expense of increased NO_X emissions. The settlement also involves civil penalties and agreements by the manufacturers to provide over \$100 million in funding for environmental projects either identified in the consent decrees or awarded to project applicants. California will receive 25

percent of the penalty funds and 20 percent of the project funds collected in the joint enforcement actions.

¹³ Some additional benefits may be associated with future EPA regulations restricting sulfur in gasoline, since the cleaner gasoline would increase the durability of catalytic converters.

STATUS OF FEDERAL MEASURES—Continued

[Tons per Day in the South Coast in 2010]

Manager	Assignment		Achieved/pending	
Measure	NO _X	ROG	NO_X	ROG
M10—Diesel Nonroad	44	5	41	9
M12—Industrial Equipment ¹	13	25	6	18
M13—Marine Vessels	9		2	
M14—Locomotives	23		23	
M15—Aircraft	4	3		
M16—Pleasure Craft		12		10
Total	109	47	88	39
National Tier 2 Standards ¹			4	
Heavy-Duty Settlement			2	
Grand Total	109	47	94	39
Shortfall			15	8

¹The rulemakings for these standards have not been completed and, therefore, the reduction numbers are projections.

Much of the shortfall is due to the State's expectation that EPA would issue stringent standards for commercial aircraft engines and ocean-going vessels, and that turnover in these engines would be rapid enough to achieve substantial reductions by 2010. As noted above, emissions standards for these categories have been established internationally through organizations within the United Nations. Unfortunately, the existing standards set by ICAO and the IMO will not achieve significant reductions by 2010 from commercial aircraft and ocean-going vessels, particularly due to the long lifespan of these engines.

There are also small shortfalls associated with M10 (Diesel Nonroad) and M16 (Pleasurecraft), and expected from forthcoming EPA regulations for M12 (Industrial Equipment). This would result if the national regulations establish standards or compliance schedules less aggressive than CARB had assumed.

D. EPA Proposed Consent Decree and Settlement Agreement

When EPA took final action to approve the 1994 ozone SIP, EPA expected to complete the PCP in June 1997. In lieu of approving the Federal measure assignments, the final action approving the SIP included commitments by EPA to undertake rulemaking at the PCP conclusion to issue any controls that were determined to be appropriate for EPA. EPA approved California's commitment to take the following actions as appropriate after the PCP: (1) to revise the South Coast attainment demonstration by December 31, 1997, to reflect the results of the PCP; and (2) to issue regulations by December 31, 1999, to accomplish

those emission reductions determined to be appropriate for CARB.

Difficult issues associated with aviation and shipping strategies have required more time to resolve than EPA initially anticipated, and EPA has not yet concluded the PCP. In 1998, the Coalition for Clean Air, Natural Resources Defense Council, and Communities for a Better Environment amended a complaint against EPA originally filed in 1997 (Coalition for Clean Air, et al. vs. SCAQMD, CARB, and USEPA, No. CV 97-6916 HLH (C.D. CA.)). The amended complaint sought relief against EPA for failing to adopt Measure M13 (Marine Vessels) and Measure M15 (Aircraft) or substitutes with greater or equivalent emissions, failing to conclude the PCP in June 1997, and failing to determine the respective obligations of EPA and the State as to the additional emission reductions needed.

Under a proposed consent decree with the environmental plaintiffs, EPA has now committed to conclude the PCP. The proposed settlement was signed by all parties and lodged with the Court on November 13, 1998, in the form of a stipulation, consent decree, and settlement agreement. EPA issued a notice of the pending settlement on December 9, 1998 (63 FR 67879), consistent with CAA section 113(g). Parties filed a motion to enter the agreement on May 10, 1999.

1. Consent Decree

The proposed consent decree includes the following EPA commitments:

1. EPA shall, pursuant to the Clean Air Act and 40 CFR 52.238, conclude the South Coast mobile source public consultative process by determining by July 1, 1999:

- a. What, if any, Volatile Organic Compounds ("VOC") and Nitrogen Oxides ("NO $_{\rm X}$ ") mobile source controls, including associated emissions reductions, are needed to attain the 1-hour ozone National Ambient Air Quality Standard ("NAAQS") in the South Coast Air Basin by no later than November 15, 2010 and are appropriate for EPA to promulgate;
- b. EPA's rulemaking schedule for the controls identified in subparagraph 1(a). In determining such schedule, EPA will attempt to propose as many such measures as feasible by no later than December 31, 2000 and to promulgate final measures by no later than December 31, 2001;
- c. What, if any, VOC and NO_X mobile source emission reductions are needed to attain the 1-hour ozone NAAQS in the South Coast Air Basin by no later than November 15, 2010 and are appropriate for the State of California to achieve through enforceable measures; and
- d. The schedule for the State to submit to EPA a revised demonstration to attain the 1-hour NAAQS in the South Coast Air Basin by no later than November 15, 2010.
- 2. 40 CFR 52.220(c)(235)(I)(A)(1) contains a State commitment to submit control measures to achieve emission reductions determined to be appropriate, if any, by December 31, 1999. However, prior to July 1, 1999, EPA will discuss with the State whether the deadline in such commitment is still appropriate.

EPA is proposing to take the actions described in Section II of this document to comply with these provisions in the pending consent decree.

2. Settlement Agreement

Accompanying the consent decree is a proposed settlement agreement, in which EPA agrees to undertake various additional activities as part of its efforts to ensure that the Federal government does its share in helping to solve the ozone problem in the South Coast. The proposed settlement agreement commits EPA to the following specific actions. The terms of the settlement agreement are reproduced for informational purposes and are not proposed for public comment, although EPA does invite suggestions from the public on the best ways for the Agency to implement its commitments.

a. Federal Agencies. EPA Region 9 will, in consultation with the General Services Administration (GSA) and the Department of Energy (DOE), promote the purchase and use of low-emitting motor vehicles and other emission reduction and pollution prevention activities by Federal agencies located in the South Coast. With respect to the purchase of low-emitting motor vehicles, EPA will, in consultation and coordination with GSA and DOE, promote efforts of Federal agencies located in the South Coast to meet or exceed the alternative-fuel vehicle purchase requirements contained in the Energy Policy and Conservation Act and Executive Order 13031, including the requirements that, starting on July 1, 1999 and thereafter, at least 75 percent of the new vehicle purchases by the Federal agencies for use in the South Coast be alternative-fueled vehicles and that all Federal agencies located in the South Coast take steps to maximize the emission reductions achieved under this program.

b. Aircraft, Airport, Ocean-Going Vessels, and Ports. EPA will continue to provide forums and staff and management support for negotiating agreements to achieve feasible reductions in the South Coast from these categories, through operational strategies. EPA will also continue to work with lead Federal agencies negotiating international controls on aircraft engines and ocean-going vessels to achieve the greatest feasible emissions reduction benefits. Whenever possible, EPA will involve CARB, SCAQMD, and the environmental groups in these activities. EPA will provide to the public information on actions taken by the airline industry pursuant to the FAA-EPA agreement, and the emissions reductions achieved by these actions, and will involve the

public, as feasible and appropriate, in the development and implementation of future agreements on voluntary retrofit programs and other voluntary programs. Within 90 days of issuing the final rulemaking on marine vessel engines, EPA will complete an assessment of the feasibility of establishing incentive programs designed to increase the number of lower emitting engines in fleets which operate exclusively in the South Coast.

c. National Standards for Onroad Heavy-Duty Diesel-Cycle Engines. During the public comment period following issuance of the proposed 1999 review to reassess the appropriateness of the year 2004 HDDV standards, EPA will hold a public meeting in the Los Angeles area to present information on the impacts of the HDDV standards on the South Coast and any measures available and consistent with the Clean Air Act to assure the maximum emission reductions from the HDDV rule in the South Coast. Information from this meeting and other outreach efforts relating to the South Coast will be considered in the final determination made pursuant to the 1999 review.

d. Retrofit requirements for onroad and nonroad vehicles and engines in the South Coast Air Basin. EPA will provide technical assistance to CARB to use the State's authority to require retrofitting of used nonroad engines. If CARB decides to provide incentives to stimulate retrofit rather than to require it, EPA will provide assistance in the State's efforts to comply with applicable Clean Air Act requirements for approval and credit of such measures.

e. Concentration of Cleaner Preempted Engines (Farm and Construction Equipment <175hp) in the South Coast. EPA will undertake a study of the benefits and costs and legality of a Federal program, perhaps particularly in areas classified as extreme and severe for ozone, that would provide incentives for manufacturers to increase sales and use of equipment powered by engines certified and produced to meet the most stringent exhaust emission standards then applicable, e.g., through increased fleet turnover. EPA intends to complete the study by September 1, 1999. The study will estimate as precisely as possible the emission reduction benefits, anticipated compliance costs and other impacts (including energy and safety considerations) on vehicle/engine manufacturers and owners, and emissions and air quality impacts both

within and outside the area(s) of concentration, including a specific analysis for the South Coast. If EPA finds that the incentive approach is feasible, needed, and does not impede progress in other parts of the country, EPA intends to undertake expeditious actions to implement the program, with the goal of ensuring emission reduction benefits at the earliest feasible date.

E. State Update to the 1994 Ozone SIP for the South Coast

On May 20, 1999, CARB submitted a SIP update consisting of the following documents:

- (1) An update to the South Coast ozone SIP, reporting on implementation of CARB and EPA control measures, which California assumed in the 1994 ozone SIP for the South Coast; and
- (2) Executive Order G-99-037 committing the State: (a) to continue working with EPA to achieve the emission reduction commitments in the SIP for federal measures; (b) to adopt by December 31, 2000, and submit as a SIP revision, a revised attainment demonstration for the Federal 1-hour ozone standard in the South Coast; and (c) to adopt by December 31, 2001, control measures sufficient to achieve any additional emission reductions which are determined to be appropriate for CARB.

EPA found the submittal to be complete on May 20, 1999.¹⁴

1. Report on the Status of CARB Adoption of Control Measures in the 1994 Ozone SIP Submittal

CARB's report reviews the CARB and EPA accomplishments over the past four years in adopting controls which CARB committed to adopt or "assigned" to the Federal government. The report also provides references to adopted CARB regulations and associated emission reductions which fulfill the majority of CARB's near-term obligations under the 1994 ozone plan. The report uses the 1994 ozone SIP's currency, i.e., the emissions factors and emissions inventories consistent with those used in the 1994 ozone SIP, rather than improved inventories. The report also uses the term Reactive Organic Gases (ROG) in lieu of the Federal terminology, VOC.

The CARB update includes a table showing the status of CARB measures in the 1994 ozone SIP ("CARB Progress toward 1994 SIP Commitments").

¹⁴ EPA adopted the completeness criteria on February 16, 1990 (55 FR 5830) and, pursuant to

section 110(k)(1)(A) of the CAA, revised the criteria on August 26, 1991 (56 FR 42216).

CARB PROGRESS TOWARD 1994 SIP COMMITMENTS

[Tons per day in South Coast in 2010]

Source category and CARB measure	1994 SIP commitment		Adopted or planned rule		(Shortfall)	
	ROG	NO _X	ROG	NO _X	ROG	NO_X
Passenger Cars and Light-Duty Trucks:						
M1: Car Scrappage	14	11	0	0	(14)	(11)
M2: Advanced Technology	10	15	7	25	(3)	10
Medium- and Heavy-Duty Gasoline						
Trucks:						
M3: Accelerated emission stand-						
ard	3	33	3	27	0	(6)
M8: Emission standard	0	3	0	3	0	0
Heavy-Duty Diesel Trucks & Buses:						
M4: Cleaner engine incentives	0	1	0	1	0	0
M5: 2004 std plus early reductions	5	56	5	51	0	(5)
New: Off-cycle diesel settlement			0	5	0	5
Off-Road Diesel Equipment:						
M9: Emission standard—adopt						
1999	3	34	3	34	0	0
Off-Road Gasoline and LPG Equip-						
ment:						
M11: Emission standard	23	12	25	7	2	(5)
Off-Road Motorcycles:						
New: Emission standard			0.8	0.3	0.8	0.3
Marine Pleasurecraft						
New: Emission standard beyond						
M16			4	0	4	0
Cleaner-Burning Gasoline:						
New: Combustion chamber de-						
posits			0	10	0	10
Small Off-Road Engines:						
Baseline: Changes to emission						
std			(2)	0	(2)	0
Consumer Products:			()		` '	
CP2: Mid-term measures	36	0	9	0	(27)	0
Aerosol Paints:					` '	
CP3: Aerosol paints standards	7	0	5	0	(2)	0
CARB Settlement Commitments:					` '	
New: Measures adopted by 12/99			12	0	12	0
New: Measures adopted by 12/00			14	2	14	2
New: Measures adopted by 12/01			16	0	16	0
Total for Measures due by						
12/01	101	165	101.8	165.3	0	0

The following discussion summarizes the State's update with respect to each CARB and EPA control measure identified in the State's 1994 submittal.

a. Light- and Medium-Duty Vehicles (State Measure M1—Accelerated Retirement of Light-Duty Vehicles, and State Measure M2—Improved Control Technology for Light-Duty Vehicles) Measure M1 called for accelerated retirement of cars and light trucks. CARB expects to need to pursue alternatives to the scrap program because of the lack of a funding mechanism. Measure M2 provided for additional emission reductions from cars and light trucks through more stringent emission standards beginning in 2004. The Low-Emission Vehicle II (LEV II) regulations implementing M-2 were adopted in November 1998 and achieved 52 tpd of emission reductions: 7 tpd of ROG and 45 tpd of NO_X. LEV II will provide 30 tpd of NO_X reductions beyond the M–2 commitment, and the State is applying 20 tpd toward the long-term mobile source measure for advanced control technologies or techniques (known as the "Black Box"). ¹⁵ LEV II also left a 3 tpd ROG shortfall which must be made up through new measures.

In 1998, CARB adopted a new measure calling for tighter emission standards for on-road motorcycles to take effect beginning in 2000. The emission reductions associated with this measure were not included in the SIP,

and provide additional reductions toward the CARB's overall commitments.

b. Medium- and Heavy-Duty Gasoline Trucks (State Measure M3—Accelerated Ultra-Low Emitting Vehicle Requirement for Medium-Duty Vehicles; State Measure M8—Heavy-Duty Gasoline Vehicles; Lower Emission Standards in California). Measure M3 was adopted in 1995, but a calculation error in the 1994 SIP resulted in a shortfall in the associated emission reductions even though the regulation achieved the performance standard specified in the SIP. Measure M8 for heavy-duty gasoline trucks was also adopted in 1995, and achieved the performance standard in the SIP.

c. Heavy-Duty Trucks and Buses (State Measure M4—Heavy-Duty Diesel Vehicles; Early Introduction of 2.0 g/

 $^{^{15}}$ CAA section 182(e)(5) authorizes EPA to approve long-term, conceptual measures that rely on new technologies as part of the attainment demonstration for the South Coast, the only ozone nonattainment area classified as "extreme" under the CAA

bhp-hr NO_X Engines in Fleets through Incentives: State Measure M5—Heavy-Duty Diesel Vehicles; additional NO_X Reductions in California; State Measure M7-Accelerated Retirement of Heavy-Duty Vehicles). CARB is currently implementing M4 through the Carl Moyer program and the State is also working to secure continuing funding for the Carl Moyer program. Measure M5 required a California emission standard for heavy-duty diesel trucks and buses that would parallel national standards to be implemented in 2004. California adopted the national standard in 1998, achieving over 90 percent of the M5 commitment. This measure also assumed that California would implement the new national standard for diesel trucks and buses two years early (in 2002). However, based upon further analysis, CARB concluded that a California-only standard could harm the state's economy without providing any emission benefits if truck operators simply based their operations out of state. The 5 tpd of emission benefits associated with an early California-only standard will be achieved through the diesel off-cycle settlement, discussed above in section I.B.2.h.

Measure M7 in the original 1994 SIP was replaced with measure M-17 in 1998. Measure M-17 is a long-term commitment to reduce emissions from heavy-duty diesel engines through inuse compliance programs and possibly

further incentives.

d. Off-Road Equipment (State Measure M9—Off-Road Diesel Equipment—2.5 g/bhp-hr NO_X Standard; State Measure M11-Industrial Equipment, Gas & LPG). CARB is currently developing a regulation to implement measure M9 to reduce emissions from off-road diesel equipment. Under the terms of a 1996 agreement between CARB, EPA, and the engine manufacturers, emission standards for off-road diesel engines will phase-in beginning in 2001—four years earlier than expected in the SIP. This measure is in development and will be considered by the Board in 1999.

Under measure M11, CARB adopted new emission standards for off-road equipment (like forklifts) powered by spark-ignition engines. The adopted regulation provides 2 additional tpd of ROG emissions, but falls 5 tpd short of

the NO_X commitment.

In 1998, CARB modified existing emission standards for small off-road engines, such as those used in lawn and garden equipment, to address technical feasibility concerns and higher than expected deterioration in emission performance. The modified regulations focus on reducing deterioration.

However, because deterioration emissions were not included in the 1994 SIP inventory, there is no credit in 1994 SIP currency for these reductions. The 2 tpd shortfall resulting from the regulatory changes must be made up through other strategies.

In 1998, CARB also adopted new emission standards for marine pleasurecraft, such as outboard motors, personal watercraft, and small jet boats. In the process of improving the emission inventory, CARB found that emissions from marine pleasurecraft were much higher than assumed in the 1994 SIP. The new emission standards will achieve significant real emission reductions. However, because the marine pleasurecraft inventory in the 1994 SIP is modest, the emission reductions in SIP currency are relatively small. Nevertheless, the new marine pleasurecraft standards provide additional reductions in 2010. When the statewide SIP strategy is revised in 2000, CARB will update the marine pleasurecraft inventory and take full credit for the benefits of the new regulation.

e. Mobile Source Fuels. With the introduction of cleaner-burning gasoline in 1996, gasoline refiners also introduced additives to reduce combustion chamber deposits. The decrease in combustion chamber deposits led to an unexpected additional decrease in NO_X emissions. In 1998, CARB adopted regulations to require the use of such additives to "lock in" the NO_X benefits already realized. The emission benefits of this regulation will decrease over time, providing 10 tpd of additional NO_X reductions in the South Coast in 2010.

f. Consumer Products and Aerosol Paints. The 1994 SIP called for 43 tpd of ROG reductions from consumer products and aerosol paints measures to be adopted by 1997. Adopted measures thus far have achieved 14 tpd of emission reductions, leaving a shortfall of 29 tpd. The State believes that additional reductions from consumer products are achievable, but at a lower level of effectiveness than called for in the SIP. As a result, CARB expects to look to other source categories to provide supplemental emission reductions in the near-term, and reevaluate the appropriate level for longterm commitments for consumer products in the next comprehensive SIP update in 2000.

g. State Actions to Eliminate Near-Term Emissions Reduction Shortfall. The State's SIP update acknowledges that the total near-term reductions achieved fall short of CARB's SIP goal. In SIP currency, CARB has a near-term shortfall of 42 tpd of ROG and 2 tpd of NO_{X} . The State presents the following description of its activities in the future to address this shortfall:

We recognize our responsibility to eliminate these deficits so that the ozone standard can be attained by the statutory deadline. Over the next three years, ARB has agreed to adopt and implement measures to eliminate the near-term shortfall. Toward that end, we are planning to develop and propose a number of new regulatory measures in 1999 and 2000, and to take further steps to address the deficit.

ARB staff has pledged to consider, develop, and propose regulations to reduce emissions associated with gasoline refueling, revisit medium- and heavy-duty gasoline truck standards, reduce the emission standard for heavy-duty buses, require the use of clean diesel fuel in locomotives, adopt a suggested control measure for architectural coatings, and pursue additional emission reductions from consumer products. Additional or alternate measures may be added or substituted so long as the aggregate emission reductions are achieved.

EPA agrees with the State that this commitment reflects expeditious action to achieve the reductions required in the 1994 ozone SIP.

h. Long-Term Measures. As discussed earlier, the SIP also commits CARB to achieve 102 tpd of ROG and 30 tpd of NO_X in the long-term. The remaining long-term NO_X commitment has been reduced to 10 TPD because 20 TPD of the additional NO_X reductions from LEV II have been applied to the mobile source "Black Box."

Among the long-term commitments is measure M17, a replacement measure submitted to EPA in 1998 to substitute for measure M7, accelerated retirement program for heavy-duty trucks. M17 relies on an expanded in-use compliance program, which may include in-use NO_X testing plus supplementary incentives. The SIP submittal identifies an adoption date of 2004, with implementation beginning in 2005. Under the terms of the State's settlement with the Natural Resources Defense Council, Coalition for Clean Air, and Communities for a Better Environment (Coalition for Clean Air, et al. vs. SCAQMD, CARB, and USEPA, No. CV 97-6916 HLH (C.D. CA.)), CARB agreed to accelerate the adoption of M17 to 2003, if technically feasible.

The remaining long-term commitments were not specifically addressed in the lawsuit settlement. However, CARB will host a New Technologies Symposium in October 1999 to explore technologies capable of achieving zero and near-zero emissions, assess the feasibility of developing new regulations based on the technologies, and preview CARB's latest approaches

to making up the remaining SIP shortfalls.

2. CARB Review of Federal Actions That Contribute Emission Reductions

The State's report notes that EPA has made significant progress toward reducing emissions from federal sources. The following section summarizes the State's review of progress toward the Federal measures for each source category.

- a. Heavy-Duty Diesel Trucks and Buses. The State notes that EPA's adoption of new national standards in 1997 achieved the Federal emission reductions from heavy-duty diesel vehicles in Measure M6 of the 1994 ozone SIP submittal. In addition, the State calculates an additional 2 tpd of NO_X emission reductions from the settlement of the off-cycle enforcement action against diesel engine manufacturers.
- b. Off-Road Equipment. CARB states that EPA's 1998 national standards for diesel engines used in off-road equipment implements Measure M10 in the 1994 ozone SIP submittal. Under the terms of a 1996 agreement between CARB, EPA, and the engine manufacturers, emission standards for off-road diesel engines will phase in beginning in 2001—four years earlier than expected in the SIP. The adopted regulation provides 4 tpd of ROG beyond the reductions assumed in the 1994 ozone SIP submittal, but falls 3 tpd short in NO_X reductions.
- c. Marine Pleasurecraft. The State's report indicates that the 1994 ozone SIP submittal reflected EPA's original intent to control stern drive engines, but EPA's 1995 emissions standards did not do so, resulting in a shortfall of 2 tpd of ROG reductions compared to Measure M16.
- d. Locomotives. CARB concludes that EPA's stringent emission standards for new and re-built locomotives, coupled with CARB's Memorandum of Agreement with rail operators in the South Coast, are together expected to achieve the full emission reductions from Measure M14 in the 1994 ozone SIP submittal.
- e. Marine Vessels. The State observes that marine vessels are among the most challenging categories from which to obtain emission reductions because emission standards are established through an international process. CARB's report estimates that new IMO emission standards that take effect in 2000 will provide 1.1 tpd of NO_X reductions. EPA's own emission standards for the captive fleet of diesel marine engines provide an additional 0.5 TPD of NO_X reductions. Additional reductions of 7 TPD of NO_X would still

need to be achieved to meet the target in M13.

f. Aircraft. Regarding Measure M15, aircraft emission standards have traditionally been set by ICAO. CARB states that, because EPA preferred to work through the ICAO process to pursue aircraft engine emission standards, the consultative process has focused on voluntary strategies to reduce emissions from airport ground access transportation and ground support equipment. EPA and FAA have also convened a stakeholder process with state air agencies, airlines, engine manufacturers, and other interested parties to try to develop a national voluntary agreement for emission reductions from aircraft and related sources. Since none of these approaches have been finalized, there are no creditable emission reductions from aircraft or airports yet.

3. CARB Recommendations for Near-Term Federal Initiatives

Based on EPA's completed rulemakings and initiatives that CARB expects EPA to complete shortly, CARB concludes that the total reductions fall short of the emission reductions called for from Federal measures in the 1994 ozone SIP submittal by 8 tpd of ROG and 15 tpd of NO_X. The State expresses its belief that new measures under development or consideration by EPA, plus longer-term strategies, offer the opportunity for significant additional emission reductions from Federal sources to decrease or eliminate the remaining shortfall.

CARB observes that, in the near-term, EPA could develop various strategies, which have the potential to help make up shortfalls. The State identified the following possible Federal initiatives as under development.

a. Light- and Medium-Duty Vehicles. CARB discusses potential Tier 2 standards for passenger cars and light trucks nationwide, which were not anticipated in the 1994 SIP. The State already credits EPA with 4 tpd of NO_X reduction in its shortfall analysis, and notes that additional reductions might be achieved if the heavier sport-utility vehicles are subject to an interim NO_X standard in the national program. In commenting on EPA's accompanying proposal to limit sulfur in gasoline to levels currently required in California, CARB notes that the sale of lower sulfur gasoline nationwide will contribute to the success of the State's LEV II program by allowing Californians to travel out of state without fear that dirtier gasoline will poison the catalytic converter or degrade the emission control system in their vehicles.

- b. Heavy-Duty Gas Trucks. CARB notes that new national emission standards for heavy-duty gasoline trucks might be issued in the near future, providing additional benefits beyond CARB's M8 commitment for reducing emissions from heavy-duty gasoline trucks.
- c. Off-Road Spark-Ignition Equipment. The State discusses reduction estimates from potential EPA regulations for off-road spark-ignition engines. CARB estimates an emission reduction shortfall of 7 tpd ROG and 7 tpd NO $_{\rm X}$, assuming that the regulations will be based on California's standards but would be implemented in 2004 instead of 2001, due to EPA resource limitations.
- d. Marine Pleasurecraft. CARB references national emission standards for inboard engines used in marine pleasurecraft engines in 1999, with implementation beginning in 2004. CARB discusses the possibility that in this rulemaking EPA may issue emissions standards for recreational diesel marine engines, in the same timeframe as the gasoline engines. The State believes that these sets of standards could remedy the 2 tpd shortfall in ROG reductions that resulted from the changes EPA made in its proposed marine pleasurecraft regulations when the rules were finalized in 1995.
- e. Marine Vessels. The State's update reports on the prospect of final national emission standards for marine diesel engines. The State discusses a technical workgroup that is evaluating technical issues associated with potential operational strategies for deep sea marine vessels (i.e., moving the shipping channel and/or speed reduction). The working group expects to complete its technical assessment of the two alternatives by the end of 1999. Assuming that an appropriate operational strategy is selected in 2000, the State estimates that implementation could begin in the 2000-2003 time frame depending on which strategy is chosen. Additional time may be needed depending on the level of coordination and involvement of other organizations such as the U.S. Navy, U.S. Coast Guard, and IMO. CARB also encourages EPA to work with the U.S. Coast Guard to encourage IMO to adopt more stringent second tier standards earlier than currently scheduled.
- f. Clean Diesel Fuel. CARB notes that EPA is beginning a process that may lead to new nationwide specifications in 2000 for fuel used in on-road vehicles and potentially off-road equipment as well. If promulgated, the State assumed that the Federal requirements for low-

sulfur diesel fuel would result in lower emissions from vehicles, trucks and locomotives that cross into California from other states.

g. Federal Incentives. The State indicates that Federal financial incentives could support cost-effective programs that directly reduce emissions by accelerating the move to cleaner engines in school and transit buses, as well as mobile sources under federal control like locomotives, farm and construction equipment, harborcraft, ships, and aircraft. CARB believes that California's Carl Moyer program for heavy-duty diesel engines provides a successful model. In partnership with CARB and local districts, EPA could target incentives to accelerate the replacement of the dirty engines that run for decades (20 to 40 years or more in some cases) with much cleaner models that reduce ozone-forming emissions (plus air toxics) at a relatively low cost. The State believes that these types of incentives would be an ideal use for the proposed \$200 million Clean Air Partnership Fund. According to the State, the Federal government could also take a stronger leadership role in accelerating the turnover of its own vehicle fleet to cleaner models, including expanded use of alternativefueled vehicles.

4. CARB Recommendations for Longer-Term EPA Actions

CARB encourages EPA to evaluate the strategies described below for technical feasibility, air quality benefits, and cost-effectiveness.

a. Heavy-Duty Diesel Vehicle Emission Standards. As part of the 1995 Statement of Principles, EPA, CARB, and engine manufacturers agreed to evaluate whether emission standards for heavy-duty diesel vehicles can be tightened beginning in 2008. Further lowering the NO_{X} and particulate matter emission standards from heavy-duty diesel vehicle in concert with cleaner diesel fuel would reduce emissions and significantly reduce public exposure to particulate diesel exhaust.

b. In-Use Compliance Program for Heavy-Duty Diesel Vehicles. California's report encourages EPA to rely on CARB's ongoing work (SIP measure M17) to develop an in-use compliance program for NO_X emissions from heavy-duty diesel vehicles as the basis for a national program.

c. Aircraft Engines. As part of the effort to pursue all possible approaches to reducing airport and aircraft-related emissions, the State urged EPA to: work with engine manufacturers to encourage the development and commercialization of aircraft engines that emit less NO_X; work with airlines on voluntary

programs to achieve an increasingly cleaner aircraft fleet; work with FAA to pursue ICAO aircraft engine emission standards that, at a minimum, reflect the lowest emitting currently available aircraft engines; and pursue where necessary regulations to ensure emission reductions from aircraft operations.

II. Proposed EPA Action

A. Commitment To Eliminate Remaining Shortfall

EPA, CARB, and affected stakeholders, including the South Coast Air Quality Management District (SCAQMD) and the environmental plaintiffs, have met during the PCP and have identified various approaches, particularly for the aviation and marine vessel categories, that have the potential to contribute additional reductions that could reduce or eliminate the remaining shortfall. The PCP participants generally agree, however, that it is not possible to identify specific emission reduction measures for these difficult source categories by the July 1, 1999 deadline for concluding the PCP, since more time will be required to resolve technical issues relating to the benefits and feasibility of control options.

Therefore, EPA and CARB intend to continue a focused cooperative effort to review these remaining questions and agree upon the best approach for achieving the relatively small balance of reductions still unaccomplished. CARB has committed to continue working with EPA and affected parties to achieve the emission reduction commitments in the SIP for Federal measures, and to adopt by December 31, 2001, control measures needed to achieve any additional emission reductions which are determined to be appropriate for CARB. EPA proposes to assume responsibility for identifying appropriate Federal measures, which would be adopted as expeditiously as possible but no later than December 31, 2001. Whenever feasible, any Federal measures would be proposed by December 31, 2000.

EPA proposes to complete any actions identified as appropriate for EPA rulemaking under the Agency's enforceable commitment, promulgated at the time of the 1994 ozone SIP approval, "to undertake rulemaking, after the South Coast mobile source public consultative process, to promulgate any VOC and NO_X mobile source controls which are determined to be appropriate for EPA and needed for ozone attainment in the Los Angeles-South Coast Air Basin Area." 40 CFR 52.238. EPA believes that this approach is consistent with the EPA commitments

under sections I.1(a) and I.1.(b) of the proposed consent decree, quoted above, although EPA notes that actions taken to reduce emissions might not be limited to controls on mobile sources and fuels.

EPA is currently considering various options including the projects discussed in the overview of Federal Measures in section I.B.2, and CARB's suggested list of Federal initiatives in sections I.E.3 and I.E.4, that may achieve all or portions of the remaining reductions. Once EPA decides which options to pursue, the Agency will undertake formal rulemaking, with public notice and comment opportunities. EPA will inform and involve State and local stakeholders in this process.

Finally, EPA intends to set expeditious implementation dates for any resulting national regulations consistent with the Agency's CAA authority, to help South Coast achieve, at a minimum reductions needed to reach attainment by 2010.

B. Approval of SIP Update

EPA is also proposing to approve the update to the South Coast ozone SIP submitted by CARB on May 20, 1999. As noted above, the update consists of a report on the status of implementation of CARB's committal measures in the 1994 ozone SIP, along with a report on emission reductions from EPA national mobile source regulations, in the context of the South Coast ozone SIP attainment demonstration.

As discussed above, EPA and CARB have agreed that controls will be identified and adopted by the appropriate agencies by December 31, 2001 to eliminate the shortfall, currently estimated to be 8 tpd VOC and 15 tpd NO_X. CARB has made such an enforceable commitment as a replacement for the existing State commitment (40 CFR 52.220(c)(235)). CARB also committed to revise the South Coast ozone attainment demonstration by December 31, 2000. EPA proposes to approve Executive Order G-99-037, dated May 20, 1999. and submitted on May 20, 1999, which updates the timelines in Executive Order G-96-031. EPA believes that this approach is consistent with sections I.1.(c) and I.1.(d) of the proposed consent decree.

Nothing in this action should be construed as permitting or allowing or establishing a precedent for any future request for revision to any state implementation plan. Each request for revision to the state implementation plan shall be considered separately in light of specific technical, economic, and environmental factors and in

relation to relevant statutory and regulatory requirements.

III. Administrative Requirements

A. Executive Order 12866

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order (E.O.) 12866, Regulatory Planning and Review.

B. Executive Order 12875

Under Executive Order 12875, Enhancing the Intergovernmental Partnership, EPA may not issue a regulation that is not required by statute and that creates a mandate upon a State, local or tribal government, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by those governments, or EPA consults with those governments. If EPA complies by consulting. Executive Order 12875 requires EPA to provide to the Office of Management and Budget a description of the extent of EPA's prior consultation with representatives of affected State, local and tribal governments, the nature of their concerns, copies of any written communications from the governments, and a statement supporting the need to issue the regulation. In addition, Executive Order 12875 requires EPA to develop an effective process permitting elected officials and other representatives of State, local and tribal governments "to provide meaningful and timely input in the development of regulatory proposals containing significant unfunded mandates. Today's rule does not create a mandate on State, local or tribal governments. The rule does not impose any enforceable duties on these entities. Accordingly, the requirements of section 1(a) of E.O. 12875 do not apply to this rule.

C. Executive Order 13045

Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be "economically significant" as defined under E.O. 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency. This rule is not subject to E.O. 13045 because it does not involve decisions intended to mitigate environmental health or safety risks.

D. Executive Order 13084

Under Executive Order 13084. Consultation and Coordination with Indian Tribal Governments, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities." Today's rule does not significantly or uniquely affect the communities of Indian tribal governments. Accordingly, the requirements of section 3(b) of E.O. 13084 do not apply to this rule.

E. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses. small not-for-profit enterprises, and small governmental jurisdictions. This final rule will not have a significant impact on a substantial number of small entities because SIP approvals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities. Moreover, due

to the nature of the Federal-State relationship under the Clean Air Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co., v. U.S. EPA,* 427 U.S. 246, 255–66 (1976); 42 U.S.C. 7410(a)(2).

F. Unfunded Mandates

Under section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated annual costs to State, local, or tribal governments in the aggregate; or to private sector, of \$100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that this action does not include a Federal mandate that may result in estimated annual costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action proposes to approve pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Oxides of nitrogen, Ozone, Particulate matter, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: May 26, 1999.

Felicia Marcus,

Regional Administrator, Region IX.
[FR Doc. 99–14317 Filed 6–4–99; 8:45 am]
BILLING CODE 6560–50–P