# SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

### **STAFF REPORT**

**Rule 801, New Source Performance Standards** 

and

**Rule 904, Air Toxics Control Measures** 

Proposed Amendments February 26, 2008

Prepared by: Marc Cooley

Assistant Air Quality Engineer

**Reviewed by:** Kevin J. Williams, Ph.D.

**Program Coordinator** 

Aleta Kennard

Supervisor, Technical Services

Approved by: Brigette Tollstrup

**Division Manager** 

#### **BACKGROUND**

#### Rule 801

New Source Performance Standards (NSPS) are promulgated by the United States Environmental Protection Agency (EPA) and apply to new, modified and reconstructed sources. The NSPS are contained in Title 40 of the Code of Federal Regulations (CFR), Part 60. The purpose of these standards is to require best demonstrated technology to achieve continuous emission reductions. The NSPS program takes into consideration compliance costs, environmental impact, and energy effects, among other factors.

The Federal Clean Air Act (CAA) authorizes EPA to delegate authority for implementing and enforcing NSPS regulations to states or local districts. The Sacramento Metropolitan Air Quality Management District (SMAQMD, "District") first accepted delegation for the NSPS program on December 8, 1978.

Rule 801 was adopted on November 19, 1991, to incorporate the NSPS program by reference into the District rules. Sources are required to comply with all applicable NSPS subparts regardless of whether or not they are adopted by the District; however, adoption by the District facilitates implementation and enforcement, and makes it easier for sources to identify applicable requirements.

EPA continues to amend NSPS regulations and to promulgate NSPS subparts for new source categories and industries. The District amended Rule 801 in 1993, 1996, 1998, 2001 and 2004 to update the rule with the most recent NSPS regulations.

#### Rule 904

The California Air Resources Board (CARB) adopts Airborne Toxic Control Measures (ATCMs) to reduce the emissions of identified toxic air contaminants. Section 39666 of the Health and Safety Code gives CARB the authority to adopt ATCMs for nonvehicular sources, while Section 39667 gives CARB the authority to adopt ATCMs for vehicular emissions.

Section 39666(d) of the Health and Safety Code requires districts to implement and enforce ATCMs for nonvehicular sources. The District adopted Rule 904 on May 1, 1997, to incorporate by reference the ATCMs contained in Title 17 of the California Code of Regulations (CCR). Adopting by reference facilitates implementation and enforcement and makes it easier for sources to identify applicable requirements. Rule 904 was last amended on January 22, 2004 to update the rule with newly adopted ATCMs.

## **SUMMARY OF CHANGES**

#### Rule 801

Since Rule 801 was last amended on January 22, 2004, the EPA has amended several of the New Source Performance Standards. The amendments were mainly related to updating

emission standards to match current technology, providing alternative compliance methods, or alternative testing and monitoring procedures. In addition, five new NSPS subparts – Subpart VVa (Equipment Leaks in Synthetic Organic Chemical Manufacturing), Subpart GGGa (Equipment Leaks in Petroleum Refining), Subpart EEEE (Other Solid Waste Incineration (OSWI) Units), Subpart KKKK (Stationary Combustion Turbines) and Subpart IIII (Stationary Compression Ignition (CI) Internal Combustion (IC) Engines) – were promulgated.

Currently, there are no OSWI units (new subpart EEEE) or petroleum refineries (new subpart GGGa) within the District, and no permit applications for these types of units are pending. Because there are approximately 1,350 stationary CI engines and 26 stationary combustion turbines under permit in the District, there likely will be new sources of these types that will become subject to subparts IIII and KKKK.

Subpart IIII applies to stationary CI engines whose construction, modification or reconstruction commenced after July 11, 2005. For fire pump engines, and for engines manufactured prior to April 1, 2006, this subpart applies only if the engine is modified or reconstructed after July 11, 2005. Additionally, manufacturers of 2007 model year or later engines with a displacement of less than 30 liters per cylinder, including agricultural engines, are required to comply with the federal nonroad CI Engine Certification Standards, which are essentially the same as California Off-Road CI Engine Certification Standards.

Subpart KKKK applies to stationary combustion turbines with a maximum heat input equal to or greater than 10 mmBtu/hr, based on higher heating value of the fuel used, that commence construction, modification, or reconstruction after February 18, 2005. The stationary combustion turbines subject to this subpart are exempt from the requirements of subpart GG, which applies to turbines greater with a maximum heat input greater than or equal to 10 mmBtu/hr, based on lower heating value of the fuel used. The NOx emissions standards for subpart KKKK, which depend on the maximum heat input, fuel, application, and location of the turbine, range from 15 ppm (for > 850 mmBtu/hr firing natural gas) to 150 ppm (for  $\leq$  50 mmBtu/hr firing fuels other than natural gas).

Several stationary sources in the District have emission units that are subject to standards that have been amended. Three sources (Campbell Soup Supply, Carson Energy, and UC Davis Medical Center) have boilers that are subject to subpart Dc. Five sources (Carson Energy, Sacramento Cogeneration Authority, Sacramento Power Authority, SMUD Cosumnes Power Plant, and UC Davis Medical Center) have gas turbines that are subject to subpart GG. Two sources (Sacramento City Landfill and Kiefer Landfill) are subject to subpart WWW. One source (Procter & Gamble) has chemical process units that are subject to subpart VV. If new chemical process units are constructed or if the existing units undergo modification or reconstruction in the future, they could become subject to the more stringent requirements of new subpart VVa.

The table in Appendix B lists the EPA actions on the NSPS program that have occurred since the last update to Rule 801 and briefly describes the requirements of each.

#### Rule 904

Rule 904 was last amended on January 22, 2004. Since that time, CARB has adopted seven new ATCMs to control the emissions of toxic air contaminants from additional nonvehicular source categories, and two existing ATCMs were amended. The ATCM Section 93119 for limiting onboard incineration on cruise ships and oceangoing ships is not included in Rule 904 because Sacramento County has no coastline; therefore, this ATCM is not applicable to the District. The new and amended ATCMs (all in 17 CCR) that could potentially apply to sources within the District are described below.

The new ATCM Section 903101.5 for thermal spraying does not affect any currently known sources within the District. There are no permitted thermal spraying operations, and no permit applications for thermal spraying operations are pending.

The amended ATCM Section 93102 for chromium plating and chromic acid anodizing facilities is applicable to the five permitted decorative electroplating facilities within the District. In addition, this ATCM applies to any person who sells, supplies, offers for sale, uses, or manufactures for sale in California a chromium electroplating or chromic acid anodizing kit.

The amended ATCM Section 93109 for emissions of perchloroethylene (perc) from dry cleaning and water-repelling operations is applicable to the approximately 67 permitted perc dry cleaning operations in the District. In addition, this ATCM applies to any person who sells, distributes, installs, owns, or operates dry cleaning equipment that uses any solvent that contains perc.

The new ATCM Section 93114 is applicable to all nonvehicular diesel fuel offered, sold or supplied for use.

The new ATCM Section 93115 for stationary compression ignition (CI) engines is applicable to the approximately one prime power, 160 agricultural and 978 emergency standby stationary CI engines. In addition, this ATCM applies to any person who sells, offers for sale, leases or purchases a stationary CI engine with a rated brake horsepower greater than 50.

The new ATCM Section 93116 for diesel-fueled portable engines is applicable to the approximately 653 engines within the District that are registered in the Statewide Portable Equipment Registration Program. It is expected that additional portable engines will operate within the District and be subject to this ATCM.

The new ATCM Section 93117 is applicable to all diesel fuel offered, sold or supplied for use in intrastate diesel-electric locomotives and harborcraft.

The new ATCM Section 93118 for auxiliary diesel and diesel-electric engines operated on ocean-going vessels applies to very few, if any, vessels that currently navigate waterways within Sacramento County.

The table in Appendix C lists the CARB actions on the ATCM program that have occurred since the last update to Rule 904 and briefly describes the requirements of each.

#### SOCIOECONOMIC IMPACT

Sources must comply with the requirements included in Rules 801 and 904 whether or not the requirements are adopted by the District. The NSPS subparts included in Rule 801 are already in effect under federal regulations and are enforceable by U.S. EPA. The ATCMs included in Rule 904 are already in effect under state regulations and are enforceable by CARB and the District. The action of adopting these regulations by reference does not impose any additional requirements on affected sources. Therefore, there are no associated costs or socioeconomic impacts.

#### **ENVIRONMENTAL REVIEW AND COMPLIANCE**

Staff finds that the proposed amendments to Rules 801 and 904 are exempt from the California Environmental Quality Act (CEQA) as ministerial actions under Section 15268 of the State CEQA Guidelines.

#### **PUBLIC COMMENTS**

Staff held two workshops to discuss the amendments to Rule 801 and Rule 904. These workshops, which also included a discussion of proposed Rule 311, Registration Fees for Agricultural Compression Ignition Engines, were held on February 11, 2008 in Wilton and February 12, 2008 in Walnut Grove. The workshop notice was mailed to all persons who have requested rulemaking notices and to all addresses on the Sacramento County Agricultural Commissioner's list of pesticide users. The notice was also distributed by the Sacramento County Farm Bureau by e-mail. In addition, the amended rules were submitted to the U.S. EPA and CARB for review.

To date, staff has not received any comments. Comments that are received after the final distribution of this staff report will be presented at the Board hearing.

#### **FINDINGS**

The California Health and Safety Code, Division 26, Air Resources, requires local districts to comply with a rule adoption protocol as set forth in Section 40727 of the Code. This section has been revised through legislative mandate to contain six findings that the District must make when developing, amending, or repealing a rule. These findings, effective January 1, 1992, and their definitions are listed in the following tables:

# Rule 801 – Required Findings

Finding	Finding Determination
<b>Authority:</b> The District must find that a provision of law or of a state or federal regulation permits or requires the District to adopt, amend, or repeal the rule.	The District is authorized to adopt and amend Rule 801 by California Health and Safety Code (HSC) Sections 40001, 40702, and 41010. The U.S. EPA has delegated to the District the authority to implement and enforce the NSPS program [40 CFR 60.4(d)(2)(vi)]. [HSC Section 40727(b)(2)].
<b>Necessity:</b> The District must find that the rulemaking demonstrates that a need exists for the rule, or for its amendment or repeal.	Amending Rule 801 allows the District to incorporate the most recent standards, which facilitates implementation and enforcement and makes it easier for sources to identify applicable requirements. [HSC Section 40727(b)(1)].
Clarity: The District must find that the rule is written or displayed so that its meaning can be easily understood by the persons directly affected by it.	The District has reviewed the rule and determined that it can be understood by the affected industries. In addition, the record contains no evidence that people directly affected by the rule cannot understand the rule. [HSC Section 40727(b)(3)].
<b>Consistency:</b> The rule is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.	The amendments are adopted by reference to 40 CFR Part 60; therefore, they are in harmony with existing federal regulations, and do not conflict with existing statutes or court decisions. [HSC Section 40727(b)(4)].
Non-Duplication: The District must find that either: 1) The rule does not impose the same requirements as an existing state or federal regulation; or 2) that the duplicative requirements are necessary or proper to execute the powers and duties granted to, and imposed upon the District.	No state rule or regulation similarly applies to affected sources. Although the amendments duplicate federal regulations, they are necessary and proper to allow the District to retain its delegated authority to implement and enforce the NSPS program. [HSC Section 40727(b)(5)].
<b>Reference:</b> The District must refer to any statute, court decision, or other provision of law that the District implements, interprets, or makes specific by adopting, amending or repealing the rule.	In amending Rule 801, the District is implementing Section 111(c) of the federal Clean Air Act, as amended in 1990, which authorizes state adoption of the NSPS program. [HSC Section 40727(b)(6)].
Additional Informational Requirements: In complying with HSC Section 40727.2, the District must identify all federal requirements and District rules that apply to the same equipment or source type as the proposed rule or amendments.	HSC Section 40727.2(g) exempts amended rules that are verbatim incorporations by reference of the federal NSPS from the requirements imposed by 40727.2(a)-(f). [HSC Section 40727.2].

# Rule 904 – Required Findings

Finding	Finding Determination
Authority: The District must find that a provision of law	The District is authorized to adopt and amend Rule 904
or of a state or federal regulation permits or requires the	by California Health and Safety Code (HSC) Sections
District to adopt, amend, or repeal the rule.	39666(d), 40702 and 41010. [HSC Section 40727(b)(2)].
Necessity: The District must find that the rulemaking	Amending Rule 904 allows the District to incorporate the
demonstrates that a need exists for the rule, or for its	most recent ATCMs, which facilitates implementation and
amendment or repeal.	enforcement as required by HSC Section 39666(d).
Clarity. The District result find that the mule is smithen as	[HSC Section 40727(b)(1)].
Clarity: The District must find that the rule is written or displayed so that its meaning can be easily understood	The District has reviewed the rule and determined that it can be understood by the affected sources. In addition,
by the persons directly affected by it.	the record contains no evidence that people directly
by the persons directly affected by it.	affected by the rule cannot understand the rule. [HSC
	Section 40727(b)(3)].
Consistency: The rule is in harmony with, and not in	The amendments are adopted by reference to the state
conflict with or contradictory to, existing statutes, court	regulations contained in Title 17, Division 3, Chapter 1,
decisions, or state or federal regulations.	Subchapter 7.5 of the California Code of Regulations;
	therefore, they are in harmony with existing state
	regulations, and do not conflict with federal regulations,
	existing statutes or court decisions. [HSC Section
	40727(b)(4)].
Non-Duplication: The District must find that either: 1)	Although the amendments duplicate state regulations,
The rule does not impose the same requirements as an	they are necessary and proper to allow the District to
existing state or federal regulation; or 2) that the	implement and enforce the ATCMs as required by HSC
duplicative requirements are necessary or proper to execute the powers and duties granted to, and imposed	Section 39666(d). [HSC Section 40727(b)(5)].
upon the District.	
Reference: The District must refer to any statute, court	In amending Rule 904, the District is making specific its
decision, or other provision of law that the District	power and duties under HSC Section 39666(d). [HSC
implements, interprets, or makes specific by adopting,	Section 40727(b)(6)].
amending or repealing the rule.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Additional Informational Requirements: In complying	HSC Section 40727.2(g) exempts amended rules that
with HSC Section 40727.2, the District must identify all	are verbatim incorporations by reference of the state
federal requirements and District rules that apply to the	ATCMs from the requirements imposed by 40727.2(a)-
same equipment or source type as the proposed rule or	(f). [HSC Section 40727.2].
amendments.	

### APPENDIX A LIST OF CHANGES TO RULES

Rul		

First Paragraph The first sentence was revised to show that the District is adopting the

provisions of 40 CFR Part 60 that are in effect on the date these

amendments are adopted.

Subparts A, D, Da, Db, Dc,

E, Eb, J, AA, AAa, BB, GG,

WWW, CCCC

Revised to show the date and Federal Register citation of the most recent

amendment to each of these subparts.

Subparts VV, GGG Revised titles and date to reflect most recent amendments to these

subparts.

Subpart VVa New subpart added.

Subpart GGGa New subpart added.

Subpart EEEE New subpart added.

Subpart IIII New subpart added

Subpart KKKK New subpart added.

**Rule 904** 

First Paragraph Revised to show that the District is adopting the provisions of 17 CCR that

are in effect on the date these amendments are adopted.

3. Section 93101.5 New ATCM added.

34. Section 93102 Title and operative date revised to reflect most recent amendment of the

ATCM.

45. Section 93103 Renumbered.

<u>56</u>. Section 93104 Renumbered.

<u>67</u>. Section 93105 Renumbered.

78. Section 93106 Renumbered

89. Section 93107 Renumbered.

910. Section 93108 Renumbered.

<del>10</del> 11. Section 93108.5	Renumbered.
11 <u>12</u> . Section 93109	Title and operative date revised to reflect most recent amendment of the ATCM.
<del>12</del> 13. Section 93110	Renumbered.
<del>13</del> 14. Section 93111	Renumbered.
44 <u>15</u> . Section 93112	Renumbered.
<del>15</del> 16. Section 93113	Renumbered.
17. Section 93114	New ATCM added.
18. Section 93115	New ATCM added.
19. Section 93116	New ATCM added.
20. Section 93117	New ATCM added.
21. Section 93118	New ATCM added.

# APPENDIX B LIST OF NSPS AMENDMENTS

Federal Register Citation	Affected Subparts	Summary of Action
69FR1802 January 12, 2004	Appendix B	EPA amended Appendix B by adding new Performance Specification 11, which establishes the required initial installation and performance procedures for evaluating the acceptability of a particulate matter (PM) continuous emission monitoring system (CEMS). This specification
		does not apply to the evaluation of the ongoing performance of a PM CEMS.
69FR1816 January 12, 2004	Appendix F	EPA amended Appendix F by adding Procedure 2, which establishes the minimum requirements for evaluating the effectiveness of quality control (QC) and quality assurance (QA) procedures and the quality of data produced by a continuous emission monitoring system (CEMS). This procedure applies to PM CEMS used for continuously determining emissions standards or permit compliance.
69FR41346 July 8, 2004	A, GG	EPA amended subpart GG to include several acceptable alternative testing and monitoring procedures. The amendments reflect changes in NOx emission control technologies and turbine design since the standards were promulgated.  EPA amended subpart A to incorporate by reference several ASTM standards associated with changes to subpart GG.
70FR8523 February 22, 2005	AA, AAa	EPA amended the monitoring requirements to allow use of a bag leak detection system as an alternative to a continuous opacity monitoring system (COMS). Minor typographical errors were corrected. None of the amendments affected a compliance standard, reporting requirement or recordkeeping requirement.
70FR28649 May 18, 2005	A, B, Da	EPA amended subparts A, B and Da by revising and adding paragraphs to the definitions, incorporation by reference section and recordkeeping requirements related to the finalization of mercury emission standards for new and existing coal-fired electric utility steam generating units. Mercury emissions are to be determined by operating a CEMS or an appropriately long-term method (sorbent trap) as allowed.
70FR55568 September 22, 2005	CCCC	EPA amended subpart CCCC to revise definitions of waste (solid, commercial or industrial) and commercial and industrial solid waste incineration (CISWI) units to more clearly delineate those units

Federal Register Citation	Affected Subparts	Summary of Action
<u> </u>		with waste energy recovery and without waste
		energy recovery. The amendment did not include
		standards for those units with only waste heat
		recovery in the CISWI source category.
70FR74679	Dc	EPA revised subpart Dc to correct the definition of
December 16, 2005		"annual capacity factor".
70FR74870	A, EEEE	EPA promulgated a new subpart EEEE, which
December 16, 2005		established performance standards for new other
		solid waste incineration (OSWI) units.
		This subpart is applicable to units for which
		construction commenced after December 9, 2004
		or for which modification or reconstruction was
		commenced on or after June 16, 2006. Subpart
		EEEE requires affected units to meet emission
		limits for cadmium, carbon monoxide,
		dioxins/furans, hydrogen chloride, lead, mercury,
		opacity, NOx, PM and sulfur dioxide. In addition,
		subpart EEEE contains requirements for
		performance testing, monitoring, recordkeeping
		and reporting.
71FR9453	GG	EPA amended subpart GG to include several
February 24, 2006		acceptable alternative testing and monitoring
		procedures.
71FR9866	Da, Db, Dc	EPA amended emission limits for sulfur dioxide,
February 27, 2006		NOx, and PM in subpart Da (electric utility steam
		generating units); sulfur dioxide and PM in
		subpart Db (industrial-commercial-institutional
		steam generating units); and sulfur dioxide and
		PM in subpart Dc (small industrial commercial-
		institutional steam generating units). These
		amended emission limits apply only to those units
		that began construction, modification or
		reconstruction after February 28, 2005. Also,
		several technical clarifications and corrections
		were made to clarify the applicability of the
71FR27324	E, Eb	subparts to combined cycle power plants.  EPA amended subparts E (incinerators) and Eb
May 10, 2006	□, EU	(large municipal waste combustors) to update
Way 10, 2000		emission standards to reflect the actual
		performance levels being achieved by existing and
		new municipal waste combustion (MWC) units.
		The most significant revisions were made in the
		cadmium and mercury emission limits.
		EDA also amended soverel arguetters
		EPA also amended several operating,
		performance testing, and monitoring provisions to
		clarify operator stand-in provisions; require
		increased reliability from CEMS (95% data
		reliability per calendar year & 90% data reliability
		per quarter); and allow CEMS to monitor PM or

Federal Register Citation	Affected Subparts	Summary of Action
		mercury in place of stack testing. The
		amendments require CEMS to generate at least
		95 percent data availability on a calendar year
		basis and at least 90 percent availability per
		quarter.
71FR31100	Α	EPA revised a minor error in wording in section
June 1, 2006		60.13. The revision did not affect a compliance
,		standard, reporting requirement, or a record
		keeping requirement.
71FR33388	Da, Db	EPA amended subpart Da to revise the definitions
June 9, 2006		of "coal", "coal-fired electric utility steam
00 0, 2000		generating unit", and "potential combustion
		concentration." For subpart Db, a reference to
		subpart section 60.40a was revised to 60.40Da for
		consistency with reclassification that occurred on
		August 30, 2005.
71FR38482	A, KKKK	EPA amended subpart A to incorporate by
	A, KKKK	reference additional ASTM methods related to
July 6, 2006		
		subpart KKKK.
		EDA promulgated a new subpart KKKK which
		EPA promulgated a new subpart KKKK, which
		established performance standards for new
		stationary combustion turbines. This subpart is
		applicable to units for which construction,
		modification or reconstruction commenced after
		February 18, 2005. Turbines regulated under this
		subpart are exempt from the requirements of
		subpart GG. Heat recovery steam generators and
		duct burners subject to this subpart are exempted
		form the requirements of subparts Da, Db and Dc.
		Subpart KKKK requires turbines with a maximum
		heat input equal to or exceeding 10.7 gigajoules
		(10 mmBtu) per hour to meet emissions limits for
		NOx and sulfur dioxide. In addition, subpart KKKK
		contains requirements for performance testing,
74500454	A 1111	monitoring, recordkeeping and reporting.
71FR39154	A, IIII	EPA incorporated by reference an ASTM method
July 11, 2006		for determining gaseous compounds by extractive
		direct interface Fourier Transform Infrared (FTIR)
		Spectroscopy in subpart A. Subsequent
		paragraphs were renumbered accordingly.
		CDA promulgated a new subsect IIII which
		EPA promulgated a new subpart IIII, which
		established performance standards for new
		stationary compression ignition (CI) internal
		combustion engines (ICE). Subpart IIII is
		applicable to engines, except fire pump engines,
		whose construction, modification or reconstruction
		commenced after July 11, 2005. For fire pump

Federal Register Citation	Affootod Cubnorts	Summary of Action
rederal Register Citation	Affected Subparts	Summary of Action
		engines, and for engines manufactured prior to April 1, 2006, this subpart applies only if the engine is modified or reconstructed after July 11, 2005. Additionally, manufacturers of 2007 model year or later engines with a displacement of less than 30 liter per cylinder, including agricultural engines, are required to comply with the federal nonroad CI Engine Certification Standards.  Subpart IIII requires affected units to meet emission limits for NOx, PM, carbon monoxide and nonmethane hydrocarbons. In addition, subpart IIII contains low sulfur diesel fuel usage requirements. Finally, subpart IIII contains
!		requirements for performance testing,
		recordkeeping and reporting.
71FR55119 September 21, 2006	J, BB, WWW	EPA amended subparts J (petroleum refineries), BB (Kraft pulp mills), and WWW (municipal solid waste landfills) to correct the equation for determining coke burn-off rate; to remove an inadvertent paragraph requiring CEMS be subject to the quality assurance provision of Appendix F; and to make Method 3C a required test method for methane.
71FR66681 November 16, 2006	Db	EPA amended subpart Db to include a new paragraph establishing a standard and several reporting and recordkeeping requirements for facility-specific NOx limits. Emission limits for fossil fuel-only and simultaneous fossil fuel and chemical byproduct/waste combustion were established.
71FR67802 November 24, 2006	EEEE	EPA amended Table 1 and Table 2 in subpart EEEE to correct average time for opacity measurements to be consistent with EPA Method 9.
72FR27437 May 16, 2007	A	EPA amended subpart A to allow source owners or operators to petition extension of deadline(s) for required initial or subsequent performance tests in the event of a force majeure. A `force majeure' is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the

Federal Register Citation	Affected Subparts	Summary of Action
		affected facility.
72FR32710 June 13, 2007	A, D, Da, Db, Dc	EPA amended subpart A to incorporate by reference additional ASTM methods.
		EPA amended subparts D (fossil-fuel-fired steam generators), Da, Db and Dc to add compliance alternatives, and to revise certain recordkeeping and reporting requirements. The amendment for subpart Da allowed for two alternatives to demonstrate compliance with the PM emissions limit. The affected source can decide to monitor PM control performance based on the opacity level measured during the stack performance test; or by using a predictive emissions model for an electrostatic precipitator (ESP); or by using a bag leak detection system on a fabric filter.
		All parts were amended to include monitoring alternatives to existing requirements to use COMS for steam generating units burning gaseous fuels or low sulfur fuel oils. Units subject to subpart D or Da may elect to use CO CEMS in place of COMS. Units subject to subpart Db or Dc may elect to either use a CO CEMS or to operate according to a site-specific monitoring plan in place of using a COMS. For parametric monitoring of PM emissions, a grace period was provided to bring the monitoring parameters back into range established during the most recent PM emissions performance test.
		Finally, minor revisions were made to correct typographical, printing, grammatical errors and unintentional technical omissions.
72FR51494 September 7, 2007	Appendix A, B	EPA amended Appendix A & B by adding two optional test methods for determination of relative accuracy of mercury monitoring systems installed on combustion flue gas streams as required by subpart Da.
72FR64860 November 16, 2007	A, VV, VVa, GGG, GGGa,	EPA promulgated new subparts VVa and GGGa, which established new performance standards for equipment leaks of VOC from the synthetic organic chemicals manufacturing industry (SOCMI), and from petroleum refineries, respectively. Both subparts are applicable to units for which construction, reconstruction or modification commenced after November 7, 2006.
		At the same time, EPA amended the existing standards for equipment leaks of VOC in subparts

Federal Register Citation	Affected Subparts	Summary of Action
		VV (SOCMI) and GGG (petroleum refineries) so that they will now apply only to units constructed on or before November 7, 2006. Changes to both subparts were also made to revise the headings, clarify definitions, and correct references and miscellaneous errors. Amendments to subpart VV simplified the compliance requirements for pumps, and provided an alternative compliance option that allows for less frequent monitoring for pumps and valves in units which operate part-time.
		The new standards of subparts VVa and GGGa parallel those in the amended subparts VV and GGG, respectively, but also include lower leak definitions for pumps and valves, and additional recordkeeping and instrument calibration requirements. Subpart VVa also includes monitoring and repair requirements for connectors.  EPA amended subpart A to incorporate by
		EPA amended subpart A to incorporate by reference additional ASTM methods.

## APPENDIX C LIST OF ATCM AMENDMENTS

New Section 93101.5 – ATCM for Thermal Spraying. This ATCM limits the emissions of hexavalent chromium and nickel from thermal spraying operations. The ATCM applies to each thermal spraying operation at a stationary source that uses materials containing chromium, chromium compounds, nickel, or nickel compounds. Currently, the District does not have any permitted thermal spraying operations. Portable thermal spray operations are exempt from this ATCM. Effective January 1, 2006, any person conducting existing thermal spraying operations must route emissions from such operations through an air pollution control system that meets the appropriate control efficiency requirements in the ATCM. Maximum hourly emissions of nickel from point and volume sources must not exceed 0.1 lb and 0.01 lb, respectively.

Amended Section 93102 – ATCM for Chromium Plating and Chromic Acid Anodizing Facilities. This amended ATCM limits the emissions of toxic air contaminants from chromium electroplating and chromic acid anodizing facilities. The amended ATCM applies to any owner or operator of any facility performing hard chromium electroplating, decorative chromium electroplating, or chromic acid anodizing and to any person who sells, supplies, offers for sale, uses, or manufactures for sale in California a chromium electroplating or chromic acid anodizing kit

The amended ATCM maintains the previously established emission limits based on facility type for existing facilities that were in operation before October 24, 2007; however the amendment requires all facilities using the hexavalent chromium process to comply with the same requirements. The amended ATCM establishes a more stringent emission limit of 0.0015 mg/amp-hr with an add-on air pollution control device. The new requirements are phased in for new, modified and existing facilities depending on the amount of annual permitted ampere-hours and the distance to the nearest sensitive receptor (greater or less than 330 feet). For smaller facilities, the use of chemical fume suppressants is required in lieu of the more stringent requirement. New facilities are subject to zoning requirements, must install a HEPA add-on control device, and the emission rate shall be no more than 0.0011 mg/amp-hr as measured after the control device.

The amended ATCM also establishes testing requirements, monitoring requirements and housekeeping requirements to reduce potential fugitive emissions from all facilities, effective April 28, 2008.

Amended Section 93109 – ATCM for Emissions of Perchloroethylene from Dry Cleaning and Water-Repelling Operations. This amended ATCM limits the emissions of perchloroethylene (perc) from dry cleaning and water-repelling operations. The amended ATCM applies to any person who sells or distributes perc to California dry cleaners or who sells, distributes, installs, owns, or operates dry cleaning equipment in California that uses any solvent containing perc.

The amended ATCM prohibits new perc dry cleaning machines after January 1, 2008 and establishes compliance dates for the removal of all perc dry cleaning machines by January 1, 2023 with an intermediate requirement of July 1, 2010 for removal for machines older than 15 years and machines in co-residential buildings. Additionally, the amended ATCM expands

recordkeeping requirements for dry cleaners and adds recordkeeping and reporting requirements for perc manufacturers and distributors who sell to California dry cleaners.

New Section 93114 – ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines – Standards for Nonvehicular Diesel Fuel. The ATCM applies to diesel fuel offered, sold, or supplied for use in nonvehicular diesel engines, to limit the emissions of toxic air contaminants. As of December 12, 2004, California nonvehicular diesel fuel is subject to all of the requirements of sections 2281, 2282 and 2284 applicable to vehicular diesel fuel (Title 13 California Code of Regulations, Division 3, Chapter 5, Article 2).

New Section 93115 – ATCM for Stationary Compression Ignition (CI) Engines. This ATCM limits the emissions of both toxic air contaminants (diesel particulate matter) and criteria pollutants from the use of stationary CI engines. Except for specific exemptions, the ATCM applies to any person who either sells, offers for sale, leases or purchases a stationary CI engine with a rated brake horsepower greater than 50 for use in California. As of January 1, 2006, no owner or operator of a new or in-use stationary CI engine shall fuel the engine or any fuel tank with any fuel unless the fuel is one of the following: CARB diesel fuel, an alternative fuel or a CARB diesel fuel with additives meeting CARB verification. Effective March 11, 2005, the ATCM limits the non-emergency use of engines at or near schools and sets criteria for when emergency operation is allowed during rolling blackouts.

As of January 1, 2005, the ATCM requires new stationary emergency standby diesel-fueled CI engines and new stationary prime diesel-fueled CI engines to meet emission standards for diesel PM and criteria pollutants at the time of installation. Additionally, new stationary diesel-fueled engines used in agricultural operations are subject to less stringent requirements.

As of January 1, 2005, the ATCM requires in-use stationary emergency standby diesel-fueled CI engines and in-use, stationary prime diesel-fueled CI engines to meet emission standards for diesel PM and criteria pollutants by a set time period.

For in-use engines complying solely by limiting the number of hours or operation, compliance deadlines occur between January 1, 2006 and January 1, 2009, depending on the model year of the engine(s) and the fleet size. Compliance schedules are established specifically for those owners or operators with four or more engines located within the District and those owners or operators with three or fewer engines located within the District.

In addition to the diesel PM emission standards, engines must meet off-road CI engine certification standards for an off-road engine of same model year and horsepower rating or, if no limits have been established for an off-road engine, then the engine must meet Tier 1 standards (HC, NOx, NMHC+NOx and CO) for an off-road engine of the same maximum rated power, except for in-use stationary emergency CI engines that operate 20 hours per year or less for maintenance and testing.

Effective January 1, 2005, the ATCM requires stationary diesel-fueled engines to have installed a non-resettable engine hour meter with a minimum display capability of 9,999 hours.

Effective January 1, 2005, the ATCM requires owners or operators of stationary emergency diesel-fueled CI engines to keep a monthly log of engine information, with additional information required for in-use engines. Sellers of new emergency standby and prime diesel-fueled CI engines sold to agricultural operations are required to report information for engines sold each year.

Exemptions from the diesel PM standards of the rule (some of which require District approval) include new and in-use dual-fueled engines using < 5% diesel fuel with digester or landfill gas, new and in-use engines used for training Department of Defense personnel, in-use engines with selective catalytic reduction (SCR) systems, emergency engines at nuclear facilities, prime engines operating < 20 hours a year, and direct-drive fire pump engines.

On November 16, 2006, CARB amended the ATCM to include standards, effective October 18, 2007, for in-use engines used in agricultural operations. In order to ensure compliance with the new standards, the amendment added a requirement for CI engines used in agricultural operations to be registered with the local district. The amendment also authorized the districts to require fees to recover the cost of implementing and enforcing the registration program and other ATCM requirements applicable to agricultural CI engines.

In-use agricultural engines greater than 50 hp are required to meet Tier 3 or Tier 4 off-road CI engine certification standards. Compliance dates for uncertified engines range from 2010 to 2015, depending on size and application. Compliance dates for Tier 1 and 2 engines range from 2014 to 2015, but not earlier than 12 years after the date of initial installation.

New Section 93116 – ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater. This ATCM limits the emissions of toxic air contaminants and criteria pollutants from the use of diesel-fueled portable engines having a rated brake horsepower of 50 and greater. Except for specific exemptions, the ATCM applies to all diesel-fueled portable engines having a maximum rated horsepower of 50 hp and greater. Effective March 11, 2005, diesel-fueled portable engines shall only use one of the following fuels: CARB diesel fuel, a CARB-verified alternative fuel, or a CARB diesel fuel with additives meeting CARB verification.

As of January 1, 2010, the ATCM requires all portable diesel-fueled engines be certified to meet California standards for new manufactured nonroad engines (i.e. Tier 1, 2, or 3). However, in lieu of complying with these standards, owners of emergency or low-use engines can commit to replacing these engines with Tier 4 engines. Portable diesel-fueled engines that have not been permitted or registered prior to January 1, 2006, are required to meet the most stringent emission standards for nonroad engines unless the engine is a Tier 1 or 2 engine that has been operating in California between March 1, 2004 and October 1, 2006. By January 1, 2020, all emergency, low-use, and lattice boom crane engines must meet be certified to Tier 4 emission standards, equipped with a level-3 verified technology or equipped with technology that has been verified to achieve at least 85% reduction in diesel PM emissions.

Starting January 1, 2013, the ATCM requires fleets to comply with a weighted PM emission average, with exceptions for emergency, low-use, and lattice boom engines. Exemptions are allowed for emergency, low-use, lattice boom crane engines and engines with documented functioning SCR systems. The fleet average emission limits are reduced beginning of 2017,

and by 2020, all engines are required to meet the most stringent emission requirements. The fleet averaging requires a status report by March 1, 2011 with a report due upon each change in fleet average requirements.

Finally, effective January 1, 2012, the ATCM requires recordkeeping, reporting and meter installation on each portable diesel-fueled engine unless an entire fleet meets the emission requirements.

New Section 93117 – ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines – Standards for Nonvehicular Diesel Fueled Used in Intrastate Diesel-Electric Locomotives and Harborcraft. This ATCM limits the emissions of air toxic contaminants from the use of nonvehicular diesel fuel used in intrastate diesel-electric locomotives and harborcraft. As of January 1, 2007, California nonvehicular diesel fuel sold, offered for sale or supplied for use in diesel-electric intrastate locomotives or harborcraft is subject to all the requirements of sections 2281, 2282 and 2284 applicable to vehicular diesel fuel (Title 13, California Code of Regulations, Division 3, Chapter 5, Article 2) except for military specification fuel used in military vessels.

New Section 93118 – ATCM for Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-Going Vessels Within California Waters and 24 Nautical Miles of the California Baseline. This ATCM limits the emissions of toxic air contaminants from the use of auxiliary diesel engines and diesel-electric engines on ocean-going vessels within regulated California waters. Except for specific exemptions, the ATCM applies to any person who owns, operates, charters, rents, or leases any ocean-going vessel that operates in any of the regulated California Waters. As of December 6, 2006, no person shall operate any auxiliary diesel engine, while the vessel is operating in any of the regulated California waters, which emits levels of criteria pollutants in excess of the emission rates of those pollutants that would result had the engine used either marine gas oil or marine diesel oil with a sulfur content of no more than 0.5 % by weight. Additionally, as of January 1, 2010, the same auxiliary engines as above that use marine gas oil shall have no more than 0.1% sulfur by weight. Recordkeeping, reporting and monitoring requirements apply to any person subject to this section. The ATCM also provides an option for an alternative control of emissions (ACE) plan for those that are unable to meet the emission requirements.