SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT

STATEMENT OF REASONS

Rule 801, New Source Performance Standards

and

Rule 904, Air Toxics Control Measures

Proposed Amendments
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RULE JUSTIFICATION

Rule 801

New Source Performance Standards (NSPS) are promulgated by the U.S. 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 impacts, 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 (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, 2004, 2008, and 2011 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. California Health and Safety Code (CSHC) §39666 gives CARB the authority to adopt ATCMs for non-vehicular sources, while CSHC §39667 gives CARB the authority to adopt ATCMs for vehicular emissions.

CSHC §39666(d) requires air districts to implement and enforce ATCMs for non-vehicular 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 amended in 2001, 2004, 2008, and 2011 to update the rule with amended or newly adopted ATCMs.

SUMMARY OF RULE AMENDMENTS

Rule 801

Since Rule 801 was last amended, EPA has amended several of the NSPS. 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, eight new NSPS subparts were promulgated.

Three of the new NSPS do not apply to any current facilities in the District. A summary of these NSPS is included in Appendix B.

- Subpart Ga (Standards of Performance for Nitric Acid Plants for Which Construction, Reconstruction, or Modification Commenced After October 14, 2011)
- Subpart BBa (Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013)
- Subpart LLLL (Standards of Performance for New Sewage Sludge Incineration Units)

The remaining five new subparts apply or potentially apply to facilities types that operate in the District and are discussed in more detail in the following section.

- Subpart XXX (Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014)
- Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015)
- Subpart OOOOa (Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015)
- Subpart QQQQ (Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces)
- Subpart TTTT (Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units)

<u>New subparts</u>

Subpart XXX applies to municipal solid waste landfills which commence construction, reconstruction, or modification after July 17, 2014. Clean Air Act (CAA) Section 111 requires EPA to review, and, if appropriate, revise standards of performance at least every eight years. The new standard reflected changes to the population of landfills and an analysis of timing and methods for reducing emissions. The new standard lowered the emissions threshold for applicability and required more landfills to install controls to reduce landfill gas emissions. It also incorporated new information for surface emissions monitoring and wellhead monitoring. Currently, the Kiefer Landfill, L and D Landfill LLC, and City of Sacramento hold permits for landfill gas collection systems in the District.

Subpart OOOO applies to oil and gas facilities which commence construction, reconstruction, or modification after August 23, 2011. This NSPS regulates volatile organic compound (VOC) emissions from gas wells, centrifugal compressors, reciprocating compressors, pneumatic controllers, and storage vessels. It revised the existing leak detection and repair requirements and established emission limits reflecting maximum achievable control technology for previously uncontrolled emission sources in the natural gas production, transmission, and storage source categories. The NSPS includes testing and monitoring, notification, recordkeeping, and reporting requirements.

Subpart OOOOa applies to oil and gas facilities which commence construction, reconstruction, or modification after September 18, 2015. EPA established new standards to reduce emissions of greenhouse gases (GHGs), especially methane, as well as VOC across a variety of additional emission sources in the oil and natural gas source category. These additional sources include: hydraulically fractured oil well completions, pneumatic pumps, and fugitive emissions from well sites and compressor stations. The new standards also subjected sources and equipment covered under Subpart OOOO to GHGs requirements.

Gas production and storage facilities in the District are subject to subparts OOOO and OOOOa based on their construction, reconstruction, or modification dates.

Subpart QQQQ applies to new wood-fired residential hydronic heaters, wood-fired forced-air furnaces, and any other wood-fired appliance that meets the definition of central heater manufactured or sold at retail on or after May 15, 2015. EPA established particulate matter (PM) emissions limits based on appliance types, manufacturing dates, sizes, and fuel options. This NSPS affects individuals and businesses in the District that manufacture, sell, distribute, install, or operate a residential hydronic heater, forced-air furnace, or other central heater manufactured after the effective date of the final rule. These businesses include hardware stores, builders, and contractors.

Subpart TTTT applies to fossil fuel-fired electric utility generating units (EGUs) that commenced construction after January 8, 2014 or commenced reconstruction or modification after June 18, 2014. It applies to units with base load rating greater than 250 MMBtu/h and capability of selling greater than 25 MW of electricity to a utility power distribution system. EPA established different carbon dioxide emissions limits based on the power generating output. This new subpart specifies monitoring and compliance determination, recordkeeping, and reporting requirements. There are four facilities in the District that would be affected by this new subpart if they undergo reconstruction or modification in the future: Carson Cogeneration, Sacramento Cogeneration Authority, SMUD Cosumnes Power Plant, and Sacramento Power Authority.

Amended subparts

EPA amended several NSPS subparts. The subparts that apply to source types located in the District are discussed below.

Subpart A (General Provisions) contains definitions, notification and recordkeeping procedures, general information, and requirements that apply to all NSPS. The latest changes include updates to test methods, updates to "Incorporations by Reference," changes to the delegations of authority to states and local agencies, and updates to the addresses for states and local agencies.

Subparts D, Da, Db, and Dc were amended in February 2012 to update the emissions standards for sulfur dioxide, nitrogen oxides, and PM for units that begin construction, modification, or reconstruction after May 3, 2011. The EPA action also added, removed, or revised definitions for several technical terms. Subpart Da was also amended in April 2013 and November 2014 for technical corrections regarding definitions and monitoring provisions and revised the startup and

shutdown periods provisions. Subparts Db was amended in February 2014 for technical clarification and editorial corrections for emissions testing and operations.

Subpart D (Fossil-Fuel Fired Steam Generators for which Construction is Commenced after August 17, 1971) applies to furnaces and boilers with heat inputs capacities greater than 250 million Btu per hour (MMBtu/hr). There are no steam generating units in the District with heat input capacities large enough for Subpart D to apply.

Subpart Da (Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978) applies to electric utility steam generating units, including heat recovery steam generators (HRSGs) with heat input capacities greater than 250 MMBtu/hr. Units subject to Subpart Da are exempt from Subpart D. There are no units within the District with heat input capacities large enough for Subpart Da to apply.

Subpart Db (Industrial-Commercial-Institutional Steam Generating Units) applies to steam generating units with heat input capacities greater than 100 MMBtu/hr for which construction, modification or reconstruction is commenced after June 19, 1984. Within the District, Subpart Db applies to an HRSG at Sacramento Power Authority and two boilers at the Sacramento Cogeneration Authority.

Subpart Dc (Small Industrial-Commercial-Institutional Steam Generating Units) applies to steam generating units, including HRSGs, with heat input capacities greater than 10 MMBtu/hr and less than or equal to 100 MMBtu/hr for which construction, modification or reconstruction is commenced after June 9, 1989. In the District, there are 68 boilers and HRSGs permitted with heat input capacities in this range. The owners of these units include government agencies, defense contractors, manufacturers, services companies, hospitals, food processing companies, and cogeneration facilities.

Subpart AAA (New Residential Wood Heaters) applies to residential wood heaters manufactured on or after July 1, 1988. EPA revised subpart AAA to broaden the applicability of wood heaters beyond adjustable burn rate wood heaters to all single burn rate wood heaters/stoves/appliances, pellet heaters/stoves/appliance, and all other residential wood heaters except residential hydronic heaters and residential forced-air furnaces (which are covered by the new subpart QQQQ). The revision established lower PM emissions limits starting in 2015 and even lower starting in 2020. It also established modified labelling, emissions testing, reporting, and certification requirements. The revised subpart affects individuals and businesses in the District that manufacture, sell, distribute, install, or operate residential wood heaters, such as hearth products stores, hardware stores, builders, and contractors.

Subparts IIII (Stationary Compression Ignition Internal Combustion Engines) and JJJJ (Stationary Spark Ignition Internal Combustion Engines) apply to internal combustion (IC) engines. EPA revised subparts IIII and JJJJ for consistency with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for stationary reciprocating IC engines. The amendments included alternative testing options for certain large spark ignition stationary engines, management practices for a subset of existing spark ignition engines in sparsely populated areas, and alternative monitoring and compliance options for the same engines in populated areas. EPA established management practices for existing compression ignition engines, limits on the hours

that stationary emergency engines may be used for emergency demand, and related reporting and monitoring requirements. IC engines are widely used in different facilities to drive electrical generators, pumps, and compressors. They are also used in the event of an emergency such as a fire or flood.

Minor Updates and Technical Corrections

EPA made technical and editorial corrections to the requirements for source testing of emissions and operations in February 2014. EPA revised testing provisions that contained inaccuracies and outdated procedures and added new alternatives. The updated subparts that apply to District sources are listed below:

- Subpart Db — Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
- Subpart O — Standards of Performance for Sewage Treatment Plants
- Subpart UU — Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture
- Subpart NNN — Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations
- Subpart IIII — Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- Subpart JJJJ — Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

EPA also made several typographical, technical, and editorial corrections to various subparts in June 2016 and August 2016. The updated subparts that apply to District sources are listed below:

- Subpart GG — Standards of Performance for Stationary Gas Turbines
- Subpart LLL — Standards of Performance for SO_2 Emissions from Onshore Natural Gas Processing for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011
- Subpart NNN — Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing
- Subpart JJJJ — Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
- Subpart KKKK — Standards of Performance for Stationary Combustion Turbines
- Subpart OOOO — Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or Before September 18, 2015

The table in Appendix B lists all 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

Since Rule 904 was last amended in 2011, CARB has adopted amendments to four ATCMs:

ATCM for Stationary Compression Ignition (CI) Engines: There are approximately 1,270 stationary CI engines in Sacramento County to which this ATCM applies. CARB adopted amendments primarily to more closely align the rule with federal standards. In addition, implementation of emission standards for new emergency standby direct-drive fire pump engines was delayed for up to three years.

ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater: There are approximately 50 portable CI engines in Sacramento County to which this ATCM applies. CARB adopted amendments that, most significantly, extended the deadline to replace noncertified engines by one year, to January 1, 2011, for a limited number of engines in small fleets.

ATCM for Fuel Sulfur and Other Operational Requirements for Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline: Although this ATCM includes ocean-going vessels operated in inland waters, it applies to very few, if any, vessels currently operating in the Sacramento River.

ATCM for Commercial Harbor Craft: Although this ATCM includes harbor craft operated in inland waters, Sacramento County currently does not have a port or harbor craft subject to this ATCM.

Appendix C describes the CARB actions on the ATCMs in further detail.

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 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 §15268 of the State CEQA Guidelines.

PUBLIC COMMENTS

At least 30 days before the Board hearing to consider adoption of these proposed amendments to Rules 801 and 904, a public notice for the hearing will be published in the Sacramento Bee and posted on the District's web site. Email notices will be sent to CARB, EPA, and all persons who have requested rulemaking notices. The text of the proposed changes will be made available at that time.

Written comments may be sent to the District prior to the hearing. Oral and written testimony may be presented at the 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 §40727 of the Code. This section contains six findings that the District must make when developing, amending, or repealing a rule. These findings and their definitions are listed in the following tables:

Rule 801 – Required Findings

Finding	Finding Determination
Authority: 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) §§40001, 40702, and 41010. EPA has delegated to the District the authority to implement and enforce the NSPS program [40 CFR 60.4(d)(2)(vi)] [HSC §40727(b)(2)].
Necessity: 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 §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 §40727(b)(3)].
Consistency: 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. They do not conflict with existing statutes or court decisions. [HSC §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 §40727(b)(5)].
Reference: 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 §111(c) of the federal Clean Air Act, as amended in 1990, which authorizes state adoption of the NSPS program. [HSC §40727(b)(6)].
Additional Informational Requirements: In complying with HSC §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 §40727.2(g) exempts rules that are verbatim incorporations by reference of the federal NSPS from the requirements imposed by §40727.2(a)-(f). [HSC §40727.2].

Rule 904 – Required Findings

Finding	Finding Determination
Authority: 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 904 by California Health and Safety Code (HSC) §§39659, 40001, 40702 and 41010. [HSC §40727(b)(2)].
Necessity: The District must find that the rulemaking demonstrates that a need exists for the rule, or for its amendment or repeal.	Amending Rule 904 allows the District to incorporate the most recent ATCMs, which facilitates implementation and enforcement as required by HSC §39666(d). [HSC §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 sources. In addition, the record contains no evidence that people directly affected by the rule cannot understand the rule. [HSC §40727(b)(3)].
Consistency: 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 the state regulations contained in Title 17, Division 3, Chapter 1, Subchapter 7.5 of the California Code of Regulations; therefore, they are in harmony with existing state regulations. They do not conflict with federal regulations, existing statutes or court decisions. [HSC §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.	Although the amendments duplicate state regulations, they are necessary and proper to allow the District to implement and enforce the ATCMs as required by HSC §39666(d). [HSC §40727(b)(5)].
Reference: 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 904, the District is making specific its power and duties under HSC §39666(d). [HSC §40727(b)(6)].
Additional Informational Requirements: In complying with HSC §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 §40727.2(g) exempts rules that are verbatim incorporations by reference of the state ATCMs from the requirements imposed by §40727.2(a)-(f). [HSC §40727.2].

APPENDIX A
LIST OF CHANGES TO RULES

Rule 801

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 to Rule 801 are adopted.
Subparts A, D, Da, Db, Dc, Ec, F, G, H, J, Ja, O, T, U, V, W, X, BB, GG, KK, LL, UU, AAA, BBB, DDD, III, KKK, LLL, NNN, CCCC, IIII, JJJJ, and KKKK	Revised to show the date and Federal Register citation of the most recent amendment to each of these subparts.
Subpart Ga	New subpart added.
Subpart BBa	New subpart added.
Subpart XXX	New subpart added.
Subpart LLLL	New subpart added.
Subpart OOOO	New subpart added.
Subpart OOOOa	New subpart added.
Subpart QQQQ	New subpart added.
Subpart TTTT	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 to Rule 904 are adopted.
93115	Revised to show the date of the most recent amendment to the ATCM.
93116	Revised to show the date of the most recent amendment to the ATCM.

§93118.2	Revised to show the date of the most recent amendment to the ATCM.
§93118.5	Revised to show the date of the most recent amendment to the ATCM.

APPENDIX B
LIST OF NSPS AMENDMENTS

Federal Register Citation	Affected Subparts	Summary of Action
76 FR 15372 March 21, 2011	A and LLLL	EPA promulgated a new NSPS for sewage sludge incineration units. The NSPS established emission limits for nine pollutants: cadmium, carbon monoxide, hydrogen chloride, lead, mercury, nitrogen oxides, PM, polychlorinated dibenzo-p-dioxins and dibenzofurans, and sulfur dioxide.
76 FR 15704 March 21, 2011	A and CCCC	EPA revised the NSPS for commercial and industrial solid waste incineration units to address court rulings. EPA revised the definition of CISWI units, revised emission limits based on subcategories established under the final definitions, and revised the rule to apply during startup, shutdown, and malfunction.
76 FR 18407 April 4, 2011	Ec	EPA amended the NSPS for hospital/medical/infectious waste incinerators (HMIWIs) to address court rulings. The action corrected errors in the emissions limits for large HMIWIs, corrected erroneous cross-references in the reporting and recordkeeping requirements, and corrected errors in the emissions limits tables.
76 FR 28662 May 18, 2011	A and CCCC	EPA delayed the effective date of the NSPS for Commercial and Industrial Solid Waste Incineration Units (76 FR 15704) until judicial review or EPA reconsideration of the rule is completed.

Federal Register Citation	Affected Subparts	Summary of Action
76 FR 37954 June 28, 2011	IIII and JJJJ	EPA revised the NSPS for new stationary compression ignition IC engines to set more stringent standards for engines with displacement between 10 and 30 liters per cylinder, consistent with mobile source marine engines; and require engines with displacement 30 liters or above to align more closely with similar mobile source marine engines. The revisions provided additional flexibility to engine owners and operators to follow alternative engine operation and maintenance procedures. EPA also revised the NSPS for new stationary spark ignition IC engines to correct mistakes in the original NSPS and make minor changes. These revisions were estimated to reduce NO_X by 1,100 tons per year (tpy), PM by 38 tpy, and hydrocarbons by 18 tpy in the year of 2030 nationwide.
77 FR 9304 February 16, 2012	A, D, Da, Db, and Dc	EPA amended the NSPS for fossil fuel-fired electric utility, industrial-commercial-institutional, and small-commercial-institutional steam generating units. New emissions standards were set for SO_2, NO_X, and PM in subpart Da for units that begin construction, modification, or reconstruction after May 3, 2011. Compliance with the emission limits of the rule will be determined using testing, monitoring, and other compliance provisions similar to those set forth in the existing standards. EPA also finalized several minor technical clarifications and corrections to existing NSPS provisions.
77 FR 23399 April 19, 2012	Da	EPA corrected typographical errors, including cross-reference errors and certain preamble text.
77 FR 44488 July 30, 2012	Appendix A-6	EPA added Method 16C for measuring total reduced sulfur (TRS) emissions from stationary sources.

Federal Register Citation	Affected Subparts	Summary of Action
77 FR 48433 August 14, 2012	A, G, and Ga	EPA promulgated a new NSPS (Ga) for nitric acid plants, which includes a new NO_X emission limit for plants commencing construction, modification, or reconstruction after October 14, 2011.
77 FR 49490 August 16, 2012	A, KKK, LLL, and OOOO	EPA finalized the review of the NSPS for the oil and natural gas source industry. 1) Reviewed the NSPS for VOC from leaking components at onshore natural processing plants and NSPS for SO_2 from natural gas processing plants. 2) Established standards for certain oil and gas operations not covered by the existing standards, which includes regulating VOC emissions from gas wells, centrifugal compressors, reciprocating compressors, pneumatic controllers, and storage vessels. 3) Finalized the residual risk and technology review for the Oil and Natural Gas Production source category. 4) Revised the existing leak detection and repair requirements. 5) Established emissions limits reflecting maximum achievable control technology for certain uncontrolled emissions sources in the oil and natural gas production categories. 6) Revised the regulatory provisions related to emissions during periods of startup, shutdown, and malfunction.
77 FR 56422 September 12, 2012	A, J, and Ja	EPA lifted the stay of effective date for the amendments to the NSPS for petroleum refineries.

Federal Register Citation	Affected Subparts	Summary of Action
78 FR 6674 January 30, 2013	A, IIII, and JJJJ	EPA revised the NSPS for stationary compression ignition engines and the NSPS for stationary spark ignition engines for consistency with the Reciprocating Internal Combustion Engines National Emission Standards for Hazardous Air Pollutants (RICE NESHAP). Provisions were added to the NSPS to set limits on the hours that stationary emergency engines may be used for emergency demand response, and establish fuel and reporting requirements for emergency demand response engines. EPA also made corrections for technical and editing errors.
78 FR 9112 February 7, 2013	A and CCCC	EPA established standards and effective dates for new and existing commercial and industrial solid waste incineration units. The NSPS revision also made technical corrections to clarify definitions, references, applicability, and compliance issues.
78 FR 10006 February 12, 2013	F	EPA amended the NSPS for Portland cement plants in response to court decisions. The stack emission standard for PM was revised.
78 FR 24073 April 24, 2013	Da	EPA reconsidered certain issues in the previous final rule published on February 16, 2012 (77 FR 45967) and made technical corrections to definitions and monitoring provisions in the NSPS for fossil-fuel-fired electric utility steam generators.
78 FR 28052 May 13, 2013	Ec	EPA amended the NSPS for hospital/ medical/ infectious waste incinerators (HMIWIs). Minor revisions were made to the compliance and performance testing provisions.
78 FR 58416 September 23, 2013	OOOO	EPA amended the NSPS for the oil and natural sector in response to a petition for reconsideration. The amendments clarified notification and compliance dates, ensured control of all storage vessel affected facilities, updated key definitions, and corrected technical errors in the previous final rule.

Federal Register Citation	Affected Subparts	Summary of Action
78 FR 76753 December 19, 2013	Ja	EPA amended the definition of "delayed coking unit" by removing process piping and associated equipment from the definition, and removed a redundant definition from the rule text.
79 FR 11228 February 27, 2014	A, Db, Ec, H, O, BB, GG, KK, LL, UU, NNN, IIII, JJJJ, Appendix A-1, Appendix A-2, Appendix A-4, Appendix A-5, Appendix A-6, Appendix A-7, Appendix A-8, Appendix B, and Appendix F	EPA made technical and editorial corrections the requirements for source testing of emissions and operations. The amendments updated testing provisions that contained inaccuracies and outdated procedures. It also added new alternatives.
79 FR 18952 April 4, 2014	A, BB, and BBa	EPA established a new NSPS for kraft pulp mills which commence construction, reconstruction, or modification after May 23, 2013. The revised standard included PM emissions limits for recovery furnaces, smelt dissolving tanks and lime kilns, and opacity limits for recovery furnaces and lime kilns equipped with electrostatic precipitators. It also included additional testing requirements and updated monitoring, recordkeeping and reporting requirements for affected sources, including electronic reporting of performance testing data.
79 FR 25681 May 6, 2014	Ga	EPA made a technical correction to the NSPS for nitric acid plants published on August 4, 2012 (78 FR 48447).
79 FR 28439 May 16, 2014	Appendix F	EPA promulgated a new quality assurance/quality control procedure (referred to as Procedure 3) for continuous opacity monitoring systems.
79 FR 68777 November 19, 2014	Da	EPA amended the standard for industrial boilers and electric generating units to revise the startup and shutdown provisions.

Federal Register Citation	Affected Subparts	Summary of Action
79 FR 79019 December 31, 2014	OOOO	EPA amended the NSPS for Crude Oil and Natural Gas Production, Transmission, and Distribution to address the issues related to well completion and storage vessel provisions. EPA also made technical corrections and additional amendments to further clarify this rule.
80 FR 13672 March 16, 2015	A, AAA, QQQQ, Appendix A-8, and Appendix I	EPA revised the NSPS for New Residential Wood Heaters (Subpart AAA) and added a new NSPS (QQQQ) for New Residential Hydronic Heaters and Forced Furnaces. The revision of Subpart AAA: 1) broadened the applicability beyond adjustable rate wood heaters to include all single burn rate wood heaters/stoves/appliances, pellet heaters/ stoves/appliances and all other residential wood heaters except residential masonry heaters and units regulated under the new subpart QQQQ; 2) developed a two-phase implementation of more stringent emissions limits; 3) modified test methods to allow manufacturers to use cord wood for certification tests; and 4) streamlined the certification processes to conditionally allow extra time for manufacture and sale of devices until EPA reviews the application. The new subpart QQQQ is similar to Subpart AAA, and established emission limits for new residential hydronic heaters and forced-air furnaces with phased implementation. It also included requirements for certification testing, labeling, and quality assurance.
80 FR 38628 July 7, 2015	Appendix B and Appendix F	EPA revised the performance specification and test procedures for hydrogen chloride (HCl) continuous emission monitoring systems (CEMS).
80 FR 42397 July 17, 2015	Appendix B	EPA made a typographical correction on PS-18 – Performance Specifications and Test Procedures for HCl CEMS at Stationary Sources.

Federal Register Citation	Affected Subparts	Summary of Action
80 FR 44772 July 27, 2015	F	EPA amended the NSPS for Portland Cement Plants. The amendment removed the affirmative defense provisions, clarified certain terms, and made technical corrections.
80 FR 48262 August 12, 2015	OOOO	EPA amended the NSPS for the Oil and Natural Gas sector and revised the definitions of "low pressure gas well" and "storage vessel." EPA also removed provisions concerning storage vessels connected or installed in parallel.
80 FR 50386 August 19, 2015	T, U, V, W, and X	EPA revised the NSPS for five Phosphate Fertilizers Production source categories. The revisions included new requirements to establish an allowable range for pressure drop through process scrubbing systems, keep records of daily pressure drop through process scrubbing systems, and keep records of deviations. It also redefined several terms and made typographical corrections.
80 FR 64510 October 23, 2015	A and TTTT	EPA established the NSPS for emissions of carbon dioxide (CO_2) from newly constructed, modified, and reconstructed fossil fuel-fired electric utility generating units (EGUs). It also addressed related permitting and reporting issues and established final emissions guidelines for states to use in developing plans to limit CO_2 emissions from existing fossil fuel-fired EGUs.
80 FR 75178 December 1, 2015	J and Ja	EPA made technical corrections and clarifications to the NSPS for petroleum refineries to improve consistency and clarity and address issues related to a 2008 industry petition for reconsideration.
81 FR 20172 April 6, 2016	Da	EPA revised procedures for calculating compliance with the NSPS daily average PM emission limit using PM CEMS.
81 FR 31515 May 19, 2016	Appendix B and Appendix F	EPA made several minor technical amendments to the performance specifications and test procedures for HCl CEMS used for compliance determination at stationary sources.

Federal Register Citation	Affected Subparts	Summary of Action
81 FR 35824 June 3, 2016	A, OOOO, and OOOOa	EPA amended the existing NSPS (OOOO) and established new standards (OOOOa) for the Oil and Natural Gas sector. EPA amended several aspects of the existing subpart OOOO related to implementation. These improvements and the setting of the standards for GHGs in the form of limitations on methane resulted from earlier petitions for reconsideration. The implementation improvements did not change operations and equipment requirements. EPA added a new subpart OOOOa, based on the Best System of Emission Reduction (BSER) for reducing emissions of GHGs, specifically methane and VOC across a variety of additional emissions sources in the oil and natural gas source category.
81 FR 40956 June 23, 2016	CCCC	EPA amended the NSPS to address issues raised in petitions for reconsideration of the 2013 CISWI Units rule. 1. The "CEMS data during startup and shutdown" definition was revised to be subcategory-specific. 2. The PM limit for the waste-burning kiln subcategory was revised. 3. A fuel variability factor was incorporated into the emission limits for cadmium, hydrogen chloride, mercury, lead, filterable PM and nitrogen oxides. 4. The definition of kiln was revised to be consistent with the Portland Cement NESHAP. 5. EPA clarified certain applicability provisions related to incinerator units and air curtain incinerator units subject to the 2000 CISWI NSPS.
81 FR 42542 June 30, 2016	A, GG, BBB, DDD, III, LLL, NNN, KKKK, and OOOO	EPA made typographical corrections to various parts of the NSPS.

Federal Register Citation	Affected Subparts	Summary of Action
81 FR 43950 July 6, 2016	IIII	EPA amended the NSPS for stationary compression ignition internal combustion engines to allow manufacturers to design the engines so that operators can temporarily override performance inducements related to the emission control system for stationary CI internal combustion engines. The amendments apply to engines operating during emergency situations where the operation of the engine or equipment is needed to protect human life: however, the engine is required to comply with tier 1 emission standards during such emergencies. EPA also amended the standards for certain stationary CI internal combustion engines located in remote areas of state of Alaska.
81 FR 45232 July 13, 2016	Ja	EPA made minor technical corrections and clarifications to the NSPS for Petroleum Refineries.
81 FR 59332 August 29, 2016	A and XXX	EPA promulgated a new NSPS for Municipal Solid Waste Landfills. This new subpart applies to landfills that commence construction, reconstruction, or modification after July 17, 2014. Compared to the older NSPS (WWW), the new NSPS lowered the emission threshold for requiring a landfill gas control system. The new standard also incorporated new information on surface emissions monitoring and wellhead monitoring.
81 FR 59800 August 30, 2016	A, JJJJ, Appendix A-1, Appendix A-2, Appendix A-5, Appendix A-6, Appendix A-7, Appendix A-8, Appendix B, and Appendix F	EPA made technical and editorial corrections and revisions related to source testing of emissions. EPA updated testing provisions, and added alternative provisions to existing testing methods to improve data quality and provide flexibility.
82 FR 24878 May 31, 2017	XXX	EPA granted a stay for subpart XXX for 90 days from May 31, 2017 to August 29, 2017.

Federal Register Citation	Affected Subparts	Summary of Action
82 FR 25730 June 5, 2017	OOOOa	EPA granted stays for certain provisions under subpart OOOOa from June 2, 2017 to August 31, 2017.
82 FR 36688 August 7, 2017	Appendix B	EPA corrected an omission in revisions requested to Performance Specification 2 in the "revisions" rule published on August 30, 2016 (81 FR 59800).
82 FR 37822 August 14, 2017	Appendix F	EPA revised Procedure 2, which includes QA/QC procedures for PM CEMS used for compliance determination at stationary sources.
82 FR 44106 September 21, 2017	Appendix F	EPA made minor technical amendments to Procedure 6, which includes QA procedures for HCl CEMS used for compliance determination at stationary sources.
83 FR 10628 March 12, 2018	OOOOa	EPA finalized amendments of two narrow provisions of the requirements for the collection of fugitive emissions from components at well sites and compressor stations: 1) removed the requirement for completion of delayed repair during unscheduled or emergency vent blowdowns, and 2) provided separate monitoring requirements for well sites located on the Alaskan North Slope.
83 FR 15964 April 13, 2018	A	EPA updated the delegation of certain NSPS to the New Mexico Environmental Department.

APPENDIX C
LIST OF ATCM AMENDMENTS

Since Rule 904 was last amended in 2011, CARB has adopted amendments to four ATCMs, which are coded in Title 17 of the California Code of Regulations. Each of the amended ATCMs are discussed below.

Amended §93115 – ATCM for Stationary Compression Ignition (CI) Engines: This ATCM applies to any person who owns or operates a stationary CI engine ≥ 50 brake horsepower (bhp) in California, or who sells, offers for sale, leases, or purchases a stationary CI engine ≥ 50 bhp for use in California. Its purpose is to reduce diesel PM emissions from new and in-use engines. There are approximately 1,270 stationary CI engines in Sacramento County to which this ATCM applies. CARB approved amendments to the ATCM in October 2010, which closely aligned it with the federal NSPS requirements (40 CFR Subpart IIII). The amendments included the following significant changes:

- The sell-through provision for new emergency standby engines was removed because it was no longer needed.
- The definition of "emergency standby engine" was changed to clarify that it does not include any diesel engine that supplies power to an electrical grid or that supplies power as part of a financial arrangement with any entity, except for those engines enrolled in a demand response program.
- The previous version of the ATCM would have required new emergency standby engines to meet the after-treatment based Tier 4 standards when they are more stringent than 0.15 g/bhp-hr. This requirement was eliminated and instead, the ATCM was aligned with the NSPS requirement that any new emergency standby engine must be 2007 model year or newer.
- For new emergency standby direct-drive fire pump engines, the ATCM was amended to delay implementation of emissions standards for up to three years. This delay was necessary to allow adequate time for these engines to meet National Fire Protection Association specifications.
- The ATCM was amended to exempt direct drive fire pump engines ≤50 bhp from the requirement to meet the Off-Road Standards and instead rely on the federal NSPS requirements for these engines.
- A requirement was added for owners or operators of emergency standby engines used in demand response programs to report annually information on engines and hours of operation to the local district and the CARB Executive Officer.

Amended §93116 – ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater: This ATCM applies to owners and operators of portable diesel engines rated ≥ 50 bhp. Its purpose is to reduce diesel PM emissions from both new and in-use engines. There are approximately 50 portable CI engines in Sacramento County to which this ATCM applies. CARB approved amendments to the ATCM in 2010 in two phases. The amendments included the following significant changes:

- The deadline to replace noncertified engines was extended by one year, to January 1, 2011, for a limited number of engines in small fleets.

- Allowed engines used in portable applications that are certified to the federal on-highway emission standards to operate beyond January 1, 2010. These certified on-highway engines became part of the portable fleet, and subject to the fleet emission standards in the ATCM.
- Auxiliary deck engines used on two-engine water well drilling rigs were subjected to the Off-Road Vehicle Regulation, effectively exempting them from the ATCM.
- Revised the requirements for noncertified engines that are designated as emergency use or low use.
- Until January 1, 2017, allowed local air districts, under certain circumstances, to issue permits to engines that are certified but not to the current tier.

Amended §93118.2 – ATCM for Fuel Sulfur and Other Operational Requirements for Ocean-going Vessels within California Waters and 24 Nautical Miles of the California Baseline: This ATCM requires the use of low-sulfur marine distillate fuels to reduce toxic air contaminant emissions from the use of auxiliary diesel and diesel-electric engines, main propulsion diesel engines, and auxiliary boilers on ocean-going vessels within Regulated California Waters. In June 2011, CARB approved amendments to the ATCM, which included the following significant changes:

- The original ATCM required marine fuels to comply with a Phase 2 limit of 0.1 weight percent sulfur beginning on January 1, 2012. The amendments extended the Phase 2 compliance date by two years, to January 1, 2014.
- Changes were made to the noncompliance fee provision, which allows, in certain specified situations, the payment of fees in lieu of direct compliance with the rule. A revised schedule of fees was included in the amendments.

This ATCM includes ocean-going vessels operated in inland waters. It could potentially apply to vessels operating in the Sacramento River. However, there are few, if any, of these vessels.

Amended §93118.5 – ATCM for Commercial Harbor Craft: The purpose of this ATCM is to reduce emissions of diesel PM and NO_X from new and in-use CI engines on commercial harbor craft. In June 2010, CARB approved amendments to the ATCM, which included expanding the applicability of in-use engine requirements to include in-use crew and supply, barge, and dredge vessels. These engines are required to meet EPA Tier 2 or Tier 3 marine or nonroad engine standards in effect at the time the engine is required to comply with the in-use emission requirements.

This ATCM includes harbor craft operated in inland waters. Sacramento County currently does not have a port, but this ATCM would apply if a port were constructed on the Sacramento County side of the Sacramento River.