

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

(Adopted February 3, 2006)

RULE 3501 RECORDKEEPING FOR LOCOMOTIVE IDLING

(a) Purpose

The purpose of this rule is to record idling events to identify opportunities for reducing idling emissions and to assist in quantifying idling emissions.

(b) Applicability

This rule shall apply to Class I freight railroads and switching and terminal freight railroads that operate locomotives in the District.

(c) Definitions

(1) **ALTERNATIVE TECHNOLOGY** means a locomotive propulsion strategy by which NO_x and diesel PM emission reductions of 85 percent or greater, on a gram per brake horsepower-hour (g/bhp-hr) basis, as compared to emission levels for conventional diesel locomotives operating on a comparable duty cycle (switch or line-haul), can be achieved and verified. Strategies include battery dominant hybrid systems with diesel internal combustion engines, locomotive motive power fueled with natural gas, propane, ethanol, methanol, hydrogen, electricity, fuel cells, advanced technologies that do not rely on diesel fuel, and any of these fuels used in combination with each other or in combination with non-diesel fuel.

(2) **ANTI-IDLING DEVICE** means a device installed on a diesel locomotive designed to automatically shut-off the main diesel internal combustion engine used for locomotive motive power after a specified time period when specified parameters (e.g., engine water temperature, ambient temperature, battery charge, railcar brake pressure, etc.) are at acceptable levels, and then automatically restart the engine when parameters are no longer at acceptable levels.

(3) **CLASS I FREIGHT RAILROAD** means a Class I railroad, as classified by the Surface Transportation Board in 49 CFR Part 1201 Subpart A, that primarily transports freight rather than passengers.

(4) **DISTRICT** means the South Coast Air Quality Management District's geographical area of jurisdiction, consisting of the four-county South Coast Air Basin and the Riverside County portions of the Salton Sea Air

Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The South Coast Air Basin, which is a subarea of the District, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east and includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and the Palo Verde Valley in the east.

- (5) ENGAGED means the condition in which a locomotive's controls (e.g., reverser handle, throttle handle, brake handle, etc.) are set in such a way while idling that an installed anti-idling device can automatically shut-off and restart the main diesel internal combustion engine used for locomotive motive power.
- (6) FOREIGN POWER means a locomotive that is not owned or leased by the operator but operated in the District by the operator.
- (7) IDLE OR IDLING OR IDLING EVENT means the operation of a locomotive's diesel internal combustion engine(s) used for locomotive motive power during which the engine is not used to move the locomotive. It shall not be considered idling when the engine is operating while the locomotive is being slowed or moved by gravity.
- (8) INTERDISTRICT LOCOMOTIVE means, for the purpose of this rule, a diesel locomotive that is not foreign power that operates within the District for any period of time, and is not an intradistrict locomotive.
- (9) INTRADISTRICT LOCOMOTIVE means, for the purpose of this rule, a diesel locomotive that is not foreign power that operates within the District for which at least 90 percent of its annual fuel consumption, annual hours of operation, or annual rail miles traveled occur within the District.
- (10) LOCOMOTIVE means, for the purpose of this rule, a self-propelled piece of on-track equipment designed for moving or propelling railroad cars that are designed to carry freight, passengers or other equipment, but which itself is not designed or intended to carry freight, passengers (other than those operating the locomotive) or other equipment. The following equipment is not a locomotive: equipment designed for operation both on highways and rails; specialized railroad equipment for maintenance, construction, post-accident recovery of equipment, or repairs; and vehicles

propelled by engines with rated horsepower of less than 750 kW (1006 hp).

- (11) **LOCOMOTIVE IDENTIFIER** means a numeric or alphanumeric sequence that is used by a railroad to uniquely identify individual locomotives such as the road number displayed on the front, back and sides of locomotive exteriors.
- (12) **OPERATOR** means, for the purpose of this rule, a railroad responsible for operations associated with movement of freight within the District.
- (13) **RAILROAD** means, for the purpose of this rule, a commercial entity that operates locomotives to primarily transport freight.
- (14) **RESPONSIBLE COMPANY OFFICIAL** means, for the purpose of this rule, a president, chief executive officer, secretary, treasurer, chief financial officer, head of operations, or vice president of a railroad in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the railroad, as approved by the Executive Officer.
- (15) **SWITCHING AND TERMINAL RAILROAD** means a non-Class I railroad engaged primarily in switching and/or terminal services for other freight railroads.
- (16) **TAMPER OR TAMPERED WITH** means for the purpose of this rule, the modification or disabling of an anti-idling device that would circumvent its normal operation such that even if specified parameters (e.g. engine water temperature, ambient temperature, battery charge, railcar brake pressure, etc.) are at acceptable levels, the main diesel internal combustion engine used for locomotive motive power will not automatically shut-off after a specified time period.
- (17) **UNCONTROLLED INTERDISTRICT LOCOMOTIVE FLEET** means the portion of the interdistrict locomotive fleet that is not equipped with either anti-idling devices or is not operating exclusively using an alternative technology as of February 3, 2006, including any locomotives added to the interdistrict locomotive fleet after February 3, 2006 that are not equipped with anti-idling devices or are not operating exclusively with alternative technologies.
- (18) **UNCONTROLLED INTRADISTRICT LOCOMOTIVE FLEET** means the portion of the intradistrict locomotive fleet that is not equipped with either anti-idling devices or is not operating exclusively using an

alternative technology as of February 3, 2006, including any locomotives added to the intradistrict locomotive fleet after February 3, 2006 that are not equipped with anti-idling devices or are not operating exclusively with alternative technologies.

(d) Recordkeeping Requirements

- (1) Effective August 3, 2006, the operator shall record the following information for each idling event of 30 minutes or more:
 - (A) A description of the idling event, including:
 - (i) Name of locomotive operator and name of owner, if different; and
 - (ii) Locomotive identifier; and
 - (iii) Specific location of idling event, including specification of milepost information; and
 - (iv) Date and time of idling event onset; and
 - (v) Duration of idling event.
 - (B) For idling events of more than two hours an operator shall provide an explanation of the reason for the idling event.
- (2) An operator required to conduct recordkeeping pursuant to paragraph (d)(1) shall maintain for a period of not less than two years and make available to the Executive Officer within this period, upon request, all information necessary to verify and substantiate records addressed under paragraph (d)(1), such as dispatch center files, locomotive operational logs, locomotive position information from any electronic system that can be used to verify location, maintenance and repair records, and any methods or techniques identified under subparagraph (e)(2)(L).
- (3) An operator exempt from paragraph (d)(1) due to the installation of anti-idling devices shall maintain for a period of not less than two years from the date of installation of the anti-idling device and make available to the Executive Officer within this period, upon request, all information necessary to verify the installation of anti-idling devices and that the anti-idling devices were set at 15 minutes or less and were engaged when idling. This information may include records from anti-idling device event recorders.

(e) Reporting Requirements

- (1) Beginning the first Wednesday following August 3, 2006, and each Wednesday thereafter, the operator shall submit the records specified in paragraph (d)(1) to the Executive Officer for each recorded idling event that occurred over the seven day period terminating on the preceding Friday.
- (2) On or before April 4, 2006, and every year thereafter, the operator shall submit an annual report to the Executive Officer that includes for each interdistrict and intradistrict locomotive operated in the District within the past calendar year, if not previously reported or if different from the most recently submitted annual report, the following information:
 - (A) locomotive identifier and whether the locomotive is an interdistrict or intradistrict locomotive; and
 - (B) a description of the type of service the locomotive performed (e.g., line haul service, local service, yard switching, road switching); and
 - (C) number of engines; and
 - (D) manufacturer, model classification, year(s) of manufacture and repower, if applicable, and EPA emissions tier or other measure of locomotive emissions for EPA pre-Tier 0 locomotives, when available; and
 - (E) engine horsepower for the year(s) of manufacture (and repower, if applicable); and
 - (F) whether equipped with an anti-idling device, and if so, with the following additional information:
 - (i) description of the anti-idling device, including the manufacturer, model number, and year of installation; and
 - (ii) written statement specifying whether the anti-idling device is set at 15 minutes or less, is engaged when idling, and will not be tampered with; and
 - (G) whether operated exclusively using an alternative technology; and
 - (H) description of any emission control devices; and
 - (I) statement whether or not the locomotive is equipped with a Global Positioning System (GPS); and

- (J) locomotive identifiers of locomotives that are no longer operated in the District that were previously reported; and
 - (K) a timetable, or similar document, showing operator's rail routes in the District, including milepost designations for stations and sidings; and
 - (L) The method or technique used to record idling event information required pursuant to paragraph (d)(1).
- (3) All reports shall be submitted electronically in a format approved by the Executive Officer.
- (A) Weekly reports shall be sent as attachments to e-mail messages to the Executive Officer, or an appointed designee.
 - (B) Annual reports may be sent either as e-mail message attachments to the Executive Officer, or an appointed designee, or on storage media (e.g., CD, DVD) mailed via U.S. Mail or delivered by courier service.
- (4) All reports shall include the name, title and signature of the responsible company official certifying the accuracy of the records submitted.
- (f) **Alternative Compliance Plan**
- An operator may comply with an Alternative Compliance Plan that is submitted to and approved by the Executive Officer, in lieu of complying with the requirements of paragraphs (d)(1), (d)(2), (e)(1), for those fleets covered by its Alternative Compliance Plan. The Alternative Compliance Plan may apply to an operator's intradistrict locomotive fleet, interdistrict locomotive fleet, or both.
- (1) The Alternative Compliance Plan shall be submitted at least 90 days before its intended use, but no later than June 30, 2006 if intended for use for the operator's intradistrict fleet and not later than January 1, 2008 if intended for use for only the operator's interdistrict fleet.
 - (2) The operator shall comply with recordkeeping and reporting requirements pursuant to paragraphs (d)(1), (d)(2), and (e)(1) until the Executive Officer approves the Alternative Compliance Plan.
 - (3) The Alternative Compliance Plan shall contain the following information, as applicable:
 - (A) A schedule to equip all locomotives in the intradistrict fleet with anti-idling devices or to operate exclusively using alternative

- technologies, or any combination thereof, to meet the following timelines:
- (i) 50% of the uncontrolled intradistrict locomotive fleet on or before December 31, 2006; and
 - (ii) 100% of the uncontrolled intradistrict locomotive fleet on or before December 31, 2007.
- (B) A schedule to equip all locomotives in the interdistrict fleet with anti-idling devices or to operate exclusively using alternative technologies, or any combination thereof, to meet the following timelines:
- (i) 50% of the uncontrolled interdistrict locomotive fleet on or before June 30, 2008; and
 - (ii) 100% of the uncontrolled interdistrict locomotive fleet on or before June 30, 2010.
- (C) Details of the locomotive fleets subject to the Alternative Compliance Plan that include the following:
- (i) specific locomotive identifier;
 - (ii) total number of locomotives subject to the Plan; and
 - (iii) number of locomotives subject to the Plan to be equipped with anti-idling devices or to begin operating exclusively using alternative technologies; and
 - (iv) projected dates of installing anti-idling devices or use of alternative technology .
- (D) If anti-idling devices are to be installed, a statement that each anti-idling device will be set at 15 minutes or less, will be engaged when idling, and will not be tampered with.
- (g) Plan Approval
- (1) Within 90 days of submittal of an Alternative Compliance Plan, the Executive Officer will approve or disapprove the Plan. The Executive Officer shall approve the Plan if it is complete and meets the requirements under subdivision (f).
 - (2) If the use of an alternative technology is requested, the NO_x and diesel PM emissions baseline for the conventional diesel locomotive shall be based upon the applicable U.S. EPA emissions tier specified in 40 CFR, Part 92, Section 92.8, unless the locomotive is manufactured prior to 1973.

In that case the operator shall establish baseline emission levels using the U.S. EPA specification for the Tier 0 emissions level, as specified in 40 CFR, Part 92, Section 92.8.

(h) Fees and Right of Appeal

- (1) The Alternative Compliance Plan shall constitute a plan for the purpose of fees assessed under Rule 306 – Plan Fees.
- (2) The operator may appeal the disapproval by the Executive Officer of an Alternative Compliance Plan to the Hearing Board under Rule 216 – Appeals and Rule 221 - Plans. If the Hearing Board denies the appeal, the Alternative Compliance Plan shall be revised, consistent with the findings and rulings by the Hearing Board and resubmitted within 90 days after the Board’s decision. The revised submittal shall correct all deficiencies identified by the Hearing Board.

(i) Circumvention

The moving of a locomotive for the purpose of preventing idling for more than the length of time for which recordkeeping is required under paragraph (d)(1) or to prevent an anti-idling device from shutting off a locomotive’s main propulsion engine shall be considered a violation of this rule.

(j) Penalties

Failure to comply with any requirement of this rule or any provision of an approved Alternative Compliance Plan will result in a separate violation for each locomotive for each day of non-compliance and subject to penalties under Health and Safety Code Section 42400 et seq.

(k) Exemptions

- (1) An operator shall be exempt from the requirements of paragraphs (d)(1), (d)(2), and (e)(1) for any locomotive, including foreign power, which is equipped with an anti-idling device that is set at 15 minutes or less, engaged when idling, and not tampered with. This exemption shall be in effect as of the date the locomotive is first operated in the District using the anti-idling device.
- (2) An operator shall be exempt from the requirements of paragraphs (d)(1), (d)(2), and (e)(1) for any locomotive, including foreign power, which is equipped to operate exclusively using an alternative technology. This

exemption shall be in effect as of the date the locomotive is first operated in the District using the alternative technology.

- (3) An operator that submits an Alternative Compliance Plan prepared pursuant to subdivision (f) shall be exempt from recording and reporting idling events pursuant to paragraphs (d)(1), (d)(2), and (e)(1) for the intradistrict and interdistrict locomotive fleets addressed in an approved Alternative Compliance Plan.

- (1) Severability

If any provision of this rule is held by judicial order to be invalid, or invalid or inapplicable to any person or circumstance, such order shall not affect the validity of the remainder of this rule, or the validity or applicability of such provision to other persons or circumstances. In the event any of the exceptions to this rule are held by judicial order to be invalid, the persons or circumstances covered by the exception shall instead be required to comply with the remainder of this rule.