

RULE 515 STATIONARY RAIL YARD CONTROL EMISSION REDUCTION CREDITS

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100 GENERAL

101 PURPOSE: To provide the owners of a rail yard a mechanism for quantifying, certifying, and banking emission reductions from the installation and use of a control device which reduces emissions from locomotive engines in rail yards.

102 APPLICABILITY:

102.1 Geographic: The provisions of this rule apply to rail operations located anywhere in Placer County.

102.2 Application: This rule applies to the owner of a rail yard who installs a control device to reduce emissions from locomotive engines to generate ERCs. The use of ERCs for offsets is subject to the requirements of Rule 502, NEW SOURCE REVIEW and Section 304 of this rule.

102.3 Severability: If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity of the remaining portions of the rule.

200 DEFINITIONS

201 ACTUAL EMISSIONS: The emissions measured by a certified CEMS at the inlet of a control device which reduces emissions from locomotive engines in rail yards.

202 ACTUAL EMISSION REDUCTIONS: Actual emission reductions means the difference in emissions exiting a control device and emissions entering a control device, as measured by a certified CEMS.

203 APCO: Air Pollution Control Officer.

204 APPLICANT: The owners of a rail yard submitting an application to bank ERCs and obtain ERC certificates in accordance with this rule.

205 BANKING: The system of quantifying, adjusting, certifying, recording, and registering ERCs for future use or transfer. This system shall be called the Emission Reduction Credit Bank (ERC Bank).

206 CEMS: Continuous emission monitoring system.

207 CERTIFIED ERCs: ERCs which have been evaluated under the requirements of this rule and other applicable District, state and federal rules and regulations and which have been authorized by the Air Pollution Control Officer.

208 CONTROL DEVICE: Stationary equipment used to treat and/or control various air emissions such that the outlet emissions are less than the inlet emissions.

209 EMISSION REDUCTION CREDITS (ERCs): Reductions of actual emissions that are registered with the District in accordance with the requirements of this rule.

210 EMISSION REDUCTION SHORTFALL: Amount of emissions in pounds that the quarterly emission reductions achieved by the control device falls short of the permit requirement.

211 ENFORCEABLE: Emission reductions and other required actions are enforceable if: (1) they are independently verifiable; (2) program and permit violations are defined; (3) those liable can be identified; (4) the U.S. Environmental Protection Agency (EPA) and the APCO

maintain the ability to seek penalties for violations and, where applicable, to secure appropriate corrective action; (5) citizens have access to all the emissions-related information obtained from the source; (6) citizens can file suits against sources for violations; and (7) they are practicably enforceable in accordance with EPA guidance on practicable enforceability.

- 212 ERC CERTIFICATE:** A document which provides title to a defined quantity and pollutant type of ERC's issued by the District.
- 213 ERC OWNER:** The person or legal entity in whose name the ERC Certificate is issued and listed in the Register.
- 214 BASELINE ACTUAL EMISSIONS:** Baseline actual emissions are those exhaust emissions captured from locomotive engines and measured at the control device inlet during the first four calendar quarters of operation after the CEMS has been certified.
- 215 OFFSET:** The use of an ERC to compensate for an emission increase of an affected pollutant from a new or modified source subject to the requirements of Rule 502, NEW SOURCE REVIEW.
- 216 PERMANENT:** Permanent means the actual emission reductions continue or endure for the duration of any project utilizing the resulting ERCs as offsets.
- 217 PRIORITY RESERVE BANK:** A depository for preserving ERCs pursuant to Rule 505, PRIORITY RESERVE.
- 218 QUANTIFIABLE:** Ability to reliably replicate measured emission reductions by adhering to the quantification protocol.
- 219 QUARTERLY:** Pertaining to any calendar quarter beginning in January, April, July, and October.
- 220 REAL:** Actually occurring, implemented, and not artificially devised.
- 221 REGISTER:** The document that records all ERC deposits, withdrawals, transfers, and transactions.
- 222 RELATIVE ACCURACY TEST AUDIT (RATA):** A quality performance procedure performed pursuant to 40 CFR Part 60, Appendix F, Procedure 1 to certify the accuracy of the continuous emissions monitors.
- 223 SURPLUS:** The amount of emission reductions that are, at the time of generation of an ERC, not otherwise required by federal, state, or local law, not required by any legal settlement or consent decree, and not relied upon to meet any requirement related to the California State Implementation Plan (SIP). However, emission reductions required by a state statute that provides that the subject emission reductions shall be considered surplus may be considered surplus for purposes of the Rule if those reductions meet all other requirements of this section. Examples of federal, state, and local laws and of SIP-related requirements include, but are not limited to, the following:
- 223.1 The federally-approved California SIP;
 - 223.2 Other adopted State air quality laws, and regulations not in the SIP, including but not limited to, any requirement, regulation, or measure that: (1) the District or the State has included on a legally-required and publicly-available list of measures that are scheduled for adoption by the District or the State in the future; or (2) is the subject of a public notice distributed by the District or the State regarding an intent to adopt such revision;

- 223.3 And other source- or source-category specific regulatory or permitting requirement, including, but not limited to, Reasonable Available Control Technology (RACT), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Best Available Control Measures (BACM), Best Available Control Technology (BACT), and the Lowest Achievable Emission Rate (LAER); and
- 223.4 Any regulation or supporting documentation that is required by the federal Clean Air Act but is not contained or referenced in 40 C.F.R. Part 52, including but not limited to: assumptions used in attainment and maintenance demonstrations (including Reasonable Further Progress demonstrations and milestone demonstrations), including any proposed control measure identified as potentially contributing to an enforceable near-term emissions reduction commitment; assumptions used in conformity demonstrations, and assumptions used in emissions inventories.

224 TRANSFER: The change in ownership of an ERC from one person or legal entity to another.

300 STANDARDS

301 CONTROL DEVICE PERMIT REQUIREMENTS:

- 301.1 The applicant shall obtain a permit pursuant to Rule 501, GENERAL PERMIT REQUIREMENTS to install a stationary control device in rail yards for the purpose of reducing exhaust emissions from locomotive engines.
- 301.2 The control device permit shall include enforceable conditions that ensure compliance with the applicable portions of Section 500 – Monitoring, Testing, Recordkeeping, and Reporting.

302 PROPOSED ERC ISSUANCE: Prior to proposing issuance of an ERC certificate pursuant to Section 402.6 of this rule, the APCO shall make the following determinations:

- 302.1 The actual emission reductions are real, surplus, enforceable, permanent, and quantifiable.
- 302.2 The continuous monitors used to measure inlet and outlet emissions of the control device meet the requirements of Section 500 of this rule.
- 302.3 The analysis provided by the applicant of historical locomotive activity and expected future emission reductions in the locomotive fleet are adequate to project future actual emission reductions by the control device.
- 302.4 Actual emissions reductions have been calculated and adjusted pursuant to the provisions of Sections 404 and 405 of this rule, respectively.
- 302.5 The applicant has paid the fees required pursuant to Rule 601, PERMIT FEES.

303 FINAL ERC ISSUANCE: The APCO shall not issue an ERC certificate until the permit for the control device responsible for creating the emission reductions has been modified to include, at a minimum, the following:

- 303.1 The minimum quantity of ERC pollutant(s) to be removed from the exhaust stream per quarter, and
- 303.2 Conditions that ensure compliance with the applicable portions of Section 500 – Monitoring, Testing, Recordkeeping and Reporting, and
- 303.3 A statement that the permittee may not retire the permit for the control device unless the rail yard is shutdown or the permittee surrenders to the District a Certified ERC

certificate for the same quantity of quarterly emission reductions required by the permit.

303.4 Statements that incorporate all of the provisions of Section 406 – Violations.

304 RESTRICTIONS ON USE OF ERCs:

304.1 The use of PM₁₀ and/or PM_{2.5} ERCs generated pursuant to this rule shall not be used to provide offsets for diesel particulate matter. The ERC certificate shall contain a statement prohibiting such use.

304.2 ERCs generated pursuant to this rule from locations in Federal Attainment Areas shall not be used for offsets in Federal Non-attainment Areas.

400 ADMINISTRATIVE REQUIREMENTS

401 APPLICATION PROCEDURES:

401.1 The applicant shall submit an application on forms supplied by the District.

401.2 The application may be for reductions of one or more affected pollutants. The application shall contain sufficient information to allow for adequate evaluation of the actual emission reductions. At a minimum, for each pollutant for which an ERC certificate is requested, the application shall contain emissions data from a certified CEMS for a minimum of four consecutive calendar quarters.

401.3 The applicant shall provide an analysis of historical locomotive activity at the control device location to support emission calculations and show reasonable expectation that a specific amount of emission reductions can be achieved on an on-going basis, taking into account lower than expected activity level, and other factors.

401.4 The applicant shall provide an analysis of expected future emission reductions in the locomotive fleet as the fleet is upgraded with newer, lower-emitting locomotives.

401.5 The applicable fees shall be submitted pursuant to Rule 601, PERMIT FEES.

402 ADMINISTRATIVE PROCEDURES AND TIMETABLE:

402.1 The APCO shall determine whether an ERC application is complete no later than thirty (30) calendar days following receipt of the application, or after a longer time period if agreed upon in writing by both the applicant and the APCO.

402.2 Upon determination that the application is complete, the APCO shall notify the applicant in writing. Thereafter, only information to clarify, correct, or otherwise supplement the information submitted in the application may be requested by the District.

402.3 If the APCO determines that the application is not complete, the applicant shall be notified, in writing, of the decision, specifying the additional information that is required. The applicant shall have sixty (60) days, or a longer time period agreed upon in writing by both the applicant and the APCO, to submit the requested information. Upon receipt of additional information, the APCO shall have another thirty (30) days to determine completeness. If no information is submitted or the application is still incomplete, the APCO may cancel the application with written notification to the applicant.

402.4 Withdrawal of an ERC application by the applicant shall result in cancellation of the application. Any re-submittal shall be processed as a new application.

- 402.5 Upon determination that an application is complete, the APCO shall have 180 calendar days to take final action. During this time period, the District shall follow the public notification procedures in Subsections 402.6, 402.7, and 402.8.
- 402.6 Upon completion of the preliminary evaluation of the application, the APCO shall provide written notice of such to the applicant, the ARB, and EPA and publish a public notice in a local newspaper of general circulation. The public notice shall specify the applicant, the quantity of ERCs proposed to be certified and the location where a copy of the preliminary evaluation and proposed revised operating permit may be inspected.
- 402.7 Publication of the public notice required in Subsection 402.6 shall commence a thirty (30) day public comment period during which the APCO shall accept written comments on the merits of the preliminary evaluation. Upon conclusion of this thirty (30) day period, the APCO shall have another thirty (30) days to render a final decision to approve, conditionally approve, or deny the application taking into consideration all written comments. This final decision shall be provided in writing to the applicant, any commenters, the US Environmental Protection Agency, and the California Air Resources Board.
- 402.8 The APCO shall make available for public inspection at the District's office the information submitted by the applicant and the APCO's preliminary evaluation no later than the date the public notice of the preliminary decision is published.
- 402.9 The applicant or any other party may appeal the APCO's final decision in accordance with Regulation 7, PROCEDURE BEFORE THE HEARING BOARD.
- 403 REGISTRATION OF EMISSION REDUCTION CREDITS:** ERC certificates issued in accordance with this rule shall be registered and maintained by the District according to the provisions of Rule 504, EMISSION REDUCTION CREDITS, Section 410, Registration and Section 411, ERC Register, respectively.
- 404 QUANTIFICATION PROTOCOL:** The following procedures shall be used to calculate actual emission reductions achieved by installing a control device to reduce locomotive exhaust emissions.
- 404.1 Actual emission reductions shall be calculated for each calendar quarter by subtracting measured emissions exiting the control device from measured emissions entering the control device, as measured for each pollutant by a CEMS which complies with the requirements of Sections 501 and 502.
- 404.2 ERCs for particulate matter emission reductions shall be expressed in terms of PM₁₀ and/or PM_{2.5}.
- 404.3 ERCs for nitrogen oxides, reactive organic compounds, carbon monoxide, sulfur oxides, PM₁₀ and PM_{2.5} shall be quantified in terms of pounds of pollutant per quarter for each calendar quarter.
- 404.4 Emission calculations for quantifying emission reductions shall be based upon at least four consecutive calendar quarters of CEMS data.
- 405 EMISSION REDUCTION CREDIT ADJUSTMENTS OF CALCULATED CREDITS:** Before the APCO may issue an ERC certificate, the actual emission reductions calculated for each calendar quarter pursuant to Section 404 shall be reduced by the following amounts:
- 405.1 The APCO shall retire 10% of the calculated quantity of NO_x emission reductions for air quality benefit.

- 405.2 The APCO shall transfer an additional 5% of the calculated quantity of emission reductions to the Priority Reserve Bank.
- 405.3 The APCO shall retire an equivalent percentage of the calculated quantity of emission reductions to account for expected future improvements in the fleet, as determined by Section 401.4.

406 VIOLATIONS:

- 406.1 Failure to comply with any provision of this rule or permit condition established pursuant to this rule shall constitute a violation of this rule.
- 406.2 Failure to provide the quarterly emission reduction incorporated in the permit to operate for the control device shall be considered an emission reduction shortfall and shall be a separate violation for each day of the quarter. If an emission reduction shortfall occurs, the permittee shall take the following corrective actions in order:
 - 406.2.1 The permittee shall average the actual emission reductions reported for the previous four quarters to determine if a sufficient quantity of actual emission reductions occurred to satisfy the quarterly emission reduction requirement on an annual basis. If the annual emission reductions satisfy the quarterly emission reduction requirement, the violation will be deemed resolved, if not the permittee shall comply with (ii) below.
 - 406.2.2 The permittee shall submit a compliance plan quantifying the amount of the emission reduction shortfall and indicating how the emission reduction shortfall will be remedied within the next 4 quarters. Such remedies may include cancelling any unused ERCs, reducing additional emissions during any of the next four quarters, such that on an annual basis the required quarterly amount of emission reductions is provided, or purchasing and retiring the necessary amount of ERCs.
- 406.3 Unnecessary idling or load testing for the sole purpose of providing the quarterly emission reduction or make-up of a prior quarter shortfall in emission reductions shall be a violation of this rule and the permit to operate.
- 406.4 If a compliance plan is not submitted or any emission reduction shortfall is not made up within four quarters of the shortfall occurrence, and any portion of the ERC certificate remains unused, a portion of the ERC certificate equivalent to the shortfall shall be revoked by the District.
- 406.5 If activity levels at the rail yard fall below those projected pursuant to Section 401.3, the permittee may submit an application to revise the quarterly emission reductions required, based on the new activity levels. EPA must also provide written concurrence as to any new quarterly emission reduction requirement prior to issuance of a revised permit to operate.

500 MONITORING, TESTING, RECORDKEEPING AND REPORTING

501 CONTINUOUS MONITORS:

- 501.1 For each control device installed to generate ERCs, the applicant shall install, and thereafter operate, maintain, certify, and quality-assure a continuous emission monitoring system (CEMS) which measures the inlet and outlet stack gas concentrations for each pollutant for which an ERC is to be issued and the oxygen concentrations in ppmv. The measured concentrations shall be corrected to 15 percent oxygen on a dry basis.
- 501.2 The CEMS shall meet the applicable requirements of 40 CFR 60 Appendix B, Performance Specifications 2 and 3, and 40 CFR Part 60 Appendix F, Procedure 1.

The CEMS shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. CEMS for PM shall not be required to include condensables.

- 501.3 The CEMS shall be programmed to calculate and record the actual emission reductions achieved by the control device, measured in pounds, on a daily basis, and summed quarterly.
- 501.4 A CEMS certification test protocol shall be submitted to the District and EPA no later than 30 days prior to the test date to allow review of the test plan and to arrange for an observer to be present at the test. The protocol shall include a process for demonstrating the accuracy of the computer programming used to calculate emissions. The certification test shall be conducted in accordance with the submitted protocol and any changes required by the District or EPA. The applicant shall furnish the District and EPA a written report of the results of performance tests within 60 days of completion. Certification testing of the CEMS may be conducted as part of the initial performance test for each control device.
- 501.5 For each control device installed to generate ERCs, the applicant shall install, and thereafter maintain and operate a continuous monitoring system to measure and record the stack gas volumetric flow rate. The system shall meet the 40 CFR Part 52, Appendix E Performance Specifications.

502 TESTING:

- 502.1 The CEMS shall be tested annually and quarterly in accordance with the requirements of 40 CFR 60 Appendix F, Procedure 1. The PM testing shall include the filter catch only.
- 502.2 A performance test shall be performed on the control device once every five years, in accordance with the requirements of 40 CFR 60.13.

503 RECORDKEEPING AND REPORTING:

- 503.1 The control device permittee shall maintain CEMS records that contain the following: The occurrence and duration of any startup, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements.
- 503.2 The control device permittee shall maintain records and submit a written report regarding operation of the control device and CEMS quarterly. The report is due on the 30th day following the end of the calendar quarter and shall include the applicable time and date of each period during which the CEMS was inoperative (monitor down time), except for zero and span checks, and the nature of system repairs or adjustments.
- 503.3 The owner of the control device shall prepare and submit to the District a quarterly report which is due on the 30th day following the end of the calendar quarter. The quarterly report shall detail the quantity and type of emissions reduced by operation of the control device; calculated pursuant to Section 404.1. If actual emission reductions achieved are less than the emission reduction requirements specified in the permit, the permittee shall also submit a compliance plan indicating how the emission reduction shortfall will be remedied.
- 503.4 All records required pursuant to this rule shall be kept for a minimum of five (5) years and made available to District inspectors upon request.

600 PROGRAM EVALUATION

- 601** The APCO shall evaluate this program at least once every 3 years after rule adoption and submit the evaluation program report to the EPA.
- 602** The evaluation report shall include for each applicant:
- 602.1 The number of Certified ERCs issued for each pollutant (pounds per quarter).
 - 602.2 Actual emission reductions achieved for each pollutant (pounds per quarter).
 - 602.3 The average cost of ERCs (dollars per ton) by pollutant during the evaluation period.
 - 602.4 The attainment status for each pollutant for which an ERC was issued, at the ERC generation and use locations.
- 603** If there were any emission reduction shortfall, the evaluation report shall also describe:
- 603.1 The number of quarters where there was a shortfall.
 - 603.2 The APCO's analysis of factors which contributed to the shortfall.
 - 603.3 Corrective measures taken to prevent recurrence of the shortfall.
 - 603.4 How long it took the rail yard owner to make up the shortfall.
- 604** The evaluation report shall also describe:
- 604.1 Any unintentional beneficial or detrimental effects from the program.
 - 604.2 Cost savings, if any, experienced by sources from using these ERCs.
 - 604.3 Whether the APCO had sufficient resources to implement this program.
 - 604.4 Any lessons learned.