



RULE 515 – STATIONARY RAIL YARD CONTROL EMISSION REDUCTION CREDITS



PUBLIC HEARING PRESENTATION

October 9, 2008

**Don Duffy
Associate Air Quality Engineer
Placer County Air Pollution Control District**



BACKGROUND

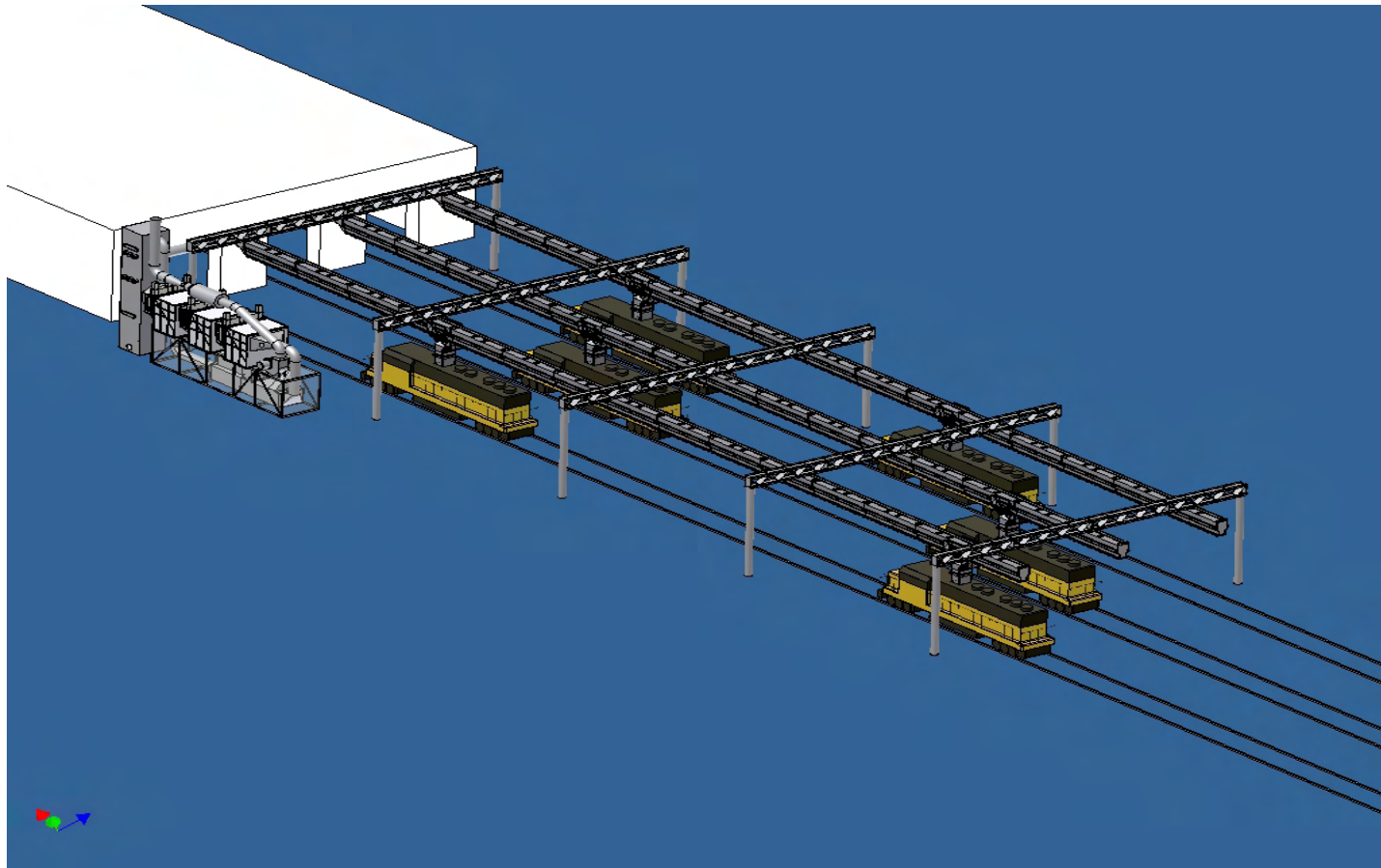
- CAPCOA ERC conference in Carmel, June 2004, initiated effort to develop non-traditional ERCs. Attendees represented regulators, industry and environmental organizations
- CAPCOA non-traditional ERC subcommittee selected three pilot projects
 - PCAPCD – Stationary rail yard emission control
 - SJAQMD – Dairy controls
 - SCAQMD – Head end rail controls
- Rule 515 is the outcome of the PCAPCD project



BACKGROUND

- Stationary rail yard control means using traditional stationary source control devices to treat locomotive exhaust
- PCAPCD motivated to reduce emissions from J. R. Davis rail yard in Roseville after learning the results of ARB HRA released in 2004
- ERCs are a potential source of funding for installation of emission controls in the rail yard
- The following pictures and illustrations clarify the concept

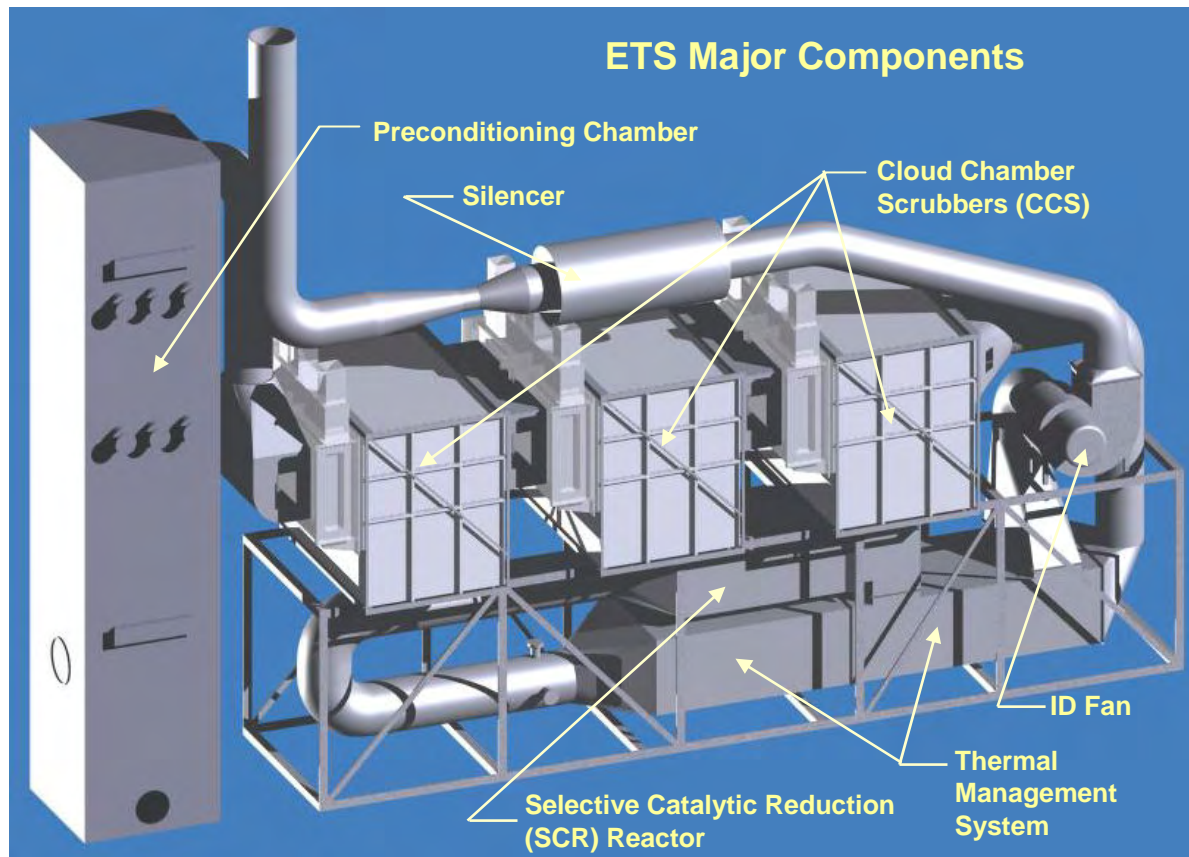
STATIONARY EMISSION CONTROL CONCEPT



LOCOMOTIVES AT THE DIESEL SHOP



EMISSIONS CONTROL DEVICES



EMISSIONS CONTROL DEVICES



EMISSIONS CONTROL DEVICES





PROPOSED RULE 515

- Stationary source permit
 - Control device to obtain an ATC and PTO per Rule 501, General Permit Requirements
 - Permit to contain requirement for continuous emission monitors (CEMS)
 - Obtain CEMS data for four consecutive quarters prior to ERC application
 - Permit to be amended prior to ERC issuance to add Rule 515 conditions



PROPOSED RULE 515

- Rule 515 modifications to PTO
 - Add a condition requiring a specified minimum quantity of emissions to be removed from the exhaust stream per quarter
 - Add conditions that ensure compliance with applicable portions of Rule 515 regarding monitoring, testing, recordkeeping and reporting
 - Add a statement that any quarterly emission reduction shortfall constitutes a violation for each day of the compliance period
 - Add a condition that requires an emission reduction shortfall be made up within four quarters

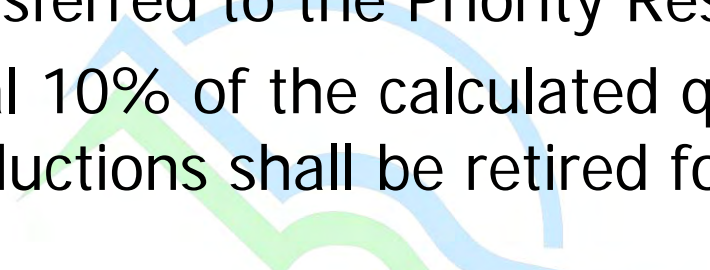


PROPOSED RULE 515

- ERC application procedures
 - Application may be for one or more affected pollutants
 - Application to contain emissions data from a certified CEMs for a minimum of 4 consecutive calendar quarters
 - Applicant to supply an analysis of historical locomotive activity to show reasonable expectation that the emission reductions can be achieved
 - Applicant to provide an analysis of expected future emission reductions as the locomotive fleet is upgraded with lower-emitting locomotives



PROPOSED RULE 515

- Adjustments of calculated credits
 - 5% of the calculated quantity of emission reductions shall be transferred to the Priority Reserve Bank
 - An additional 10% of the calculated quantity of NO_x emission reductions shall be retired for air quality benefit
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PROPOSED RULE 515

- Restrictions on use of ERCs
 - The use of PM_{10} and/or $PM_{2.5}$ ERCs generated pursuant to this rule shall not be used to provide offsets for diesel particulate matter
 - ERCs from locations in Federal Attainment Areas shall not be used for offsets in Federal Non-attainment Areas



PROPOSED RULE 515

■ Violations

- Failure to provide the quarterly emission reduction incorporated in the permit to operate for the control device shall be a separate violation for each day of the quarter.
- Any emission shortfall shall be made up within four quarters of the shortfall occurrence
- Unnecessary idling or load testing for the sole purpose of providing the quarterly emission reduction or make-up of a prior shortfall shall be a violation of this rule and the permit to operate



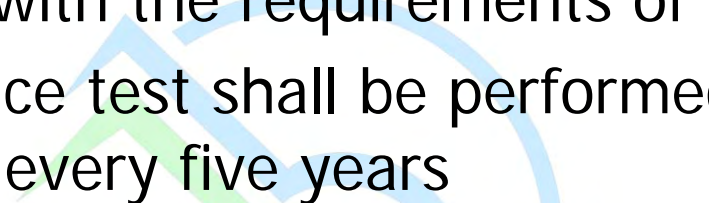
PROPOSED RULE 515

- Continuous monitors
 - For each control device installed to generate ERCs, the applicant shall install, operate, maintain, certify, and quality-assure a CEMS
 - The CEMS shall measure both inlet and outlet concentrations of each ERC pollutant
 - A CEMS shall be installed to measure and record stack gas volumetric flow rate
 - The CEMS shall meet the requirements of 40 CFR 60
 - A CEMS certification test protocol shall be submitted to the District and EPA for approval prior to use in collection of pre-application data



PROPOSED RULE 515

- Testing

- The CEMS shall be tested quarterly and annually in accordance with the requirements of 40 CFR 60
 - A performance test shall be performed on the control device once every five years
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PROPOSED RULE 515

- Recordkeeping and reporting
 - 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, periods when the CEMS is inoperative, and emission measurements
 - The control device permittee shall submit a quarterly report to the District detailing periods when the CEMS was inoperative
 - The owner or operator shall submit a quarterly report detailing the type and quantity of emissions reduced
 - The permittee shall report breakdowns of the control device or the CEMS per District Rule 404