

(Adopted December 8, 1995)(Amended March 8, 1996)
(Amended November 8, 1996)
(Amended October 9, 1998)

RULE 2202 - ON-ROAD MOTOR VEHICLE MITIGATION OPTIONS

(a) Purpose

The purpose of this Rule is to provide employers with a menu of options to reduce mobile source emissions generated from employee commutes, to comply with federal and state Clean Air Act requirements, Health & Safety Code Section 40458, and Section 182(d)(1)(B) of the federal Clean Air Act.

(b) Applicability

Effective June 19, 1998, this rule applies to any employer who employs 250 or more employees on a full or part-time basis at a worksite for a consecutive six-month period calculated as a monthly average, except as provided in subdivision (l) of this rule.

(c) Sunset Provision

This rule shall be rescinded at such time that a replacement measure is implemented which produces an equivalent level of emission reductions and such emission reductions are real, quantifiable, and surplus relative to the most recently adopted state implementation plan.

(d) Definitions

For the purpose of this Rule, the following definitions shall apply:

- (1) AIR QUALITY INVESTMENT PROGRAM (AQIP) is an emission reduction option, in which monies collected by the District from employers are used to fund mobile source emission reduction programs that have been approved by the District's Governing Board.
- (2) ALTERNATIVE FUEL VEHICLE is any vehicle powered by natural gas (NG), methanol, propane, liquefied petroleum gas (LPG) or electricity that

has been certified and/or approved by the California Air Resources Board (CARB) to have met the transitional low-emission vehicle (TLEV), low-emission vehicle (LEV), ultra-low-emission vehicle (ULEV), or zero-emission vehicle (ZEV) emissions standards.

- (3) EMISSION REDUCTION TARGET (ERT) is the annual VOC, NOx, and CO emissions required to be reduced based on the number of employees per worksite and the employee emission reduction factor, determined in accordance with the provisions of subdivision (e) of this rule.
- (4) EMPLOYEE is any person employed by a person(s), firm, business, educational institution, non-profit agency or corporation, government or other entity. The term exempts the following in accordance with the Rule 2202 - On-Road Motor Vehicle Mitigation Options Implementation Guidelines (amended October 9, 1998) seasonal employees; temporary employees; volunteers; field personnel; field construction workers; and independent contractors.
- (5) EMPLOYER is any person(s), firm, business, educational institution, non-profit agency or corporation, government agency, or other entity that employs 250 or more employees. Several subsidiaries or units that occupy the same work site and report to one common governing board or governing entity or that function as one corporate unit are considered to be one employer.
- (6) MOBILE SOURCE EMISSION REDUCTION CREDITS (MSERCs) are real, quantifiable, emission reductions, in accordance with the California Air Resources Board's Mobile Source Credit Guidelines, approved by the Executive Officer or designee, that can be used to comply with District Regulations, as authorized by Regulation XVI, Mobile Source Offset Programs.
- (7) NITROGEN OXIDES (NOx) are nitric oxides and nitrogen dioxides, collectively expressed as nitrogen dioxide.
- (8) PEAK COMMUTE TRIP is any employee trip from home to work occurring during the peak window.
- (9) PEAK WINDOW is the period of time, Monday through Friday between the hours of 6:00 AM and 10:00 AM, and used in calculating the vehicle trip emission credit.
- (10) PERFORMANCE TARGET ZONE is a geographic area that determines the employee emission reduction factor for a particular worksite pursuant to the map in Attachment I of this rule.

- (11) REMOTE SENSING is an emissions reduction strategy in which gross-polluting vehicles are identified by exhaust gas analyzers. Remote sensors measure absorption changes in the infrared or ultraviolet light spectrum and correlate that change to exhaust emissions levels. Emissions reductions resulting from the subsequent repair of the identified vehicles can be used to meet the emission reduction target according to the provisions of paragraph (f)(1), which allows credits through Regulation XVI.
 - (12) SCHOOL DISTRICT means a public agency of the state that is a school district of every kind or class except a community college district, and shall include a County Office of Education.
 - (13) VEHICLE TRIP EMISSION CREDITS (VTEC) are the emission reductions that result from the reduction of peak commute trips; other work related trips; alternative fuel vehicles; or other District approved method; expressed in pounds per year per pollutant, and determined according to the provisions of subdivision (g) of this rule.
 - (14) VOLATILE ORGANIC COMPOUND (VOC) is any volatile compound of carbon, excluding: methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds as defined in District Rule 102.
 - (15) WORKSITE means a structure, building, portion of a building, or grouping of buildings that are in actual physical contact or are separated solely by a private or public roadway or other private or public right-of-way, and that are occupied by the same employer. Employers may opt to treat more than one structure, building or grouping of buildings as a single worksite, even if they do not have the above characteristics, if they are located within a 2 mile radius and are in the same Performance Target Zone.
- (c) Requirements
- An employer subject to this Rule shall annually register with the District beginning within 90 days of receipt of notification to implement an emission reduction program to reduce emissions related to employee commutes and to meet a worksite specific emission reduction target (ERT) specified for the subsequent year. The annual ERT shall be determined according to the following equation, for VOC, NO_x, and CO, based on employee emission reduction factors specified in paragraph (m)(1) of this rule.

$$\left[\begin{array}{c} \text{Emission} \\ \text{Reduction Target} \\ \text{(lbs / year)} \end{array} \right] = \left[\left[\begin{array}{c} \text{Employees} \end{array} \right] \times \left[\begin{array}{c} \text{Employee Emission} \\ \text{Reduction Factor} \end{array} \right] \right] - \left[\begin{array}{c} \text{Vehicle Trip} \\ \text{Emission Credit} \end{array} \right]$$

Where:

Employees = Average daily number of employees reporting to work in the Peak Window for a typical Monday through Friday period excluding those weeks which include a national holiday.

Employee Emission

Reduction Factor = Determined by year of the registration submittal and the worksite Performance Target Zone in paragraph (m)(1) of this rule.

Vehicle Trip

Emission Credits = Determined according to subdivision (g) of this rule.

(f) On-Road Vehicle Mitigation Options

Employers shall use credits generated pursuant to one or more of the following emission reduction options to meet their Emission Reduction Target (ERT):

(1) Mobile Source Emission Reduction Credits

Any person may implement a mobile source offset program in accordance with the provisions of Regulation XVI such as Old Vehicle Scrapping, Clean On-Road Vehicles, Clean Off-Road Mobile Equipment, and Remote Sensing.

(2) Emission Reduction Credits (ERC) from Stationary Sources

Any person may elect to use Emission Reduction Credits (ERC) generated from stationary sources after January 1, 1996, in accordance with the provisions of Regulation XIII.

(3) Air Quality Investment Program (AQIP)

Notwithstanding other provisions of this rule, employers may participate in the air quality investment program by submitting an air quality investment, to be placed in a restricted fund in accordance with Rule 311 – Air Quality Investment Program (AQIP) Fees.

The District shall use these funds to obtain an emission reduction or air quality benefit that is equivalent to the sum of the ERTs for all participating employers in the AQIP.

(4) Other Emission Reduction Strategies

Notwithstanding the foregoing provisions, any employer may receive credit toward its ERT for any emission reduction strategy that the employer or other person demonstrates to the Executive Office achieves real, quantifiable, enforceable, and surplus emission reductions for a discrete period of time. Such strategies may include, but are not limited to, the reduction of non-work trips, other vehicle or engine accelerated turnover programs, investments in clean fuel infrastructure, clean fuel fleet purchases or conversion as specified in Regulation XVI, the provision of new vehicle purchase subsidies or discounts, and local community or development projects that reduce trip or energy demand or that expand clean fuel or high-occupancy travel options. The Executive Officer shall not approve an alternative emission reduction program unless it is consistent with other District regulations and Governing Board policies, and shall consider guidelines established by the California Air Resources Board and the Environmental Protection Agency.

(g) Vehicle Trip Emission Credits (VTEC)

Employers may elect to implement any of the following strategies and obtain vehicle trip emission credits that can be applied towards their ERT. Such actions are at the sole discretion of the employer.

(1) Peak Commute Trip Reductions

Employers may receive VTEC from employee commute reductions that occur during the peak window in accordance with the Rule 2202 - On-Road Motor Vehicle Mitigation Options Implementation Guidelines (amended October 9, 1998). VTEC obtained from peak commute trip reductions shall be determined according to the following equation:

$$\text{VTEC} = \left[\frac{\text{Creditable Commute}}{\text{Vehicle Reductions (CCVR)}} \right] \times \left[\frac{\text{Emission}}{\text{Factor (EF)}} \right]$$

Where:

CCVR = The daily average of total commute vehicle reductions that are real, surplus, and quantifiable.

EF = Emission Factor in paragraph (m)(2) of this rule.

In calculating VTEC for the subsequent year, employers may utilize data from previous years obtained by one of the following methods, with the exception of (C), provided that employers maintain programs that would reasonably be expected to achieve an equivalent level of reductions during the subsequent year:

- (A) Default data based on the weighted average of the average vehicle ridership survey data of the previous three consecutive years, or
- (B) Data obtained by conducting an average vehicle ridership survey in accordance with the Rule 2202 - Commute Reduction Program Guidelines, or
- (C) Data based on the default average vehicle ridership of 1.10, or
- (D) Data obtained by an equivalent methodology approved by the Executive Officer or designee.

(2) Other Work-Related Trip Reductions

Employers may receive additional VTEC from employee commute reductions that occur outside of the peak window or from non-commute vehicle usage calculated as creditable trip reductions and approved by the Executive Officer or designee. VTEC obtained from other work-related trip reductions shall be determined according to the following equation:

$$\text{VTEC} = \left[\frac{\text{Creditable Trip Reductions (CTR)}}{\text{Conversion Factor (CF)}} \right] \times \left[\frac{\text{Emission Factor (EF)}}{\text{Factor (EF)}} \right]$$

Where:

CTR = The daily average of one-way trip reductions that are real, surplus, and quantifiable. A round trip is considered to be two one-way trips.

CF = 2.0 for Peak Window trips; 2.3 for other trips.

EF = Emission Factor in paragraph (m)(2) of this rule.

(3) Alternative Fuel Vehicles

Employers may receive VTEC for the use of alternative fuel vehicles (original equipment manufacturer (OEM) or converted) for commute or other work-related trips, in accordance with the Rule 2202 - On-Road Motor Vehicle Mitigation Options Implementation Guidelines (amended October 9, 1998) and according to the following formula:

$$\begin{aligned}
 \text{VTEC} &= [\text{VT(NGs)}] \times [0.83] \times [\text{EF}] \\
 &+ [\text{VT(Ms)}] \times [0.80] \times [\text{EF}] \\
 &+ [\text{VT(Ps)}] \times [0.80] \times [\text{EF}] \\
 &+ [\text{VT(ZEVs)}] \times [\text{EF}] \\
 &\hline
 &\text{Conversion Factor (CF)}
 \end{aligned}$$

Where:

VT(NGs) = Daily Average Number of Vehicle Trips from natural gas vehicles

VT(Ms) = Daily Average Number of Vehicle Trips from flexible fuel vehicles operated on Methanol

VT(Ps) = Daily Average Number of Vehicle Trips from Propane or LPG vehicles

VT(ZEVs) = Daily Average Number of Vehicle Trips from Zero-Emission Vehicles

EF = Emission Factor from paragraph (m)(2) of this rule.

CF = 2.0 for Peak Window trips; 2.3 for other trips.

(4) Vehicle Miles Traveled (VMT) Reduction Programs

Subject to approval of the Executive Officer or designee, employers may elect to implement VMT reduction programs and receive VTEC towards their ERT. Reduction of annual employee commute VMT may result from employment center relocation, video-conference centers, telecommuting centers or other alternative programs approved by the Executive Officer or designee. The Executive Officer shall not offer any VTEC for a VMT reduction program unless it includes baseline VMT estimates and demonstrates that VMT reductions result in real, quantifiable, and surplus emission reductions.

(5) Parking Cash-Out Program

Employers may elect to implement a Parking Cash-Out Program to reduce employee commutes and receive VTEC toward their ERT. Parking Cash-Out is a program where an employer offers to provide a cash allowance to an employee, equivalent to the parking subsidy that the employer would otherwise pay to provide the employee with a parking space. Incorporation of the Parking Cash-Out Program as one of the options in Rule 2202, does

not relieve the affected parties from complying with the provisions of the Health and Safety Code section 43845 (AB 2109-Katz).

(h) General Emissions Credit Provisions:

The following provisions shall apply to any of the emission credit strategies identified in this rule:

- (1) An employer or other person seeking credit under this rule may use actual annual mileage per vehicle, or alternative estimates of vehicle miles traveled (VMT) contained in Rule 2202 - On Road Motor Vehicle Mitigation Options Implementation Guidelines (amended October 9, 1998).
- (2) Emission credit strategies that do not provide the precise amount of surplus emission reductions required for each of the three pollutants addressed by this rule (VOC, NOx, and CO) may still qualify for equivalent credit if the employer provides equivalent credits obtained pursuant to paragraph (h)(3).
- (3) Any person holding surplus emission credits, other than vehicle trip emission credits (VTEC), pursuant to this rule may trade some or all of the those credits to other employers.
- (4) Upon the expiration of this rule, any unused emission credits may be applied to other emission reduction programs pursuant to and consistent with District rules and regulations.

(i) Program Administration

Rule 2202 shall be administered according to the following:

- (1) Employers shall annually register with the District to implement an Emission Reduction Program for each worksite. Employers shall commence implementation of the approved Emission Reduction Program within 60 days of approval by the Executive Officer. The registration shall include the following information:
 - (A) The name of the highest ranking company official, the name of the contact person, company address, telephone numbers for all participating worksites;
 - (B) The on-road vehicle mitigation option(s) that will be used;
 - (C) The total number of employees that report to work in the peak window;
 - (D) The total number of employees at that worksite; and,

- (E) Calculations for VOC, NOx, and CO emission reductions for any of the on-road vehicle mitigation options in subdivision (f) or the vehicle trip emission credit options in subdivision (g).
- (2) Annual registration shall include changes in employment base and any other changes that would necessitate adjustment in emission reduction targets or program implementation.
- (3) Employers may request to amend their Emission Reduction Program at any time and implement the amendments with written approval of the Executive Officer subject to the criteria contained in paragraph (i)(1).
- (4) Rather than registering with the District for each individual worksite, an employer may submit a single registration to implement an Emission Reduction Program that meets the aggregated ERT of several sites.
- (5) Emission credits obtained pursuant to subdivision (f) or (g) shall be surrendered to the Executive Officer within the first six months of the approval of the registration forms. The Executive Officer may grant extensions not to exceed six months on a case by case basis upon a finding that earlier compliance would present an unreasonable hardship.
- (6) Records which document the accuracy and validity of all information submitted to the District as required by this rule shall be kept by the employer for a minimum of three years and made available upon request during normal business hours.
- (7) On a quarterly basis the Executive Officer shall recommend to the District's Governing Board the release of monies from the AQIP restricted fund. The program shall be administered and consideration of proposals shall be subject to the following:
 - (A) Proposals shall be accepted on an ongoing basis;
 - (B) Equal consideration shall be given to cost-effective proposals and those that achieve long-term advancement of mobile source technology;
 - (C) The amount of emission reductions required to demonstrate equivalent emission reductions shall be determined on a quarterly basis;
 - (D) The allocation of funding shall be recommended for proposals that reduce equivalent emissions within each county proportional to the contribution level of employers within each county to the greatest extent feasible; and,

- (E) The emissions reductions are demonstrated to be real, quantifiable, enforceable, and surplus, in accordance with the Rule 2202 - On-Road Motor Vehicle Mitigation Options Implementation Guidelines (amended October 9, 1998).
- (8) Registration forms submitted by employers shall be subject to the fee schedule set forth in Rule 308 – On-Road Motor Vehicle Mitigation Options Fees and Rule 311 – Air Quality Investment Program (AQIP) Fees. Employers choosing to implement the Employee Commute Reduction Program under paragraph (l)(3) shall be subject to the fee schedule set forth in Rule 308.
- (9) Any employer subject to Rule 2202 or to the exemptions of paragraph (l)(3) of this rule shall comply with the requirements of Rule 701 – Air Pollution Emergency Contingency Actions.
- (j) **Previously Delegated Programs**
Any employer that is in compliance with an ordinance adopted by a local government that has a trip reduction ordinance that was approved by the District prior to the effective date of this rule, and that has an existing memorandum of agreement with the District, shall be deemed in compliance with this rule.
- (k) **Delegation to Local Governments**
The District may delegate authority to implement all or part of Rule 2202, except for the provisions of paragraph (f)(3), to any local government that satisfies the following criteria:
 - (1) The local government adopts an ordinance that is at least as stringent as Rule 2202 in the following areas:
 - (A) Applicability;
 - (B) Emission reductions target;
 - (C) Vehicle trip emission credit calculations;
 - (D) Annual registration; and
 - (E) Recordkeeping.
 - (2) The local government demonstrates to the satisfaction of the Executive Officer that:
 - (A) It has an implementation plan providing adequate resources to adopt and enforce the ordinance; and

- (B) Multiple site employers with more than one regulated worksite in the District have the option of complying with the District rule instead of the local ordinance.
 - (3) The local government has executed a Memorandum of Understanding with the Executive Officer specifying the procedures to monitor and review performance of the local government in implementing the program, and procedures for revocation of delegation if the Executive Officer determines that performance of the local government is inadequate.
- (l) Exemptions
- (1) Employee Threshold
Any employer whose employee population at the worksite decreases to fewer than 250 employees for the prior consecutive six month period, calculated as a monthly average; or fewer than 33 employees are scheduled to report to work Monday through Friday between 6-10 AM for the prior consecutive 90 days, may submit a written request to the Executive Officer or designee to be exempted from this rule. Employers must submit a registration form not later than 90 days after they know or should have known that they no longer qualify for this exemption.
 - (2) Declared Bankruptcy
An employer who has declared bankruptcy, for the official business or governmental operations of its organization or company, through a judicial court filing and confirmation process, may request the Executive Officer to grant a temporary waiver from complying with the requirements of this rule. Upon demonstration of the filing and confirmation of bankruptcy, the Executive Officer will grant an exemption for the duration of bankruptcy, not to exceed two (2) years, from the date of the waiver.
 - (3) Employee Commute Reduction Program
Rather than comply with the provisions of subdivision (c) of this rule, employers may elect to implement an employee commute reduction program that demonstrates conformance with the Employee Commute Reduction Program Guidelines (amended October 9, 1998).
- (A) Performance Goal
- Employers must provide a program that will be reasonably likely to result in achieving their average vehicle ridership goal within three years. The goals shall be as follows: 1.75 for Performance Target

Zone 1; 1.5 for Performance Target Zone 2; and 1.3 for Performance Target Zone 3.

(B) Supplemental Strategies

Notwithstanding the above, an employer may elect to supplement its Employee Commute Reduction Program with any strategy listed in subdivisions (f) or (g) in order to achieve their goal.

(4) Renewal Date

(A) The currently approved Rule 2202 Employee Commute Reduction Program shall remain in effect until the triennial renewal date.

(B) The currently approved Rule 2202 Registration shall remain in effect until the annual renewal date.

(5) Primary and Secondary School Districts and Schools

Any public or private primary or secondary school district or school that buses two (2) students for every one (1) peak window employee at worksites subject to the rule is exempt from Rule 2202, according to the following criteria:

(A) School districts and schools shall keep records demonstrating the maintenance of this ratio on-site and make them available upon request by the Executive Officer or designee; and

(B) On a case by case basis, the Executive Officer or designee may approve a request by a school district or school to modify the default student-to-employee ratio to reflect location, trip length and other school district or school specific busing program characteristics in order to maintain equivalency with emission reductions which would occur if the district or school met its emission reduction goals under Rule 2202; and

(C) The Executive Officer may periodically update and publish the default student-to-employee ratio to reflect changes to revised emission factors published by the California Air Resources Board.

School districts and schools may opt not to be exempt but to implement a Rule 2202 program and claim credit for surplus emission reduction credits earned through a student busing program and other Rule 2202 compliance options.

(6) Primary and Secondary School District Financial Hardship

Due to their financial hardship, notwithstanding the criteria of paragraph (1)(5), school districts that have received a Negative or Qualified Certification status from their County Board of Education pursuant to Chapter 6, Part 24 of Division 3 of the Education Code, deeming that based upon current projections the school district or county office of education will not or may not meet its financial obligations, may request the Executive Officer to grant a temporary exemption from the requirements of the rule. The Executive Officer shall grant a temporary exemption for the period during which the Negative or Qualified Certification status applies.

(m) **Emission Factors**

The following emission factors, which shall be used in calculations pursuant to this rule, are based on California Air Resources Board's EMFAC 7F emission factor model and BURDEN 7F vehicle activity model. These emission factors shall be revised upon publication by the California Air Resources Board of final revised emission factors.

(1) **Employee Emission Reduction Factors**

The following employee emission reduction factors (pounds per year per employee) shall be used in determining the Emission Reduction Target with respect to the worksite Performance Target Zone. The Performance Target Zone is determined by the worksite location within the geographic boundaries as described in Attachment I and the Rule 2202 - On-Road Motor Vehicle Mitigation Options Implementation Guidelines (amended October 9, 1998).

**Employee Emission Reduction Factors
for Performance Target Zone 1**

Emission	1992	1995	1998
CO ₂	8.40	6.17	64.23
CO	7.48	5.76	58.07
NO _x	6.55	5.24	51.51
PM ₁₀	5.73	4.83	45.35
SO ₂	5.22	4.42	42.27
NO ₂	4.81	4.01	39.19

**Employee Emission Reduction Factors
for Performance Target Zone 2**

Emission			
Year	AVOC	NOx	CO
1997	6.45	4.83	49.86
1998	5.84	4.42	45.14
1999	5.12	4.11	40.01
2000	4.40	3.80	35.19
2001	4.10	3.39	32.83
2002	3.79	3.08	30.37

**Employee Emission Reduction Factors
for Performance Target Zone 3**

Emission			
Year	AVOC	NOx	CO
99	4.51	3.29	34.58
1998	3.99	3.08	31.29
1999	3.58	2.88	27.70
2000	3.07	2.57	24.42
2001	2.87	2.36	22.78
2002	2.56	2.16	21.03

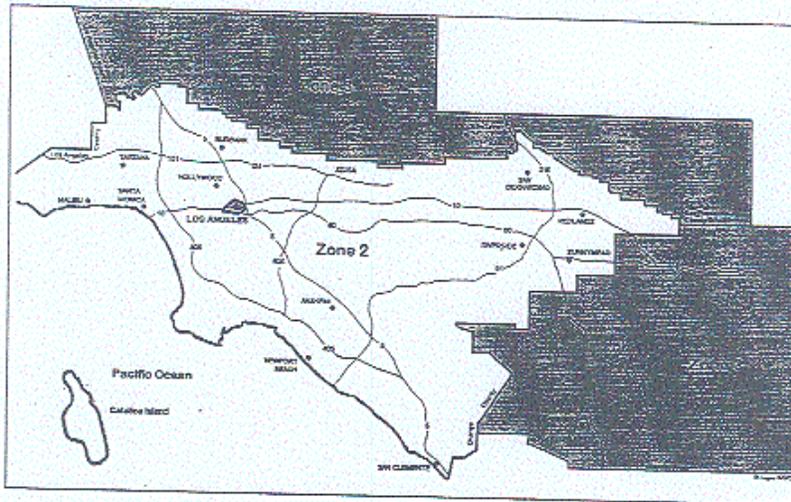
- (2) The following default emission factors (pounds per year per daily commute vehicle) may be used in determining vehicle trip emission credits.

**Emission Factors
for Vehicle Trip Emission Credit (VTEC)**

Emission			
Year	AVOC	NOx	CO
1997	19	14	146
1998	17	13	132
1999	15	12	117
2000	13	11	103
2001	12	10	96
2002	11	9	89

- (3) The emission factors in paragraphs (m)(1) and (m)(2) may be modified to site specific emission factors reflecting vehicle age and trip length characteristics of the employee vehicle fleet, in accordance with the calculation procedures included in Rule 2202 - On-Road Vehicle Emissions Mitigation Options Implementation Guidelines.

ATTACHMENT I
PERFORMANCE TARGET ZONES



- A worksite's Performance Target Zone depends on its location.
- **Zone 1** is the Central City Area of Downtown Los Angeles within the District's Source/Receptor Area 1.
- **Zone 2** corresponds to the District's Source/Receptor Areas 2 through 12, 16 through 23, and 32 through 35, excluding the Central City Area.
- **Zone 3** corresponds to the District's Source/Receptor Areas 13 through 15, 24 through 31, and 36 through 38.

