

APPENDIX B

Supplemental Worksheets & Tables



RULE 2202 - REGISTRATION FORM

APPENDIX B – SUPPLEMENTAL WORKSHEETS & TABLES

TABLE 1
Employee Emission Reduction Factors

Performance Zone 1 (1.75 AVR)
(pounds per year per employee)

Emission Year	VOC	NO_x	CO
2008	2.35	2.85	28.67
2009	2.12	2.57	26.06
2010	1.90	2.33	23.67
2011	1.74	2.12	21.80
2012	1.59	1.93	19.99
2013	1.46	1.75	18.34
2014	1.36	1.60	16.93

Performance Zone 2 (1.50 AVR)
(pounds per year per employee)

Emission Year	VOC	NO_x	CO
2008	1.83	2.22	22.30
2009	1.65	2.00	20.27
2010	1.48	1.81	18.41
2011	1.35	1.65	16.95
2012	1.24	1.50	15.55
2013	1.14	1.36	14.27
2014	1.05	1.25	13.17

Performance Zone 3 (1.30 AVR)
(pounds per year per employee)

Emission Year	VOC	NO_x	CO
2008	1.26	1.54	15.44
2009	1.14	1.39	14.03
2010	1.02	1.25	12.75
2011	0.94	1.14	11.74
2012	0.86	1.04	10.76
2013	0.79	0.94	9.88
2014	0.73	0.86	9.12



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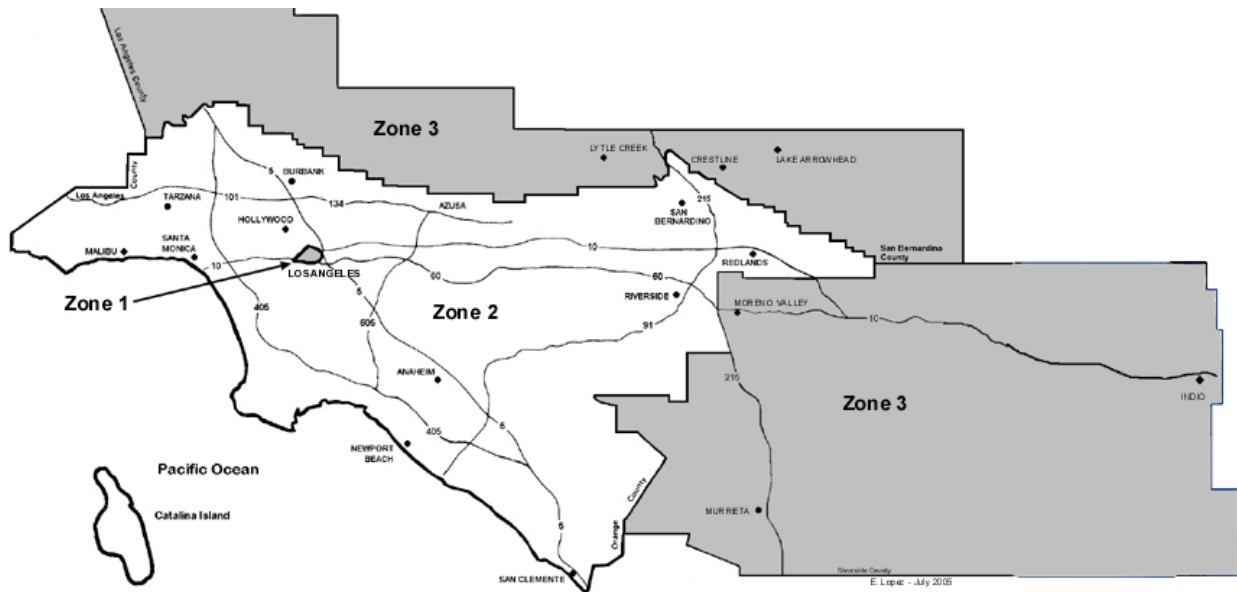
TABLE 2
Emission Factors
for Vehicle Trip Emission Credit (VTEC)
(pounds per year per daily commute vehicle)

Emission Year	VOC	NO_x	CO
2008	5.48	6.65	66.89
2009	4.94	6.01	60.82
2010	4.44	5.43	55.23
2011	4.06	4.94	50.86
2012	3.72	4.50	46.65
2013	3.42	4.09	42.80
2014	3.16	3.74	39.51



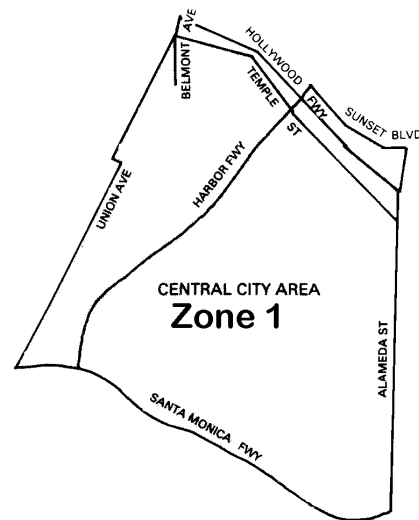
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PERFORMANCE ZONES

- A worksite's Performance Zone depends on its location.
- District's Source/Receptor Areas are shown in Attachment 3 of Rule 701 - Air Pollution Emergency Contingency Actions.
- **Zone 1** is the Central City Area of Downtown Los Angeles within the AQMD's Source/Receptor Area 1.
- **Zone 2** corresponds to the AQMD's Source/Receptor Areas 2 through 12, 16 through 23, and 32 through 35, excluding the Zone 1 - Central City Area.
- **Zone 3** corresponds to the AQMD's Source/Receptor Areas 13, 15, 24 through 31, and 36 through 38.





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Introduction

The purpose of the Supplemental Worksheets is to assist the preparer in determining their CCVR (Creditable Commute Vehicle Reduction) Credits or VTEC (Vehicle Trip Emission Credits).

The use of the Worksheets is optional and is not required to be submitted with the Compliance Forms. However, the Worksheets and/or other supporting records must be kept at the worksite and be made available upon request to the AQMD or its representatives.

The employer may calculate their CCVR using any of the following:

- a. AQMD approved survey;
- b. Weighted average of the most immediate past three years of AVR data using the current year employee numbers (this option cannot be used in the ECRP Offset); or
- c. 1.1 AVR default using the current year employee numbers (this option cannot be used in the ECRP Offset); or
- d. Other AQMD approved method.

Notes:

1. The AQMD approved survey can be found in Appendix A.
2. Other AQMD approved methods must be approved in writing prior to submittal of the Compliance Forms.



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SUPPLEMENTAL WORKSHEETS AQMD Approved Survey

By using the AQMD approved survey results, the peak CCVR is determined by the daily average of commute vehicle reductions based on the AVR.

Step 1: Enter in the table below the weekly employee trips from the survey data. Do the same for the weekly vehicle trips.

	Weekly Total Employee Trips (Line ET of Form IV-1)	Weekly Total Vehicle Trips (Line TV of Form IV-1)	
ET			TV

Step 2: Using the table below, subtract the Weekly Total Vehicle Trips (TV) from the Weekly Total Employee Trips (ET) and divide the result by 5 to obtain the daily amount of creditable commute vehicle reductions (CCVR). $[ET - TV] \div 5 = CCVR$

ET	
TV	
$[ET - TV] \div 5 =$ CCVR	

Step 3: Enter this number (CCVR) on line 2, Section III of the compliance forms, or alternatively, line 3, Section IV-3 of the compliance forms.



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SUPPLEMENTAL WORKSHEETS Weighted Average

The weighted average is determined by using the survey data of the most immediate past three years. Do not use the arithmetic average of AVR. The weighted average CCVR is determined as follows:

Step 1

Enter in the table below the survey data of the weekly employee trips from the last three years and add. Do the same for the weekly vehicle trips.

Year 1	Weekly employee trips (line ET of form IV-1)		Weekly vehicle trips (line TV of form IV-1)	
	ET ₁		TV ₁	
Year 2	ET ₂		TV ₂	
Year 3	ET ₃		TV ₃	
Total	ET_T		TV_T	

Step 2

Using the calculated totals from Step 1, divide the total of column ET by the total of column TV.

ET _T	
TV _T	
ET _T ÷ TV _T = AVR _{Weighted}	

The result is AVR_{Weighted}.

Continue on to Step 3.



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Step 3

Using the $AVR_{Weighted}$ calculated in Step 2, divide the current daily employee ($E_{Current}$) by the $AVR_{Weighted}$. This will result in the current daily vehicle trips ($TV_{Current}$).

$E_{Current}$	
$AVR_{Weighted}$	
$E_{Current} \div AVR_{Weighted} =$ $TV_{Current}$	

The current daily employee number ($E_{Current}$) may be established through payroll records in determining the number of employee reporting to work in the peak window.

Step 4

Calculate the CCVR using the information from Step 3 by subtracting the current daily vehicle trips ($TV_{Current}$) from the current daily employee ($E_{Current}$).

$E_{Current}$	
$TV_{Current}$	
$E_{Current} - TV_{Current} =$ $CCVR$	

This is the CCVR based on the weighted average of three years data.

Step 5

Enter this number on line 2, Section III of the Compliance Forms.



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SUPPLEMENTAL WORKSHEETS Default AVR

Step 1

Determine the current daily employee number ($E_{Current}$). This is the number of employees reporting to work in the peak window. Enter this number in table below.

Step 2

Divide the current daily employee number ($E_{Current}$) by 1.1 and calculate the current daily vehicle trips ($TV_{Current}$).

$E_{Current}$	
$E_{Current} \div 1.1 = TV_{Current}$	

The current daily employee number ($E_{Current}$) may be established through payroll records in determining the number of employee reporting to work in the peak window

Step 3

Calculate the CCVR using the information from Step 2 by subtracting the current daily vehicle trips ($TV_{Current}$) from the current daily employee ($E_{Current}$).

$E_{Current}$	
$TV_{Current}$	
$E_{Current} - TV_{Current} =$ CCVR	

This is the CCVR based on the default average vehicle ridership.

Step 4

Enter this number on line 2, Section III of the Compliance Forms.