



**Rule 2202 - On-Road Motor Vehicle Mitigation Options  
Emission Factors**  
Effective January 1, 2019

Table 1 – Employee Emission Reduction Factors  
Performance Zone 1  
(pounds / year / employee)

Year	VOC	NOx	CO
2018	1.40	1.06	11.85
2019	1.26	0.92	10.52
2020	1.15	0.81	9.50
2021	1.06	0.72	8.69
2022	0.98	0.65	7.99
2023	0.91	0.58	7.36
2024	0.86	0.52	6.82
2025	0.81	0.47	6.31

Table 2 - Employee Emission Reduction Factors  
Performance Zone 2  
(pounds / year / employee)

Year	VOC	NOx	CO
2018	1.09	0.82	9.22
2019	0.98	0.72	8.18
2020	0.89	0.63	7.39
2021	0.82	0.56	6.76
2022	0.76	0.50	6.21
2023	0.71	0.45	5.72
2024	0.67	0.41	5.30
2025	0.63	0.37	4.90

Table 3 - Employee Emission Reduction Factors  
Performance Zone 3  
(pounds / year / employee)

Year	VOC	NOx	CO
2018	0.75	0.57	6.38
2019	0.68	0.50	5.66
2020	0.62	0.44	5.11
2021	0.57	0.39	4.68
2022	0.53	0.35	4.30
2023	0.49	0.31	3.96
2024	0.46	0.28	3.67
2025	0.44	0.26	3.40

Table 4 - Annual Emission Factors  
(pounds / year / daily commute vehicle)

Year	VOC	NOx	CO
2018	3.27	2.47	27.65
2019	2.93	2.16	24.54
2020	2.68	1.90	22.16
2021	2.47	1.69	20.28
2022	2.29	1.51	18.64
2023	2.13	1.35	17.16
2024	2.00	1.22	15.91
2025	1.89	1.11	14.71

Pursuant to Rule 2202 (m) *Emission Factors*, the emission factors have been developed from the most recent EPA approved EMFAC model.

*EMFAC2014 Web Based Database (Effective December 2015)*



**Rule 2202 - On-Road Motor Vehicle Mitigation Options**  
**Annual ERC Discount Percentages**  
 Effective January 1, 2019

	VOC	NOx	CO
2019	1.27	1.07	1.08
2020	0.91	0.88	0.90
2021	0.92	0.89	0.92
2022	0.93	0.89	0.92
2023	0.93	0.90	0.92
2024	0.94	0.90	0.93
2025	0.94	0.91	0.92

The Annual ERC Discount Percentage is determined by:

$$\text{Annual ERC Discount Percentage} = \frac{ef_{\text{current year}}}{ef_{\text{previous year}}}$$

Where:

$ef_{\text{current year}}$  = Emission factor for the current year of use

$ef_{\text{previous year}}$  = Emission factor for the year immediately prior to the current year of use

The current year ERC annual allocation can then be determined using the discount percentage as follows:

$$\text{Current Year ERC Annual Allocation} = \text{Previous Year ERC Annual Allocation} * \text{Annual ERC Discount Percentage}$$

**Reference:** Rule 2202 Implementation Guidelines, June 6, 2014  
 II.C. Emission Reduction Credits (ERCs)