

**R01 - BULK GASOLINE LOADING RACK EMISSIONS, REFORMULATED GASOLINE**

**CALCULATION METHODS**

$$E_a = (Q_g + 0.127Q_d + Q_t) \times 0.02 \times C_i$$

$$E_h = E_a / H$$

**NOTES:**

- Annual throughput (Qg) is for all gasoline dispensed by this loading rack.
- An average portion (12.7%) of the annual diesel throughput (Qd) is assumed to be loaded into transport vehicle previously holding gasoline.
- All of the annual throughput (Qg) for transit mix is assumed to be processed by the loading rack.
- A District factor for TOG & ROG of 0.02 lbs/1000 gallons of throughput should be used to estimate loading rack emissions.
- Maximum hourly emissions are assumed to equal average hourly emissions until more refined procedures are available.
- Speciation of loading rack hydrocarbon emissions is assumed to be identical to reformulated gasoline vapor.

POLLUTANT	District Emission Factor	REFERENCE	ARB	(UNITS)	COMMENTS
	(Weight Percent - Gasoline Vapor)	DOCUMENT	FACTOR		
NOX					
CO					
SOX					
TOG	100.00%				Emission factor of 0.02 lbs / 1000 gal thru put based on District testing.
ROG	100.00%				Assume 100% of vapor emissions are ROG.
TSP					
PM10					
BENZENE	0.40%				Based on vapor speciation of reformulated gasoline.
ETHYL BENZENE	0.10%				Based on vapor speciation of reformulated gasoline.
HEXANE	1.40%				Based on vapor speciation of reformulated gasoline.
LEAD					
TOLUENE	1.10%				Based on vapor speciation of reformulated gasoline.
2,2,4-TRIMETHYLPENTANE	0.70%				Based on vapor speciation of reformulated gasoline.
XYLENES	0.40%				Based on vapor speciation of reformulated gasoline.

Last Updated on 4/25/08  
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