

G02 - GASOLINE DISPENSING, SUBMERGED FILL OF UNDERGROUND TANK WITH NO CONTROLS

CALCULATION METHODS

$E_a = U_a \times EF \text{ (lbs TOG/1000 gallons throughput)} \times C_i \text{ (lbs Ci/lb TOG)}$

$E_h = T \text{ (maximum fuel delivery capacity)} \times EF \text{ (lbs TOG/1000 gallons delivered)} \times C_i \text{ (lbs Ci/lb TOG)}$

NOTES:

- Annual throughput (U_a) is for gasoline only, do not include diesel or jet fuels.
- Use a set ROG / TOG factor of 20.0 lbs/1000 gallons thrupt for annual estimates.
- Max. hourly emissions are assumed to occur during fuel delivery.
- Use a set ROG / TOG Factor of 7.3 lbs/1000 gallon delivered for hourly estimates.
- No Phase I or Phase II controls are assumed.
- Emissions from tank loading, breathing, and refueling are speciated using average vapor concentration values for reformulated & oxygenated gasoline.
- Emissions from spillage are speciated using average liquid concentration values for reformulated & oxygenated gasoline.

POLLUTANT	District Emission Factor	EPA REFERENCE	ARB	(UNITS)	COMMENTS
	(lbs/lb emissions)	DOCUMENT	FACTOR		
NOX					
CO					
SOX					
TOG	1.000	AP-42, Section 5.2 and others	20	lbs/1000 gal	Sum of loading (7.3), breathing (1.0), refueling (11.0), and spillage (0.7).
ROG	1.000	AP-42, Section 5.2 and others	20	lbs/1000 gal	Sum of loading (7.3), breathing (1.0), refueling (11.0), and spillage (0.7).
TSP					
PM10					
BENZENE	0.0042				ASSUMES 0.4% BY WEIGHT IN VAPOR AND 1.0% BY WEIGHT IN LIQUID
ETHYL BENZENE	0.0015				ASSUMES 0.1% BY WEIGHT IN VAPOR AND 1.6% BY WEIGHT IN LIQUID
HEXANE	0.0141				ASSUMES 1.4% BY WEIGHT IN VAPOR AND 1.8% BY WEIGHT IN LIQUID
LEAD					
TOLUENE	0.0134				ASSUMES 1.1% BY WEIGHT IN VAPOR AND 8.0% BY WEIGHT IN LIQUID
2,2,4-TRIMETHYLPENTANE	0.0070				ASSUMES 0.7% BY WEIGHT IN VAPOR AND 0.8% BY WEIGHT IN LIQUID
XYLENES	0.0047				ASSUMES 0.4% BY WEIGHT IN VAPOR AND 2.4% BY WEIGHT IN LIQUID