

W05 - GENERIC PLANT - HYDROGEN SULFIDE AND VOC CONTROLS

CALCULATION METHODS

$E_a = U_a \text{ (million gal/year)} \times EF \text{ (lbs/million gal thru put)}$

$E_h = U_h \text{ (million gal/hour)} \times EF \text{ (lbs/million gal thru put)}$

NOTES:

- Emission factors are an average of all source test data (Encina 1991/1993 and Point Loma 1990/1996).

- Assume that hydrogen sulfide controls have an efficiency of 99%.

- Assume that VOC Controls have an efficiency of 80%.

Pollutant	Emission Factor (lbs/million gallons)	Reference Document	ARB Factor	Units	Comments
TOG	0.442			lbs/million gal	
VOC	0.02			lbs/million gal	
Acetone	0.00048			lbs/million gal	
Ammonia	0.0308			lbs/million gal	
Benzene	0.000826			lbs/million gal	
Benzyl Chloride	0.000128			lbs/million gal	
Bromodichloro-methane	0.000034			lbs/million gal	
Bromoform	0.000028			lbs/million gal	
Carbon Disulfide	0.00312			lbs/million gal	
Carbon Tetrachloride	0.00426			lbs/million gal	
Chlorine	0.0107			lbs/million gal	
Chlorobenzene	0.0000115			lbs/million gal	
Chloroform	0.014			lbs/million gal	
Chlorofluorocarbons	0.000518			lbs/million gal	
P-Dichlorobenzene	0.00195			lbs/million gal	
Dimethyl Sulfide	0.0000274			lbs/million gal	
1,4 - Dioxane	0.0165			lbs/million gal	
Ethyl benzene	0.000218			lbs/million gal	
Ethylene Dichloride	0.0145			lbs/million gal	
4-Ethyl Toluene	0.0000406			lbs/million gal	CAS 622-96-8, not included on EIS/Cal Method as is not currently listed on Toxics Hot Spots as of 04/19/2023.
Formaldehyde	0.00242			lbs/million gal	
2-Hexanone	0.0000095			lbs/million gal	CAS 591-78-6, not included on EIS/Cal Method as is not currently listed on Toxics Hot Spots as of 04/19/2023.

Hydrogen Sulfide	0.00831			lbs/million gal	
Methane	0.0518			lbs/million gal	
Methanol	0.00000121			lbs/million gal	
Methylene Chloride	0.0368			lbs/million gal	
Methyl Ethyl Ketone	0.0000155			lbs/million gal	
Perchloroethylene	0.00676			lbs/million gal	
Sodium Hydroxide	0.00119			lbs/million gal	
Styrene	0.000009			lbs/million gal	
Toluene	0.00191			lbs/million gal	
1,1,1 - Trichloroethane	0.0011			lbs/million gal	
Trichloroethylene	0.00876			lbs/million gal	
Trimethylbenzenes	0.000074			lbs/million gal	
Vinyl Chloride	0.000113			lbs/million gal	
Xylenes	0.000848			lbs/million gal	

Last Updated on 04/19/2023 (W05)
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