

W03- POINT LOMA HEADWORKS - AFTER 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 based on site specific source test data obtained on 1996.

- Data from the old source test conducted for the Toxics Emissions Inventory 1989 is not used since the facility has been modified significantly after this test. However, the 1996 source test did not sample for hydrogen sulfide, methanol, and perchloroethylene. Therefore, for these three compounds, the old test data was used to determine emission factors.

- Emission factors are determined after controls.

Pollutant	District Emission Factor (lbs/ million gallons)	Reference Document	ARB Factor	Units	Comments
TOG	0.0192			lbs/million gal	Sum of all organic emissions below.
VOC	0.0102			lbs/million gal	VOC=TOG-exempt compounds.
Acetone	0.0000801			lbs/million gal	VOC=TOG-exempt compounds.
Ammonia	0.0000986			lbs/million gal	Determined by using NH ₄ OH emission factor and fraction of NH ₃ in NH ₄ OH.
Benzene	0.000001			lbs/million gal	
Benzyl Chloride	0.0000213			lbs/million gal	
Bromodichloro- methane	0.00000667			lbs/million gal	No health data. Not presented in emission print outs. Accounted for in TOG/ROG.
Bromoform	0.00000467			lbs/million gal	No health data. Not presented in emission print outs. Accounted for in TOG/VOC.
Carbon Disulfide	0.0000095			lbs/million gal	
Carbon Tetrachloride	0.00000225			lbs/million gal	
Chlorobenzene	0.00000192			lbs/million gal	
Chloroform	0.000107			lbs/million gal	
Chlorofluoro- carbons	0.000029			lbs/million gal	
P-Dichloro- benzene	0.00000275			lbs/million gal	
Dimethyl Sulfide	0.00000458			lbs/million gal	
Ethylene Benzene	0.0000025			lbs/million gal	
4-Ethyl Toluene	0.0000068			lbs/million gal	No health data. Not presented in emission print outs. Accounted for in TOG/VOC
Formaldehyde	0.00000217			lbs/million gal	No health data. Not presented in emission print outs. Accounted for in TOG/VOC.
2-Hexanone	0.00000158			lbs/million gal	No health data. Not presented in emission print outs. Accounted for in TOG/VOC.
Hydrogen Sulfide	0.000514			lbs/million gal	Using old test data (uncontrolled emission) and assume a control efficiency of 99%.
Methane	0.0862			lbs/million gal	No health data. Not presented in emission print outs. Accounted for in TOG/VOC.
Methanol	0.00000121			lbs/million gal	Using old test data (uncontrolled emission) and assume a control efficiency of 80%.
Methylene Chloride	0.0000773			lbs/million gal	
Methyl Ethyl Ketone	0.00000258			lbs/million gal	
Perchloro- ethylene	0.000138			lbs/million gal	Using old test data (uncontrolled emission) and assume a control efficiency of 80%.

Styrene	0.0000015			lbs/million gal	
Toluene	0.00000642			lbs/million gal	
1,1,1 - Trichloro-Ethane	0.0000208			lbs/million gal	
Trichloro-Ethylene	0.00000208			lbs/million gal	
Trimethyl-Benzenes	0.0000123			lbs/million gal	No health data. Not presented in emission print outs. Accounted for in TOG/VOC.
Vinyl Chloride	0.000001			lbs/million gal	
Xylenes	0.00000925			lbs/million gal	

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