

San Joaquin Valley Refinery Emissions (lbs/yr)

Pollutant Name	Kern Oil & Refining	San Joaquin Refining	Tricor Refining	Alon Bakersfield
1,1,2,2-Tetrachloroethane	0.29	0.00	0.00	0.00
1,1,2-Trichloroethane	0.18	0.00	0.00	0.00
1,1-Dichloroethane	0.13	0.00	0.00	0.00
1,2,4-Trimethylbenzene	472.00	47.28	< 0.01	5.01
1,2-Dichloropropane	0.15	0.00	0.00	0.00
1,3-butadiene	18.00	0.01	0.00	< 0.01
1,3-Dichloropropene	0.15	0.00	0.00	0.00
2,2,4-Trimethylpentane	107.00	21.60	0.00	0.47
2-Methyl naphthalene	< 0.01	0.00	0.00	0.00
3-Methylcholanthrene	< 0.01	0.00	0.00	0.00
7,12-Dimethylbenz[a]anthracene	< 0.01	0.00	0.00	0.00
Acenaphthene	< 0.01	0.01	0.00	0.00
Acenaphthylene	< 0.01	0.11	0.00	0.00
Acetaldehyde	57.60	13.96	2.09	3.83
Acrolein	30.40	4.78	1.82	0.89
Aluminum	0.00	0.00	0.00	0.00
Ammonia	130.00	1.16	0.07	0.00
Anthracene	66.90	< 0.01	0.00	0.00
Antimony	0.73	0.00	0.00	0.00
Arsenic	1.18	0.00	0.00	0.00
Barium	8.12	0.00	0.00	0.00
Benz[a]anthracene	0.05	0.01	0.00	0.00
Benzene	466.00	246.84	9.02	31.59
Benzo[a]pyrene	0.12	< 0.01	0.00	0.00
Benzo[b]fluoranthene	0.06	< 0.01	0.00	0.00
Benzo[e]pyrene	0.00	0.00	0.00	0.00
Benzo[g,h,i]perylene	0.02	< 0.01	0.00	0.00
Benzo[k]fluoranthene	0.03	< 0.01	0.00	0.00
Beryllium	0.36	0.00	0.00	0.00
Biphenyl	22.60	16.23	0.00	4.58
Cadmium	1.61	0.00	0.00	0.00
Carbon disulfide	64.30	0.00	0.00	0.00
Carbon monoxide	2020.00	0.00	0.00	0.00
Carbon tetrachloride	0.20	0.00	0.00	0.00
Carbonyl Sulfide	161.00	0.00	0.00	0.00

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Chlorine	0.00	0.00	0.00	0.00
Chlorobenzene	0.15	0.00	0.00	0.00
Chloroform	0.16	101.86	0.00	0.00
Chromium	5.49	0.00	0.00	0.00
Chromium, hexavalent (& compounds)	0.30	0.00	0.00	0.00
Chrysene	0.17	< 0.01	0.00	0.00
Cobalt	< 0.01	0.00	0.00	0.00
Copper	6.84	0.00	0.00	0.00
Cresols (mixtures of) {Cresylic acid}	0.19	0.00	0.00	0.00
Cumene	28.80	12.61	0.00	0.79
Cyclohexane	123.00	0.40	0.00	0.00
Dibenz[a,h]anthracene	0.01	< 0.01	0.00	0.00
Dichlorobenzenes (mixed isomers)	0.01	0.00	0.00	0.00
Diesel engine exhaust, particulate matter	11.10	0.00	0.00	0.00
Dioxins, total, w/o individ. isomers reported {PCDDs}	0.00	0.00	0.00	0.00
Ethyl benzene	666.00	34.90	26.21	138.42
Ethylene	0.06	0.00	0.00	0.00
Ethylene dibromide {EDB}	22.40	0.00	0.00	0.00
Ethylene dichloride {EDC}	12.30	0.00	0.00	0.00
Ethylene glycol monobutyl ether	247.00	0.00	0.00	0.00
Fluoranthene	0.60	0.02	0.00	0.00
Fluorene	3.24	1.05	0.00	0.00
Formaldehyde	675.00	70.79	8.31	104.28
Hexane	237.00	164.87	3.11	89.06
Hydrochloric acid	0.00	0.00	0.00	0.00
Hydrogen Sulfide	983.00	768.84	12.69	42.03
Indeno[1,2,3-cd]pyrene	0.15	< 0.01	0.00	0.00
Isobutyraldehyde	0.56	0.00	0.00	0.00
Isopropyl alcohol	0.00	0.00	31.03	0.00
Lead	6.83	0.00	0.00	0.00
Manganese	13.40	0.00	0.00	0.00
Mercury	0.60	0.00	0.00	0.00
Methanol	35.00	0.00	0.00	9.19
Methyl isobutyl ketone {Hexone}	13.90	0.00	0.00	0.00
Methyl tert-butyl ether	6.17	0.00	0.00	0.00

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Methylene chloride {Dichloromethane}	0.47	0.00	0.00	0.00
Naphthalene	317.00	30.20	60.82	8.42
Nickel	19.80	0.00	0.00	0.00
NOx	36600.00	35492.25	19363.33	6434.44
o-Xylene	0.00	4.97	34.62	0.00
PAH	0.52	0.33	0.07	0.27
Particulate Matter	6480.00	10068.85	2878.04	2316.86
Phenanthrene	11.50	0.27	0.00	0.00
Phenol	11.00	1.52	0.03	0.00
Phosphoric acid	< 0.01	0.00	0.00	0.00
Phosphorus	0.89	0.00	0.00	0.00
Polychlorinated biphenyls (PCBs)	0.00	0.00	0.00	0.00
Propylene	70.60	619.31	357.98	217.48
Propylene glycol monomethyl ether acetate	17.60	0.00	0.00	0.00
Pyrene	1.81	0.02	0.00	0.00
Selenium	0.04	0.00	0.00	0.00
Silver	2.23	0.00	0.00	0.00
Sodium hydroxide	< 0.01	0.00	50.83	0.00
Styrene	0.14	0.00	0.00	0.00
Sulfur Dioxide	7120.00	991.56	382.64	162.48
Sulfuric Acid	< 0.01	0.00	0.00	47.50
Thallium	8.07	0.00	0.00	0.00
Toluene	2950.00	327.25	85.69	33.50
Trichloroethylene	< 0.01	0.00	0.00	0.00
Trimethylbenzenes	0.00	11.92	83.08	0.00
Vanadium (fume or dust)	0.02	0.00	0.00	0.00
Vinyl chloride	0.08	0.00	0.00	0.00
Xylenes	2780.00	527.34	103.55	15.42
Zinc	38.40	0.00	0.00	0.00