



South Coast Air Quality Management District

**Valero Refinery (formerly Ultramar)
2013 Rule 1118 Quarterly Flare Emissions**

Emission Target

2013 SOx Emissions Target (lbs)	Year-to-date SOx Emissions (lbs)
29,605	13,324.2

Quarter I (January 1, 2013 - March 31, 2013)

Flare ID	Total Gas Flow (scf)	Emissions (lbs)				
		PM-10	NOx	ROG	CO	S as SO2
LPG	8,032,123	39.4	3,654.60	84.3	899.6	1,321.30
Phase 0	5,901,451	81.2	609.1	205.3	1,186.40	375.3
Phase I	3,204,220	25.4	411	28.7	149.6	89.2
Phase 2	5,598,466	66.3	653.7	175.2	1,005.70	382
Total	22,736,260	212.3	5,328.40	493.5	3,241.30	2,167.80

Quarter II (April 1, 2013 - June 30, 2013)

Flare ID	Total Gas Flow (scf)	Emissions (lbs)				
		PM-10	NOx	ROG	CO	S as SO2
LPG	6,279,198	30.8	2,857.00	65.9	703.3	1,032.90
Phase 0	4,901,463	59.3	544.3	137.3	786.7	4,796.20
Phase I	4,189,306	45.8	496.9	106.3	605.3	127.6
Phase 2	4,088,267	34.2	516.5	44.7	239.2	113.5
Total	19,458,234	170.1	4,414.70	354.2	2,334.50	6,070.20

Quarter III (July 1, 2013 - September 30, 2013)

Flare ID	Total Gas Flow (scf)	Emissions (lbs)				
		PM-10	NOx	ROG	CO	S as SO2
LPG	6,864,471	33.6	3,123.30	72.1	768.8	1,129.20
Phase 0	5,617,544	74.4	598.2	188.3	1,086.20	401.1
Phase I	3,624,797	33.5	440.3	49.8	273.2	419.5
Phase 2	5,293,333	60.1	626.8	152	869.4	883.5
Total	21,400,145	201.6	4,788.60	462.2	2,997.60	2,833.30

Quarter IV (October 1, 2013 - December 31, 2013)

Flare ID	Total Gas Flow (scf)	Emissions (lbs)				
		PM-10	NOx	ROG	CO	S as SO2
LPG	5,712,071	28	2,599.00	60	639.8	939.6
Phase 0	6,030,366	83.1	617.3	205.7	1,188.40	308.2
Phase 1	3,627,198	33.5	448	56.3	311.2	186.8
Phase 2	5,557,595	64.5	574.3	93.3	524.4	818.3
Total	20,927,230	209.1	4,238.60	415.3	2,663.80	2,252.90
Total	23,579,022	257.5	4,858.00	800.7	4,950.50	6,877.00