

Southern Oil Refining Pty Ltd
42 Lewington Street, Bomen, NSW 2650
EPA License number 11408

Air Emissions – Utilities Block Stack (Point Source 1)												
Pollutant	Unit of Measure	100 percentile conc. limit	Monitoring frequency	Yearly Summary 2012								Exceedance (Y,N)
				Mar	Jun	Sept	Dec	Min. Value	Mean Value	Median Value	Max. Value	
Cadmium	g/m ³	0.0002	Quarterly	0.0000034	0.0000028	0.00019	0.000017	0.0000028	0.000053	0.000010	0.00019	N
Chlorine	g/m ³	0.2	Quarterly	0.000055	<0.000069	<0.00017	0.000066	0.000055	0.00009	0.000068	0.00017	N
Mercury	g/m ³	0.0002	Quarterly	0.0000014	0.0000027	0.0000014	0.0000021	0.0000014	0.0000019	0.00000175	0.0000027	N
Nitrogen Oxides	g/m ³	0.3	Quarterly	0.13	0.13	0.12	0.13	0.12	0.13	0.13	0.13	N
Hydrogen Sulfide	g/m ³	0.005	Quarterly	0.000016	<0.000003	0.000011	0.0000072	0.000003	0.0000093	0.0000091	0.000016	N
Dioxins & Furans	ng/m ³	0.1	Yearly	-	0.017	-	-	0.017	0.017	0.017	0.017	N
Hydrogen Chloride	g/m ³	0.1	Quarterly	0.0016	0.0044	0.0041	0.0031	0.0016	0.0033	0.0036	0.0044	N
Solid Particles (PM10)	g/m ³	0.05	Quarterly	0.015	0.039	0.019	0.11	0.015	0.046	0.029	0.11	Y
Sulfuric Acid Mist and/or Sulfur Trioxide	g/m ³	0.1	Quarterly	0.11	0.14	0.087	0.021	0.021	0.090	0.099	0.14	Y
Total Fluoride	g/m ³	0.05	Quarterly	0.0019	0.0017	0.0011	0.0022	0.0011	0.0017	0.0018	0.0022	N
Hazardous Substances	g/m ³	0.001	Quarterly	0.00004	0.00011	0.00025	0.00006	0.00004	0.00012	0.000085	0.00025	N
VOCs	g/m ³	0.04	Quarterly	<0.00017	0.00083	<0.0002	<0.00019	0.00017	0.00035	0.00020	0.00083	N
Temperature	K	N/A	Quarterly	755	746	728	754	728	746	750	755	N/A
Chromium	g/m ³	N/A	Quarterly	0.0000079	0.000058	0.000012	0.0000024	0.0000024	0.00002	0.000010	0.000058	N/A
Oxygen	%	N/A	Quarterly	4.4	4	5.7	5.5	4	4.9	4.95	5.7	N/A
Sulphur Dioxide	g/m ³	N/A	Quarterly	0.9	0.9	0.92	1.2	0.9	0.98	0.91	1.2	N/A
Moisture Content	%	N/A	Quarterly	25	25	23	23	23	24	24	25	N/A
Carbon Monoxide	g/m ³	N/A	Quarterly	0.012	0.18	0.0068	0.0028	0.0028	0.050	0.0094	0.18	N/A
P.A.H.	ng/m ³	N/A	Quarterly	3800	3400	6200	5600	3400	4750	4700	6200	N/A
P.A.H. (BaP-TEQ)	ng/m ³	N/A	Quarterly	77	5.5	74	19	5.5	44	47	77	N/A
Velocity	m/s	N/A	Quarterly	19	20	17	19	17	19	19	20	N/A
Volumetric Flowrate	m ³ /s	N/A	Quarterly	5.2	5.4	4.7	5.3	4.7	5.2	5.25	5.4	N/A
Dry Gas Density	kg/m ³	N/A	Quarterly	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	N/A
Speciated Organic Compounds	g/m ³	N/A	Quarterly	<0.00018	<0.00018	<0.0002	<0.00019	0.00018	0.00019	0.00019	0.0002	N/A