

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 2013								Exceedance (Y,N)
				Mar	Jun	Sept	Dec	Min. Value	Mean Value	Median Value	Max. Value	
Cadmium	g/m ³	0.0002	Quarterly	0.0000004	0.0000095	<0.000001	< 0.000001	0.0000004	0.000003	0.000001	0.0000095	N
Chlorine	g/m ³	0.2	Quarterly	0.0002	0.000095	0.00073	0.0018	0.000095	0.00071	0.00047	0.0018	N
Mercury	g/m ³	0.0002	Quarterly	0.0000011	0.0000016	<0.000002	< 0.000002	0.0000011	0.0000017	0.0000018	0.000002	N
Nitrogen Oxides	g/m ³	0.3	Quarterly	0.11	0.15	0.19	0.23	0.11	0.17	0.17	0.23	N
Hydrogen Sulfide	g/m ³	0.005	Quarterly	0.0000089	<0.000002	<0.00005	< 0.00004	0.000002	0.000025	0.000024	0.00005	N
Dioxins & Furans	ng/m ³	0.1	Yearly	-	0.086	-	0.00032	0.00032	0.043	0.043	0.086	N
Hydrogen Chloride	g/m ³	0.1	Quarterly	0.0022	0.0042	0.0078	0.0038	0.0022	0.0045	0.004	0.0078	N
Solid Particles (PM10)	g/m ³	0.05	Quarterly	0.043	0.046	0.035	0.027	0.027	0.038	0.039	0.046	N
Sulfuric Acid Mist and/or Sulfur Trioxide	g/m ³	0.1	Quarterly	0.081	0.019	0.0077	0.0096	0.0077	0.029	0.014	0.081	N
Total Fluoride	g/m ³	0.05	Quarterly	0.0019	0.00086	0.0014	0.0023	0.00086	0.0016	0.0017	0.0023	N
Hazardous Substances	g/m ³	0.001	Quarterly	0.00078	0.000044	0.000016	0.000015	0.000015	0.00021	0.00003	0.00078	N
VOCs	g/m ³	0.04	Quarterly	0.000095	<0.000086	0.00035	0.000033	0.000033	0.00014	0.00009	0.00035	N
Temperature	K	N/A	Quarterly	680	732	726	716	680	714	721	732	N/A
Chromium	g/m ³	N/A	Quarterly	0.00036	0.0000014	<0.000001	0.0000047	0.000001	0.00009	0.000003	0.00036	N/A
Oxygen	%	N/A	Quarterly	3	5.8	7	6.5	3	5.6	6.15	7	N/A
Sulphur Dioxide	g/m ³	N/A	Quarterly	1.3	0.99	0.92	0.99	0.92	1.05	0.99	1.3	N/A
Moisture Content	%	N/A	Quarterly	23	23	20	20	20	22	22	23	N/A
Carbon Monoxide	g/m ³	N/A	Quarterly	0.0035	<0.003	<0.003	0.029	0.003	0.010	0.0033	0.029	N/A
P.A.H.	ng/m ³	N/A	Quarterly	5200	3600	840	580	580	2555	2220	5200	N/A
P.A.H. (BaP-TEQ)	ng/m ³	N/A	Quarterly	30	7.9	57	5.7	5.7	25	19	57	N/A
Velocity	m/s	N/A	Quarterly	17	20	19	17	17	18	18	20	N/A
Volumetric Flowrate	m ³ /s	N/A	Quarterly	4.5	5.5	5.2	4.6	4.5	5.0	4.9	5.5	N/A
Dry Gas Density	kg/m ³	N/A	Quarterly	1.33	1.33	1.3	1.3	1.3	1.3	1.3	1.33	N/A
Speciated Organic Compounds	g/m ³	N/A	Quarterly	<0.00008	<0.00009	<0.000016	< 0.0001	0.000016	0.00007	0.00008	0.0001	N/A