

STACK MONITORING DATA

Plant 1 –Horsley Park

<u>License Number:</u> 546 <u>Licensee:</u> The Austral Brick Company Pty Ltd <u>Premises:</u> Austral Brick, Plants 1 and 2 -738-780 Wallgrove Road, Horsley Park NSW 2175 Samples taken from EPA identification point 4.		Date Sample Taken- 012/02/2016	Date Sample Taken- 09/03/2016	Date Sample Taken- 20/06/2016	Date Sample Taken- 22/06/2016	Date Sample Taken- 25/06/2016
<u>Pollutant</u>	<u>Limits as per license (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>
Total Solid Particles	100	18	27	28	23	16
Nitrogen Oxides	2000	110	99	50	51	50
Hydrogen Fluoride	50	42	35	45	47	42
Cadmium		0.0003	0.0003	0.000082	0.000053	0.00007
Dry Gas Density		1.32	1.31	1.298	1.297	1.305
Fluorine		40	33	45	44	40
Hydrogen Chloride	100	13	21	30	50	27
Hydrogen Sulfide		0.15	0.044	1.3	1.7	1.4

Mercury		0.0072	0.1	0.017	0.014	0.0095
Moisture (%)		4.1	7.2	6.38	6.4	7.05
Molecular Weight of Stack Gases (g/gmol)		29.5	29.4	29.09	29.06	29.24
Oxygen (O ₂) (%)		15.8	15.5	15.8	15.3	15.9
Sulfuric Acid Mist and Sulfur Trioxide (as SO ₃)		0.46	1	7.6	17	3.9
Sulfur Dioxide		240	300	200	220	160
Temperature (°C)		179.3	185.3	185	181	180
Type 1 Substance	1	0.014	0.11	0.023	0.019	0.014
Type 2 Substance		0.031	0.019	0.16	0.17	0.13
Velocity (m/s)		10	11	11.8	12.4	9.6
Volatile Organic Compounds as n-propane Equivalent (VOC)	40	3.6	2.4	1.5	1.3	1.7
Volumetric Flowrate (m ³ /s)		12	13	13.2	14	10.8

Plant 2 –Horsley Park

<p><u>License Number:</u> 546 <u>Licensee:</u> The Austral Brick Company Pty Ltd <u>Premises:</u> Austral Brick, Plants 1, 2 & 3 738-780 Wallgrove Road, Horsley Park NSW 2175 Samples taken from EPA identification point 5.</p>		<p>Date Sample Taken- 02/05/2016</p>	<p>Date Sample Taken- 01/06/2016</p>	<p>Date Sample Taken- 29/06/2016</p>	<p>Date Sample Taken- 20/10/2016</p>
<u>Pollutant</u>	<u>Limits as per license (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>
Total Solid Particles	100	16	26	13	17.5
Nitrogen Oxide	2000	73	78	34	49
Hydrogen Fluoride	50	21	57	64	47

Plant 3 –Horsley Park (Swindell)

<u>License Number:</u> 546 <u>Licensee:</u> The Austral Brick Company Pty Ltd <u>Premises:</u> Austral Brick, Plant 3 8-10 Old Wallgrove Road, Horsley Park NSW 2175 Samples taken from EPA identification point 7.		Date Sample Taken- 17/02/2016	Date Sample Taken- 18/03/2016	Date Sample Taken- 21/06/2016	Date Sample Taken- 28/06/2016
<u>Pollutant</u>	<u>Limits as per license (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>
Total Solid Particles	100	21	16	13	21
Nitrogen Oxide	2000	56	270	40	52
Hydrogen Fluoride	50	22	41	42	41
Sulfur Oxides		67.4	27.9	26.6	25.1
Volumetric Flowrate (m³/s)		12	11	11.5	12.5

Plant 3 –Horsley Park (Ceric)

<p><u>License Number:</u> 546 <u>Licensee:</u> The Austral Brick Company Pty Ltd <u>Premises:</u> Austral Brick, Plant 3 8-10 Old Wallgrove Road, Horsley Park NSW 2175 Samples taken from EPA identification point 7.</p>		<p>Date Sample Taken- 07/09/2016</p>	<p>Date Sample Taken- 22/09/2016 and 23/09/2016</p>	<p>Date Sample Taken- 19/10/2016</p>	<p>Date Sample Taken- 28/10/2016</p>
<u>Pollutant</u>	<u>Limits as per license (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>	<u>Concentration (mg/m³)</u>
Total Solid Particles	100	25	47	55.5	30
Nitrogen Oxide	2000	72	84	66	92
Hydrogen Fluoride	50	57	39	41.5	41
Dioxins & Furans (ng/m ³)		1.7	1.8	0.203	0.1
Dry Gas Density (Kg/m ³)		1.31	1.3	1.3	1.3
Hydrogen Chloride		89	85	42	63
Moisture (%)		7.725	7.8	8.05	7.1
Molecular Weight of Exhaust Gas (g/gmol)		29.275	29.115	29.05	29.07
Oxygen (O ₂) (%)		16.7	15.9	16.7	16
Sulfur Oxides		62.5	189	195	16.2
Sulfuric Acid Mist and Sulfur Trioxide (as SO ₃)	100	2.5	69	15	3.2

Temperature (°C)		150	169	165	177
Type 1 Substance	1	0.0066	0.03	0.0074	0.026
Type 2 Substance		0.051	0.18	0.23	0.23
Velocity (m/s)		19.75	19.25	19.4	19.9
Volatile Organic Compounds as n-propane Equivalent (VOC)	40	0.86	3.2	4.1	3.6
Volumetric Flowrate (m ³ /s)		19	17.27	17.58	17.67