

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 <b>Samples taken from EPA identification point 4.</b>		Date Sample Taken- 14/02/2017	Date Sample Taken- 29/06/2017	Date Sample Taken- 19/09/2017	Date Sample Taken- 26/10/2017
<u>Pollutant</u>	<u>Limits as per license (mg/m<sup>3</sup>)</u>	<u>Concentration (mg/m<sup>3</sup>)</u>	<u>Concentration (mg/m<sup>3</sup>)</u>	<u>Concentration (mg/m<sup>3</sup>)</u>	<u>Concentration (mg/m<sup>3</sup>)</u>
Total Solid Particles	100	20	24	23	24
Nitrogen Oxides	2000	91	56	67	65
Hydrogen Fluoride	50	61	43	45	37
Cadmium		0.0003	0.00021	0.0002	0.00018
Dry Gas Density		1.31	1.298	1.298	1.298
Fluorine		58	41	43	37
Hydrogen Chloride		44	84	160	140
Hydrogen Sulfide		0.024	0.85	4.9	2.4

Mercury		0.0055	0.013	0.012	0.014
Moisture (%)		6.4	6.96	6.22	7.38
Molecular Weight of Stack Gases (g/gmol)		29.3	29.09	29.09	29.09
Oxygen (O <sub>2</sub> ) (%)		16.6	15.9	16.2	16.6
Sulfuric Acid Mist and Sulfur Trioxide (as SO <sub>3</sub> )		1.2	9.9	11	57
Sulfur Dioxide		140	86	210	290
Temperature (°C)		200	179	186	183
Type 1 Substance	1	0.013	0.021	0.018	0.021
Type 2 Substance		0.033	0.12	0.075	0.061
Velocity (m/s)		12	14.4	12	15.6
Volatile Organic Compounds as n-propane Equivalent (VOC)	40	0.8	0.89	0.65	0.21
Volumetric Flowrate (m <sup>3</sup> /s)		14.33	16.2	13.45	17.33

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 &amp; 3 738-780          Wallgrove Road, Horsley Park NSW 2175  <b>Samples taken from EPA identification point 5.</b></p>		<p><b>Date Sample Taken-</b> 30/06/2017</p>
<u>Pollutant</u>	<u>Limits as per license</u> <u>(mg/m<sup>3</sup>)</u>	<u>Concentration (mg/m<sup>3</sup>)</u>
<b>Total Solid Particles</b>	100	12
<b>Nitrogen Oxide</b>	2000	18
<b>Hydrogen Fluoride</b>	50	48

Plant 3 – Horsley Park (Swindell)

<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><b>Date Sample Taken-</b> 18/06/2017</p>	<p><b>Date Sample Taken-</b> 14/09/2017</p>	<p><b>Date Sample Taken-</b> 25/10/2017</p>
<u>Pollutant</u>	<u>Limits as per license</u> <u>(mg/m<sup>3</sup>)</u>	<u>Concentration</u> <u>(mg/m<sup>3</sup>)</u>	<u>Concentration</u> <u>(mg/m<sup>3</sup>)</u>	<u>Concentration</u> <u>(mg/m<sup>3</sup>)</u>
<b>Total Solid Particles</b>	100	14	15	13
<b>Nitrogen Oxide</b>	2000	52	66	61
<b>Hydrogen Fluoride</b>	50	48	44	40
<b>Sulfur Oxides</b>		57	38	49.5
<b>Volumetric Flowrate (m<sup>3</sup>/s)</b>		10.1	14.1	11.4

Plant 3 – Horsley Park (Ceric)

<b>License Number:</b> 546 <b>Licensee:</b> The Austral Brick Company Pty Ltd <b>Premises:</b> Austral Brick, Plant 3 8-10 Old Wallgrove Road, Horsley Park NSW 2175 <b>Samples taken from EPA identification point 7.</b>		<b>Date Sample Taken-</b> 27/06/2017 and 28/06/2017	<b>Date Sample Taken-</b> 11/09/2017 and 12/09/2017	<b>Date Sample Taken-</b> 13/09/2017 and 14/09/2017	<b>Date Sample Taken-</b> 24/09/2017 and 25/09/2017
<u>Pollutant</u>	<u>Limits as per license (mg/m<sup>3</sup>)</u>	<u>Concentration (mg/m<sup>3</sup>)</u>	<u>Concentration (mg/m<sup>3</sup>)</u>	<u>Concentration (mg/m<sup>3</sup>)</u>	<u>Concentration (mg/m<sup>3</sup>)</u>
<b>Total Solid Particles</b>	100	29	27	33	30
<b>Nitrogen Oxide</b>	2000	100	99	83	76
<b>Hydrogen Fluoride</b>	50	46	41	47	48
<b>Dioxins &amp; Furans (ng/m<sup>3</sup>)</b>		0.8125	2.8	1.727	4.97
<b>Dry Gas Density (Kg/m<sup>3</sup>)</b>		1.2965	1.31	1.298	1.297
<b>Hydrogen Chloride</b>		87	43	130	98
<b>Moisture (%)</b>		7.26	7.1	7.445	6.34
<b>Molecular Weight of Exhaust Gas (g/gmol)</b>		29.055	29.375	29.08	29.07
<b>Oxygen (O<sub>2</sub>) (%)</b>		16.55	16	16.2	16.9
<b>Sulfur Oxides</b>		112	87.4	299	111
<b>Sulfuric Acid Mist and Sulfur Trioxide (as SO<sub>3</sub>)</b>	100	29	1.4	38	11

Temperature (°C)		191.5	190	207	188
Type 1 Substance	1	0.24	0.0083	0.021	0.025
Type 2 Substance		0.2	0.016	0.15	0.11
Velocity (m/s)		19.25	19.75	17.9	19.3
Volatile Organic Compounds as n-propane Equivalent (VOC)	40	1.5	0.68	1	1.1
Volumetric Flowrate (m <sup>3</sup> /s)		16.65	17.25	14.8	16.8