

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- 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/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	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 ₂) (%)		16.6	15.9	16.2	16.6
Sulfuric Acid Mist and Sulfur Trioxide (as SO ₃)		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 ³ /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 & 3 738-780 Wallgrove Road, Horsley Park NSW 2175 Samples taken from EPA identification point 5.</p>		<p>Date Sample Taken- 30/06/2017</p>
<u>Pollutant</u>	<u>Limits as per license (mg/m³)</u>	<u>Concentration (mg/m³)</u>
Total Solid Particles	100	12
Nitrogen Oxide	2000	18
Hydrogen Fluoride	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>		Date Sample Taken- 18/06/2017	Date Sample Taken- 14/09/2017	Date Sample Taken- 25/10/2017
<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>
Total Solid Particles	100	14	15	13
Nitrogen Oxide	2000	52	66	61
Hydrogen Fluoride	50	48	44	40
Sulfur Oxides		57	38	49.5
Volumetric Flowrate (m³/s)		10.1	14.1	11.4

Plant 3 – Horsley Park (Ceric)

License Number: 546 Licensee: The Austral Brick Company Pty Ltd Premises: Austral Brick, Plant 3 8-10 Old Wallgrove Road, Horsley Park NSW 2175 Samples taken from EPA identification point 7.		Date Sample Taken- 08/03/2017 and 09/03/2017	Date Sample Taken- 27/06/2017 and 28/06/2017	Date Sample Taken- 11/09/2017 and 12/09/2017	Date Sample Taken- 13/09/2017 and 14/09/2017	Date Sample Taken- 24/09/2017 and 25/09/2017
<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	57	29	27	33	30
Nitrogen Oxide	2000	110	100	99	83	76
Hydrogen Fluoride	50	83	46	41	47	48
Dioxins & Furans (ng/m³) WHO05-TEQ, Upper Bound		0.018	0.0062	0.025	0.019	0.034
Dry Gas Density (Kg/m³)		1.31	1.2965	1.31	1.298	1.297
Hydrogen Chloride		150	87	43	130	98
Moisture (%)		8.1	7.26	7.1	7.445	6.34
Molecular Weight of Exhaust Gas (g/gmol)		29.3	29.055	29.375	29.08	29.07
Oxygen (O₂) (%)		15.9	16.55	16	16.2	16.9
Sulfur Oxides		130	112	87.4	299	111

Sulfuric Acid Mist and Sulfur Trioxide (as SO₃)	100	3.5	29	1.4	38	11
Temperature (°C)		182.3	191.5	190	207	188
Type 1 Substance	1	0.017	0.24	0.0083	0.021	0.025
Type 2 Substance		0.085	0.2	0.016	0.15	0.11
Velocity (m/s)		19.33	19.25	19.75	17.9	19.3
Volatile Organic Compounds as n-propane Equivalent (VOC)	40	2.4	1.5	0.68	1	1.1
Volumetric Flowrate (m³/s)		17	16.65	17.25	14.8	16.8