

National Ceramic Industries Australia Limited

Racecourse Road Rutherford NSW 2320

Environment Protection Licence Number 11956

<https://apps.epa.nsw.gov.au/prpoeoapp/>

2020 Annual Emissions Monitoring Summary

Reported: 21 August 2020

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Monitoring Location	Date Sampled	Pollutant	Measured Level	EPL Limit
EPL Point 1 (Clay Preparation)	6 July 2020	Dry gas density (kg/m <sup>3</sup> )	1.29	-
		Moisture content (%)	1.7	-
		Molecular weight (g/mole)	28.8	-
		Solid Particles (mg/m <sup>3</sup> )	6.9	20
		Temperature degrees (°C)	28	-
		Velocity (m/s)	17	-
		Volumetric flowrate (m <sup>3</sup> /s)	12	-
EPL Point 3 (Pressing and Drying)	7 July 2020	Dry gas density (kg/m <sup>3</sup> )	1.29	-
		Moisture content (%)	1.1	-
		Molecular weight (g/mole)	28.8	-
		Solid Particles (mg/m <sup>3</sup> )	7.4	20
		Temperature degrees (°C)	20	-
		Velocity (m/s)	16	-
		Volumetric flowrate (m <sup>3</sup> /s)	12	-
EPL Point 5 (Dryer 1)	8 July 2020	Dry gas density (kg/m <sup>3</sup> )	1.29	-
		Moisture content (%)	9.0	-
		Molecular weight (g/mole)	28.8	-
		Solid Particles (mg/m <sup>3</sup> )	19	20
		Temperature degrees (°C)	112	-
		Velocity (m/s)	10	-
		Volumetric flowrate (m <sup>3</sup> /s)	1.3	-
EPL Point 6 (Dryer 2)	8 July 2020	Dry gas density (kg/m <sup>3</sup> )	1.29	-
		Moisture content (%)	5.5	-
		Molecular weight (g/mole)	28.8	-
		Solid Particles (mg/m <sup>3</sup> )	4.3	20
		Temperature degrees (°C)	104	-
		Velocity (m/s)	11	-
		Volumetric flowrate (m <sup>3</sup> /s)	1.5	-
EPL Point 9 (Glaze Line)	7 July 2020	Dry gas density (kg/m <sup>3</sup> )	1.29	-
		Moisture content (%)	1.0	-
		Molecular weight (g/mole)	28.8	-
		Solid Particles (mg/m <sup>3</sup> )	2.8	20
		Temperature degrees (°C)	25	-
		Velocity (m/s)	13	-
		Volumetric flowrate (m <sup>3</sup> /s)	9.1	-
EPL Point 10 (Selection Line)	7 July 2020	Dry gas density (kg/m <sup>3</sup> )	1.29	-
		Moisture content (%)	0.8	-
		Molecular weight (g/mole)	28.8	-
		Solid Particles (mg/m <sup>3</sup> )	4.7	20
		Temperature degrees (°C)	25	-
		Velocity (m/s)	5.6	-
		Volumetric flowrate (m <sup>3</sup> /s)	0.97	-
EPL Point 12 (Spray Dryer)	6 July 2020	Dry gas density (kg/m <sup>3</sup> )	1.29	-
		Moisture content (%)	17.0	-
		Molecular weight (g/mole)	28.8	-
		Solid Particles (mg/m <sup>3</sup> )	7.2	20
		Temperature degrees (°C)	80	-
		Velocity (m/s)	20	-
		Volumetric flowrate (m <sup>3</sup> /s)	19	-

2019 Annual Emissions Monitoring Summary

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Monitoring Location		Pollutant	Measured Level	EPL Limit
EPL Point 14 (Kiln 1)	1 July 2020	Cadmium (mg/m <sup>3</sup> )	0.0073	0.1
		Carbon dioxide (percent)	2.0	-
		Dry gas density (kg/m <sup>3</sup> )	1.30	-
		Hazardous substances (mg/m <sup>3</sup> )	0.079	1
		Hydrogen Fluoride (mg/m <sup>3</sup> )	5.8	5
		Mercury (mg/m <sup>3</sup> )	0.0024	0.1
		Moisture content (%)	4.8	-
		Molecular weight (g/mole)	29.0	-
		Nitrogen Oxides at 18%O <sub>2</sub> (mg/m <sup>3</sup> )	45	100
		Oxygen (percent)	17.5	-
		Solid Particles @ 18% O <sub>2</sub> (mg/m <sup>3</sup> )	18	20
		H <sub>2</sub> SO <sub>4</sub> & SO <sub>3</sub> (as SO <sub>3</sub> ) (mg/m <sup>3</sup> )	21	100
		Velocity (m/s)	16.5	-
Volumetric flowrate (m <sup>3</sup> /s)	6.3	-		
EPL Point 15 (Kiln 2)	2 July 2020 21 July 2020	Cadmium (mg/m <sup>3</sup> )	0.025	0.1
		Carbon dioxide (percent)	2.1	-
		Dry gas density (kg/m <sup>3</sup> )	1.30	-
		Hazardous substances (mg/m <sup>3</sup> )	0.26	1
		Hydrogen Fluoride (mg/m <sup>3</sup> )	2.9	5
		Mercury (mg/m <sup>3</sup> )	0.0034	0.1
		Moisture content (%)	5.9	-
		Molecular weight (g/mole)	29.0	-
		Nitrogen Oxides at 18%O <sub>2</sub> (mg/m <sup>3</sup> )	38	100
		Oxygen (percent)	17.2	-
		Solid Particles @ 18% O <sub>2</sub> (mg/m <sup>3</sup> )	21	20
		H <sub>2</sub> SO <sub>4</sub> & SO <sub>3</sub> (as SO <sub>3</sub> ) (mg/m <sup>3</sup> )	16	100
		Velocity (m/s)	15	-
Volumetric flowrate (m <sup>3</sup> /s)	6.3	-		
EPL Point 18 (Hot Air Cooler 1)	3 July 2020	Dry gas density (kg/m <sup>3</sup> )	1.29	-
		Moisture content (%)	1.1	-
		Molecular weight (g/mole)	28.8	-
		Solid Particles (mg/m <sup>3</sup> )	4.9	5
		Temperature degrees (°C)	125.5	-
		Velocity (m/s)	8.1	-
		Volumetric flowrate (m <sup>3</sup> /s)	4.4	-
EPL Point 19 (Hot Air Cooler 2)	3 July 2020	Dry gas density (kg/m <sup>3</sup> )	1.29	-
		Moisture content (%)	0.5	-
		Molecular weight (g/mole)	28.8	-
		Solid Particles (mg/m <sup>3</sup> )	4.0	5
		Temperature degrees (°C)	98	-
		Velocity (m/s)	3.1	-
Volumetric flowrate (m <sup>3</sup> /s)	1.8	-		