

# Mittagong Sands Pty Ltd

Jan-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern hall road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	0.7	22.3	8.0
Combustible Matter	g/m <sup>2</sup>	0.5	17.0	6.1

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/01/2017	Ash Content	g/m <sup>2</sup>	22.3
	Combustible Matter	g/m <sup>2</sup>	17.0
	TOTAL	g/m <sup>2</sup>	39.3

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/01/2017	Ash Content	g/m <sup>2</sup>	0.9
	Combustible Matter	g/m <sup>2</sup>	0.7
	TOTAL	g/m <sup>2</sup>	1.6

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/01/2017	Ash Content	g/m <sup>2</sup>	0.7
	Combustible Matter	g/m <sup>2</sup>	0.5
	TOTAL	g/m <sup>2</sup>	1.2

# Mittagong Sands Pty Ltd

Feb-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern hall road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	1.40	8.00	3.80
Combustible Matter	g/m <sup>2</sup>	1.10	4.30	2.47

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
28/02/2017	Ash Content	g/m <sup>2</sup>	8.0
	Combustible Matter	g/m <sup>2</sup>	4.3
	TOTAL	g/m <sup>2</sup>	12.3

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
28/02/2017	Ash Content	g/m <sup>2</sup>	1.4
	Combustible Matter	g/m <sup>2</sup>	2.0
	TOTAL	g/m <sup>2</sup>	3.4

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
28/02/2017	Ash Content	g/m <sup>2</sup>	2.0
	Combustible Matter	g/m <sup>2</sup>	1.1
	TOTAL	g/m <sup>2</sup>	3.1

# Mittagong Sands Pty Ltd

Mar-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern hall road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	4.1	14.9	10.3
Combustible Matter	g/m <sup>2</sup>	1.4	5.8	3.1

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/03/2017	Ash Content	g/m <sup>2</sup>	11.9
	Combustible Matter	g/m <sup>2</sup>	2.0
	TOTAL	g/m <sup>2</sup>	13.9

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/03/2017	Ash Content	g/m <sup>2</sup>	4.1
	Combustible Matter	g/m <sup>2</sup>	1.4
	TOTAL	g/m <sup>2</sup>	5.5

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/03/2017	Ash Content	g/m <sup>2</sup>	14.9
	Combustible Matter	g/m <sup>2</sup>	5.8
	TOTAL	g/m <sup>2</sup>	20.7

# Mittagong Sands Pty Ltd

Apr-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern hall road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	79.00	128.00	104.00
Combustible Matter	g/m <sup>2</sup>	16.00	65.00	37.67

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/04/2017	Ash Content	g/m <sup>2</sup>	128.0
	Combustible Matter	g/m <sup>2</sup>	16.0
	TOTAL	g/m <sup>2</sup>	144.0

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/04/2017	Ash Content	g/m <sup>2</sup>	79.0
	Combustible Matter	g/m <sup>2</sup>	65.0
	TOTAL	g/m <sup>2</sup>	144.0

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/04/2017	Ash Content	g/m <sup>2</sup>	105.0
	Combustible Matter	g/m <sup>2</sup>	32.0
	TOTAL	g/m <sup>2</sup>	137.0

# Mittagong Sands Pty Ltd

May-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern hall road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	7.50	29.90	15.67
Combustible Matter	g/m <sup>2</sup>	1.20	19.50	8.90

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/05/2017	Ash Content	g/m <sup>2</sup>	7.50
	Combustible Matter	g/m <sup>2</sup>	1.20
	TOTAL	g/m <sup>2</sup>	8.7

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/05/2017	Ash Content	g/m <sup>2</sup>	9.60
	Combustible Matter	g/m <sup>2</sup>	19.50
	TOTAL	g/m <sup>2</sup>	29.1

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/05/2017	Ash Content	g/m <sup>2</sup>	29.90
	Combustible Matter	g/m <sup>2</sup>	6.00
	TOTAL	g/m <sup>2</sup>	35.9

# Mittagong Sands Pty Ltd

Jun-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern haul road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	0.40	18.00	6.50
Combustible Matter	g/m <sup>2</sup>	0.50	8.50	3.20

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/06/2017	Ash Content	g/m <sup>2</sup>	1.10
	Combustible Matter	g/m <sup>2</sup>	0.60
	TOTAL	g/m <sup>2</sup>	1.70

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/06/2017	Ash Content	g/m <sup>2</sup>	18.00
	Combustible Matter	g/m <sup>2</sup>	8.50
	TOTAL	g/m <sup>2</sup>	26.50

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/06/2017	Ash Content	g/m <sup>2</sup>	0.40
	Combustible Matter	g/m <sup>2</sup>	0.50
	TOTAL	g/m <sup>2</sup>	0.90

# Mittagong Sands Pty Ltd

Jul-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern haul road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	0.80	6.20	3.17
Combustable Matter	g/m <sup>2</sup>	0.80	1.30	1.10

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/07/2017	Ash Content	g/m <sup>2</sup>	0.80
	Combustible Matter	g/m <sup>2</sup>	0.80
	TOTAL	g/m <sup>2</sup>	1.60

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/07/2017	Ash Content	g/m <sup>2</sup>	2.50
	Combustible Matter	g/m <sup>2</sup>	1.20
	TOTAL	g/m <sup>2</sup>	3.70

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/07/2017	Ash Content	g/m <sup>2</sup>	6.20
	Combustible Matter	g/m <sup>2</sup>	1.30
	TOTAL	g/m <sup>2</sup>	7.50

# Mittagong Sands Pty Ltd

Aug-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern haul road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	0.60	2.00	1.23
Combustable Matter	g/m <sup>2</sup>	0.30	0.40	0.37

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/08/2017	Ash Content	g/m <sup>2</sup>	0.60
	Combustible Matter	g/m <sup>2</sup>	0.40
	TOTAL	g/m <sup>2</sup>	1.00

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/08/2017	Ash Content	g/m <sup>2</sup>	1.10
	Combustible Matter	g/m <sup>2</sup>	0.30
	TOTAL	g/m <sup>2</sup>	1.40

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/08/2017	Ash Content	g/m <sup>2</sup>	2.00
	Combustible Matter	g/m <sup>2</sup>	0.40
	TOTAL	g/m <sup>2</sup>	2.40

# Mittagong Sands Pty Ltd

Sep-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern haul road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	1.20	4.00	2.23
Combustible Matter	g/m <sup>2</sup>	0.70	1.80	1.27

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/09/2017	Ash Content	g/m <sup>2</sup>	1.20
	Combustible Matter	g/m <sup>2</sup>	0.70
	TOTAL	g/m <sup>2</sup>	1.90

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/09/2017	Ash Content	g/m <sup>2</sup>	1.50
	Combustible Matter	g/m <sup>2</sup>	1.80
	TOTAL	g/m <sup>2</sup>	3.30

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/09/2017	Ash Content	g/m <sup>2</sup>	4.00
	Combustible Matter	g/m <sup>2</sup>	1.30
	TOTAL	g/m <sup>2</sup>	5.30

# Mittagong Sands Pty Ltd

Oct-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern haul road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	2.00	4.40	3.37
Combustable Matter	g/m <sup>2</sup>	0.90	4.40	2.43

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/10/2017	Ash Content	g/m <sup>2</sup>	2.00
	Combustible Matter	g/m <sup>2</sup>	0.90
	TOTAL	g/m <sup>2</sup>	2.90

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/10/2017	Ash Content	g/m <sup>2</sup>	4.40
	Combustible Matter	g/m <sup>2</sup>	4.40
	TOTAL	g/m <sup>2</sup>	8.80

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/10/2017	Ash Content	g/m <sup>2</sup>	3.70
	Combustible Matter	g/m <sup>2</sup>	2.00
	TOTAL	g/m <sup>2</sup>	5.70

# Mittagong Sands Pty Ltd

Nov-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern haul road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	1.80	4.00	2.83
Combustible Matter	g/m <sup>2</sup>	0.60	1.30	0.83

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/11/2017	Ash Content	g/m <sup>2</sup>	1.80
	Combustible Matter	g/m <sup>2</sup>	0.60
	TOTAL	g/m <sup>2</sup>	2.40

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/11/2017	Ash Content	g/m <sup>2</sup>	4.00
	Combustible Matter	g/m <sup>2</sup>	1.30
	TOTAL	g/m <sup>2</sup>	5.30

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/11/2017	Ash Content	g/m <sup>2</sup>	2.70
	Combustible Matter	g/m <sup>2</sup>	0.60
	TOTAL	g/m <sup>2</sup>	3.30

# Mittagong Sands Pty Ltd

Dec-17

Cowra Quartz Quarry - Glen Logan Road, Cowra NSW 2794

EPA Licence No: 11420

## Dust Monitoring Requirements:

Continuous sampling with results assessed on a monthly basis.

## Location of Monitoring Points:

Monitoring Point 1: Located in the north-western corner of the property on the eastern side of the main road as indicated by *DM01* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 2: Located between the rubbish tip and adjacent the northern haul road as indicated by *DM02* on figure 1 *Dust Deposition Gauge Location*.

Monitoring Point 3: Located between the wash plant and the main road as indicated by *DM03* on figure 1 *Dust Deposition Gauge Location*.

## Summary of Results:

Particulates	Unit of Measure	Lowest sample value	Highest sample value	Mean of samples
Ash Content	g/m <sup>2</sup>	1.10	4.40	3.07
Combustible Matter	g/m <sup>2</sup>	0.20	1.80	1.20

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/12/2017	Ash Content	g/m <sup>2</sup>	3.70
	Combustible Matter	g/m <sup>2</sup>	1.60
	TOTAL	g/m <sup>2</sup>	5.30

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/12/2017	Ash Content	g/m <sup>2</sup>	1.10
	Combustible Matter	g/m <sup>2</sup>	0.20
	TOTAL	g/m <sup>2</sup>	1.30

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/12/2017	Ash Content	g/m <sup>2</sup>	4.40
	Combustible Matter	g/m <sup>2</sup>	1.80
	TOTAL	g/m <sup>2</sup>	6.20