

# Mittagong Sands Pty Ltd

Jan-19

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>	5.9	12.5	8.8
Combustible Matter	g/m <sup>2</sup>	1.3	4.0	2.9

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/01/2019	Ash Content	g/m <sup>2</sup>	12.5
	Combustible Matter	g/m <sup>2</sup>	3.3
	TOTAL	g/m <sup>2</sup>	15.8

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/01/2019	Ash Content	g/m <sup>2</sup>	5.9
	Combustible Matter	g/m <sup>2</sup>	1.3
	TOTAL	g/m <sup>2</sup>	7.2

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/01/2019	Ash Content	g/m <sup>2</sup>	8.1
	Combustible Matter	g/m <sup>2</sup>	4.0
	TOTAL	g/m <sup>2</sup>	12.1

# Mittagong Sands Pty Ltd

Feb-19

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>	2.30	5.00	3.87
Combustible Matter	g/m <sup>2</sup>	0.50	0.80	0.70

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
28/02/2019	Ash Content	g/m <sup>2</sup>	4.3
	Combustible Matter	g/m <sup>2</sup>	0.8
	TOTAL	g/m <sup>2</sup>	5.1

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
28/02/2019	Ash Content	g/m <sup>2</sup>	2.3
	Combustible Matter	g/m <sup>2</sup>	0.5
	TOTAL	g/m <sup>2</sup>	2.8

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
28/02/2019	Ash Content	g/m <sup>2</sup>	5.0
	Combustible Matter	g/m <sup>2</sup>	0.8
	TOTAL	g/m <sup>2</sup>	5.8

# Mittagong Sands Pty Ltd

Mar-19

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>	2.5	7.8	4.6
Combustible Matter	g/m <sup>2</sup>	0.6	10.9	4.2

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/03/2019	Ash Content	g/m <sup>2</sup>	3.5
	Combustible Matter	g/m <sup>2</sup>	1.1
	TOTAL	g/m <sup>2</sup>	4.6

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/03/2019	Ash Content	g/m <sup>2</sup>	2.5
	Combustible Matter	g/m <sup>2</sup>	0.6
	TOTAL	g/m <sup>2</sup>	3.1

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/03/2019	Ash Content	g/m <sup>2</sup>	7.8
	Combustible Matter	g/m <sup>2</sup>	10.9
	TOTAL	g/m <sup>2</sup>	18.7

# Mittagong Sands Pty Ltd

Apr-19

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>	0.20	1.60	0.93
Combustible Matter	g/m <sup>2</sup>	0.10	1.10	0.47

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/04/2019	Ash Content	g/m <sup>2</sup>	0.2
	Combustible Matter	g/m <sup>2</sup>	0.1
	TOTAL	g/m <sup>2</sup>	0.3

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/04/2019	Ash Content	g/m <sup>2</sup>	1.0
	Combustible Matter	g/m <sup>2</sup>	0.2
	TOTAL	g/m <sup>2</sup>	1.2

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/04/2019	Ash Content	g/m <sup>2</sup>	1.6
	Combustible Matter	g/m <sup>2</sup>	1.1
	TOTAL	g/m <sup>2</sup>	2.7

# Mittagong Sands Pty Ltd

May-19

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>	1.70	3.10	2.40
Combustible Matter	g/m <sup>2</sup>	0.60	0.60	0.60

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/05/2019	Ash Content	g/m <sup>2</sup>	2.40
	Combustible Matter	g/m <sup>2</sup>	0.60
	TOTAL	g/m <sup>2</sup>	3.0

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/05/2019	Ash Content	g/m <sup>2</sup>	1.70
	Combustible Matter	g/m <sup>2</sup>	0.60
	TOTAL	g/m <sup>2</sup>	2.3

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/05/2019	Ash Content	g/m <sup>2</sup>	3.10
	Combustible Matter	g/m <sup>2</sup>	0.60
	TOTAL	g/m <sup>2</sup>	3.7

# Mittagong Sands Pty Ltd

Jun-19

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	39.50	26.53
Combustible Matter	g/m <sup>2</sup>	0.20	4.90	2.27

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/06/2019	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 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/06/2019	Ash Content	g/m <sup>2</sup>	39.00
	Combustible Matter	g/m <sup>2</sup>	4.90
	TOTAL	g/m <sup>2</sup>	43.90

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/06/2019	Ash Content	g/m <sup>2</sup>	39.50
	Combustible Matter	g/m <sup>2</sup>	1.70
	TOTAL	g/m <sup>2</sup>	41.20

# Mittagong Sands Pty Ltd

Jul-19

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	1.90	1.47
Combustible Matter	g/m <sup>2</sup>	0.20	0.30	0.27

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/07/2019	Ash Content	g/m <sup>2</sup>	0.80
	Combustible Matter	g/m <sup>2</sup>	0.20
	TOTAL	g/m <sup>2</sup>	1.00

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/07/2019	Ash Content	g/m <sup>2</sup>	1.90
	Combustible Matter	g/m <sup>2</sup>	0.30
	TOTAL	g/m <sup>2</sup>	2.20

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/07/2019	Ash Content	g/m <sup>2</sup>	1.70
	Combustible Matter	g/m <sup>2</sup>	0.30
	TOTAL	g/m <sup>2</sup>	2.00

# Mittagong Sands Pty Ltd

Aug-19

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>	1.70	3.00	2.17
Combustible Matter	g/m <sup>2</sup>	0.50	0.60	0.53

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/08/2019	Ash Content	g/m <sup>2</sup>	1.80
	Combustible Matter	g/m <sup>2</sup>	0.50
	TOTAL	g/m <sup>2</sup>	2.30

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/08/2019	Ash Content	g/m <sup>2</sup>	3.00
	Combustible Matter	g/m <sup>2</sup>	0.50
	TOTAL	g/m <sup>2</sup>	3.50

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/08/2019	Ash Content	g/m <sup>2</sup>	1.70
	Combustible Matter	g/m <sup>2</sup>	0.60
	TOTAL	g/m <sup>2</sup>	2.30



# Mittagong Sands Pty Ltd

Sep-19

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>	4.70	7.20	6.30
Combustable Matter	g/m <sup>2</sup>	1.00	3.00	2.00

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/09/2019	Ash Content	g/m <sup>2</sup>	7.20
	Combustible Matter	g/m <sup>2</sup>	2.00
	TOTAL	g/m <sup>2</sup>	9.20

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/09/2019	Ash Content	g/m <sup>2</sup>	7.00
	Combustible Matter	g/m <sup>2</sup>	1.00
	TOTAL	g/m <sup>2</sup>	8.00

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/09/2019	Ash Content	g/m <sup>2</sup>	4.70
	Combustible Matter	g/m <sup>2</sup>	3.00
	TOTAL	g/m <sup>2</sup>	7.70

# Mittagong Sands Pty Ltd

Oct-19

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>	3.80	5.50	4.60
Combustible Matter	g/m <sup>2</sup>	0.80	4.70	2.60

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/10/2019	Ash Content	g/m <sup>2</sup>	4.50
	Combustible Matter	g/m <sup>2</sup>	2.30
	TOTAL	g/m <sup>2</sup>	6.80

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/10/2019	Ash Content	g/m <sup>2</sup>	3.80
	Combustible Matter	g/m <sup>2</sup>	0.80
	TOTAL	g/m <sup>2</sup>	4.60

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/10/2019	Ash Content	g/m <sup>2</sup>	5.50
	Combustible Matter	g/m <sup>2</sup>	4.70
	TOTAL	g/m <sup>2</sup>	10.20

# Mittagong Sands Pty Ltd

Nov-19

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>	0.50	2.10	1.10
Combustable Matter	g/m <sup>2</sup>	0.20	0.30	0.23

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/11/2019	Ash Content	g/m <sup>2</sup>	0.50
	Combustible Matter	g/m <sup>2</sup>	0.20
	TOTAL	g/m <sup>2</sup>	0.70

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/11/2019	Ash Content	g/m <sup>2</sup>	0.70
	Combustible Matter	g/m <sup>2</sup>	0.20
	TOTAL	g/m <sup>2</sup>	0.90

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/11/2019	Ash Content	g/m <sup>2</sup>	2.10
	Combustible Matter	g/m <sup>2</sup>	0.30
	TOTAL	g/m <sup>2</sup>	2.40

# Mittagong Sands Pty Ltd

Dec-19

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>	1.50	6.60	4.17
Combustable Matter	g/m <sup>2</sup>	0.40	4.50	2.07

## Individual Results:

### Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/12/2019	Ash Content	g/m <sup>2</sup>	4.40
	Combustible Matter	g/m <sup>2</sup>	1.30
	TOTAL	g/m <sup>2</sup>	5.70

### Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/12/2019	Ash Content	g/m <sup>2</sup>	1.50
	Combustible Matter	g/m <sup>2</sup>	0.40
	TOTAL	g/m <sup>2</sup>	1.90

### Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/12/2019	Ash Content	g/m <sup>2</sup>	6.60
	Combustible Matter	g/m <sup>2</sup>	4.50
	TOTAL	g/m <sup>2</sup>	11.10