

Mittagong Sands Pty Ltd

Jan-16

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 ²	0.8	4.0	2.1
Combustable Matter	g/m ²	0.3	1.9	1.1

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/01/2016	Ash Content	g/m ²	4.0
31/01/2016	Combustible Matter	g/m ²	1.2
	TOTAL	g/m ²	5.2

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/01/2016	Ash Content	g/m ²	1.6
31/01/2016	Combustible Matter	g/m ²	1.9
	TOTAL	g/m ²	3.5

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/01/2016	Ash Content	g/m ²	0.8
31/01/2016	Combustible Matter	g/m ²	0.3
	TOTAL	g/m ²	1.1

Mittagong Sands Pty Ltd

Feb-16

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 ²	0.40	1.20	0.67
Combustible Matter	g/m ²	0.10	0.60	0.27

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
29/02/2016	Ash Content	g/m ²	0.4
29/02/2016	Combustible Matter	g/m ²	0.1
	TOTAL	g/m ²	0.5

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
29/02/2016	Ash Content	g/m ²	0.4
29/02/2016	Combustible Matter	g/m ²	0.1
	TOTAL	g/m ²	0.5

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
29/02/2016	Ash Content	g/m ²	1.2
29/02/2016	Combustible Matter	g/m ²	0.6
	TOTAL	g/m ²	1.8

Mittagong Sands Pty Ltd

Mar-16

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 ²	2.00	7.20	4.00
Combustible Matter	g/m ²	1.80	4.70	3.00

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/03/2016	Ash Content	g/m ²	7.2
31/03/2016	Combustible Matter	g/m ²	4.7
	TOTAL	g/m ²	11.9

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/03/2016	Ash Content	g/m ²	2.0
31/03/2016	Combustible Matter	g/m ²	2.5
	TOTAL	g/m ²	4.5

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/03/2016	Ash Content	g/m ²	2.8
31/03/2016	Combustible Matter	g/m ²	1.8
	TOTAL	g/m ²	4.6

Mittagong Sands Pty Ltd

Apr-16

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 ²	2.40	12.60	6.40
Combustible Matter	g/m ²	0.90	6.70	4.07

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
9/05/2016	Ash Content	g/m ²	2.4
9/05/2016	Combustible Matter	g/m ²	0.9
	TOTAL	g/m ²	3.3

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
9/05/2016	Ash Content	g/m ²	4.2
9/05/2016	Combustible Matter	g/m ²	4.6
	TOTAL	g/m ²	8.8

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
9/05/2016	Ash Content	g/m ²	12.6
9/05/2016	Combustible Matter	g/m ²	6.7
	TOTAL	g/m ²	19.3

Mittagong Sands Pty Ltd

May-16

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 ²	5.20	29.50	13.43
Combustable Matter	g/m ²	1.00	6.40	2.83

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
3/06/2016	Ash Content	g/m ²	5.20
3/06/2016	Combustible Matter	g/m ²	1.00
	TOTAL	g/m ²	6.20

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
3/06/2016	Ash Content	g/m ²	5.60
3/06/2016	Combustible Matter	g/m ²	1.10
	TOTAL	g/m ²	6.70

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
3/06/2016	Ash Content	g/m ²	29.50
3/06/2016	Combustible Matter	g/m ²	6.40
	TOTAL	g/m ²	35.90

Mittagong Sands Pty Ltd

Jun-16

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 ²	4.30	77.80	37.20
Combustable Matter	g/m ²	1.20	16.50	9.60

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
1/07/2016	Ash Content	g/m ²	29.50
1/07/2016	Combustible Matter	g/m ²	16.50
	TOTAL	g/m ²	46.00

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
1/07/2016	Ash Content	g/m ²	4.30
1/07/2016	Combustible Matter	g/m ²	1.20
	TOTAL	g/m ²	5.50

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
1/07/2016	Ash Content	g/m ²	77.80
1/07/2016	Combustible Matter	g/m ²	11.10
	TOTAL	g/m ²	88.90

Mittagong Sands Pty Ltd

Jul-16

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 ²	1.40	31.70	18.40
Combustable Matter	g/m ²	0.40	9.20	4.80

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
1/08/2016	Ash Content	g/m ²	22.10
1/08/2016	Combustible Matter	g/m ²	9.20
	TOTAL	g/m ²	31.30

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
1/08/2016	Ash Content	g/m ²	1.40
1/08/2016	Combustible Matter	g/m ²	0.40
	TOTAL	g/m ²	1.80

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
1/08/2016	Ash Content	g/m ²	31.70
1/08/2016	Combustible Matter	g/m ²	4.80
	TOTAL	g/m ²	36.50

Mittagong Sands Pty Ltd

Aug-16

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 ²	0.30	23.00	13.40
Combustable Matter	g/m ²	0.40	25.80	9.93

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/08/2016	Ash Content	g/m ²	23.00
31/08/2016	Combustible Matter	g/m ²	25.80
	TOTAL	g/m ²	48.80

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/08/2016	Ash Content	g/m ²	0.30
31/08/2016	Combustible Matter	g/m ²	0.40
	TOTAL	g/m ²	0.70

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/08/2016	Ash Content	g/m ²	16.90
31/08/2016	Combustible Matter	g/m ²	3.60
	TOTAL	g/m ²	20.50

Mittagong Sands Pty Ltd

Sep-16

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 ²	10.80	36.90	23.50
Combustible Matter	g/m ²	4.50	8.20	6.77

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/09/2016	Ash Content	g/m ²	22.80
	Combustible Matter	g/m ²	8.20
	TOTAL	g/m ²	31.00

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/09/2016	Ash Content	g/m ²	10.80
	Combustible Matter	g/m ²	7.60
	TOTAL	g/m ²	18.40

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/09/2016	Ash Content	g/m ²	36.90
	Combustible Matter	g/m ²	4.50
	TOTAL	g/m ²	41.40

Mittagong Sands Pty Ltd

Oct-16

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 ²	0.50	32.30	13.43
Combustible Matter	g/m ²	0.20	8.40	4.07

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/10/2016	Ash Content	g/m ²	7.50
31/10/2016	Combustible Matter	g/m ²	3.60
	TOTAL	g/m ²	11.10

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/10/2016	Ash Content	g/m ²	0.50
31/10/2016	Combustible Matter	g/m ²	0.20
	TOTAL	g/m ²	0.70

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/10/2016	Ash Content	g/m ²	32.30
31/10/2016	Combustible Matter	g/m ²	8.40
	TOTAL	g/m ²	40.70

Mittagong Sands Pty Ltd

Nov-16

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 ²	0.60	16.40	5.93
Combustible Matter	g/m ²	0.60	9.80	3.67

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
30/11/2016	Ash Content	g/m ²	16.40
30/11/2016	Combustible Matter	g/m ²	9.80
	TOTAL	g/m ²	26.20

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
30/11/2016	Ash Content	g/m ²	0.60
30/11/2016	Combustible Matter	g/m ²	0.60
	TOTAL	g/m ²	1.20

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
30/11/2016	Ash Content	g/m ²	0.80
30/11/2016	Combustible Matter	g/m ²	0.60
	TOTAL	g/m ²	1.40

Mittagong Sands Pty Ltd

Dec-16

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 ²	0.50	13.50	4.97
Combustable Matter	g/m ²	0.10	20.50	7.03

Individual Results:

Monitoring Point 1:

Sample Date	Particulate	Unit of Measure	Test Result
31/12/2016	Ash Content	g/m ²	13.50
	Combustible Matter	g/m ²	20.50
	TOTAL	g/m ²	34.00

Monitoring Point 2:

Sample Date	Pollutant	Unit of Measure	Test Result
31/12/2016	Ash Content	g/m ²	0.90
	Combustible Matter	g/m ²	0.50
	TOTAL	g/m ²	1.40

Monitoring Point 3:

Sample Date	Pollutant	Unit of Measure	Test Result
31/12/2016	Ash Content	g/m ²	0.50
	Combustible Matter	g/m ²	0.10
	TOTAL	g/m ²	0.60