



# Royal

## Environment Auditing & Consultancy Service

303-304, Shivallik-7, B/s. Bal Adalat, Gondal Road, RAJKOT - 360 002.

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Ref. No. : 261/08/2017-18

Date : 04/09/2017

### NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - AUGUST : 2017

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182\_2/6/10/23

Sr. No.	Particulars	Unit	Location No.1 : Weigh Bridge (Nr.Gate No-2) (E)							
			01	02		03		04		05
01.	No. of Week	----	01							05
02.	Date & Time Starting of Monitoring	----	04/08/17 08.30	08/08/17 09.20	11/08/17 09.30	16/08/17 09.00	19/08/17 09.00	22/08/17 09.30	25/08/17 09.00	29/08/17 08.20
03.	Date & Time Ending of Monitoring	----	05/08/17 08.30	09/08/17 09.20	12/08/17 09.30	17/08/17 09.00	20/08/17 09.00	23/08/17 09.30	26/08/17 09.00	30/08/17 08.20
04.	Duration of Sampling	Min.	1440 00	1440.00	1440.00	1440 00	1440 00	1440 00	1440 00	1440 00
05.	Dominant Wind Direction (From)	---	WSW	WSW	WSW	W	W	WNW	W	WSW
06.	Average Wind Speed	Km/Hr.	12.4	3.6	6.8	7.6	7.2	7.4	6.2	6.9
07.	Average flow rate for Dust Monitoring PM <sub>10</sub>	m <sup>3</sup> /min.	1.12	1.11	1.13	1.11	1.14	1.12	1.11	1.14
08.	Average flow rate for Dust Monitoring PM <sub>2.5</sub>	m <sup>3</sup> /hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM <sub>10</sub> *	µg/m <sup>3</sup>	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM <sub>10</sub>	µg/m <sup>3</sup>	68	63	58	51	45	54	49	52
12.	Permissible limits for PM <sub>2.5</sub> *	µg/m <sup>3</sup>	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM <sub>2.5</sub>	µg/m <sup>3</sup>	33	37	29	25	23	28	24	32
14.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	8.6	8.1	7.2	8.9	8.7	8.3	8.6	9.3
16.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	16.2	17.5	14.9	16.8	15.5	15.2	15.9	16.8
18.	Permissible limit for CO **	µg/m <sup>3</sup>	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m <sup>3</sup>	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.

Instrument used : (1) 4 Nos. RDS (APM - 217 BL), (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 05/05/2018

\*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service



Sandip  
Analyst



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Ref. No. : 262/08/2017-18

Date : 04/09/2017

### NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - AUGUST : 2017

Name of company : JINDAL SAW LIMITED  
 Village: Samaghogha,  
 Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182\_2/6/10/23

Sr. No.	Particulars	Unit	Location No.2 : Sinter plant - 1 (NNW)							
			01	02		03		04		05
01.	No. of Week	----	01	02		03		04		05
02.	Date & Time Starting of Monitoring	---	04/08/17 08.15	08/08/17 09.00	11/08/17 09.15	16/08/17 09.15	19/08/17 09.15	22/08/17 09.15	25/08/17 09.15	29/08/17 08.50
03.	Date & Time Ending of Monitoring	----	05/08/17 08.15	09/08/17 09.00	12/08/17 09.15	17/08/17 09.15	20/08/17 09.15	23/08/17 09.15	26/08/17 09.15	30/08/17 08.50
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	WSW	WSW	WSW	W	W	WNW	W	WSW
06.	Average Wind Speed	Km/Hr.	12.4	3.6	6.8	7.6	7.6	7.4	6.2	6.9
07.	Average flow rate for Dust Monitoring PM <sub>10</sub>	m <sup>3</sup> /min.	1.14	1.13	1.10	1.14	1.13	1.13	1.16	1.18
08.	Average flow rate for Dust Monitoring PM <sub>2.5</sub>	m <sup>3</sup> /hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM <sub>10</sub> *	µg/m <sup>3</sup>	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM <sub>10</sub>	µg/m <sup>3</sup>	72	69	73	64	62	67	62	65
12.	Permissible limits for PM <sub>2.5</sub> *	µg/m <sup>3</sup>	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM <sub>2.5</sub>	µg/m <sup>3</sup>	36	32	35	29	27	30	34	36
14.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	7.5	8.1	7.7	7.2	8.1	7.8	6.9	7.3
16.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	16.3	16.5	17.2	18.0	17.5	16.7	17.5	16.2
18.	Permissible limit for CO **	µg/m <sup>3</sup>	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m <sup>3</sup>	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 05/05/2018

\*Permissible Limits are as per NAAQ Standard 16th November 2009

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Ref. No. : 263/08/2017-18

DATE: 04/09/2017

### NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - AUGUST : 2017

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182\_2/6/10/23

Sr. No.	Particulars	Unit	Location No.3 : Nr. Work Shop Spiral-II (W)							
			01	02	03	04	05			
01.	No. of Week	----	01	02	03	04	05			
02.	Date & Time Starting of Monitoring	----	04/08/17 08.45	08/08/17 08.45	11/08/17 09.00	16/08/17 08.45	19/08/17 08.45	22/08/17 08.45	25/08/17 08.45	29/08/17 09.10
03.	Date & Time Ending of Monitoring	---	05/08/17 08.45	09/08/17 08.45	12/08/17 09.00	17/08/17 08.45	20/08/17 08.45	23/08/17 08.45	26/08/17 08.45	30/08/17 09.10
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	WSW	WSW	WSW	W	W	WNW	W	WSW
06.	Average Wind Speed	Km/Hr.	12.4	3.6	6.8	7.6	7.6	7.4	6.2	6.9
07.	Average flow rate for Dust Monitoring PM <sub>10</sub>	m <sup>3</sup> /min.	1.11	1.13	1.12	1.11	1.11	1.15	1.13	1.06
08.	Average flow rate for Dust Monitoring PM <sub>2.5</sub>	m <sup>3</sup> /hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM <sub>10</sub> *	µg/m <sup>3</sup>	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM <sub>10</sub>	µg/m <sup>3</sup>	59	56	61	54	54	58	62	60
12.	Permissible limits for PM <sub>2.5</sub> *	µg/m <sup>3</sup>	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM <sub>2.5</sub>	µg/m <sup>3</sup>	28	26	27	31	31	33	29	25
14.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	8.7	7.9	7.7	6.9	6.9	8.3	8.2	7.1
16.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	17.6	16.9	17.7	17.2	17.2	16.1	17.8	16.3
18.	Permissible limit for CO **	µg/m <sup>3</sup>	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m <sup>3</sup>	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 05/05/2018

\*Permissible Limits are as per NAAQ Standard 16th November 2009

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Ref. No. : 264/08/2017-18

DATE: 04/09/2017

### NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - AUGUST : 2017

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182\_2/6/10/23

Sr. No.	Particulars	Unit	Location No.4 : MAIN GATE (E)							
			01	02		03		04		05
01.	No. of Week	---	01	02		03		04		05
02.	Date & Time Starting of Monitoring	---	04/08/17 09.00	08/08/17 08.30	11/08/17 08.45	16/08/17 09.30	19/08/17 09.30	22/08/17 09.00	25/08/17 09.30	29/08/17 09.30
03.	Date & Time Ending of Monitoring	---	05/08/17 09.00	09/08/17 08.30	12/08/17 08.45	17/08/17 09.30	20/08/17 09.30	23/08/17 09.00	26/08/17 09.30	30/08/17 09.30
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	WSW	WSW	WSW	W	W	WNW	W	WSW
06.	Average Wind Speed	Km/Hr.	12.4	3.6	6.8	7.6	7.4	7.4	6.2	6.9
07.	Average flow rate for Dust Monitoring PM <sub>10</sub>	m <sup>3</sup> /min.	1.11	1.14	1.11	1.06	1.10	1.20	1.14	1.11
08.	Average flow rate for Dust Monitoring PM <sub>2.5</sub>	m <sup>3</sup> /hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM <sub>10</sub> *	µg/m <sup>3</sup>	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM <sub>10</sub>	µg/m <sup>3</sup>	48	52	51	47	46	50	53	48
12.	Permissible limits for PM <sub>2.5</sub> *	µg/m <sup>3</sup>	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM <sub>2.5</sub>	µg/m <sup>3</sup>	25	28	26	24	25	29	27	26
14.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	8.4	7.9	7.7	8.3	8.8	6.8	7.6	8.5
16.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	16.5	15.7	14.9	15.1	16.4	14.8	15.9	14.7
18.	Permissible limit for CO **	µg/m <sup>3</sup>	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m <sup>3</sup>	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 05/05/2018

\*Permissible Limits are as per NAAQ Standard 16th November 2009.

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Ref. No. :265/08/2017-18

Date:04/09/2017

### FUGITIVE EMISSION MONITORING REPORT

Name of company : JINDAL SAW LIMITED  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182\_Part - 2/6/10/23/22

Sr. No.	Particulars	Unit	A - 1	A - 2	A - 3
01.	Location of Ambient	----	BF-1 RMH Stock House	BF-2 RMH Stock House	Sinter RMH Yard
02.	Date of sampling	----	10/08/2017	10/08/2017	09/08/2017
03.	Time of sampling	----	10.15	10.00	9.15
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	----	WSW	WSW	WSW
06.	Average Wind Speed	Km/Hr.	6.5	6.5	3.7
07.	Average flow rate during sampling	m3/Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10*	µg/m3	3000	3000	3000
10.	Measured Concentration of PM 10	µg/m3	1452	1365	1538
11.	Permissible limits for SO2*	µg/m3	150	150	150
12.	Measured Concentration of SO2	µg/m3	12.7	12.1	13.5
13.	Permissible limits for NO2*	µg/m3	120	120	120
14.	Measured Concentration of NO2	µg/m3	20.3	21.8	19.5
15.	Permissible limit for CO **	µg/m3	2000	2000	2000
16.	Measured Concentration of CO	µg/m3	BDL	BDL	BDL
17.	Permissible limit for Pb*	µg/m3	2	2	2
18.	Measured Concentration of Pb	µg/m3	ND	ND	ND

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. Gaseous Sampler (APM 109)  
All Calibration due on : 05/05/2018

BDL= Below Detectable Limit  
ND= Not Detectable

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Ref. No. :266/08/2017-18

Date: 04/09/2017

### FUGITIVE EMISSION MONITORING REPORT

Name of company : JINDAL SAW LIMITED  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182\_Part - 2/6/10/23/22

Sr. No.	Particulars	Unit	A - 4	A - 5	A - 6
01.	Location of Ambient	----	Sinter 2 Ground Hopper	DISP "CCM" Area	BF CAST HOUSE
02.	Date of sampling	----	09/08/2017	26/08/2017	26/08/2017
03.	Time of sampling	----	9.30	9.00	9.30
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	----	WSW	W	W
06.	Average Wind Speed	Km/Hr.	3.7	6.2	6.2
07.	Average flow rate during sampling	m3/Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	<b>Permissible limits for PM 10*</b>	<b>µg/m3</b>	<b>3000</b>	<b>3000</b>	<b>3000</b>
10.	Measured Concentration of PM 10	µg/m3	1168	1036	1295
11.	<b>Permissible limits for SO2*</b>	<b>µg/m3</b>	<b>150</b>	<b>150</b>	<b>150</b>
12.	Measured Concentration of SO2	µg/m3	12.8	13.3	14.2
13.	<b>Permissible limits for NO2*</b>	<b>µg/m3</b>	<b>120</b>	<b>120</b>	<b>120</b>
14.	Measured Concentration of NO2	µg/m3	22.7	20.3	24.1
15.	<b>Permissible limit for CO **</b>	<b>µg/m3</b>	<b>2000</b>	<b>2000</b>	<b>2000</b>
16.	Measured Concentration of CO	µg/m3	BDL	BDL	BDL
17.	<b>Permissible limit for Pb*</b>	<b>µg/m3</b>	<b>2</b>	<b>2</b>	<b>2</b>
18.	Measured Concentration of Pb	µg/m3	ND	ND	ND

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. Gaseous Sampler (APM 109)  
All Calibration due on : 05/05/2018

BDL= Below Detectable Limit  
ND= Not Detectable

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Ref. No. : 274/08/17-18

Date: 04/09/2017

### STACK EMISSION MONITORING RESULTS BLAST FURNACE-1 (GPCB ID:18037)

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 2	S - 3
01	Date of Sampling	---	09/08/2017	08/08/2017	08/08/2017
02	Time of sampling	Hr.	10.20	11.35	12.35
03	Stack Attached to	---	Dedusting System	Boiler - I	Boiler - II
04	Air Pollution Control Measures	---	Bag Filter	---	---
05	Stack Height	Meter	35.0	45	45
06	Stack Diameter	Meter	1.5	1.4	1.4
07	Stack Temperature	°C	33	153	151
08	Ambient Temperature	°C	28	30	28
09	Average Velocity of Flue Gases	m/sec.	9.0	5.1	4.5
10	Isokinetic flow rate for P.M. Sampling	LPM	17	15	14
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	50	50
13	Measured Concentration of PM.	mg/Nm <sup>3</sup>	8.00	9.00	11.00
14	Permissible limits for SO <sub>2</sub>	ppm	100	250	250
15	Measured Concentration of SO <sub>2</sub>	ppm	ND	8.1	8.4
16	Permissible limits for NO <sub>x</sub>	ppm	50	150	150
17	Measured Concentration of NO <sub>x</sub>	ppm	ND	11.1	14.7
18	Permissible limits for CO vol/vol	%	N.A.	1 % Max.	1 % Max.
19	Measured Concentration of CO vol/vol	%	N.A.	0.2	0.6

Note : Minimum Detectable Limit of SO<sub>2</sub> & No<sub>x</sub> is 0.1 and 0.01 ppm respectively.

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

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Ref. No. : 272/08/17-18

Date: 04/09/2017

### STACK EMISSION MONITORING RESULTS

#### Sinter Plant - 1(GPCB ID:35456)

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 3	S - 5	S - 6
01	Date of Sampling	---	04-08-2017	04-08-2017	05-08-2017
02	Time of sampling	---	11.15	12.30	12.30
03	Stack Attached to	---	Sinter Furnace	Secondary Mixture House	Discharge End
04	Air Pollution Control Measures	---	ESP	....	ESP
05	Stack Height	Meter	50	36.08	32
06	Stack Diameter	Meter	2.0	1.25	1.30
07	Stack Temperature	°C	129	40	121
08	Ambient Temperature	°C	30	32	31
09	Average Velocity of Flue Gases	m/sec.	10.2	2.8	8.0
10	Isokinetic flow rate for P.M. Sampling	LPM	14	13	12
11	Gaseous Sampling Flow Rate	LPM	2.0	....	NA
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	150	150
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	23	15	93
14	Permissible limits for SO <sub>2</sub>	ppm	100	NA	NA
15	Measured Concentration of SO <sub>2</sub>	ppm	ND	....	....
16	Permissible limits for NO <sub>x</sub>	ppm	50	NA	NA
17	Measured Concentration of NO <sub>x</sub>	ppm	22.1	....	....

Note : Minimum Detectable Limit of SO<sub>2</sub> & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

NA= Not Applicable

ND=Not Detectable

Royal Environment Auditing & Consultancy Service



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Analyst



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Ref. No. : 273/07/17-18

Date: .04/09/2017

### STACK EMISSION MONITORING RESULTS

#### Sinter Plant -2 (GPCB ID:29017)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 6	S - 7	S - 9
01	Date of Sampling	---	22/08/2017	25/08/2017	22/08/2017
02	Time of sampling	Hr.	9.45	11.15	15.30
03	Stack Attached to	---	Secondary Mixer De-duster system	Sinter Furnace	Discharging End of sinter de-dusting system
04	Air Pollution Control Measures	---	Dust Collector	ESP	ESP
05	Stack Height	Meter	30	50	50
06	Stack Diameter	Meter	---	2	1.3
07	Stack Temperature	°C	35	134	119
08	Ambient Temperature	°C	28	29	27
09	Average Velocity of Flue Gases	m/sec.	1.89	12.0	11.5
10	Isokinetic flow rate for P.M. Sampling	LPM	8	17	17
11	Gaseous Sampling Flow Rate	LPM	NA	2.0	NA
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	150	150
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	9	32	39
14	Permissible limits for SO <sub>2</sub>	ppm	NA	100	NA
15	Measured Concentration of SO <sub>2</sub>	ppm	---	2.6	---
16	Permissible limits for NO <sub>x</sub>	ppm	NA	50	NA
17	Measured Concentration of NO <sub>x</sub>	ppm	---	21.2	---

Note : Minimum Detectable Limit of SO<sub>2</sub> & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

NA= Not Applicable

ND= Not Detectable



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Ref. No. : 276/08/2017-18

DATE:04/09/2017

### STACK EMISSION MONITORING RESULTS

#### Pipe Plant (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 2	S - 12
01	Date of Sampling	---	23/08/2017	23/08/2017	26/08/2017
02	Time of sampling	Hr.	10.15	12.15	11.10
03	Stack Attached to	---	Core Shop-I	Core Shop-II	Core Cleaning & Dusting-I
04	Air Pollution Control Measures	---	---	---	Bag Filter
05	Stack Height	Meter	30	30	30
06	Stack Diameter	Meter	0.584	0.58	0.6
07	Stack Temperature	°C	34	33	35
08	Ambient Temperature	°C	29	29	31
09	Average Velocity of Flue Gases	m/sec.	1.5	1.9	8.3
10	Isokinetic flow rate for P.M. Sampling	LPM	7	8	15
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	150	150
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	8	7	45
14	Permissible limits for SO <sub>2</sub>	mg/Nm <sup>3</sup>	40	40	40
15	Measured Concentration of SO <sub>2</sub>	mg/Nm <sup>3</sup>	1.5	1.9	ND
16	Permissible limits for Nox	mg/Nm <sup>3</sup>	25	25	25
17	Measured Concentration of Nox	mg/Nm <sup>3</sup>	5.1	4.1	4.6

Note : Minimum Detectable Limit of SO<sub>2</sub> & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

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Ref. No. : 277/08/2017-18

Date: .04/09/2017

### STACK EMISSION MONITORING RESULTS

#### Pipe Plant (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_1/2/3/7

Sr. No.	Particulars	Unit	S - 7
01	Date of Sampling	---	23/08/2017
02	Time of sampling	Hr.	15.00
03	Stack Attached to	---	Sand Reclamation
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Meter	30
06	Stack Diameter	Meter	0.9
07	Stack Temperature	°C	93
08	Ambient Temperature	°C	28
09	Average Velocity of Flue Gases	m/sec.	5.7
10	Isokinetic flow rate for P.M. Sampling	LPM	20
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	57
14	Permissible limits for SO <sub>2</sub>	mg/Nm <sup>3</sup>	40
15	Measured Concentration of SO <sub>2</sub>	mg/Nm <sup>3</sup>	1.8
16	Permissible limits for NO <sub>x</sub>	mg/Nm <sup>3</sup>	25
17	Measured Concentration of NO <sub>x</sub>	mg/Nm <sup>3</sup>	15.2

Note : Minimum Detectable Limit of SO<sub>2</sub> & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

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Ref. No. : 275/08/2017-18

Date: 04/09/2017

### STACK EMISSION MONITORING RESULTS

#### Pipe Plant (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_1/2/3/7

Sr. No.	Particulars	Unit	S - 8	S - 9	S - 15	S - 20
01	Date of Sampling	---	26/08/2017	24/08/2017	24/08/2017	25/08/2017
02	Time of sampling	Hr.	11.30	10.30	11.00	11.15
03	Stack Attached to	---	Common stack Mg Converter- I&II	Zn Coating - I	Zn Coating - II	Zn Coating - III
04	Air Pollution Control Measures	---	Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter
05	Stack Height	Meter	30	30	30	30
06	Stack Diameter	Meter	0.5	0.6	0.6	0.6
07	Stack Temperature	°C	55	34	33	46
08	Ambient Temperature	°C	30	31	28	30
09	Average Velocity of Flue Gases	m/sec.	10.8	5.7	7.8	9.2
10	Isokinetic flow rate for P.M. Sampling	LPM	19	24	14	17
11	Gaseous Sampling Flow Rate	LPM	2.0	---	---	---
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	20 (Zn)	20 (Zn)	20 (Zn)
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	75	8 (Zn)	7 (Zn)	9 (Zn)
14	Permissible limits for SO <sub>2</sub>	mg/Nm <sup>3</sup>	40	NA	NA	NA
15	Measured Concentration of SO <sub>2</sub>	mg/Nm <sup>3</sup>	ND	---	---	---
16	Permissible limits for NO <sub>x</sub>	mg/Nm <sup>3</sup>	25	NA	NA	NA
17	Measured Concentration of NO <sub>x</sub>	mg/Nm <sup>3</sup>	4.5	---	---	---

Note : Minimum Detectable Limit of SO<sub>2</sub> & No<sub>x</sub> is 0.1 and 0.01 ppm respectively.

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

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Ref. No. : 278/08/2017-18

DATE: 04/09/2017

### STACK EMISSION MONITORING RESULTS

#### Pipe Plant (SDP-2) (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 5	S - 6
01	Date of Sampling	---	12/08/2017	10/08/2017	10/08/2017
02	Time of sampling	Hr.	10.15	11.30	15.20
03	Stack Attached to	---	Magnesium Treatment	Zinc Coating	Tri- Grinding Section
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	30	30	30
06	Stack Diameter	Meter	1.00	1.00	1.00
07	Stack Temperature	°C	48	35	33
08	Ambient Temperature	°C	28	29	28
09	Average Velocity of Flue Gases	m/sec	3.5	4.8	2.45
10	Isokinetic flow rate for PM Sampling	LPM	16	20	11.00
11	Gaseous Sampling Flow Rate	LPM	---	---	---
12	Permissible limits for PM	mg/Nm <sup>3</sup>	50	50	50
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	30	25(Zn)	36.00
14	Permissible limits for SO <sub>2</sub>	PPM	NA	NA	NA
15	Measured Concentration of SO <sub>2</sub>	PPM	---	---	---
16	Permissible limits for NO <sub>x</sub>	PPM	NA	NA	NA
17	Measured Concentration of NO <sub>x</sub>	PPM	---	---	---

Note : Minimum Detectable Limit of SO<sub>2</sub> & No<sub>x</sub> is 0.1 and 0.01 ppm respectively.

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

ND= Not Detectable

N.A= Not Applicable

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Ref. No. : 268/08/17-18

Date: 04/09/2017

### Performance Evaluation of Air Pollution Control Equipments Blast Furnace Plant-1(GPCB ID:18037)

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_Part - 1/3

Sr. No.	Particulars	Unit	S - 1
01	Date of Sampling	---	09/08/2017
02	Attached to	---	De-dustingSystem
03	Stack Height	Meter	35
04	Stack Duct Diameter	Meter	1.4
05	Stack Temperature	°C	39
06	Ambient Temperature	°C	30
07	Average Velocity of Flue Gases	m/sec.	14.3
08	IsoKinetic Flowrate for Sampling	LPM	26
09	Inlet	mg/Nm <sup>3</sup>	1078
10	Outlet	mg/Nm <sup>3</sup>	8
11	Efficiency	%	99.27

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2017

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Ref. No. : 267/08/17-18

Date: 04/09/2017

### Performance Evaluation of Air Pollution Control Equipments Sinter Plant-1 (GPCB ID 35456)

Name of Company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_Part - 1/3

Sr. No.	Particulars	Unit	S - 3
01	Date of Sampling	---	04-08-2017
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	136
06	Ambient Temperature	°C	30
07	Average Velocity of Flue Gases	m/sec.	17
08	IsoKinetic Flowrate for Sampling	LPM	24
09	Inlet	mg/Nm <sup>3</sup>	1469
10	Outlet	mg/Nm <sup>3</sup>	23
11	Efficiency	%	98.44

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2017

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Ref. No. : 269/08/17-18

Date: 04/09/2017

### Performance Evaluation of Air Pollution Control Equipments

#### Sinter Plant-2 (GPCB ID:29017)

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_Part - 1/3

Sr. No.	Particulars	Unit	S - 7
01	Date of Sampling	---	17/08/2017
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	138
06	Ambient Temperature	°C	29
07	Average Velocity of Flue Gases	m/sec.	17.3
08	IsoKinetic Flowrate for Sampling	LPM	24
09	Inlet	mg/Nm <sup>3</sup>	1825
10	Outlet	mg/Nm <sup>3</sup>	32
11	Efficiency	%	98.25

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2017

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Ref. No. : 110/05/17-18

Date: 04/09/2017

### Performance Evaluation of Air Pollution Control Equipments Pipe Plant (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_Part - 1/3

Sr. No.	Particulars	Unit	S - 8	S - 22
01	Date of Sampling	---	26/08/2017	26/08/2017
02	Attached to	---	Common stack Mg Converter - I & II	Mg Converter - III
03	Stack Height	Meter	30	30
04	Stack Diameter	Meter	0.5	0.5
05	Stack Temperature	°C	64	63
06	Ambient Temperature	°C	30	30
07	Average Velocity of Flue Gases	m/sec.	9.5	11.2
08	IsoKinetic Flowrate for Sampling	LPM	16	19
09	Inlet	mg/Nm <sup>3</sup>	688	682
10	Outlet	mg/Nm <sup>3</sup>	75	75
11	Efficiency	%	89.10	89.00

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2017

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Ref. No. : 270/08/17-18

Date: .04/09/2017

### Performance Evaluation of Air Pollution Control Equipments Pipe Plant (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_Part - 1/3

Sr. No.	Particulars	Unit	S - 9	S - 20
01	Date of Sampling	---	24/08/2017	25/08/2017
02	Attached to	---	Zinc Coating - I	Zinc Coating - III
03	Stack Height	Meter	30	30
04	Stack Duct Diameter	Meter	0.6	0.6
05	Stack Temperature	°C	35	48
06	Ambient Temperature	°C	32	30
07	Average Velocity of Flue Gases	m/sec.	10	13
08	IsoKinetic Flowrate for Sampling	LPM	18.5	70
09	Inlet	mg/Nm <sup>3</sup>	281	215
10	Outlet	mg/Nm <sup>3</sup>	28	36
11	Efficiency	%	90.03	83.26

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2017

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Ref. No. : 271/08/17-18

Date: 04/09/2017

### Performance Evaluation of Air Pollution Control Equipments

#### Pipe Plant (SDP-2) (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255\_Part - 1/3

Sr. No.	Particulars	Unit	S - 1
01	Date of Sampling	---	12/08/2017
02	Attached to	---	Mg Treatment
03	Stack Height	Meter	30
04	Stack Duct Diameter	Meter	1.00
05	Stack Temperature	°C	46
06	Ambient Temperature	°C	36
07	Average Velocity of Flue Gases	m/sec.	10.5
08	IsoKinetic Flowrate for Sampling	LPM	19
09	Inlet	mg/Nm <sup>3</sup>	1515
10	Outlet	mg/Nm <sup>3</sup>	7
11	Efficiency	%	99.54

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2017

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Ref. No. : 284/08/2017-18

Date: .04/09/2017

### AMBIENT NOISE LEVEL MEASUREMENT

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Date of sampling : 25th August, 2017

Sr. No.	Location of Sampling	Value in dB(A) Day Time			Value in dB(A) Night Time		
		Min.	Max.	Leq	Min.	Max.	Leq
01.	Admin. Building	46.8	63.8	56.8	44.5	57.2	53.5
02.	Old Colony	44.8	57.9	55.1	42.8	55.7	49.1
03.	Nr. LPG Yard	46.1	56.2	53.1	43.9	55.2	53.2
04.	New Colony (School)	43.5	57.3	53.1	45.2	56.3	52.8
05.	Nr. SDP-2	53.1	62.8	57.9	53.9	57.6	54.7
06.	Nr. Coating Plant	54.1	63.8	60.2	52.9	59.2	54.3
07.	Nr. Gate No. 2	53.8	58.9	54.5	47.1	57.8	54.2
08.	Nr. Sinter Plant-1	55.9	71.8	66.8	54.3	62.4	57.2
09.	Nr. Sinter Plant-2	56.3	70.2	64.5	52.3	67.8	62.1
10.	Nr. Blast Furnace-1	54.8	62.4	59.6	54.3	63.1	60.5
11.	Nr. Blast Furnace-2	56.9	63.7	58.9	48.2	61.5	58.3
12.	Nr. Main Gate (Security Office)	50.8	59.2	55.4	44.9	58.3	53.7

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB,C-80 to 130 dB.

Recalibration is due on : 12/09/2017

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Ref. No. : 282/08/2017-18

Date: .04/09/2017

### WORK ZONE NOISE LEVEL MEASUREMENT BLAST FURNACE- 1 (GPCB ID:18037)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 6th July, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Nr. Stock House	62.5	76.3	71.2
02.	Inside Control Room	48.1	56.2	53.2
03.	Inside Control room of Cast House	44.9	56.8	50.2
04.	Inside Laboratory	43.5	51.2	48.3
05.	Inside Control Room of Blower House	55.9	59.8	56.3
06.	Inside Control Room of CPP	51.3	63.2	58.5

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.

Recalibration is due on : 12/09/2017

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Ref. No. : 258/07/2017-18

Date: .04/09/2017

### WORK ZONE NOISE LEVEL MEASUREMENT BLAST FURNACE - 2 (GPCB ID:29026)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 6th July, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	52.2	58.4	55.3
02.	Nr. Stock House	51.5	62.5	57.6
03.	C/R Blower House	56.3	63.1	58.7

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB,C-80 to 130 dB.

Recalibration is due on : 12/09/2017

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# Royal

## Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s. Bal Adalat, Gondal Road, RAJKOT - 360 002.

Ph.: +91 281 2360695 ■ E-mail : royalenvironment@live.com ■ admin@royalconsultancy.com

Ref. No. : 282/08/2017-18

Date: .04/09/2017

### WORK ZONE NOISE LEVEL MEASUREMENT

#### SINTER PLANT- 1 (GPCB ID:35456)

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Date of sampling : 8th July, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
1	Inside Control Room	40.8	48.2	43.6
2	Inside Mechanical Room	47.5	57.06	51.9
3	Inside Electrical Room	42.1	50.2	47.3
4	Inside Plant Office	44.9	56.6	53.1

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.

Recalibration is due on : 12/09/2017

Royal Environment Auditing & Consultancy Service



Sandip  
Analyst



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Ref. No. : 285/08/2017-18

Date: .04/09/2017

### WORK ZONE NOISE LEVEL MEASUREMENT

#### SINTER PLANT - 2 (29017)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 17th August, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	46.1	55.3	51.1
02.	Inside Operator Room	57.2	63.5	60.5
03.	Near Proportioning Bulding	53.2	64.1	57.9
04.	Near Crusher House	60.7	66.3	64.4

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB,C-80 to 130 dB.

Recalibration is due on : 12/09/2017

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Ref. No. : 283/08/2017-18

Date: .04/09/2017

### WORK ZONE NOISE LEVEL MEASUREMENT PIPE PLANT (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 11th August, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room of Annealing Furnace of DISP / SDP	46.2	54.2	49.5
02	Inside Control Room – Mill Area of Spiral Plant	55.0	62.3	56.2
03	Nr. Pipe Cutting Area of Spiral Plant	61.2	76.2	68.3
04	Inside JCO Plant	65.2	75.6	68.3
05	Inside DISP / SDP Plant	63.8	70.2	66.3
06	Nr. CCM SDP-2	60.5	70.3	67.1
07	Inside Control Room of Annealing Furnace of SDP-2	45.9	56.38	55.6
08	Nr. Zinc Coating SDP-2	62.5	68.7	64.2
09	Near Mould Shop	64.1	77.6	72.2

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.

Recalibration is due on : 12/09/2017

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Analyst

**Form No. 37**

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7-A (a)(e).

1 Name of the Department/Plant.: BF Plant-1 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 18037)

2 Raw materials, by products and finished products involved in the process. TOTAL DUST &amp; CO.

3 Particulars of sampling

Date of Sampling : 8th August, 2017

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remark	Signature person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m3					
1	BF Plant (Cast House)	CO	Personal Respirable Dust sampler IAS 001	02	12-14	13.0	50 (ppm)	Gravimetric	3	----	<i>Sandip</i>	Mr. Sandip Ramoliya
		Total Dust			2.3-2.8	2.55	10					

Instruments used : Envirotech make personal sampler, Model No. IAS 001

Calibration Due on : 12/11/2017

For. Royal Environment Auditing &amp; Consultancy Service



*Sandip*  
Authorized Sign

**Form No. 37**

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7-A (a)(e).

- 1 Name of the Department/Plant.: **Sinter Plant-1 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 35456)**
- 2 Raw materials, by products and finished products involved in the process. **TOTAL DUST**
- 3 Particulars of sampling

Date of Sampling : 4th August, 2017

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remark	Signature of person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m3					
1	Sinter Plant At First Floor	Total Dust	Personal Respirable Dust sampler IAS 001	02	1.2-1.6	1.4	10	Gravimetric	4	---	<i>Sandip</i>	Mr. Sandip Ramoliya

Instruments used : Envirotech make personal sampler, Model No. IAS 001

Calibration Due on. : 12/11/2017

For. Royal Environment Auditing &amp; Consultancy Service

*Sandip*  
Authorized Sign



**Form No. 37**

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7-A (a)(e).

- 1 Name of the Department/Plant.: **Sinter Plant-2 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID:29017)**
- 2 Raw materials, by products and finished products involved in the process. **TOTAL DUST**
- 3 Particulars of sampling

Date of Sampling : 17th August, 2017

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m3					
1	Sinter Plant- At First Floor	Total Dust	Personal Respirable Dust sampler IAS 001	02	1.2-1.5	1.35	10	Gravimetric	5	----	<i>Sandip</i>	Mr. Sandip Ramoliya

Instruments used : Envirotech make personal sampler, Model No. IAS 001

Calibration Due on. : 12/11/2017

For. Royal Environment Auditing &amp; Consultancy Service



*Sandip*  
Authorized Sign

**Form No. 37**  
**(Prescribed under Rule 12-B)**

Register containing particulars of monitoring of working environment required under Section 7-A (a)(e).

- 1 Name of the Department/Plant.: DISP, JCO & Coating Units at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 18036)
- 2 Raw materials, by products and finished products involved in the process. TOTAL DUST
- 3 Particulars of sampling

Date of Sampling : 9th July, 2017

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remark	Signature of person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m <sup>3</sup>					
1	CCM Area (SDP / DISP)	Total Dust	Personal Respirable Dust sampler IAS 001	02	3.1-3.9	3.5	10	Gravimetric	5	---	<i>Sandip</i>	Mr. Sandip Ramoliya

Instruments used : Envirotech make personal sampler, Model No. IAS 001

Calibration Due on. : 12/11/2017

For. Royal Environment Auditing & Consultancy Service



*Sandip*  
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Ref. No. : 286/08/2017-18

Date: .04/09/2017

### REPORT OF DOMESTIC WASTE WATER ANALYSIS

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Source of Sample Collection : Sewage Treatment Plant (Inlet & Outlet)

Date of Sampling : 31/08/2017

Test Method : As per IS Standards - 3025

Sr. No.	Parameters	Unit	GPCB limits for Treated Effluent	Raw Sewage	Treated Effluent
01.	pH	pH Unit	---	7.60	7.03
02.	BOD (3 Days at 27°C)	mg/l	<20	154	8
03.	Total Dissolve Solid	mg/l	...	1361	1452
04.	COD	mg/l	...	127	32
05.	Total Suspended Solid	mg/l	<30	148	8
06.	Oil & Grease	mg/l	...	ND	ND
07.	Residual Chlorine	mg/l	Min. 0.5	---	0.65

ND=Not Detectable

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Hitesh  
Analyst



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Ref. No. : 260/07/2017-18

Date: .04/09/2017

### WATER & WASTE WATER QUALITY ANALYSIS REPORT

Name of company : JINDAL SAW LIMITED,  
Village: Samaghogha,  
Tal. : Mundra, Dist. Kutch

Source of Sample : SLAG GRANULATION POND (BLAST FURNACE)

Date of Sampling : 31/08/2017

Sr. No.	Parameters	Unit	Results
01.	pH	...	8.25
02.	Colour	pt.co.units	40
03.	Tempreture	°C	52
04.	Total suspended solids	mg/l	4
05.	Total dissolve solids	mg/l	4435
06.	Phenolic compounds	mg/l	ND
07.	Oil & Grease	mg/l	ND
08.	Cyanide	mg/l	ND
09.	Ammonical nitrogen (as NH <sub>3</sub> -N)	mg/l	1.85
10.	BOD (3 Days at 27°C)	mg/l	18.0
11.	COD	mg/l	95.0

Royal Environment Auditing & Consultancy Service

*D. J. J. J.*



*Samir*  
Analyst