



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s. Bal Adalat, Gondal Road, RAJKOT - 360 002.
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REACS/JINDAL-SMG/2017-18/07/091

Date: 27/06/2017

To,
Jindal Saw Limited,
Village: Samaghogha,
Taluka: Mundra,
District: Kutch.

Kind attn.: Mr. A.K. Pandey (AGM-HSE)

Dear Sir,

Sub.: Report of National Ambient Air Quality, Stack Emission, Ambient Air Quality, Work Place, Noise, Effluent Water Analysis

Ref.: Our visit at Samaghogha on June 2017.

We are in reference to the above subject.

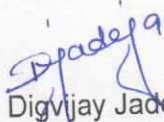
Please find enclosed herewith following analysis reports in one copy:

1) Ambient Air Quality – NAAQM	:	36 locations
2) Stack Monitoring – PM	:	16 samples
3) Stack Monitoring- PM, SO ₂ , NO _x	:	15 samples
4) Bag Filter efficiency (SPM)	:	10 samples
5) Fugitive emission- Transfer Points	:	06 samples
6) Work Area Monitoring	:	06 samples
7) Ambient Noise Level	:	24 samples
8) Workzone noise level	:	23 Samples
9) Waste water analysis	:	02 samples
10) Drinking Water Sample	:	00 Samples

Thanking you,

Yours faithfully,

For, Royal Environment Auditing & Consultancy Service,


Digvijay Jadeja

Encl: As above.



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Ref. No. : 201/06/2017-18

Date : 05/07/2017

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JUNE : 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	02	03	04	05	06	07	08	09
02.	Date & Time Starting of Monitoring	----	01/06/17 09.00	05/06/17 09.15	08/06/17 09.00	12/06/17 08.40	15/06/17 09.05	19/06/17 08.55	22/06/17 09.00	26/06/17 08.30	29/06/2017; 08.45
03.	Date & Time Ending of Monitoring	---	02/06/17 09.00	06/06/17 09.15	09/06/17 09.00	13/06/17 08.40	16/06/17 09.05	20/06/17 08.55	23/06/17 09.00	27/06/17 08.30	30/06/2017; 08.45
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	W	NW	W	W	NW	WSW	NW	WSW	W
06.	Average Wind Speed	Km/Hr.	2.5	3.5	4.1	5.5	4.4	6.5	5.2	6.8	5.8
07.	Average flow rate for Dust Monitoring PM ₁₀	m ³ /min.	1.10	1.12	1.10	1.12	1.10	1.20	1.12	1.2	1.20
08.	Average flow rate for Dust Monitoring PM _{2.5}	m ³ /hr.	1.0	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	0.2
10.	Permissible limits for PM ₁₀ *	µg/m ³	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM ₁₀	µg/m ³	50	48	40	48	45	50	58	55	50
12.	Permissible limits for PM _{2.5} *	µg/m ³	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM _{2.5}	µg/m ³	26	28	25	24	22	30	35	34	31
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	7.5	8.3	7.8	8.2	9.3	8.5	8.4	9.0	7.5
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.1	15.5	17.3	18.5	14.5	15.3	14.3	16.2	17.5
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	B.D.L.	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.

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Ref. No. : 202/06/2017-18

Date : 05/07/2017

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JUNE : 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	---	01/06/17 09.10	05/06/17 09.30	08/06/17 09.15	12/06/17 09.00	15/06/17 09.20	19/06/17 09.10	22/06/17 09.15	26/06/17 08.45	29/06/2017; 09.00
03.	Date & Time Ending of Monitoring	---	02/06/17 09.10	06/06/17 09.30	09/06/17 09.15	13/06/17; 09.00	16/06/17 09.20	20/06/17 09.10	23/06/17 09.15	27/06/17 08.45	30/06/2017; 09.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	W	NW	W	W	NW	WSW	NW	WSW	W
06.	Average Wind Speed	Km/Hr.	2.5	3.5	4.1	5.5	4.4	6.5	5.2	6.8	5.8
07.	Average flow rate for Dust Monitoring PM ₁₀	m ³ /min.	1.12	1.14	1.16	1.10	1.20	1.14	1.10	1.2	1.20
08.	Average flow rate for Dust Monitoring PM _{2.5}	m ³ /hr.	1.0	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	0.2
10.	Permissible limits for PM ₁₀ *	µg/m ³	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM ₁₀	µg/m ³	58	48	50	45	55	50	54	45	40
12.	Permissible limits for PM _{2.5} *	µg/m ³	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM _{2.5}	µg/m ³	34	28	25	22	26	28	32	30	24
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.5	8.1	7.5	6.8	7.0	7.7	6.5	7.0	6.8
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	15.8	16.3	17.4	18.2	17.3	16.4	17.3	15.8	16.8
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	B.D.L.	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. : 203/06/2017-18

Date : 05/07/2017

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JUNE : 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	---	01/06/17 09.25	05/06/17 09.45	08/06/17 09.30	12/06/17 09.15	15/06/17 09.35	19/06/17 09.30	22/06/17 09.30	26/06/17 09.00	29/06/2017 09.15
03.	Date & Time Ending of Monitoring	---	02/06/17 09.25	06/06/17 09.45	09/06/17 09.30	13/06/17 09.15	16/06/17 09.35	20/06/17 09.30	23/06/17 09.30	27/06/17 09.00	30/06/2017 09.15
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	W	NW	W	W	NW	WSW	NW	WSW	W
06.	Average Wind Speed	Km/Hr.	2.5	3.5	4.1	5.5	4.4	6.5	5.2	6.8	5.8
07.	Average flow rate for Dust Monitoring PM ₁₀	m ³ /min.	1.11	1.14	1.15	1.16	1.05	1.12	1.13	1.04	1.16
08.	Average flow rate for Dust Monitoring PM _{2.5}	m ³ /hr.	1.0	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	0.2
10.	Permissible limits for PM ₁₀ *	µg/m ³	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM ₁₀	µg/m ³	55	52	50	40	38	46	42	50	32
12.	Permissible limits for PM _{2.5} *	µg/m ³	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM _{2.5}	µg/m ³	28	30	24	22	25	26	22	24	20
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.5	7.3	6.4	6.8	7.8	7.7	8.2	6.8	7.5
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	18.2	17.3	17.5	16.8	17.3	15.8	17.4	16.7	18.3
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	B.D.L.	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 (A/M - 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

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Ref. No. : 204/06/2017-18

Date : 05/07/2017

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JUNE : 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	---	01/06/17 09.40	05/06/17 10.00	09/06/17 09.45	12/06/17 09.30	15/06/17 09.50	19/06/17 09.45	22/06/17 09.45	26/06/17 09.15	29/06/2017; 09.30
03.	Date & Time Ending of Monitoring	---	02/06/17 09.40	06/06/17 10.00	09/06/17 09.45	13/06/17 09.30	16/06/17 09.50	20/06/17 09.45	23/06/17 09.45	27/06/17 09.15	30/06/2017; 09.30
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	W	NW	W	W	NW	WSW	NW	WSW	W
06.	Average Wind Speed	Km/hr.	2.5	3.5	4.1	5.5	4.4	6.5	5.2	6.8	5.8
07.	Average flow rate for Dust Monitoring PM ₁₀	m ³ /min.	1.12	1.14	1.10	1.12	1.14	1.12	1.14	1.06	1.05
08.	Average flow rate for Dust Monitoring PM _{2.5}	m ³ /hr.	1.0	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	0.2
10.	Permissible limits for PM ₁₀ *	µg/m ³	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM ₁₀	µg/m ³	52	55	48	40	42	46	44	39	35
12.	Permissible limits for PM _{2.5} *	µg/m ³	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM _{2.5}	µg/m ³	27	24	26	21	24	30	32	34	28
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	9.2	7.8	7.5	8.1	7.5	6.5	7.8	8.1	7.4
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.4	15.2	14.3	14.8	13.7	14.8	15.3	14.3	16.7
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	B.D.L.	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.

D. J. Dadeja
 Royal Environment Auditing & Consultancy Service



Somesh
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Ref. No. :205/06/2017-18

Date : 05/07/2017

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	---	07/06/2017	07/06/2017	14/06/2017
03.	Time of sampling	---	10.00	9.45	9.45
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	---	W	W	NW
06.	Average Wind Speed	Km/Hr.	5.4	5.4	4.5
07.	Average flow rate during sampling	m ³ /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/m ³	3000	3000	3000
10.	Measured Concentration of PM 10	µg/m ³	1135	1256	1315
11.	Permissible limits for SO ₂ *	µg/m ³	150	150	150
12.	Measured Concentration of SO ₂	µg/m ³	11.5	12.8	14.3
13.	Permissible limits for NO ₂ *	µg/m ³	120	120	120
14.	Measured Concentration of NO ₂	µg/m ³	21.5	20.8	19.3
15.	Permissible limit for CO **	µg/m ³	2000	2000	2000
16.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL
17.	Permissible limit for Pb*	µg/m ³	2	2	2
18.	Measured Concentration of Pb	µg/m ³	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. :206/06/2017-18

Date : 05/07/2017

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	---	14/06/2017	21/06/2017	21/06/2017
03.	Time of sampling	---	10.00	8.45	9.00
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	---	NW	WSW	WNW
06.	Average Wind Speed	Km/Hr.	4.5	2.8	2.8
07.	Average flow rate during sampling	m ³ /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/m ³	3000	3000	3000
10.	Measured Concentration of PM 10	µg/m ³	1035	1088	1254
11.	Permissible limits for SO ₂ *	µg/m ³	150	150	150
12.	Measured Concentration of SO ₂	µg/m ³	12.7	13.7	14.3
13.	Permissible limits for NO ₂ *	µg/m ³	120	120	120
14.	Measured Concentration of NO ₂	µg/m ³	23.4	20.5	24.3
15.	Permissible limit for CO **	µg/m ³	2000	2000	2000
16.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL
17.	Permissible limit for Pb*	µg/m ³	2	2	2
18.	Measured Concentration of Pb	µg/m ³	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. : 207/06/17-18

Date : 05/07/2017

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	---	15-06-2017
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	181
06	Ambient Temperature	°C	35
07	Average Velocity of Flue Gases	m/sec.	26
08	IsoKinetic Flowrate for Sampling	LPM	17
09	Inlet	mg/Nm ³	3654
10	Outlet	mg/Nm ³	30
11	Efficiency	%	99.18

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

Calibration due on 12/09/2017



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S. S. S.
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Ref. No. : 208/06/17-18

Date : 05/07/2017

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	---	09/06/2017
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	156
06	Ambient Temperature	°C	35
07	Average Velocity of Flue Gases	m/sec.	19.8
08	IsoKinetic Flowrate for Sampling	LPM	25
09	Inlet	mg/Nm ³	2415
10	Outlet	mg/Nm ³	48
11	Efficiency	%	98.01

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

Calibration due on 12/09/2017

Royal Environment Auditing & Consultancy Service



[Signature]
Analyst



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Ref. No. : 209/06/17-18

Date : 05/07/2017

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 - 15	S - 20	S - 23	
01	Date of Sampling	---	12/06/2017	12/06/2017	10/06/2017	13/06/2017	07/06/2017
02	Attached to	---	Zinc Coating - I	Zinc Coating - II	Zinc Coating - III	Zinc Coating Machine	Zinc Coating - V
03	Stack Height	Meter	30	30	30	30	30
04	Stack Duct Diameter	Meter	0.6	0.6	0.6	0.6	0.9
05	Stack Temperature	°C	45	43	42	41	43
06	Ambient Temperature	°C	36	35	37	34	38
07	Average Velocity of Flue Gases	m/sec.	11.5	10.8	12.4	11.5	11.3
08	IsoKinetic Flowrate for Sampling	LPM	20	19	22	20	20
09	Inlet	mg/Nm ³	1525	1065	1184	1215	1235
10	Outlet	mg/Nm ³	6	6	7	8	5
11	Efficiency	%	99.61	99.44	99.41	99.34	99.60

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

Calibration due on 12/09/2017

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Ref. No. : 210/06/17-18

Date : 05/07/2017

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	S-8	S-8
01	Date of Sampling	---	16/06/2017	08/06/2017	08/06/2017
02	Attached to	---	Mg Treatment	Mg Converter - 1	Mg Converter - 2
03	Stack Height	Meter	30	30	30
04	Stack Duct Diameter	Meter	1.00	0.5	0.5
05	Stack Temperature	°C	46	43	42
06	Ambient Temperature	°C	36	36	36
07	Average Velocity of Flue Gases	m/sec.	10.5	10.9	11.2
08	IsoKinetic Flowrate for Sampling	LPM	19	20	21
09	Inlet	mg/Nm ³	1515	1435	1625
10	Outlet	mg/Nm ³	7	5	6
11	Efficiency	%	99.54	99.65	99.63

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

Calibration due on 12/09/2017

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Ref. No. : 211/06/17-18

Date : 05/07/2017

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 - 1	S - 3	S - 6
01	Date of Sampling	---	15/06/2017	15/06/2017	15/06/2017
02	Time of sampling	---	10.15	11.30	12.35
03	Stack Attached to	---	Fuel & Flux Crusher and Screening building	Sinter Furnace	Discharge End
04	Air Pollution Control Measures	---	Bag Filter	ESP	ESP
05	Stack Height	Meter	32.0	50	32
06	Stack Diameter	Meter	1.40	2.0	1.30
07	Stack Temperature	°C	43	138	128
08	Ambient Temperature	°C	35	36	36
09	Average Velocity of Flue Gases	m/sec.	6.2	5.5	9.5
10	Isokinetic flow rate for P.M. Sampling	LPM	18	18	19
11	Gaseous Sampling Flow Rate	LPM	NA	2.0	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150
13	Measured Concentration of PM.	mg/Nm ³	12	30	15
14	Permissible limits for SO ₂	ppm	NA	100	NA
15	Measured Concentration of SO ₂	ppm	...	ND
16	Permissible limits for NO _x	ppm	NA	50	NA
17	Measured Concentration of NO _x	ppm	22.5

Note : Minimum Detectable Limit of SO₂ & 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. : 212/06/17-18

Date : 05/07/2017

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 - 1	S - 3	S - 7	S - 9
01	Date of Sampling	---	09/06/2017	09/06/2017	10/06/2017	10/06/2017
02	Time of sampling	Hr.	11.00	12.00	10.15	11.15
03	Stack Attached to	---	Fuel crushing de-duster system (Flux)	Fuel Screening deduster System (Flux Screening)	Sinter Furnace	Discharging End of sinter de-dusting system
04	Air Pollution Control Measures	---	Dust Collector	Dust Collector	ESP	ESP
05	Stack Height	Meter	30	30	50	50
06	Stack Diameter	Meter	0.7	0.7	2	1.3
07	Stack Temperature	°C	42	43	126	108
08	Ambient Temperature	°C	35	36	36	37
09	Average Velocity of Flue Gases	m/sec.	8.50	7.80	10.8	15.3
10	Isokinetic flow rate for P.M. Sampling	LPM	18	17	20	16
11	Gaseous Sampling Flow Rate	LPM	NA	NA	2.0	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	20	22	48	21
14	Permissible limits for SO ₂	ppm	NA	NA	100	NA
15	Measured Concentration of SO ₂	ppm	---	---	2.8	---
16	Permissible limits for NO _x	ppm	NA	NA	50	NA
17	Measured Concentration of NO _x	ppm	---	---	20.5	---

Note : Minimum Detectable Limit of SO₂ & 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. : 213/06/17-18

Date : 05/07/2017

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	S - 4
01	Date of Sampling	---	17/06/2017	17/06/2017	19/06/2017	19/06/2017
02	Time of sampling	Hr.	10.15	11.30	12.30	15.00
03	Stack Attached to	---	Dedusting System	Boiler - I	Boiler - II	Stove Stack
04	Air Pollution Control Measures	---	Bag Filter	---	---	---
05	Stack Height	Meter	35.0	45	45	50.0
06	Stack Diameter	Meter	1.5	1.4	1.4	2.25
07	Stack Temperature	°C	42	126	120	208
08	Ambient Temperature	°C	34	35	38	36
09	Average Velocity of Flue Gases	m/sec.	9.7	5.5	4.5	4.1
10	Isokinetic flow rate for P.M. Sampling	LPM	17	17	15	11
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	50	50	50
13	Measured Concentration of PM.	mg/Nm ³	ND	ND	ND	ND
14	Permissible limits for SO ₂	ppm	100	250	250	250
15	Measured Concentration of SO ₂	ppm	ND	ND	ND	ND
16	Permissible limits for NO _x	ppm	50	150	150	150
17	Measured Concentration of NO _x	ppm	ND	11.5	14.3	ND
18	Permissible limits for CO vol/vol	%	N.A.	1 % Max.	1 % Max.	1 % Max.
19	Measured Concentration of CO vol/vol	%	N.A.	0.2	0.4	0.6

Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

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

Calibration due on : 12/09/2017

N.D.=Not Detectable

N.A.=Not Applicable.

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Ref. No. : 214/06/17-18

Date : 05/07/2017

STACK EMISSION MONITORING RESULTS BLAST FURNACE - 2 (GPCB ID:29026)

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 - 4	S - 5
01	Date of Sampling	---	19/06/2017	19/06/2017	19/06/2017
02	Time of sampling	Hr.	10.00	11.00	12.00
03	Stack Attached to	---	Dedusting System	Coke fine building dust collecting system	Iron Ore fine & Dust Collecting System
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	40.0	30.0	30.0
06	Stack Diameter	Meter	1.5	0.45	0.35
07	Stack Temperature	°C	45	50	46
08	Ambient Temperature	°C	32	35	38
09	Average Velocity of Flue Gases	m/sec.	18.5	8.5	8.1
10	Isokinetic flow rate for P.M. Sampling	LPM	8	15	14
11	Gaseous Sampling Flow Rate	LPM	NA	NA	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150
13	Measured Concentration of PM.	mg/Nm ³	8	10	12
14	Permissible limits for SO ₂	mg/Nm ³	NA	NA	NA
15	Measured Concentration of SO ₂	mg/Nm ³	---	---	---
16	Permissible limits for NO _x	mg/Nm ³	NA	NA	NA
17	Measured Concentration of NO _x	mg/Nm ³	---	---	---

Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

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

NA=Not Applicable

Calibration due on : 12/09/2017

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Ref. No. : 215/06/2017-18

Date : 05/07/2017

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	S - 22	S - 23
01	Date of Sampling	---	08/06/2017	10/06/2017	10/06/2017	10/06/2017	08/06/2017	07/06/2017
02	Time of sampling	Hr.	11.30	10.30	10.15	11.15	12.30	12.30
03	Stack Attached to	---	Common stack Mg Converter- I&II	Zn Coating - I	Zn Coating - II	Zn Coating - III	Mg Converter -III	Zn Coating - IV & V
04	Air Pollution Control Measures	---	Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter	Bag Filter	Cyclone Separator & Bag Filter
05	Stack Height	Meter	30	30	30	30	30	30
06	Stack Diameter	Meter	0.5	0.6	0.6	0.6	0.5	0.9
07	Stack Temperature	°C	44	42	40	38	45	40
08	Ambient Temperature	°C	35	36	36	37	36	35
09	Average Velocity of Flue Gases	m/sec.	10.2	11.3	10.5	11.4	10.5	10.4
10	Isokinetic flow rate for P.M. Sampling	LPM	19	20	19	20	19	19
11	Gaseous Sampling Flow Rate	LPM	2.0	---	---	---	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	20 (Zn)	20 (Zn)	20 (Zn)	150	20 (Zn)
13	Measured Concentration of PM	mg/Nm ³	6	6 (Zn)	6 (Zn)	7 (Zn)	7	5 (Zn)
14	Permissible limits for SO ₂	mg/Nm ³	40	NA	NA	NA	40	NA
15	Measured Concentration of SO ₂	mg/Nm ³	ND	---	---	---	ND	---
16	Permissible limits for Nox	mg/Nm ³	25	NA	NA	NA	25	NA
17	Measured Concentration of Nox	mg/Nm ³	4.2	---	---	---	3.5	---

Note : Minimum Detectable Limit of SO₂ & 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. : 216/06/2017-18

Date : 05/07/2017

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 - 3	S - 4	S - 12	S - 18
01	Date of Sampling	—	13/06/2017	13/06/2017	14/06/2017	14/06/2017	20/06/2017	20/06/2017
02	Time of sampling	Hr.	10.10	12.10	14.30	15.30	11.10	16.15
03	Stack Attached to	—	Core Shop-I	Core Shop-II	Core Shop-III	Core Shop-IV	Core Cleaning & Dusting-I	Core Cleaning & Dusting-II
04	Air Pollution Control Measures	—	—	—	—	—	Bag Filter	Bag Filter
05	Stack Height	Meter	30	30	30	30	30	30
06	Stack Diameter	Meter	0.584	0.58	0.584	0.584	0.6	0.6
07	Stack Temperature	°C	40	42	38	36	41	45
08	Ambient Temperature	°C	34	36	35	36	37	37
09	Average Velocity of Flue Gases	m/sec.	3.5	3.2	3.6	3.8	6.5	10.2
10	Isokinetic flow rate for P.M. Sampling	LPM	14	13	15	16	12	18
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	15	12	18	22	16	30
14	Permissible limits for SO ₂	mg/Nm ³	40	40	40	40	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	1.2	1.5	1.4	1.3	ND	ND
16	Permissible limits for Nox	mg/Nm ³	25	25	25	25	25	25
17	Measured Concentration of Nox	mg/Nm ³	4.1	3.2	3.5	2.8	4.3	5.5

Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

ND= Not Detectable

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

Calibration due on : 12/09/2017

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Ref. No. : 217/06/2017-18

Date : 05/07/2017

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	---	20/06/2017
02	Time of sampling	Hr.	15.00
03	Stack Attached to	---	Sand Reclamation
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Metèr	30
06	Stack Diameter	Meter	0.9
07	Stack Temperature	°C	65
08	Ambient Temperature	°C	37
09	Average Velocity of Flue Gases	m/sec.	10.5
10	Isokinetic flow rate for P.M. Sampling	LPM	18
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM	mg/Nm ³	35
14	Permissible limits for SO ₂	mg/Nm ³	40
15	Measured Concentration of SO ₂	mg/Nm ³	1.2
16	Permissible limits for NO _x	mg/Nm ³	25
17	Measured Concentration of NO _x	mg/Nm ³	14.5

Note : Minimum Detectable Limit of SO₂ & No_x 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. : 218/06/2017-18

Date : 05/07/2017

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 - 2	S - 5	S - 8
01	Date of Sampling	---	16/06/2017	16/06/2017	16/06/2017	13/06/2017
02	Time of sampling	Hr.	10.00	11.15	15.30	17.10
03	Stack Attached to	---	Magnesium Treatment	Socket Cleaning	Zinc Coating	Zinc Coating Machine
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	Bag Filler	---
05	Stack Height	Meter	30	30	30	30
06	Stack Diameter	Meter	1.00	0.50	1.00	1.20
07	Stack Temperature	°C	55	50	38	44
08	Ambient Temperature	°C	35	35	36	36
09	Average Velocity of Flue Gases	m/sec	3.5	4.4	3.6	3.8
10	Isokinetic flow rate for PM Sampling	LPM	13	12	14	15
11	Gaseous Sampling Flow Rate	LPM	---	---	---	---
12	Permissible limits for PM	mg/Nm ³	50	50	50	50
13	Measured Concentration of PM	mg/Nm ³	10	11	19 (Zn)	8 (Zn)
14	Permissible limits for SO ₂	PPM	NA	NA	NA	NA
15	Measured Concentration of SO ₂	PPM	---	---	---	---
16	Permissible limits for NO _x	PPM	NA	NA	NA	NA
17	Measured Concentration of NO _x	PPM	---	---	---	---

Note : Minimum Detectable Limit of SO₂ & Nox 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. : 224/06/2017-18

Date : 05/07/2017

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 : 15th June, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
1	Inside Control Room	42.5	47.2	44.1
2	Inside Mechanical Room	46.3	56.3	54.3
3	Inside Electrical Room	43.7	48.8	46.2
4	Inside Plant Office	44.5	55.2	49.3

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. : 225/05/2017-18

Date : 05/07/2017

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 : 17th June, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Nr. Stock House	63.1	76.1	70.2
02.	Inside Control Room	48.5	55.1	51.3
03.	Inside Control room of Cast House	44.3	54.3	50.5
04.	Inside Laboratory	42.7	48.6	45.5
05.	Inside Control Room of Blower House	54.5	57.3	55.7
06.	Inside Control Room of CPP	53.4	61.2	56.2

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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Ref. No. : 226/06/2017-18

Date : 05/07/2017

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 : 17th June, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room of Annealing Furnace of DISP / SDP	46.1	52.5	48.3
02	Inside Control Room – Mill Area of Spiral Plant	55.2	61.4	55.2
03	Nr. Pipe Cutting Area of Spiral Plant	60.3	75.4	67.3
04	Inside JCO Plant	64.4	74.2	66.4
05	Inside DISP / SDP Plant	67.2	71.3	67.2
06	Inside Coating Plant	63.3	67.6	65.1
07	Nr. CCM SDP-2	61.5	68.2	63.7
08	Inside Control Room of Annealing Furnace of SDP-2	46.4	56.2	55.2
09	Nr. Zinc Coating SDP-2	61.2	68.5	63.7
10	Near Mould Shop	64.4	77.5	72.5

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

Royal Environment Auditing & Consultancy Service



Servant
Analyst



Royal

Environment Auditing & Consultancy Service

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Ref. No. : 227/06/2017-18

Date : 05/07/2017

AMBIENT NOISE LEVEL MEASUREMENT

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 19th June, 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	46.1	62.4	49.5	44.2	58.2	54.2
02.	Old Colony	43.2	55.3	46.2	43.8	54.3	50.2
03.	Nr. LPG Yard	46.2	55.1	51.2	44.5	55.1	51.1
04.	New Colony (School)	44.2	57.3	53.3	45.1	54.8	52.7
05.	Nr. SDP-2	54.3	61.2	59.3	55.3	57.3	56.1
06.	Nr. Coating Plant	55.1	64.4	61.5	54.3	60.5	56.6
07.	Nr. Gate No. 2	52.7	58.3	54.4	49.3	56.4	51.4
08.	Nr. Sinter Plant-1	56.7	71.5	67.5	55.4	61.7	58.3
09.	Nr. Sinter Plant-2	57.3	68.8	64.3	53.7	66.3	60.2
10.	Nr. Blast Furnace-1	55.2	60.3	57.3	52.8	62.8	57.2
11.	Nr. Blast Furnace-2	58.3	61.2	60.2	49.3	59.7	55.3
12.	Nr. Main Gate (Security Office)	49.2	57.3	55.2	45.8	58.1	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

Royal Environment Auditing & Consultancy Service



Sewak
Analyst



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Ref. No. : 228/06/2017-18

Date : 05/07/2017

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 : 19th June, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	50.2	59.3	56.5
02.	Nr. Stock House	51.3	61.2	56.7
03.	C/R Blower House	56.4	62.7	59.2

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





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Ref. No. : 229/06/2017-18

Date : 05/07/2017

WORK ZONE NOISE LEVEL MEASUREMENT

SINTER PLANT - 2 (29017)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 10th June, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	46.2	53.5	50.2
02.	Inside Operator Room	58.2	61.2	60.2
03.	Near Proportioning Bulding	55.2	64.2	61.2
04.	Near Crusher House	61.5	66.5	63.2

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

Royal Environment Auditing & Consultancy Service

Analyst





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Ref. No. : 230/06/2017-18

Date : 05/07/2017

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 : 20/06/2017

Test Method : As per IS Standards - 3025

Sr. No.	Parameters	Unit	GPCB limits for Treated Effluent	Raw Sewage	Treated Effluent
01.	pH	pH Unit	---	8.15	7.35
02.	BOD (3 Days at 27°C)	mg/l	<20	160	7
03.	Total Dissolve Solid	mg/l	...	1435	1535
04.	COD	mg/l	...	130	32
05.	Total Suspended Solid	mg/l	<30	150	10
06.	Oil & Grease	mg/l	...	ND	ND
07.	Residual Chlorine	mg/l	Min. 0.5	---	0.70

ND=Not Detectable

Royal Environment Auditing & Consultancy Service

Sensip
Analyst



Ref. No. : 219/06/2017-18

Date : 05/07/2017

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 : 15th June, 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	1.0-1.3	1.20	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
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 : 9th June, 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 ³					
1	Sinter Plant At First Floor	Total Dust	Personal Respirable Dust sampler IAS 001	02	1.2-1.8	1.5	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 & 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: **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 & CO.**
- 3 Particulars of sampling

Date of Sampling : 17th June, 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	10-12	11.0	50 (ppm)	Gravimetric	4	---	<i>Sureja</i>	Mr. Sandip Ramoliya
		Total Dust			2.8-3.0	2.90	10					

Instruments used : Envirotech make personal sampler, Model No. IAS 001
Calibration Due on. : 12/11/2017

For. Royal Environment Auditing & Consultancy Service

Sureja
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.: **BF Plant-2 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 29026)**
- 2 Raw materials, by products and finished products involved in the process. **TOTAL DUST & CO.**
- 3 Particulars of sampling

Date of Sampling : 19th June, 2017

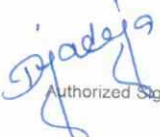
Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule)	Refrance Method	Number of workers exposed at the location being monitored	Remark	Signature person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m3					
1	BF Plant (Cast House)	CO	Personal Respirable Dust sampler IAS 001	02	4-6	5.0 (ppm)	50 (ppm)	Gravimetric	6	---		Mr. Sandip Ramoliya
		Total Dust			1.5-2.5	2.0	10					

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

Calibration Due on. : 12/11/2017

For. Royal Environment Auditing & Consultancy Service




Authorized Sign

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

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

- 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 : 19th June, 2017

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule) mg/m3	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						
1	CCM Area (SDP / DISP)	Total Dust	Personal Respirable Dust sampler IAS 001	02	3.2-4.0	3.6	10	Gravimetric	3	---	<i>Sandip</i>	Mr. Sandip Ramoliya
2	CCM Area (SDP-2)	Total Dust		02	1.6-1.8	1.7	10	Gravimetric	4	---		

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

Calibration Due on : 12/11/2017

For. Royal Environment Auditing & Consultancy Service

G. J. Jadhav
Authorized Sign

