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Environment Auditing & Consultancy Service

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

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Ref. No. : 548/04/17-18

Date: 30/04/2018

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

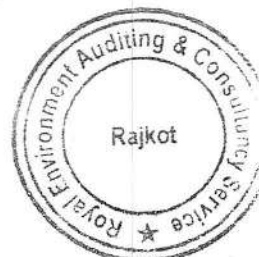
Test Method : As per IS Standards - 11255_Part - 1/3

Sr. No.	Particulars	Unit	S - 1
01	Date of Sampling	---	06-04-2018
02	Attached to	---	De-dusting System
03	Stack Height	Meter	35
04	Stack Duct Diameter	Meter	1.4
05	Stack Temperature	°C	43
06	Ambient Temperature	°C	30
07	Average Velocity of Flue Gases	m/sec.	14.2
08	IsoKinetic Flowrate for Sampling	LPM	26
09	Inlet	mg/Nm ³	1092
10	Outlet	mg/Nm ³	3
11	Efficiency	%	99.73

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

Calibration due on 14/09/2018

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Ref. No. : 556/04/17-18

Date: 30/04/2018

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	---	06/04/2018	06/04/2018	06/04/2018
02	Time of sampling	Hr.	10.30	11.05	14.45
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	43	157	154
08	Ambient Temperature	°C	30	30	30
09	Average Velocity of Flue Gases	m/sec.	14.2	5.9	5.8
10	Isokinetic flow rate for P.M. Sampling	LPM	25	18	18
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	50	50
13	Measured Concentration of PM.	mg/Nm ³	3	ND	ND
14	Permissible limits for SO ₂	ppm	100	250	250
15	Measured Concentration of SO ₂	ppm	ND	8.1	7.9
16	Permissible limits for NO _x	ppm	50	150	150
17	Measured Concentration of NO _x	ppm	ND	10.7	13.6
18	Permissible limits for CO vol/vol	%	N.A.	1 % Max.	1 % Max.
19	Measured Concentration of CO vol/vol	%	N.A.	0.2	0.1

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 : 14/09/2018

N.D=Not Detectable

N.A.=Not Applicable

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Ref. No. : 569/04/2017-18

Date: 30/04/2018

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 April, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Nr. Stock House	61.8	77.5	72.6
02.	Inside Control Room	48.5	58.6	55.4
03.	Inside Control room of Cast House	48.3	65.2	56.8
04.	Inside Laboratory	43.7	56.2	48.7
05.	Inside Control Room of Blower House	52.1	62.7	58.6
06.	Inside Control Room of CPP	50.2	59.3	53.6

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 : 14/09/2018

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Ref. No. : 573/04/2017-18

Date : 30/04/2018

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 : 26/04/2018

Test Method : As per IS Standards - 3025

Sr. No.	Parameters	Unit	GPCB limits for Treated Effluent	Raw Sewage	Treated Effluent
01.	pH	pH Unit	---	7.43	7.59
02.	BOD (3 Days at 27°C)	mg/l	<20	154	3
03.	Total Dissolve Solid	mg/l	...	1212	1425
04.	COD	mg/l	...	124	8
05.	Total Suspended Solid	mg/l	30 <100	133	3
06.	Oil & Grease	mg/l	...	ND	ND
07.	Fecal Coliform	MPN/100ml	1000	NA	Absent
08.	Residual Chlorine	mg/l	Min. 0.5	---	0.70

ND=Not Detectable

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Ref. No. : 274/04/2017-18

DATE:- 30/04/2018

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 : 26/04/2018

Sr. No.	Parameters	Unit	Permissible limit	Results
01.	pH	...	6.5 to 8.5	8.21
02.	Colour	pt.co.units	100	41
03.	Tempreture	°C	40	32
04.	Total suspended solids	mg/l	100	5
05.	Total dissolve solids	mg/l	2100	1736
06.	Phenolic compounds	mg/l	1	ND
07.	Oil & Grease	mg/l	10	ND
08.	Chlorides	mg/l	600	330
09.	Sulphate	mg/l	1000	700
10.	Ammonical nitrogen (as NH ₃ -N)	mg/l	50	1.83
11.	BOD (3 Days at 27°C)	mg/l	30	19.0
12.	COD	mg/l	100	62.0

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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 : 6th April, 2018

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						
1	BF Plant (Cast House)	CO	Personal Respirable Dust sampler VPDS 203	02	5.5-13.8	9.5	50 (ppm)	Gravimetric	6	---	<i>[Signature]</i>	Mr. Hitesh Umletiya
		Total Dust			1.1-2.3	1.70	10					

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203

Calibration Due on. : 12/03/2019



For. Royal Environment Auditing & Consultancy Service

[Signature]
Authorized Sign



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Ref. No. : 542/04/2017-18

DATE:- 30/04/2018

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - APRIL : 2018

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)							
			1		2		3		4	
01.	No. of Week	---	1		2		3		4	
02.	Date & Time Starting of Monitoring	---	03/04/18 09.20	06/04/18 09.00	9/04/18 09.15	13/04/18 09.10	16/04/18 09.00	20/04/18 08.50	23/04/18 09.15	25/04/18 09.00
03.	Date & Time Ending of Monitoring	---	04/04/18 09.20	07/04/18 09.00	10/04/18 09.15	14/04/18 09.10	17/04/18 09.00	21/04/18 08.50	24/04/18 09.15	26/04/18 09.00
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)	---	NE	NE	NNE	NE	SE	SE	SE	NE
06.	Average Wind Speed	Km/Hr.	2.8	3.6	3.8	4.9	6.7	5.1	7.0	4.8
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.11	1.13	1.11	1.12	1.13	1.11	1.14	1.13
08.	Average flow rate for Dust Monitoring PM2.5	m ³ /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 PM10*	µg/m ³	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	60	58	61	58	62	60	57	63
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m ³	38	35	32	36	37	41	43	39
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.1	8.3	8.0	7.6	7.9	8.3	8.0	82.0
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	15.3	16.8	17.1	16.3	16.4	17.2	17.0	17.3
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	B.D.L.	BDL	BDL	BDL	BDL	BDL	BDL	BDL

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. : 543/04/2017-18

DATE:- 30/04/2018

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - APRIL : 2018

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)							
			1	2	3	4	5	6	7	8
01.	No. of Week	---								
02.	Date & Time Starting of Monitoring	---	03/04/18 08.50	06/04/18 09.30	09/04/18 09.30	13/04/18 09.25	16/04/18 09.15	20/04/18 09.30	23/04/18 09.30	25/04/18 09.30
03.	Date & Time Ending of Monitoring	---	04/04/18 08.50	07/04/18 09.30	10/04/18 09.30	14/04/18 09.25	17/04/18 09.15	21/04/18 09.30	24/04/18 09.30	26/04/18 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)	---	NE	NE	NNE	NE	SE	SE	SE	NE
06.	Average Wind Speed	Km/Hr.	2.8	3.6	3.8	4.9	6.7	5.1	7.0	4.8
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.14	1.13	1.11	1.12	1.13	1.11	1.12	1.13
08.	Average flow rate for Dust Monitoring PM2.5	m ³ /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 PM10*	µg/m ³	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	63	57	61	54	60	64	55	59
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m ³	36	38	41	39	35	42	41	34
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	7.6	7.2	7.3	8.1	7.7	7.5	8.2	8.0
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.4	16.8	17.4	17.3	17.8	17.5	16.9	16.6
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	B.D.L.	BDL	BDL	BDL	BDL	BDL	BDL	BDL

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. : 544/04/2017-18

DATE:- 30/04/2018

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - APRIL : 2018

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)							
			1		2		3		4	
01.	No. of Week	---								
02.	Date & Time Starting of Monitoring	---	03/04/18 09.30	06/04/18 08.45	9/04/18 09.00	13/04/18 08.45	16/04/18 09.30	20/04/18 09.00	23/04/18 09.45	25/04/18 08.45
03.	Date & Time Ending of Monitoring	---	04/04/18 09.30	07/04/18 08.45	10/04/18 09.00	14/04/18 08.45	17/04/18 09.30	21/04/18 09.00	24/04/18 09.45	26/04/18 08.45
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)	---	NE	NE	NNE	NE	SE	SE	SE	NE
06.	Average Wind Speed	Km/Hr.	2.8	3.6	3.8	4.9	6.7	5.1	7.0	4.8
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.11	1.13	1.12	1.11	1.12	1.13	1.12	1.11
08.	Average flow rate for Dust Monitoring PM2.5	m ³ /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 PM10*	µg/m ³	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	64	56	62	56	60	58	63	56
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m ³	32	34	29	33	38	37	41	39
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.6	8.5	8.1	7.6	8.3	8.0	7.8	7.9
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.4	16.6	15.9	16.9	17.8	17.3	16.8	17.2
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	B.D.L.	BDL	BDL	BDL	BDL	BDL	BDL	BDL

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. : 541/04/2017-18

DATE:- 30/04/2018

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - APRIL : 2018

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

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

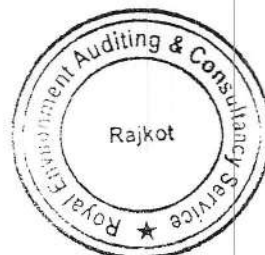
Sr. No.	Particulars	Unit	Location No.1 : Weigh Bridge (Nr.Gate No-2) (E)							
			1	2	3	4	5	6	7	8
01.	No. of Week	---								
02.	Date & Time Starting of Monitoring	---	03/04/18 09.00	06/04/18 09.15	9/04/18 08.50	13/04/18 09.00	16/04/18 08.45	20/04/18 09.15	23/04/18 09.00	25/04/18 09.15
03.	Date & Time Ending of Monitoring	---	04/04/18 09.00	07/04/18 09.15	10/04/18 08.50	14/04/18 09.00	17/04/18 08.45	21/04/18 09.15	24/04/18 09.00	26/04/18 09.15
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)	---	NE	NE	NNE	NE	SE	SE	NNE	NE
06.	Average Wind Speed	Km/Hr.	2.8	3.6	3.8	4.9	6.7	5.1	4.1	4.8
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.12	1.11	1.13	1.12	1.11	1.12	1.11	1.1
08.	Average flow rate for Dust Monitoring PM2.5	m ³ /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 PM10*	µg/m ³	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	58	60	55	62	57	61	58	49
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m ³	36	34	35	38	40	34	44	30
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	6.4	7.6	7.9	8.0	8.3	7.6	8.3	7.4
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	15.8	16.1	16.3	16.0	17.1	17.5	17.3	16.5
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL	BDL	BDL	BDL	BDL	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. :545/04/2017-18

Date:..30/04/2018

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	----	11/04/2018	11/04/2018	10/04/2018
03.	Time of sampling	----	9.15	9.30	9.15
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	----	SE	SE	NE
06.	Average Wind Speed	Km/Hr.	6.4	6.4	4.2
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	1312	1341	1362
11.	Permissible limits for SO ₂ *	µg/m ³	150	150	150
12.	Measured Concentration of SO ₂	µg/m ³	14.8	16.6	13.2
13.	Permissible limits for NO ₂ *	µg/m ³	120	120	120
14.	Measured Concentration of NO ₂	µg/m ³	16.2	16.6	17
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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303-304, Shivalik-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 281 2360695 Email : royalservice@live.com admin@royalconsultancy.com

Ref. No. :546/04/2017-18

Date: 30/04/2018

FUGITIVE EMISSION MONITORING REPORT

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

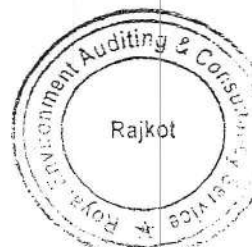
Test Method : As per IS Standards - 5182_Part - 2/6/10/23/22

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	----	10/04/2018	12/04/2018	12/04/2018
03.	Time of sampling	---	9.30	9.00	9.20
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	----	NE	SE	SE
06.	Average Wind Speed	Km/Hr.	40.2	8.6	8.6
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	1336	1289	1431
11.	Permissible limits for SO ₂ *	µg/m ³	150	150	150
12.	Measured Concentration of SO ₂	µg/m ³	13.1	12.5	13.8
13.	Permissible limits for NO ₂ *	µg/m ³	120	120	120
14.	Measured Concentration of NO ₂	µg/m ³	17.2	16.5	17.5
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. : 567/04/2017-18

Date: 30/04/2018

AMBIENT NOISE LEVEL MEASUREMENT

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

Date of sampling : 4th April, 2018

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	42.5	63.8	54.5	42.5	57.1	48.2
02.	Old Colony	43.4	59.3	52.4	42.8	57.6	51.2
03.	Nr. LPG Yard	42.5	58.2	53.6	45.7	57.3	52.8
04.	New Colony (School)	41.4	53.9	48.4	47.1	58.7	50.8
05.	Nr. SDP-2	48.7	68.7	60.1	53.4	62.4	58.4
06.	Nr. Coating Plant	55.8	66.8	63.5	52.3	61.4	56.8
07.	Nr. Gate No. 2	54.7	65.8	58.2	46.1	65.4	56.2
08.	Nr. Sinter Plant-1	53.5	75.1	63.4	55.3	66.8	60.4
09.	Nr. Sinter Plant-2	50.2	72.3	63.8	52.5	67.7	61.8
10.	Nr. Blast Furnace-1	56.8	66.3	60.2	50.4	65.3	62.4
11.	Nr. Blast Furnace-2	51.8	65.3	62.4	46.3	62.8	57.4
12.	Nr. Main Gate (Security Office)	54.1	64.6	59.5	42.8	63.9	56.1

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 : 14/09/2018

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Ref. No. : 553/04/17-18

Date: 30/04/2018

Performance Evaluation of Air Pollution Control Equipments Blast Furnace Plant-2 (GPCB ID:29026)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

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

Sr. No.	Particulars	Unit	S - 1
01	Date of Sampling	---	09/04/2018
02	Attached to	---	Dedusting System
03	Stack Height	Meter	40
04	Stack Duct Diameter	Meter	1.5
05	Stack Temperature	°C	36
06	Ambient Temperature	°C	30
07	Average Velocity of Flue Gases	m/sec.	12.52
08	IsoKinetic Flowrate for Sampling	LPM	29
09	Inlet	mg/Nm ³	1276
10	Outlet	mg/Nm ³	6
11	Efficiency	%	99.53

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

Calibration due on 14/09/2018



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Ref. No. : 557/04/17-18

Date: 30/04/2018

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
01	Date of Sampling	---	09/04/2018	09/04/2018
02	Time of sampling	Hr.	11.20	10.30
03	Stack Attached to	---	Dedusting System	Coke fine building dust collecting system
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter
05	Stack Height	Meter	40.0	30.0
06	Stack Diameter	Meter	1.5	0.45
07	Stack Temperature	°C	34	33
08	Ambient Temperature	°C	31	31
09	Average Velocity of Flue Gases	m/sec.	9.7	4.5
10	Isokinetic flow rate for P.M. Sampling	LPM	18	19
11	Gaseous Sampling Flow Rate	LPM	NA	NA
12	Permissible limits for PM	mg/Nm ³	150	150
13	Measured Concentration of PM.	mg/Nm ³	6	9
14	Permissible limits for SO ₂	mg/Nm ³	NA	NA
15	Measured Concentration of SO ₂	mg/Nm ³	—	—
16	Permissible limits for No _x	mg/Nm ³	NA	NA
17	Measured Concentration of NO _x	mg/Nm ³	—	—

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 : 14/09/2018

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P. J. J. J.



[Signature]
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Ref. No. : 571/04/2017-18

Date: 30/04/2018

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 : 9th April, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	46.8	66.4	57.3
02.	Nr. Stock House	46.4	63.4	59.2
03.	C/R Blower House	56.8	69.2	65.4

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 : 14/09/2018

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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 : 9th April, 2018

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						
1	BF Plant (Cast House)	CO	Personal Respirable Dust sampler VPDS 203	02	7-12	9.5 (ppm)	50 (ppm)	Gravimetric	5	---	<i>Hitesh Umleti</i>	Mr. Hitesh Umletiya
		Total Dust			1.2-3.2	2.2	10					

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203

Calibration Due on. : 12/03/2019



For. Royal Environment Auditing & Consultancy Service

Hitesh Umleti
Authorized Sign



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Ref. No. : 549/04/17-18

Date: 30/04/2018

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	---	05-04-2018
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	141
06	Ambient Temperature	°C	32
07	Average Velocity of Flue Gases	m/sec.	17.2
08	IsoKinetic Flowrate for Sampling	LPM	24
09	Inlet	mg/Nm ³	1554
10	Outlet	mg/Nm ³	19
11	Efficiency	%	98.78

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

Calibration due on 14/09/2018



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Ref. No. : 555/04/17-18

Date: 30/04/2018

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 - 2	S - 3	S - 7
01	Date of Sampling	---	18-04-2018	18-04-2018	05-04-2018
02	Time of sampling	Hr.	11.45	11.50	12.00
03	Stack Attached to	---	Fuel crushing de-duster system (Flux)	Fuel Screening deduster System (Flux Screening)	Sinter Furnace
04	Air Pollution Control Measures	---	Dust Collector	Dust Collector	ESP
05	Stack Height	Meter	30	30	50
06	Stack Diameter	Meter	0.7	0.7	2
07	Stack Temperature	°C	39	45	134
08	Ambient Temperature	°C	30	30	30
09	Average Velocity of Flue Gases	m/sec.	7.20	6.92	12.2
10	Isokinetic flow rate for P.M. Sampling	LPM	13	28	16
11	Gaseous Sampling Flow Rate	LPM	NA	NA	2.0
12	Permissible limits for PM	mg/Nm ³	150	150	150
13	Measured Concentration of PM	mg/Nm ³	9	10	19
14	Permissible limits for SO ₂	ppm	NA	NA	100
15	Measured Concentration of SO ₂	ppm	---	---	8.5
16	Permissible limits for NO _x	ppm	NA	NA	50
17	Measured Concentration of NO _x	ppm	---	---	18.1

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 : 14/09/2018

NA= Not Applicable

ND= Not Detectable

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Ref. No. : 572/04/2017-18

Date: 30/04/2018

WORK ZONE NOISE LEVEL MEASUREMENT

SINTER PLANT - 2 (29017)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 5th April, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	44.2	62.6	55.4
02.	Inside Operator Room	46.9	66.1	56.8
03.	Near Proportioning Building	50.2	67.8	63.9
04.	Near Crusher House	57.1	74.3	65.9

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 : 14/09/2018

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H. Her
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.: **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 : 5th April, 2018

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						
1	Sinter Plant-2 at First Floor	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.2-2.6	1.90	10	Gravimetric	5	---	<i>[Handwritten Signature]</i>	Mr. Hitesh Umletiya

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203

Calibration Due on. : 12/03/2019



For. Royal Environment Auditing & Consultancy Service

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Ref. No. : 547/04/17-18

Date: 30/04/2018

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	---	05-04-2018
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	152
06	Ambient Temperature	°C	30
07	Average Velocity of Flue Gases	m/sec.	16
08	IsoKinetic Flowrate for Sampling	LPM	21
09	Inlet	mg/Nm ³	1416
10	Outlet	mg/Nm ³	21
11	Efficiency	%	98.52

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

Calibration due on 14/09/2018

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Ph. +91 281 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 554/04/17-18

Date: 30/04/2018

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 - 4	S - 5	S - 6
01	Date of Sampling	---	07-04-2018	09-04-2018	07-04-2018	07-04-2018
02	Time of sampling	---	10.30	11.15	12.30	15.10
03	Stack Attached to	---	Sinter Furnace	Primary Mixture House	Secondary Mixture House	Discharge End
04	Air Pollution Control Measures	---	ESP	ESP
05	Stack Height	Meter	50	19.75	36.08	32
06	Stack Diameter	Meter	2.0	1.25	1.25	1.30
07	Stack Temperature	°C	136	34	34	125
08	Ambient Temperature	°C	31	31	30	31
09	Average Velocity of Flue Gases	m/sec.	10.2	2.9	2.3	8.7
10	Isokinetic flow rate for P.M. Sampling	LPM	15	16	9	21
11	Gaseous Sampling Flow Rate	LPM	2.0	NA	NA	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	21	9	10	20
14	Permissible limits for SO ₂	ppm	100	NA	NA	NA
15	Measured Concentration of SO ₂	ppm	8.1
16	Permissible limits for NO _x	ppm	50	NA	NA	NA
17	Measured Concentration of NO _x	ppm	17.4

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 : 14/09/2018

NA= Not Applicable
ND=Not Detectable

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Ref. No. : 568/04/2017-18

Date: 30/04/2018

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 : 7th April, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
1	Inside Control Room	41.5	63.8	54.7
2	Inside Mechanical Room	43.2	64.5	52.8
3	Inside Electrical Room	42.2	62.5	56.7
4	Inside Plant Office	44.7	63.9	57.8

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 : 14/09/2018

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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 : 7th April, 2018

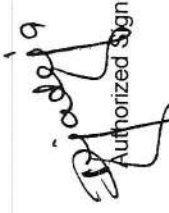
Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA Concentration (As given in Second Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remark	Signature of person taking samples	Name (in block letters)
				Number of sample	Range	Average						
1	Sinter Plant-1 at First Floor	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.2-3.2	2.2	10	Gravimetric	5	---		Mr. Hitesh Umletiya

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203

Calibration Due on. : 12/03/2019



For. Royal Environment Auditing & Consultancy Service



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Ref. No. : 550/04/17-18

Date: 30/04/2018

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	---	16/04/2018	16/04/2018
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	54	51
06	Ambient Temperature	°C	30	30
07	Average Velocity of Flue Gases	m/sec.	8.54	8.8
08	IsoKinetic Flowrate for Sampling	LPM	15	16
09	Inlet	mg/Nm ³	751	742
10	Outlet	mg/Nm ³	12	11
11	Efficiency	%	98.40	98.52

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

Calibration due on 14/09/2018



Royal Environment Auditing & Consultancy Service

Signature

Signature
Analyst



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Ref. No. : 551/04/17-18

DATE:- 30/04/2018

Performance Evaluation of Air Pollution Control Equipments

Pipe Plant (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

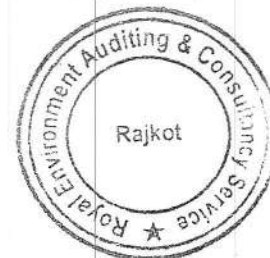
Tal. : Mundra, Dist. Kutch

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

Sr. No.	Particulars	Unit	S - 15	S - 20
01	Date of Sampling	---	17/04/2018	17/04/2018
02	Attached to	---	Zinc Coating - II	Zinc Coating - III
03	Stack Height	Meter	30	30
04	Stack Duct Diameter	Meter	0.6	0.6
05	Stack Temperature	°C	38	36
06	Ambient Temperature	°C	30	30
07	Average Velocity of Flue Gases	m/sec.	9.67	12
08	IsoKinetic Flowrate for Sampling	LPM	19	22
09	Inlet	mg/Nm ³	352	461
10	Outlet	mg/Nm ³	12	11
11	Efficiency	%	96.59	97.61

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

Calibration due on 14/09/2018



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Ref. No. : 552/04/17-18

Date: 30/04/2018

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 - 5	S-8
01	Date of Sampling	---	11/04/2018	10/04/2018	11/04/2018
02	Attached to	---	Mg Treatment	Zinc Coating	Zinc Coating machine(FL-7)
03	Stack Height	Meter	30	30	30
04	Stack Duct Diameter	Meter	1.00	1.00	0.8
05	Stack Temperature	°C	39	38	46
06	Ambient Temperature	°C	31	30	30
07	Average Velocity of Flue Gases	m/sec.	8.94	8.31	9.38
08	IsoKinetic Flowrate for Sampling	LPM	17	16	17
09	Inlet	mg/Nm ³	1227	351	346
10	Outlet	mg/Nm ³	15	3	4
11	Efficiency	%	98.78	99.15	98.84

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100
Calibration due on 14/09/2018

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Analyst



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Ref. No. : 558/04/2017-18

DATE:- 30/04/2018

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 - 15	S - 20	S - 22
01	Date of Sampling	---	16/04/2018	17/04/2018	17/04/2018	16/04/2018
02	Time of sampling	Hr.	10.45	15.25	11.30	11.50
03	Stack Attached to	---	Common stack Mg Converter- I&II	Zn Coating - II	Zn Coating - III	Mg Converter -III
04	Air Pollution Control Measures	---	Bag Filter	Cyclone Seprater & Bag Filter	Cyclone Separator & Bag Filter	Bag Filter
05	Stack Height	Meter	30	30	30	30
06	Stack Diameter	Meter	0.5	0.6	0.6	0.5
07	Stack Temperature	°C	54	34	33	43
08	Ambient Temperature	°C	30	30	30	30
09	Average Velocity of Flue Gases	m/sec.	10.23	6.2	8.7	6.9
10	Isokinetic flow rate for P.M. Sampling	LPM	18	28	16	28
11	Gaseous Sampling Flow Rate	LPM	2.0	---	---	---
12	Permissible limits for PM	mg/Nm ³	150	20 (Zn)	20 (Zn)	150
13	Measured Concentration of PM	mg/Nm ³	14	10 (Zn)	11 (Zn)	16
14	Permissible limits for SO ₂	mg/Nm ³	40	NA	NA	40
15	Measured Concentration of SO ₂	mg/Nm ³	ND	---	---	ND
16	Permissible limits for NO _x	mg/Nm ³	25	NA	NA	25
17	Measured Concentration of NO _x	mg/Nm ³	5.1	---	---	5.2

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 : 14/09/2018

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Ref. No. : 559/04/2017-18

Date: 30/04/2018

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	—	12/04/2018	12/04/2018	12/04/2018	12/04/2018	18/04/2018	18/04/2018
02	Time of sampling	Hr.	10.20	11.30	11.40	15.30	10.45	11.55
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	34	33	35	41	36	37
08	Ambient Temperature	°C	30	30	30	30	30	30
09	Average Velocity of Flue Gases	m/sec.	2.1	2.2	2.3	2.3	8.2	6.9
10	Isokinetic flow rate for P.M. Sampling	LPM	9	9	10	9	16	28
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	9	7	6	4	10	11
14	Permissible limits for SO ₂	mg/Nm ³	40	40	40	40	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	4.2	4.6	5.1	4.3	ND	ND
16	Permissible limits for Nox	mg/Nm ³	25	25	25	25	25	25
17	Measured Concentration of Nox	mg/Nm ³	6.1	6.3	5.7	5.6	5.2	5.6

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 : 14/09/2018

ND= Not Detectable

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Ref. No. : 560/04/2017-18

Date: 30/04/2018

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	---	12/04/2018
02	Time of sampling	Hr.	16.20
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	91
08	Ambient Temperature	°C	31
09	Average Velocity of Flue Gases	m/sec.	8.12
10	Isokinetic flow rate for P.M. Sampling	LPM	28
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	16
14	Permissible limits for SO ₂	mg/Nm ³	40
15	Measured Concentration of SO ₂	mg/Nm ³	4.7
16	Permissible limits for NO _x	mg/Nm ³	25
17	Measured Concentration of NO _x	mg/Nm ³	12.2

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 : 14/09/2018

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Ref. No. : 331/04/17-18

DATE:- 26-04-2018

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_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 2
01	Date of Sampling	---	10/04/2018	10/04/2018
02	Time of sampling	Hr.	10.15	11.30
03	Stack Attached to	---	Pickling & Passivation - 1	Pickling & Passivation - 2
04	Air Pollution Control Measures	---	Wet Scrubber	Wet Scrubber
05	Stack Height	Meter	15.0	15.0
06	Stack Diameter	Meter	-	-
07	Stack Temperature	°C	31	31
08	Ambient Temperature	°C	30	30
09	Average Velocity of Flue Gases	m/sec.	6.3	5.8
10	Isokinetic flow rate for P.M. Sampling	LPM	-	-
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0
12	Permissible limits for SO ₂	mg/Nm ³	40	40
13	Measured Concentration of SO ₂	mg/Nm ³	10.8	11.7
14	Permissible limits for No _x	mg/Nm ³	25	25
15	Measured Concentration of NO _x	mg/Nm ³	12.4	13.9

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 : 14/09/2018

NA=Not Applicable

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Ref. No. : 561/04/2017-18

Date: 30/04/2018

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 - 6	S - 8
01	Date of Sampling	---	11/04/2018	10/04/2018	10/04/2018	10/04/2018	11/04/2018
02	Time of sampling	Hr.	10.20	10.15	11.20	15.25	16.10
03	Stack Attached to	---	Magnesium Treatment	Socket Cleaning	Zinc Coating	Tri- Grinding Section	Zinc Coating Machine(FL-7)
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	Bag Filler	Bag Filter	Cyclone Separator & Bag Filter
05	Stack Height	Meter	30	30	30	30	30
06	Stack Diameter	Meter	1.00	0.50	1.00	1.00	1.20
07	Stack Temperature	°C	44	36	34	37	33
08	Ambient Temperature	°C	31	31	31	31	31
09	Average Velocity of Flue Gases	m/sec	6.9	4.5	4.6	1.33	4.3
10	Isokinetic flow rate for PM Sampling	LPM	28	18	19	16	18
11	Gaseous Sampling Flow Rate	LPM	---	---	---	---	---
12	Permissible limits for PM	mg/Nm ³	50	50	50	50	50
13	Measured Concentration of PM	mg/Nm ³	17	14	3 (Zn)	13	4 (Zn)
14	Permissible limits for SO ₂	PPM	NA	NA	NA	NA	NA
15	Measured Concentration of SO ₂	PPM	---	---	---	---	---
16	Permissible limits for NO _x	PPM	NA	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 : 14/09/2018

ND= Not Detectable
N.A= Not Applicable

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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 : 10th, 16th & 23th march, 2018

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA Concentration (As given in Second Schedule) mg/m ³	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						
2	Coating Plant-1 (Application area)	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.4-2.2	1.80	10	Gravimetric	5	---		Mr. Hitesh Umletiya
2	CCM Area (DISP)	Total Dust		02	1.5-3.3	2.4	10	Gravimetric	8	---		
4	CCM Area (SDP-2)	Total Dust		02	1.3-2.5	1.9	10	Gravimetric	4	---		

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203

Calibration Due on. : 12/03/2019



For: Royal Environment Auditing & Consultancy Service


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Ref. No. : 570/04/2017-18

Date: 30/04/2018

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 : 10th, 16th & 23th April, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room of Annealing Furnace of DISP / SDP	43.8	58.3	52.7
02	Inside DISP / SDP Plant	52.7	67.3	60.1
03	Nr. CCM SDP-2	53.5	71.8	63.4
04	Inside Control Room of Annealing Furnace of SDP-2	44.9	63.2	53.7
05	Nr. Zinc Coating SDP-2	62.1	76.1	68.3
06	Insie Coating Plant	71.7	80.2	78.5
07	Near Mould Shop	60.1	76.8	73.2

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 : 14/09/2018

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Ref. No. : 275/04/2017-18

DATE:- 30/04/2018

WATER & WASTE WATER QUALITY ANALYSIS REPORT

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

Source of Sample : Effluent Treatment Plant

Date of Sampling : 26/04/2018

Sr. No.	Parameters	Unit	Permissible limit	Results
01.	pH	...	6.5 to 8.5	7.90
02.	Colour	pt.co.units	100	21
03.	Tempreture	°C	40	32
04.	Total suspended solids	mg/l	100	11
05.	Total dissolve solids	mg/l	2100	1521
06.	Phenolic compounds	mg/l	1	ND
07.	Oil & Grease	mg/l	10	ND
08.	Chlorides	mg/l	600	402
09.	Sulphate	mg/l	1000	524
10.	Ammonical nitrogen (as NH ₃ -N)	mg/l	50	1.23
11.	BOD (3 Days at 27°C)	mg/l	30	11.0
12.	COD	mg/l	100	56.0

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