



RAIL WHEEL PLANT/BELA (INDIAN RAILWAYS) GOVT. OF INDIA		OFFICE OF THE CHIEF ADMINISTRATIVE OFFICER, ADMINISTRATIVE BUILDING, VILLAGE-BELA, BLOCK- DARIAPUR, SARAN (CHHAPRA), BIHAR.
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MONTH WISE ANALYSIS OF GROUND WATER JANUARY 2018

- REF:** (i) Ministry of Environment and Forest (MoEF)/GOI environmental Clearance no. J-11011/527/2010-IA.II(I) dated 12.01.2012.
ii) Bihar State Pollution Control Board (BSPCB) Discharge Consent Order Letter No. pt 2-116/11 t-6094, dated 03.08.2016.
(iii) BSPCB Emission Consent Order letter No. PT(NOC)-628/09 T-6095, dated 03.08.2016.

(Sampling & Analysis done by MoEF Recognized Environmental Laboratory, EMTRC Consultants Pvt. Ltd.)

<i>Ground Water sample</i>		UNIT	Limit as per IS10500:2012		JANUARY 2018	
			Limit (Max) (mg/l) Desirable	<i>Permissible limit in the absence of alternative source</i>	<i>Borewell No. 03</i>	<i>Borewell No. 4</i>
1.	pH	--	6.5 to 8.5	--	7.52	7.45
2.	Colour	Hazen	5	15	Colorless	Colorless
3.	Turbidity on NTU	NTU	1	5	<1	<1
4.	Total Dissolved Solids (TDS)	mg/l.	500	2000	470	480
5.	Total Alkalinity as CaCO ₃	mg/l.	200	600	200	200
6.	Total Hardness as CaCO ₃	mg/l.	200	600	230	230
7.	Calcium as Ca	mg/l.	75	200	68	68
8.	Magnesium as Mg	mg/l.	30	100	14.6	14.6
9.	Sulphate as SO ₄	mg/l.	200	400	22	26
10.	Chloride as Cl	mg/l.	250	1000	30	32
11.	Nitrate as NO ₃	mg/l.	45	---	4.8	5.2
12.	Iron as Fe	mg/l.	0.3	---	0.16	0.14
13.	Arsenic as As	mg/l.	0.01	0.05	<0.001	<0.001
14.	Fluoride as F	mg/l.	1.0	1.5	0.76	0.78
15.	Total Coliform	MPN/100 ml	0	--	0	0

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MONTH WISE ANALYSIS OF NOISE SAMPLE –JANUARY2018

- (i) Ministry of Environment and Forest (MoEF)/GOI environmental Clearance no. J-11011/527/2010-IA.II(I) dated 12.01.2012.
- (ii) Bihar State Pollution Control Board (BSPCB) Discharge Consent Order Letter No. pt 2-116/11 t-6094, dated 03.08.2016.
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Monitoring Location	Limit (Max) Leq: dBA	Test result	
		Day time Leq: dBA	Night time Leq: dBA
1 Near Main Gate	Day time- 75 dBA Night time- 70 dBA	54.2	44.2
2 Near ADM Building		51.6	42.6

Monitoring Location	Limit (Max) 90 dBA (as per Bihar Factories Rule, 1950)	Daytime dB	Night time dB
3 Near Final Wheel Processing Sec.	1- 105 ¾- 107	74.8	67.4
4 Near Furnace	½- 110 ¼- 115	94.2	88.8

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MONTH WISE ANALYSIS OF STACK EMISSION MONITORING JANUARY 2018

- (i) Ministry of Environment and Forest (MoEF)/GOI environmental Clearance no. J-11011/527/2010-IA.II(I) dated 12.01.2012.
(ii) Bihar State Pollution Control Board (BSPCB) Discharge Consent Order Letter No. pt 2-116/11 t-6094, dated 03.08.2016.
(iii) BSPCB Emission Consent Order letter No. PT(NOC)-628/09 T-6095, dated 03.08.2016.


(Sampling & Analysis done by MoEF Recognized Environmental Laboratory, EMTRC Consultants Pvt. Ltd.)

STACK EMISSION MONITORING REPORT JANUARY 2018

	Stack connected to Bag House attached with Electric Arc Furnace	Prescribed Standard Limit	Test result January 2018
a.	PM mg / NM ³	50	42
b.	SO ₂ mg / NM ³	Not specified	< 1 (BDL)
c.	NO _x mg / NM ³	Not specified	45
d.	Gas Temp °C	---	49
e.	Velocity m/s	----	11.8

	Stack connected to Draw Furnace	Prescribed Standard Limit	Test result November 2017
f.	PM mg / NM ³	50	22
g.	SO ₂ mg / NM ³	Not specified	< 1 (BDL)
h.	NO _x mg / NM ³	Not specified	16
i.	Gas Temp °C	---	38
j.	Velocity m/s	----	7.2

Sr.o.	Stack connected to Normalizing Furnace	Prescribed Standard Limit	Test result November 2017
P	PM mg / NM ³	50	44
q	SO ₂ mg / NM ³	Not specified	< 1 (BDL)
r	NO _x mg / NM ³	Not specified	30
t	Gas Temp °C	---	310
u	Velocity m/s	----	12.8


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MONTH WISE ANALYSIS OF WASTE WATER FROM CANTEEN (BEFORE TREATMENT) JAUARY2018

- REF: (i)** Ministry of Environment and Forest (MoEF)/GOI environmental Clearance no. J-11011/527/2010-IA.II(I) dated 12.01.2012.
 ii) Bihar State Pollution Control Board (BSPCB) Discharge Consent Order Letter No. pt 2-116/11 t-6094, dated 03.08.2016.
 (iii) BSPCB Emission Consent Order letter No. PT(NOC)-628/09 T-6095, dated 03.08.2016.

(Sampling & Analysis done by MoEF Recognized Environmental Laboratory, EMTRC Consultants Pvt. Ltd.,)

S.N	Parameters	Unit	Test Method	Result	CPCB Direction on STP dated 21-4-2015
1.	pH	-	APHA-4500	6.62	5.5 -9.0
2.	Colour	Hazen Unit	APHA-2120B	7	-
3.	Total suspended solids	Mg/l	APHA-2540D	84	20
4.	Total dissolved solids	Mg/l	APHA-2540B	710	2100
5.	BOD	Mg/l	APHA-5210B	20	10
6.	COD	Mg/l	APHA-5220D	65	50
7.	Oil and grease	Mg/l	APHA4500D	7.2	10
8.	Chloride as Cl	Mg/l	APHA-4500B	140	-
9.	Sulphate as SO ₂	Mg/l	APHA-4500E	60	-
10.	Ammonical N as N	Mg/l	APHA-5220D	16	5
11.	Total Kjeldahl Nitrogen as N	Mg/l	APHA-4500B	30	10
12.	Dissolved Phosphate	Mg/l	APHA-4500C	2.8	-

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MONTH WISE ANALYSIS OF POND WATER, JAUARY2018

- REF: (i)** Ministry of Environment and Forest (MoEF)/GOI environmental Clearance no. J-11011/527/2010-IA.II(I) dated 12.01.2012.
ii) Bihar State Pollution Control Board (BSPCB) Discharge Consent Order Letter No. pt 2-116/11 t-6094, dated 03.08.2016.
(iii) BSPCB Emission Consent Order letter No. PT(NOC)-628/09 T-6095, dated 03.08.2016.

(Sampling & Analysis done by MoEF Recognized Environmental Laboratory, EMTRC Consultants Pvt. Ltd.)

S.N	Parameters	Unit	Test Method	Result
1.	pH	-	APHA-4500	7.58
2.	Colour	Hazen Unit	APHA-2120B	5
3.	Total suspended solids	Mg/l	APHA-2540D	26
4.	Total dissolved solids	Mg/l	APHA-2540B	540
5.	BOD	Mg/l	APHA-5210B	14
6.	COD	Mg/l	APHA-5220D	52
7.	Oil and grease	Mg/l	APHA4500D	3.5
8.	Chloride as Cl	Mg/l	APHA-4500B	50
9.	Sulphate as SO ₂	Mg/l	APHA-4500E	45
10.	Ammonical N as N	Mg/l	APHA-5220D	4.8
11.	Total Kjeldahl Nitrogen as N	Mg/l	APHA-4500B	16
12.	Dissolved Phosphate	Mg/l	APHA-4500C	1.32

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MONTH WISE MONITORING & ANALYSIS OF AMBIENT AIR QUALITY JAUARY 2018

- (i) Ministry of Environment and Forest (MoEF)/GOI environmental Clearance no. J-11011/527/2010-IA.II(I) dated 12.01.2012.
(ii) Bihar State Pollution Control Board (BSPCB) Discharge Consent Order Letter No. pt 2-116/11 t-6094, dated 03.08.2016.
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(Sampling & Analysis done by MoEF Recognized Environmental Laboratory, EMTRC Consultants Pvt. Ltd.)

Month	Parameters	Limit(Max)	Near Main Gate	Near East Side Boundary Wall (Store Yard)	Near Main Store 2	Near ADM Building	Near Main Gate	Near East Side Boundary Wall (Store Yard)	Near Main Store 2	Near ADM Building
24 Hrs. Average Concⁿ. in µg/m³										
<u>JAUAR</u> <u>Y 2018</u>	01st Monitoring					02nd Monitoring				
	PM ₁₀	100 µg/m ³ (24 hours average)	78	78	80	72	75	86	85	75
	PM _{2.5}	60 µg/m ³ (24 hours average)	37	39	39	34	35	44	43	37
	SO ₂	80 µg/m ³ (24 hours average)	6.2	7.5	6.8	6.2	5.8	7.8	7.8	6.8
	NO ₂	80 µg/m ³ (24 hours average)	15.4	15.8	16.2	14.2	14.5	16.4	17.5	15.4

