



<b>RAIL WHEEL PLANT/BELA (INDIAN RAILWAYS) GOVT. OF INDIA</b>		<b>OFFICE OF THE CHIEF ADMINISTRATIVE OFFICER, ADMINISTRATIVE BUILDING, VILLAGE-BELA, BLOCK- DARIAPUR, SARAN (CHHAPRA), BIHAR.</b>
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**MONTH WISE ANALYSIS OF GROUND WATER JANUARY-2017**

- 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 IS10500:1991		Jan-2017	
		Limit (Max) (mg/l) Desirable	<i>Permissible limit in the absence of alternative source</i>	<i>Borewell No. 1</i>	<i>Borewell No. 4</i>
1. pH	--	6.5 to 8.5	--	7.14	7.60
2. Colour	Hazen	5	15	Colorless	Colorless
3. Turbidity on NTU	NTU	1	5	<1	<1
4. Total Dissolved Solids (TDS)	mg/l.	500	2000.00	442	484
5. Total Alkalinity as CaCO <sub>3</sub>	mg/l.	200	600.00	230	250
6. Total Hardness as CaCO <sub>3</sub>	mg/l.	200	600	280	260
7. Calcium as Ca	mg/l.	75	200	76	64
8. Magnesium as Mg	mg/l.	30	100	21.9	24.3
9. Sulphate as SO <sub>4</sub>	mg/l.	200	400	23	32
10. Chloride as Cl	mg/l.	250	1000	40	25
11. Nitrate as NO <sub>3</sub>	mg/l.	45	---	4.5	5.2
12. Iron as Fe	mg/l.	0.3	---	0.11	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	0.72	0.74
15. Coliform	MPN/100 ml	0	--	0	0


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**MONTH WISE ANALYSIS OF NOISE SAMPLE JANUARY-2017**

- (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	Unit	Limit(Max)	Daytime	Night time
1. Near Main Gate	dB(A)	<b>Day time- 75dBA Night time- 70 dBA</b>	<b>52.4</b>	<b>44.6</b>
2. Near ADM Building	dB(A)		<b>50.8</b>	<b>43.2</b>
3. Near Final Wheel Processing Sec.	dB(A)		<b>78.6</b>	<b>76.4</b>
4. Near Furnace	dB(A)		<b>94.4</b>	<b>93.6</b>

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**STACK EMISSION MONITORING REPORT FROM JANUARY-2017**

		Jan-2017
<b>Stack connected to Bag House attached with Electric Arc Furnace</b>	<b>Limit (Max)</b>	
a. PM, mg / NM <sup>3</sup>	<b>50</b>	<b>34</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<1(BDL)
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>5</b>
d. Gas Temp °C	---	<b>46</b>
e. Velocity m/s	----	<b>11.2</b>
<b>Stack connected to Normalizing Furnace</b>		
a. PM, mg / NM <sup>3</sup>	<b>50</b>	<b>26</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<1(BDL)
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>8</b>
d. Gas Temp °C	---	<b>285</b>
e. Velocity m/s	----	<b>14.6</b>
<b>Stack connected to Draw Furnace</b>		
a. PM, mg / NM <sup>3</sup>	<b>50</b>	<b>18</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<1(BDL)
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>6</b>
d. Gas Temp °C	---	<b>44</b>
e. Velocity m/s	----	<b>7.5</b>

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**MONTH WISE MONITORING & ANALYSIS OF AMBIENT AIR QUALITY JANUARY-2017**

- (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 (TTC)	Near Main Gate	Near East Side Boundary Wall (Store Yard)	Near Main Store 2	Near ADM Building (TTC)
<b>24 Hrs. Average Conc<sup>n</sup>. in µg/m<sup>3</sup></b>										
January-2017	<b>01<sup>st</sup> Monitoring</b>					<b>02<sup>nd</sup> Monitoring</b>				
	PM <sub>10</sub>	100 µg/m <sup>3</sup> (24 hours average)	58	23	65	50	62	21	62	<b>54</b>
	PM <sub>2.5</sub>	60 µg/m <sup>3</sup> (24 hours average)	26	56	27	20	28	52	25	<b>21</b>
	SO <sub>2</sub>	80 µg/m <sup>3</sup> (24 hours average)	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
	NO <sub>2</sub>	80 µg/m <sup>3</sup> (24 hours average)	10.6	9.6	10.8	<9.0	11.2	<9.0	11.5	<9.0