



<b>RAIL WHEEL PLANT/BELA</b> <b>(INDIAN RAILWAYS)</b> <b>GOVT. OF INDIA</b>		<b>OFFICE OF THE</b> <b>CHIEF ADMINISTRATIVE OFFICER,</b> <b>ADMINISTRATIVE BUILDING,</b> <b>VILLAGE-BELA, BLOCK- DARIAPUR,</b> <b>SARAN (CHHAPRA), BIHAR.</b>
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### **MONTH WISE ANALYSIS OF GROUND WATER SAMPLE DECEMBER-2015**

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-17582, dated 22.11.12.  
(iii) BSPCB Emission Consent Order letter No. PT(NOC)-628/09 T-17581, dated 22.11.12.

**(Sampling & Analysis done by MoEF Recognized Environmental Laboratory, Netal (India) Limited, Mumbai)**


<b>Ground Water sample</b>	<b>UNIT</b>	<b>Limit as per IS10500:1991</b>		<b>Actual measured value</b>	
		<b>Limit (Max) (mg/l) Desirable</b>	<b>Permissible limit in the absence of alternative source</b>	<b>Borewell No.1</b>	<b>Borewell No. 2</b>
1. Colour	Hazen	5.0	15	<1.00	<1.00
2. pH	--	6.5 to 8.5	No relaxation	7.4	7.0
3. Turbidity on NTU	NTU	1.00	5.00	<1.00	<1.00
4. Total Dissolved Solids (TDS)	mg/l.	500.00	2000.00	248	262
5. Total Hardness as CaCO <sub>3</sub>	mg/l.	200.00	600.00	220	219
6. Calcium as Ca	mg/l.	75.00	200.00	24.6	26.3
7. Magnesium as Mg	mg/l.	30.00	No relaxation	26.5	26.3
8. Iron as Fe	mg/l.	0.30	No relaxation	0.13	0.12
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l.	200.00	600.00	265	279
10. Chloride as Cl	mg/l.	250.00	1000.00	43.6	42.9
11. Sulphate as SO <sub>4</sub>	mg/l.	200.00	400.00	14.5	17.3
12. Nitrate as NO <sub>3</sub>	mg/l.	45.00	No relaxation	3.6	3.9
13. Fluoride as F	mg/l.	1.00	1.50	0.12	0.14
14. Arsenic as As	mg/l.	0.01	0.05	<0.01	<0.01
15. Coliform	MPN	ND	--	ND	ND

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### **MONTHWISE ANALYSIS OF AMBIENT NOISE LEVEL FOR DEC-2015**

- 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-17582, dated 22.11.12.  
(iii) BSPCB Emission Consent Order letter No. PT(NOC)-628/09 T-17581, dated 22.11.12.  
**(Sampling & Analysis done by MoEF Recognized Environmental Laboratory, , Netal (India) Limited,Mumbai)**

Monitoring Location	Unit	Limit(Max)	Noise level in dB(A) (Actual measured value)	
			Day time	Night time
1. Near Main Gate	dB(A)	<b>Industrial area-75.0</b>	<b>39.2</b>	<b>33.6</b>
2. Near ADM Building	dB(A)	<b>Commercial area-65.0</b>	<b>32.9</b>	<b>28.5</b>
3. Near Final Wheel Processing Sec.	dB(A)	<b>Residential area-55.0</b>	<b>52.1</b>	<b>42.9</b>
4. Near Furnace	dB(A)		<b>51.6</b>	<b>44.5</b>

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**MONTHWISE ANALYSIS OF STACK EMISSION FOR DECEMBER-2015**  
(Sampling & Analysis done by MoEF Recognized Environmental Laboratory, , Netal (India) Limited, Mumbai)

		Actual measured values
<b>Stack connected to Bag House attached with Electric Arc Furnace</b>	<b>Limit (Max)</b>	
a. PM, mg / NM <sup>3</sup>	<b>75.00</b>	<b>45.2</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>31.9</b>
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	<b>216</b>
<b>Stack connected to Normalizing Furnace</b>		
a. PM, mg / NM <sup>3</sup>	<b>75.00</b>	<b>31.6</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>53.6</b>
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	<b>242</b>
<b>Stack connected to 2400 KVA DG Set-1</b>		
a. PM, mg / NM <sup>3</sup>	<b>75.00</b>	<b>27.9</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>44.8</b>
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	<b>242</b>
<b>Stack connected to Draw Furnace</b>		
a. PM, mg / NM <sup>3</sup>	<b>75.00</b>	<b>55.6</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>71.8</b>
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	<b>209</b>
<b>Stack connected to I2400 KVA DG Set-2</b>		
a. PM, mg / NM <sup>3</sup>	<b>75.00</b>	<b>31.2</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>43.6</b>
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	<b>185</b>
<b>Stack connected to Incinerator</b>		
a. PM, mg / NM <sup>3</sup>	<b>75.00</b>	<b>Not in Operation</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	

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### MONTHWISE ANALYSIS OF AMBIENT AIR QUALITY FOR DECEMBER-2015

- 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-17582, dated 22.11.12.  
(iii) BSPCB Emission Consent Order letter No. PT(NOC)-628/09 T-17581, dated 22.11.12.  
**(Monitoring & Analysis done by MoEF Recognized Environmental Laboratory, Neetal India Limited, Mumbai)**

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 mg/m<sup>3</sup></b>											
Decem ber- 2015	<b>01<sup>st</sup> Monitoring</b>					<b>02<sup>nd</sup> Monitoring</b>					<b>Avg. Values</b>
	<b>(Actual measured values)</b>										
	PM <sub>10</sub>	100 µg/m <sup>3</sup>	47.5	59.8	50.4	36.9	48.9	49.5	47.8	35.6	<b>47.05</b>
	PM <sub>2.5</sub>	60 µg/m <sup>3</sup>	23.6	28.5	29.8	24.3	24.5	26.8	29.2	23.5	<b>26.2</b>
	SO <sub>2</sub>	80 µg/m <sup>3</sup>	6.8	9.4	8.3	7.6	7.2	8.3	7.5	8.1	<b>7.9</b>
	NO <sub>2</sub>	80 µg/m <sup>3</sup>	17.6	18.4	17.5	20.5	17.3	18.2	17.6	18.4	<b>18.2</b>