



<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 AUGUST-2016

- 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, Patna 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, Netel(India)Limited, Navi Mumbai )**

<i>Ground Water sample</i>	UNIT	Limit as per IS10500:1991		August	
		Limit (Max) (mg/l) Desirable	<i>Permissible limit in the absence of alternative source</i>	<i>Borewell No. 3</i>	<i>Borewell No. 4</i>
1. Colour	Hazen	5.0	15	< 1.00	<1.00
2. pH	--	6.5 to 8.5	No Relaxation	7.1	7.3
3. Turbidity on NTU	NTU	1.00	5.00	< 1.00	< 1.00
4. Total Dissolved Solids (TDS)	mg/l.	500.00	2000.00	270	258
5. Total Hardness as CaCO <sub>3</sub>	mg/l.	200.00	600.00	176	170
6. Calcium as Ca	mg/l.	75.00	200.00	26.5	25.4
7. Magnesium as Mg	mg/l.	30.00	No Relaxation	26.3	25.8
8. Iron as Fe	mg/l.	0.30	No Relaxation	0.14	0.18
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l.	200.00	600.00	184	182
10. Chloride as Cl	mg/l.	250.00	1000.00	45.3	42.5
11. Sulphate as SO <sub>4</sub>	mg/l.	200.00	400.00	14.3	15.2
12. Nitrate as NO <sub>3</sub>	mg/l.	45.00	No Relaxation	3.5	3.2
13. Fluoride as F	mg/l.	1.00	1.50	0.15	0.13
14. Arsenic as As	mg/l.	0.01	0.05	< 0.01	< 0.01
15. Coliform	MPN	ND	--	ND	ND


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**MONTH WISE ANALYSIS OF NOISE SAMPLE AUGUST-2016**

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Monitoring Location	Unit	Limit(Max)	Daytime	Night time
1. Near Main Gate	dB(A)	<b>Industrial area-75.0 Commercial area-65.0 Residential area-55.0</b>	<b>41.8</b>	<b>36.2</b>
2. Near ADM Building	dB(A)		<b>35.5</b>	<b>32.4</b>
3. Near Final Wheel Processing Sec.	dB(A)		<b>50.4</b>	<b>41.8</b>
4. Near Furnace	dB(A)		<b>51.6</b>	<b>43.2</b>

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**STACK EMISSION MONITORING REPORT FROM AUGUST-2016**

(Sampling & Analysis done by MoEF Recognized Environmental Laboratory, Netel(India)Limited, Navi Mumbai)

		August-2016
<b>Stack connected to Bag House attached with Electric Arc Furnace</b>	<b>Limit (Max)</b>	
a. PM, mg / NM <sup>3</sup>	<b>50.00</b>	<b>46.5</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>33.8</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>50.00</b>	<b>34.2</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>52.6</b>
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	<b>227</b>
<b>Stack connected to 2400 KVA DG Set-1</b>		
a. PM, mg / NM <sup>3</sup>	<b>75.00</b>	<b>32.5</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>41.8</b>
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	<b>221</b>
<b>Stack connected to 2400 KVA DG Set-2</b>		
a.PM, mg / NM <sup>3</sup>	<b>75.00</b>	<b>37.6</b>
b.SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>42.0</b>
c.NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	<b>202</b>
<b>Stack connected to Draw Furnace</b>		
a. PM, mg / NM <sup>3</sup>	<b>75.00</b>	<b>43.0</b>
b. SO <sub>2</sub> , mg / NM <sup>3</sup>	<b>Not specified</b>	<b>57.4</b>
c. NO <sub>2</sub> , mg / NM <sup>3</sup>	<b>710.00</b>	<b>214</b>
Stack connected to incinerator	<b>Not in operation</b>	

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**MONTH WISE MONITORING & ANALYSIS OF AMBIENT AIR QUALITY AUGUST-2016**

- 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, Patna dated 03.08.2016.  
(iii) BSPCB Emission Consent Order letter No. PT(NOC)-628/09 T-6095, dated 03.08.2016.

**(Monitoring & Analysis done by MoEF Recognized Environmental Laboratory, Netel(India)Limited, Navi 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 µg/m<sup>3</sup></b>										
August-2016	<b>01<sup>st</sup> Monitoring</b>					<b>02<sup>nd</sup> Monitoring</b>				
	PM <sub>10</sub>	100 µg/m <sup>3</sup>	45.3	54.2	51.2	43.0	51.4	50.8	51.6	46.8
	PM <sub>2.5</sub>	60 µg/m <sup>3</sup>	24.5	29.3	28.4	29.1	27.6	28.4	28.6	29.4
	SO <sub>2</sub>	80 µg/m <sup>3</sup>	7.5	8.6	8.4	8.9	9.2	8.6	8.2	8.9
	NO <sub>2</sub>	80 µg/m <sup>3</sup>	17.2	16.5	17.4	16.9	17.4	17.8	17.5	17.2