

A	SPECIFIC CONDITIONS for enhancement of (3,20,000TPA to 3,45,000TPA) Pig Iron :						
i.	On-line stack monitoring facilities for all the stacks and sufficient air pollution control equipments viz gas cleaning system, dust catcher, bag filters etc. shall be provided to control emissions from the blast furnace below 100 mg/Nm ³ .						
Com	It is under process. In first phase 1 (one) on line stack monitoring facility has installed in Boiler common stack. Another two online stack monitoring facility shall be installed within FY 12-13.						
ii.	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Dust extraction system with bag filters shall be provided at material handling areas, crushers, hoppers, vibratory screens, transfer points etc. All the conveyors shall be covered with GI sheets to prevent fugitive emissions. Further, specific measures like water sprinkling around the coal stockpiles and asphaltting or concreting of the roads shall be done to control fugitive emissions.						
Com	Main charging conveyor, all vibrating screens and the transfer points of other conveyors have been covered with GI sheets. Regular mobile water spraying in the plant area and asphaltting/concreting of about 70% of the road has been completed, to control fugitive emissions. Dry fog system commissioned in both RMHS at ground hopper and transfer hopper.						
iii.	Data on ambient air quality, stack emissions and fugitive emissions shall be regularly uploaded on the website of the company and submitted on-line to the Ministry's Regional Office at Bhubaneswar, West Bengal Pollution Control Board (WBPCB) and Central Pollution Control Board (CPCB) as well as hard copy once in six months. Data on SPM, SO ₂ and NO _x shall also be displayed outside the premises at the appropriate place for the general public.						
Com	Please See annexure E						
iv.	Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.						
Com	Area	Month	SPM (mg/m ³) Limit- 10	RPM (mg/m ³) Limit- 5	SO ₂ (mg/m ³) Limit- 5	NO ₂ (mg/m ³) Limit- 6	
	Cast House	June 2012	1.025	0.325	0.033	0.048	
	Bunker House		1.635	0.425	0.030	0.054	
	SPCM		0.853	0.171	0.033	0.052	
v.	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. Vehicular emissions should be regularly monitored.						
Com	Raw material mainly transported through railway wagon. Only vehicles having proper Vehicular Emission Certificate are allowed to enter the plant premises.						
vi.	Effluent Treatment Plant (ETP) shall be installed for the treatment of process water. All the wastewater generated shall be treated, recycled and reused either in the process or for dust suppression, green belt development and various other activities at the site. No wastewater shall be discharged outside the factory premises and 'Zero' discharge shall be adopted.						
Com	All waste water generated from different processes are collected in a pond and is recycled for slag granulation & pig quenching purposes. Average running hours of the pump, having capacity of 20 m ³ / hr is 16 hrs /day.						
vii.	The company shall obtain the permission for drawl of ground water from CGWA/CGWB.						
Com	Complied						

viii.	The solid materials collected from pollution control equipment shall be suitably stored and supplied to nearby pig iron/steel plant having sinter plant. The project authorities shall make the agreement with user of Coke, coal fines and iron ore fines and copy of the agreement shall be submitted to Ministry's Regional Office at Bhubaneshwar. Used oil shall be sold to recyclers and reprocessors only.
Com	Solid waste {Iron Ore fines (approx 15870.490Ton) / Coke fines (3193.650 Ton)} are sold to outside agencies in 2012-2013. Used oils (3880 kg) also sold to certified re-processing agencies only from 1 st April 2012 to 30 th September 2012
ix	The blast furnace slag shall be granulated and sold to the cement manufacturing units for further utilization. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal. .
Com	48821.060 TONS MT granulated Slag sold to outside agency from April to September in Fy 12-13*.
x	Green belt shall be developed in 33 % area in and around the plant as per the CPCB guidelines in consultation with DFO.
Com	4200 nos tree planted on 2011-2012.Total plant area-197 acre & greenery developed area are approx 66 acre (33%).
xi.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel sector shall be strictly implemented.
Com	Tata Steel Group of Companies, as a whole are taking necessary initiatives to adhere to the CREP recommendations.
xii	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
	Increase in production capacity is mainly on account of improved operations / process improvement resulting in 'Enhancement of Production' and hence it is not an Expansion Project. Thus these requirements are not applicable in the present instance.

	GENERAL CONDITIONS for enhancement of (3,20,000TPA to 3,45,000TPA) Pig Iron :
i	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB) and the State Government.
	Increase in production capacity is mainly on account of improved operations / process improvement resulting in 'Enhancement of Production' and hence it is not an Expansion Project. Thus these requirements are not applicable in the present instance.
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
Com	Noted for future compliance.
iii	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Pollution Control Board (SPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.

Com	Noted for compliance.																							
iv	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO ₂ and NO _x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office and the SPCB / CPCB once in six months.																							
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v	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measures like water sprinkling around the coal stockpiles and asphaltting or concreting of the roads shall be done to control fugitive emissions.																							
Com	Regular mobile water spraying (7000L/day) in the plant area and asphaltting/concreting of about 70% of the road has been completed, to control fugitive emissions.																							
vi	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.																							
Com	All waste water generated from different processes are collected in a pond and is recycled for slag granulation & pig quenching purposes. Average running hours of the pump, having capacity of 20 m ³ / hr is 16 hrs /day.																							
vii	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).																							
Com	<p>The overall noise levels in and around the plant area is within the standards (85 dBA). Date of sampling :-20th June 2012</p> <table border="1"> <thead> <tr> <th>Sl no</th> <th>Area / Location</th> <th>Ambient Limit (dBA)</th> <th>Result (dBA)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ADM Building (Near Main Gate)</td> <td rowspan="3">75 dBA (day time)</td> <td>54.1-55.6</td> </tr> <tr> <td>2</td> <td>Material Gate</td> <td>60.4-64.8</td> </tr> <tr> <td>3</td> <td>Near Cycle Stand</td> <td>60.1-64.6</td> </tr> </tbody> </table>			Sl no	Area / Location	Ambient Limit (dBA)	Result (dBA)	1	ADM Building (Near Main Gate)	75 dBA (day time)	54.1-55.6	2	Material Gate	60.4-64.8	3	Near Cycle Stand	60.1-64.6							
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viii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.																							
Com	<p style="text-align: center;">OCCUPATIONAL HEALTH CHECK-UP 2011-12</p> <table border="1"> <thead> <tr> <th>Sl no</th> <th>Name of Investigation</th> <th>No Of Employees</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Blood Test (TC, DC, Hb%)</td> <td>187</td> </tr> <tr> <td>2</td> <td>Audiometry</td> <td>157</td> </tr> <tr> <td>3</td> <td>P. F. T.</td> <td>201</td> </tr> <tr> <td>4</td> <td>Eye Test</td> <td>182</td> </tr> <tr> <td>5</td> <td>Physical Health Check-Up</td> <td>187</td> </tr> <tr> <td>6</td> <td>Blood sugar test</td> <td>79</td> </tr> </tbody> </table>			Sl no	Name of Investigation	No Of Employees	1	Blood Test (TC, DC, Hb%)	187	2	Audiometry	157	3	P. F. T.	201	4	Eye Test	182	5	Physical Health Check-Up	187	6	Blood sugar test	79
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ix	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.																							
	Pond for accumulation of rain water is already in place.																							
x	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc. Suggestions made during the public hearing shall be implemented.																							

Com	<p>Community development activities are ingrained in the working of the Company. Community development programme (2011-2012)</p> <table border="1"> <thead> <tr> <th>Sl No</th> <th>Activity</th> <th>No of cases</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NUTRITIONAL SURVEY & HEALTH CHECK-UP CAMP FOR STUDENTS OF PRIMARY SCHOOLS</td> <td>133 nos of Student were examined</td> </tr> <tr> <td>2</td> <td>Blood donation camp</td> <td>166 Personnel</td> </tr> <tr> <td>3</td> <td>HIV / AIDS AWARENESS PROGRAMME</td> <td>200 nos persons including employee, truck drivers and helpers were present.</td> </tr> <tr> <td>4</td> <td>Scholarship to meritorious students</td> <td>4 students for class 11 and class 12 in science stream of Gokulpur High School.</td> </tr> <tr> <td>5</td> <td>Self Employment Generation by making of Vermi Compose</td> <td>1006kgs of vermicompost have been produced by Self help group (Sidhu Kanu Birsha) at kunjachack village.</td> </tr> <tr> <td>6</td> <td>Distribution of books, to poor SC/ ST students coming from low income family .</td> <td>Books of have been distributed to the students of community coming from low income family .</td> </tr> <tr> <td>7</td> <td>Wheel chair distribution to disable person of our community.</td> <td>Three personnel.</td> </tr> </tbody> </table>	Sl No	Activity	No of cases	1	NUTRITIONAL SURVEY & HEALTH CHECK-UP CAMP FOR STUDENTS OF PRIMARY SCHOOLS	133 nos of Student were examined	2	Blood donation camp	166 Personnel	3	HIV / AIDS AWARENESS PROGRAMME	200 nos persons including employee, truck drivers and helpers were present.	4	Scholarship to meritorious students	4 students for class 11 and class 12 in science stream of Gokulpur High School.	5	Self Employment Generation by making of Vermi Compose	1006kgs of vermicompost have been produced by Self help group (Sidhu Kanu Birsha) at kunjachack village.	6	Distribution of books, to poor SC/ ST students coming from low income family .	Books of have been distributed to the students of community coming from low income family .	7	Wheel chair distribution to disable person of our community.	Three personnel.
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xi	Adequate fund shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures and shall be judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.																								
Com	Though the enhancement in production capacity, is not in the form of a Project, Company regularly allocates funds for pollution control measures / monitoring & CSR activities. Company also ensures utilization of funds for allocated purposes.																								
xii	The Regional Office of this Ministry / CPCB / SPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.																								
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xiii	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.																								
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xiv	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.																								
Com	Enhancement in Production capacity has been achieved by way of process modification and not by way of a Project.																								

Annexure E

Date Of Sampling:- 19th June to 20th June 2012.

Ambient PM₁₀ Level

Sl	Area / Location	Limit ($\mu\text{g}/\text{m}^3$)	Result - ($\mu\text{g}/\text{m}^3$)
1	Near ADM Building	100	97.16 (Avg)
2	Near NKCPL Yard		95.43(Avg)

Ambient SO₂ Level

Sl	Area / Location	Limit ($\mu\text{g}/\text{m}^3$)	Result - ($\mu\text{g}/\text{m}^3$)
1	Near ADM Building	80	21.8 (Avg)
2	Near NKCPL Yard		20.9 (Avg)

Ambient NO₂ Level

Sl	Area / Location	Limit ($\mu\text{g}/\text{m}^3$)	Result - ($\mu\text{g}/\text{m}^3$)
1	Near ADM Building	80	35.23 (Avg)
2	Near NKCPL Yard		34.06 (Avg)

Particulate Matter – **Date Of Sampling:- 19th June to 20th June 2012.**

Sl	Process attached to stack	Limit - mg/Nm ³	Result
1	Boiler Stack	100	20
2	Stove Stack for MBF-1		15
3	Stove Stack for MBF-2		14
4	DG Set-1	150	90
5	DG Set-2		83

Water Quality Test Report - **Date Of Sampling:- 20th June 2012.**

Effluent (Canteen Outlet)

Sl No	Parameters	Unit	Result	Limit (& Range)
1	pH (at 27 ⁰ C)		6.98	5.5-9.0
2	TSS	mg / L	85	100
3	COD	mg / L	161.9	250
4	BOD (3 days at 27 ⁰ C)	mg / L	29	30
5	Oil and grease	mg / L	5.7	10

Effluent (Emergency Discharge)

Sl No	Parameters	Unit	Result	Limit (& Range)
1	pH (at 27 ⁰ C)		7.26	5.5 – 9.0
2	TSS	mg / L	66	100
3	COD	mg / L	72.9	250 mg / L
4	BOD (3 days at 27 ⁰ C)	mg / L	19	30 mg / L
5	Oil and grease	mg / L	3.8	10 mg / L