## Compliance status to the conditions stipulated vide Environmental Clearance

Project : Crest Steel & Power Private Limited

Village: Joratarai, Post: Mangatta,

Tehsil and District: Rajnandgaon (C.G)

Project Proponent : Crest Steel & Power Private Limited

Reference : Ministry's Letter No.: J-11011/753/2008-IA II (I)

dated: 27.08.2010

## **Specific Conditions:**

Sr. No	Specific Condition		Compliance Status
1.	Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Government shall be ensured and regular reports submitted to the Ministry and its Regional Office at Bhopal.	:	Yes

2. Efforts shall be made reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the provided stacks shall be sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning plant, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm<sup>3</sup> by installing energy efficient technology.

We have installed one new AAQMS in the plant & connected to CPCB and CECB servers.

AAQMS & CEMS are installed & connected to CPCB & CECB servers.

We have installed ESP's Bag filters to control source emission. All internal roads are concrete to minimize the fugitive emission to due to internal movement of heavy vehicles. The emission levels are maintained below 50 mg/nm³. Dust suppression is carried out by water sprinklers.

Sufficient Air control devices Electrostatic precipitator (ESP) & Bag Filters are installed.

There are bag filters provided at various location for dedusting, the clean air is/will be emitted from these stacks. More stacks along with bag filter will be provided for the proposed expansion.

Online monitoring system is installed and

Display board is also installed to display the parameters.

Regular monitoring of Ambient Air Quality is being carried out. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 are maintained. Monitoring Report for April to June 23 are enclosed.

- 3. As proposed, Electrostatic precipitator (ESP) shall be provided to WHRB, CFBC, DRI plants; fume extraction and dust cleaning system
- New management is assure you that we will install the Pollution Control equipment proposed in EIA Report & follow all the guidelines as stipulated by the Honorable CECB.

Sr. No	Specific Condition		Compliance Status
	with bag filters shall be provided to the induction, electric arc and submerged electric arc furnaces to control particulate levels within 50 mg/Nm³. Dust extraction system with bag filters at material transfer points, crusher area, material handling area etc. shall be provided. Water sprinklers for dust suppression at unloading of raw material shall be provided.		
4.	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 shall be followed.	:	We have installed one new AAQMS in the plant & connected to CPCB and CECB servers.  AAQMS & CEMS are installed & connected to CPCB & CECB servers.  Online monitoring system is installed and Display board is also installed to display the parameters.  Regular monitoring of Ambient Air Quality is being carried out. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 are maintained. Monitoring Report for April to June 23 are enclosed. & Photographs are enclosed.
5.	Gaseous emission levels including 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. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414 (E) dated 30 <sup>th</sup> May, 2008 should be followed.	:	Gaseous emission levels including secondary fugitive emissions from all the sources is in under control within the latest permissible limits issued by the Ministry and regularly monitored.  Monitoring Report for April to June 23 are enclosed.
6.	Hot gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB). The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack.	:	All the proposed Sponge Iron Kilns will be equipped with WHRB based boiler so as to harness the heat energy for power generation.  Flue gases from sponge iron kiln after passing DSC, ABC will pass through WHRB based boiler and thereafter cleaned gases will be went through ESP and stack having height of adequate height.  All the aforesaid measures are already implemented in our existing sponge iron kiln and assure you that the same will be implemented in our proposed expansion too.
7.	Efforts shall further be made to use maximum water from the rain water	:	Rain water harvesting pond is constructed to collect & utilization of water rain water.

maximum water from the rain water harvesting sources. Use of aircooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water in arvesting point is constructed to collect & utilization of water rain water. Closed circuit Air Cooled Condenser is prosed in expansion project to reduce the water consumption. Installation of closed cooling circuit is proposed.

Sr. No	Specific Condition		Compliance Status
	consumption and water requirement shall be modified accordingly. All the effluent shall be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by soak pit. The water consumption shall not exceed as per the standard prescribed for the steel plants.		Treated effluent will be recycled for dust suppression, ash conditioning & green belt development.  We assure that we are maintaining ZERO discharge condition in our existing unit and the same will be implemented in proposed units too. The water consumption will not exceed as per the standard prescribed for the steel plants.
8.	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	•	Agreed.
9.	Regular monitoring of influent and effluent surface, sub-surface and ground water (including chromite) should be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E (P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhopal, Chhattisgarh Environment Conservation Board (CECB) and CPCB.	:	At present there is no effluent generation from the existing operational facility.  Regular monitoring of water is being carried out. & the sample Reports are enclosed herewith.  There is no source of ground water in the plant premises.
10.	All the coal fines, char from DRI plant and washery rejects shall be utilized in AFBC boiler of power plant and no char shall be used for briquette making or disposed off anywhere else. AFBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning. All the blast furnace (BF) slag shall be provided to the cement manufacturers. Scrap shall be used in steel melting shop (SMS) and SMS slag and kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.	:	Char/ dolochar is being utilized as fuel in FBC based power plant.  AFBC boiler is proposed to installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning. We assure that All the blast furnace (BF) slag shall be provided to the cement manufacturers. Scrap shall be used in steel melting shop (SMS) and SMS slag and kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.  Induction furnace slag after metal recovery is being utilized for land reclamation.  Generated fly ash is being given to nearby brick manufacturers units.

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Sr. No	Specific Condition		Compliance Status
	ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003.		manufacturers and cement plant too.
12.	Vehicular pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	:	Dust suppression system will be installed for preventing dust emission due to vehicular movement and loading and un-loading activities within premises. Vehicular pollution due to transportation of raw material and finished products will be controlled by sprinkling water in the roads.
13.	Transportation of raw coal during the initial phase shall be by 40-T mechanically covered or tarpaulin covered trucks from the coalmines to the washery. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within sheds/stockyards fitted with wind breakers/shields. Adequate measures hall be taken to ensure that the stored minerals do not catch fire.	:	Presently the coal washery is not Commissioned. The transportation of raw material will be done in mechanically covered or tarpaulin covered trucks only.  Coal will be stacked properly in covered shed fitted with wind breakers / shields.
14.	Hoppers of the coal crushing unit at the crushing shed and washery unit shall be fitted with high efficiency bag filters/Dust extractors and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of belt conveyor systems which shall be closed and from transportation roads.	:	We ensure that in Proposed expansion project Hoppers of the coal crushing unit and washery unit shall be fitted with high efficiency bag filters/Dust extractors and mist spray water sprinkling system will be installed. All the transfer points will be covered & belt conveyor systems will be closed by conveyor canopy.  Regular water sprinkling will be done on coal heaps.
15.	All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.	:	<ul> <li>The internal roads are of RCC &amp; the roads are regularly cleaned.</li> <li>The Green belt of 40% will be developed.</li> <li>CSPPL has already planted trees in the premises and proposed to plant additional no. of saplings for the proposed expansion @ 2500 per ha.</li> <li>16.1 ha. of area has been developed as green belt. 48,300 trees are planted out of which 42,950 nos. of trees are well grown till date, with survival rate of about 90%.</li> <li>Further 1,25,050 more trees will be planted @ 2500 trees per ha.</li> <li>Photographs of green belt and internal roads are attached herewith.</li> </ul>

- 16. The washery unit shall be a zero-discharge facility and no wastewater shall be discharged from the washery
  - The proposed washery units is designed for closed circuit circulation system and entire water will be recycled in process only. No waste water

Sr. No	Specific Condition		Compliance Status
140	into the drains/natural watercourses. Recycled water shall be used for development and maintenance of green belt and in dust suppression from Plant operations.		will be discharge outside the system.
17.	Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture of Silico Manganese (Si-Mn).	:	Agreed, as it is a valuable source of manganese.
18.	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhopal, CECB and CPCB.	:	We ensure that the Proper handling, storage, utilization and disposal of all the solid waste will be done and regular report regarding toxic metal content in the waste material will be be submitted to the Ministry's Regional Office, CECB and CPCB.  Monitoring Report for April to June 23 are enclosed.
19.	A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.	:	Regarding this we hereby like to state that our project is already designed to minimize the solid waste and for their proper utilization.  1. Regarding minimization of char/ dolochar: Quantum of wastes of sponge iron i.e. char/ dolochar/ coal fines will reduced by 40% – 45% by utilizing as fuel in own power plant.  2. Regarding Induction Furnaces: Metal recovery from SMS Slag will also reduce its volume to 15% – 18% and non metallic slag will also in form of coarse solid.  3. Regarding minimization of washery reject: Firstly we have reduced the size of washery so as to meet own requirement only. Secondly the quantum of Washery rejects will also reduced by consuming as fuel in own + sister concern's [located adjacent] power plant. (reduced by 40% – 45%)
20.	Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhopal, CECB and CPCB within 3 months of issue of environment clearance letter.	:	Risk and Disaster Management Plan along with the mitigation measures is prepared.  The copy of same is attached herewith.
21.	As proposed, green belt shall be developed in 33 % of plant area as per the CPCB guidelines in consultation with the DFO.	:	<ul> <li>The Green belt of 40% will be developed.</li> <li>CSPPL has already planted trees in the premises and proposed to plant additional no. of saplings for the proposed expansion @ 2500 per ha.</li> <li>16.1 ha. of area has been developed as green belt. 48,300 trees are planted out of which 42,950 nos. of trees are well grown till date, with survival rate of about 90%.</li> <li>Further 1,25,050 more trees will be planted @ 2500 trees per ha.</li> </ul>

Sr. No	Specific Condition		Compliance Status
			Photographs of green belt and internal roads are attached herewith.
22.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.	:	Agreed
23.	All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 17 <sup>th</sup> December, 2009 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.	:	New management has taken over the project under consideration through NCLT procedure. However new management is committed for spending Rs. 10.0 Cr. Is first phase (in 2 years) and Rs. 30.0 Cr. (in second phase) of the expansion project towards various social department activities. No record is available for CSR activities carried out if any, by previous management.
24.	At least 5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.	=	New management has taken over the project under consideration through NCLT procedure. However new management is committed for spending Rs. 10.0 Cr. Is first phase (in 2 years) and Rs. 30.0 Cr. (in second phase) towards various social department activities.  No record is available for CSR activities carried out if any, by previous management.
25.	Rehabilitation and Resettlement Plan for the project affected population including tribals, if any shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Chhattisgarh. Compensation paid in any case should not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy, 2007.	:	No rehabilitation and resettlement is required as the land purchased as there is no habitation within the land acquired [through purchase] and located close to the BORAI industrial area.
26.	The company shall provide housing for 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.	:	Agreed.

Sr.	Concept Conditions		Compliance Status
No	General Conditions		Compliance Status
1.	The project authority shall adhere to the stipulations made by Chhattisgarh Environment Conservation Board (CECB) and State Government.	:	Agreed.
2.	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	:	Agreed.
3.	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 & standards prescribed from time to time. The CECB 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.	:	The project for which the EC was granted is not implemented. However, in the proposed project this issue will be complied.  Suitable interlocks will be provided for tripping of the plant in case emission values exceed pre-set values
4.	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 Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	=	All the heavy noise generating equipment's are designed as per norms.  The noise level is being kept below 85 dBA.  We have provided noise control measures silencer, enclosures, etc. at appropriate location to control noise levels.  Monitoring Report for April to June 23 are enclosed.
5.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	:	The same is being done once in a quarter.
6.	All the environment management measures given in the EIA/EMP shall be implemented and complied with.	:	Agreed.
7.	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground	:	We have developed water harvesting structures within premises for recharging ground water table as well as utilization of within the process and assure you that the same will be developed in proposed expansion too.

Sr.	General Conditions		Compliance Status
No	General Conditions		Compliance Status
	water table.		
8.	Proper housekeeping and adequate occupational health program shall be taken up as per the Factory Act.	:	Proper housekeeping is being maintained and adequate occupational health programmes is being carried out as per Factory Act.
9.	The company shall undertake eco- development measures including community welfare measures in the project area.	:	All Eco-development activities like additional plantation; Provision of STPs for treatment of domestic water, provision of Solar Powered lights, etc will be implemented in plant and surrounding area including various social development activities.
10.	A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	:	A separate environmental management cell is set up to carry out various management and monitoring functions.  The Environmental Cell functions under the control of the General Manager along with the EMS team of the company to monitor the environmental measures.
11.	The requisite funds shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures and used judiciously 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.	=	New management has taken over the project under consideration through NCLT procedure. However new management is committed for spending requisite funds will be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government.
12.	The 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.	:	New management has taken over the project under consideration through NCLT procedure. The Project Authorities will inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities.
13.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	=	Agreed
14.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It	:	We have developed the website in 2022 after full possession of the plant. We have uploaded the monthly monitoring report & six-monthly monitoring compliance report on our website.

Sr. No	General Conditions		Compliance Status
NO	shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO <sub>2</sub> , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.		
15.	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by email) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the CWCB. The Regional Office of this Ministry at Bhopal/CPCB/CECB shall monitor the stipulated conditions.	:	The last six monthly report was submitted on 15th Jan 2019. The operation of plant was closed from September 2019 to April 2021. We regret to inform you that we have not submitted the six-monthly compliance report after possession of the plant in June 2022. We are enclosing six monthly compliance report for the period of January 2023 – June 2023. In future six monthly compliance report will be submitted regularly.
16.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	:	Environmental statement is being submitted regularly to CECB.
17.	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 CECB and may also be seen at the Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This should 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	:	Agreed

Sr. No	General Conditions	Compliance Status
	shall be forwarded to the Regional office at Bhopal.	

## PHOTOGRAPHAS OF INSTALLED AAQMS SYETEM -



## PHOTOGRAPHS OF GREEN BELT & INTERNAL ROADS -





