COMPLIANCE TO EC CONDITIONS

(PERIOD: OCT' 2019 TO MAR'2020)

	EC condition	compliance
A.	**Specific conditions:**	
I.	Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. Continuous stack monitoring facilities for all the stack shall be provided and sufficient air pollution control device via. Electrostatic precipitator (ESP), gas cleaning plant, cyclone, multi- cyclone, wet scrubber, and bag filters etc. Shall be provided to keep the emission levels below 50mg/Nm3. No charcoal shall be used as raw material. At no time, the emission level shall go beyond the prescribed standards. Inter-locking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	EC has been issued for five projects namely MBF, IF, Submerged Arc Furnace, Cement Grinding Unit and Re-rolling mill. • We have **not installed** **1. Submerged Arc Furnace** **2. Re-rolling Mill and** **3. Cement grinding Unit.** • We have installed **1. Mini Blast Furnace** **2. Blast Furnace** *** Blast Furnace is shut down from 2010** • **At present only Induction furnace** of capacity 15000 TPA is running. • Air pollution control system is installed to reduce the emission level. • No charcoal is used. • Emission level is within the prescribed limit. [Stack monitoring report dtd 06.03.2020 and dtd 12.12.2019 are attached]
•	Blast furnace top gas shall be passed through dust catcher and other cleaning equipment and the clean gas shall be used as fuel for preheating air for blast furnace. Pulse jet bag filters shall be provided to submerged arc furnace (Ferro alloy plant). Fume extraction system shall be provided to induction furnace. Wet scrubber shall be provided to re-rolling mill. Bag filters shall be provided to cement grinding unit. Bag filter house shall be provided to control dust laden gas from steel melting shop (SMS) before discharging into the	• Blast furnace is shut down since 2010. And Submerged arc furnace has not been installed. • Only Induction Furnace is installed. Fume extraction systems with wet scrubber has been provided to induction furnace. • Fixed Water sprinkling arrangement is made along road side, in the raw materials stock yards and loading areas to minimize the dust.

	atmosphere. As proposed, gravity dust catcher with multi-cyclone shall be provided to re-rolling mill. Fumes from rolling mill shall be passed through a recuperator and finally discharged to the atmosphere through a stack of adequate height as per CPCB guidelines. All the gaseous emissions shall be within 100mg/Nm^3	• Re-rolling mill has not been installed yet.
III	The National Ambient Air Quality Emission Standards issued by the ministry vide G.S.R. No.826 (E) dated 16th November, 2009 shall be followed.	The ambient air quality monitoring is being carried out on regular basis by accredited laboratory by Jharkhand State pollution control board. Monitoring locations are selected based on the EIA study carried out. There are **four** monitoring stations within the plant area for ambient air quality monitoring. The monitoring result shows that the pollution level in the area is within the permissible limit. [AAQ report dtd 12.03.2020 and dtd 23.12.2019 are enclosed.]
IV	Gaseous emission level 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 issued by the ministry for the sponge iron plant in May, 2008 shall be followed.	• Monitoring of emission level is being carried out at every quarter in a year within the plant premises as per guidelines and it is controlled. • We have no EC for Sponge iron plant.
V	In –plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Dust suppression system with water sprinkling system shall be provided to control fugitive dust emission from transfer points, conveyors, loading, raw material stock piling, sizing and stock preparation area etc. Dust extraction systems/ foggy dust arresters shall be provided to control fugitive emissions from material transfer points and	• Dust suppression system with water sprinkling system and fixed water sprinklers have been provided to control fugitive dust emission from transfer points, conveyors, loading, raw material stock piling, sizing and stock preparation area etc. • A mobile tanker is also operated to control fugitive emission.Further stationary water sprinklers have been installed along the approach road and

	finished product handling section. The fugitive emissions shall be controlled, regularly monitored and records maintained.	stock piling area. • Further plantation has been done along the plant boundary to arrest the dust within the plant premises.
VI	Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.	• Transportation of raw material and finished product is being carried out in the day time only. • Vehicular emission monitoring is being carried out for the heavy vehicles. • Regular water sprinkling is being provided to control dust emissions. [Pollution under control certificate of vehicle with validity up to 06.07.2020 is enclosed.]
VII	Total ground water requirement from bore wells shall not exceed 35m^3/day. Closed cycle cooling system shall be provided to reduce fresh water consumption. All the treated effluent shall be recycled/ reused in the process and /or for dust suppression, green belt development and various other purposes inside the plant. Domestic effluent shall be treated in septic tank followed by soak pit and used for green belt development.	• No ground water is used for industrial purpose. There is no ground water in the nearby area. This area is also declared as semi critical situation as per CGWA. • We have applied for NOC for 10 KL water for the drinking purpose only with application no. 21-4/638/JH/IND/2020 dtd 11.03.2020 which is in progress. • Total industrial as well as domestic water requirement is met from Damodar valley River with an agreement of 0.2MGD. (A copy of agreement with Damodar Valley Corporation is attached) • All the treated effluent is being reused for dust suspension, green belt development and various other purposes inside the plant. Domestic effluent is treated in septic tank followed by soak pit and used for green belt development. • The water used in the cooling tower is being settled and recirculated in the process to reduce the makeup water requirement.

VIII	Prior 'permission' for the drawl of 35 m^3/day ground water from the bore well shall be obtained from the central ground water authority /State Ground Water Board (CGWA/SGWB) and a copy submitted to ministry's regional office Bhubaneswar.	We are not using ground water. Permission for withdrawal of water has been obtained from Damodar Valley corporation. *[A copy of agreement with DVC is enclosed.]*
IX	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhance to meet the maximum water requirement. Only balance water requirement shall be met from the other sources.	Rain water harvesting structure has been constructed. A water reservoir of 50' x50' x20' capacity has been made. Balance water requirement is being met from Damodar River.
X	Zero effluent discharge shall be strictly followed and no waste water shall be discharged outside the premises.	Waste water generated from the cooling tower blow down will be settled in the settling tank and recirculated in the process. So the plant is operated with zero effluent discharge technology. Domestic waste water will be treated through soak pit via septic tank.
XI	The water consumption should not exceed 16 m^3/Ton of steel as per prescribed standard.	Total water requirement for the process is around 1.3 – 1.4 m^3 per tonne of steel.
XII	Regular monitoring of influent and effluent surface ,sub surface and ground water shall be ensured and treated waste water shall 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 Bhubaneswar, Jharkhand Pollution Control Board (JPCB) and Central Pollution Control Board (CPCB).	• Monitoring and Analysis of Cooling Tower Blow down Water, Rain Water Pond Water is carried out. • Leachate Analysis is done. [Copy of analysis reports of the month Dec'19 is enclosed.]
XIII	All the bag filter dust shall be sold to sinter plants. End cuttings from re-rolling mill shall be recycled in induction furnace. All the blast furnace (BF) slag from pig iron plant shall be granulated	It is being complied according to the condition. At present,

	and utilized in cement grinding unit. All the other solid waste including broken refractory mass shall be properly disposed off in environment –friendly manner. Used or spent oil and oily waste shall be provided to authorized recyclers/ reprocessors.	• Re-rolling mill has not been installed. • Submerge arc furnace has not been installed. • We had installed Blast furnace but it is now shut down. BF slag was sold to our Cement Grinding unit namely M/s Rajrappa Steels Private Limited, Vill – Rauta, P.O – Marar, Distt – Ramgarh [Jharkhand] during running period of Blast Furnace. Solid waste is being disposed as a substitute of soil.
XIV	All the Ferro alloy slag and SMS slag shall be used for road making and land filling inside the plant or used as building material only after passing through Toxic Chemical Leachability Potential (LCLP) test. Toxic slag shall be disposed in secured landfill as per CPCB guidelines. Otherwise hazardous substances shall be recovered from the slag and output waste and be disposed in secured landfill as per CPCB guidelines.	The slag generated from the plant is recycled and utilized for low land filling and road making.
XV	Slag produced in Ferro Manganese (Fe-Mn) production shall be used in manufacture Silico Manganese (Si-Mn).	• **It is not applicable.** Ferro-manganese as well and Silico Manganese is not manufactured in our plant.
XVI	A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.	Since we have only induction furnace which generates slag as solid waste is used as a substitute of soil.
XVII	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 shall be submitted to the Ministry's Regional Office at Bhubaneswar, Jharkhand SPCB and CPCB	Most of the solid waste generated from the plant is being utilized in the process. Only few quantities of slag and dust are utilized for filling low land and road making. [Analysis report of SLAG of the month Dec'2019 is enclosed.]

XVIII	A disaster management plan shall be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, Jharkhand and CPCB within three months of issue of environment clearance letter.	Disaster management plan is enclosed.
XIX	As proposed green belt shall be developed in 7.25acres (33%),out of total 22 acres with in and around the plant premises as per the CPCB guidelines in consultation with DFO	Plantation is being carried out in phased manner to cover 33% of the total area of the plant i.e. 7.25Acres. Till date plantation has been done along the plant boundary.
XX	All the recommendation made in the charter on corporate responsibility for environment protection (CREP) for the steel and cement plants shall be implemented.	CREP guidelines are being followed. The CSR plan is being implemented as per the requirement of the public as discussed during public hearing. Pollution Control equipment is being operated efficiently. Waste material is being disposed off eco-friendly.
XXI	All the commitments made to the public during the public hearing / Public Consultation Meeting held on 30th July, 2009 shall be satisfactorily implemented by allocating separate budget to implement the same.	The commitment made during the public hearing was implemented in time bound manner. Local Employment has been done.
XXII	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.	Necessary site services like office, rest house, first aid centre, and fuel for cooking for temporary workers, nursery school (crèche), drinking water etc for the workers has been provided.
B.	**GENERAL CONDITIONS**	
I	The project authorities must strictly adhere to the stipulations made by the Jharkhand pollution control board (JPCB) and the state government.	Being adhered to.
II	No further expansion or modification in the plant shall be carried out without prior approval of the ministry, of	There is no further expansion or modification will be done without prior approval of ministry.

	environment, and forests.	The production and implementation of the project is within the EC norms only.
III	The gaseous emissions from various process units shall conform to the load/ mass based standard notified by this ministry on 19th may 1993 and standards prescribed form time to time. The state board may specify more stringent standards for relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission level go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	Noted and followed.
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 Jharkhand SPCB. Data on ambient air quality and stack emission should be regularly submitted to this ministry including its regional office at Bhubaneswar and the Jharkhand PCB / CPCB once in six months.	Four no. of ambient air quality monitoring stations have been established in consultations with Jharkhand SPCB. The monitoring of ambient air, stack, workzone noise is being carried out by authorised laboratory. **Reports are enclosed**
V	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th may 1993 and 31th December 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	Waste water generated from the cooling tower blow down will be settled in the settling tank and recirculated in the process. So the plant will operate with zero effluent discharge technology. Domestic waste water will be treated through soak pit via septic tank.
VI	The overall noise levels in and around the plant area shall be kept within the standards (85dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA	Noise Levels at four locations in and around the plant area is within the prescribed limit. [Reports of Ambient Air Noise Monitoring data is enclosed]

	rules, 1989 viz. 75dBA (daytime) and 70 dBA (night time).	
VII	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the factories act.	It is being done in concurrence with the requirements of the Factories Act,1948 A first aid station has been provided with all necessary medical kit. An ambulance is also provided for the worker. Weekly health checkup of the workers is carried out.[A copy of Check-up register from Oct'2019 to Mar'2020 is attached]
VIII	The company shall develop surface as well as ground water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	Rain water harvesting measures are being taken. Rain water that gets collected and used for plantation after proper settling.
IX	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.	Environmental protection measures suggested in the EIA/EMP report are duly implemented in the plant.
X	As proposed, Rs. 76.00 crores and 7.00 crores shall be earmarked towards total capital cost and recurring cost/annum for the environmental pollution control measures and 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.	Agreed and being complied. State of the art environmental protection measures have been implementing in the plant facilities. Annual funds are allocated for maintenance of the environmental protective measure to control pollution within the permissible limits.
XI	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 shall simultaneously be sent to the regional office of the MOEF, the respective zonal office of CPCB and the JPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOX (ambient levels as well as stack emissions) or	We have only Induction furnace of capacity 15000TPA and we had installed Blast furnace but it has been shut down for last ten years. We have not installed Submerged Arc furnace, Cement grinding unit and Re-rolling mill yet. Therefore we request you to please exempt us from the installation of Continuous stack monitoring system. Regular ambient air quality monitoring at 4 (four) locations is being done. [AAQ report

	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.	are enclosed] The pollutants level has been displayed near main gate in the public domain. [Photograph enclosed.]
XII	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 e-mail) to the regional office of MOEF, the respective zonal office of CPCB and the JPCB. The regional office of this ministry/ CPCB/JPCB shall monitor the stipulated conditions.	Being complied.
XIII	The environmental statement for each financial year ending 31st 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.	It is being submitted from the period 01.04.2019 to 31.03.2020 in the Form - V
XIV	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 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 should be forwarded to the	The advertisement for grant EC was published in local newspaper HINDUSTAN (Hindi Dainik) dtd 30.01.2020 AND HINDUSTAN TIMES (English Daily) on dtd 29.01.2010 in English Edition. And the copy of the same is attached]

	regional office.	
XV	Project authorities shall inform the regional office as well as the ministry, the date of financial closure and final approval of the project by concerned authorities and the date of commencing the land development work.	Date of financial Closure : March of every year, Final Approval of the project : 23.12.2009 Date of Commencing the land development : 25.09.2007

Vinod Verma [Mob : 6207 160 134]

Authorised Signatory

For Radha Casting & Metalik Private Limited