Bhushan Power & Steel Ltd.
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Teh. Rengali, Dist. Sambalpur (Odisha)
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CIN : U27100DL1999PLC108350

JSWBPSL/ENV/23-24/015.
30th May 2023.

To,
The Additional Director General of Forest (C),
Ministry of Environment, Forest & Climate Change,
Eastern Regional Office, (EZ)
A/3, Chandrasekharpur,
Bhubaneswar, Pin-751023
Odisha.

Subject: Six Monthly Compliance Report (From Oct'2022to Mar'2023) on stipulated conditions of Environmental clearance for 5.5 MTPA, 3.0 MTPA, 2.8 MTPA, 2.2 MTPA and 1.2 MTPA Integrated Steel Plant of M/s Bhushan Power & Steel Limited located at village Thelkoloi, Post Lapanga, Tehsil Rengali, District Sambalpur, Odisha.

Reference.-

1. EC for 5.5 MTPA letter no J-11011/40/2009-IA-II(I),dated 06.12.2016
2. EC for 3.0 MTPA letter no J-11011/40/2009-IA II(I) Dated 17.10.2012
3. EC for 2.8MTPA letter no J-11011/40/2009-IA II(I) Dated 02.04.2010
4. EC for 2.2 MTPA letter no.J-11011/372/2006-IA II (I) Dated-29.03.2007
5. EC for 1.2 MTPA letter no.J-11011/228/2003-IA II (I) Dated-12.05.2004

Dear Sir,

Inviting your kind reference on the above-mentioned subject.

As per EIA notification 2006 and its subsequent amendments, we have sent the half yearly compliance status of the Environmental Clearances of 5.5 MTPA, 3.0 MTPA, 2.8 MTPA, 2.2 MTPA and 1.2 MTPA capacity of our Integrated Steel Plant of Bhushan Power & Steel Limited located at Village Thelkoloi, Post-Lapanga, Tehsil- Rengali, District- Sambalpur, Odisha for the period from Oct'2022 to Mar'2023 by E-mail at mail ID roez.bsr-mef@nic.in on dated 30.05.2023 from the mail id - ranjit.ghosh@jsw.in.

Please find enclosed herewith the hard copy of the six-monthly compliance report.

Thanking You,

Yours faithfully
For **Bhushan Power & Steel Limited**

30/05/23.

Ranjit Kumar Ghosh
AVP - Environment

Hard copies submitted by post to:

C.C. to : 1. The Member Secretary, OSPCB, Bhubaneswar.

2. The Member Secretary, CPCB, Parivesh Bhawan, New Delhi.

COMPLIANCE TO CONDITIONS OF LETTER
No-J-11011/40/2009-IA-II(I),dated 06.12.2016 for 5.5 MTPA

A. Specific Condition:

No	Env. Parameter	Condition Description	Compliance Status
i	Air quality Monitoring & Preservation	The project Proponent shall install 24x7 air monitoring devices to monitor air emission as provided by the CPCB and submit report to ministry and its Regional office	• Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant. ○ CAAQMS-1-Near Township ○ CAAQMS-2-Near Railway Gate ○ CAAQMS-3-Behind CRM ○ CAAQMS-4-Near ETP • 46 nos. Continuous stack emission monitoring system has been installed at all the major stacks and connected to OSPCB & CPCB. The monitoring report is being submitted in the Regional Offices of Ministry as well as OSPCB regularly.
ii	Statutory Compliance	The project Proponent shall prepare R&R plan for the affected households in the core zone, including compensation to be paid and employment to be provided and submit the same to the Regional office of the Ministry of Environment, Forest and Climate Change, Bhubaneswar Odisha.	• R&R Plan approved by RPDAC has been submitted to IRO of the Ministry of Environment, Forest & Climate Change.
iii	Air Quality Monitoring & preservation	Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz, Electrostatic precipitator (ESP), bag house, bag filters etc, shall be provided to keep the emission levels below 50 mg/Nm^3 and installing energy efficient technology.	• 46 numbers of Continuous Emission Monitoring system have been installed in all the major stacks of existing units of DRI, CPP, SMS, Blast furnace, Coke Oven, Sinter plant etc. List of CEMS installed is enclosed as **Annexure-I** • To control air pollution in different units Electrostatic Precipitator, bag house, Fumes treatment plan, wet scrubber etc. has been installed. List of Air Pollution Control devices installed is enclosed as **Annexure-II** • All the ESP's and Bag Houses are designed for emission level below 50 mg/Nm^3 in the coming projects.
iv	Air Quality Monitoring & preservation	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. The gas then shall be cleaned in ESP	• All DRI units have been equipped with Dust settling chamber (DSC) to remove coarse solids and After burning chamber (ABC) to burn carbon monoxide.

<table>
<tr><td></td><td></td><td>before leaving out into the atmosphere through ID fan and stack.</td><td>• All the DRI Units are connected with independent waste heat recovery boilers (WHRB).
• The hot gas of DRI Kiln is being used for power generation through Waste Heat Recovery boilers.
• Independent ESP's have been installed for all the DRI kilns.</td></tr>
<tr><td>v</td><td>Water Quality Monitoring & Preservation</td><td>Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. ETP sludge should be disposed off scientifically.</td><td>BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rainwater harvesting during monsoon.

M/s KRG Rainwater foundation has recently conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc.

Based on the approved Feasibility report the construction of Rainwater harvesting Structures will be done within 2 years.

All the effluent of mill area is being treated in effluent treatment plant of capacity 500 KLD. Effluent generate from Coke oven -2 treated in Bio ETP of capacity 75 M3/hr
.</td></tr>
<tr><td>vi</td><td>Waste Management</td><td>All the coal fines, char from DRI plant shall be utilized and no char shall be used for briquette making or disposed off anywhere else. 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.</td><td>Existing units solid wastes and utilization is as follows.
<table>
<tr><th>No</th><th>Waste Description</th><th>Utilization /disposal</th></tr>
<tr><td>01</td><td>Coal fines</td><td>Reused in Captive power plant</td></tr>
<tr><td>02</td><td>DRI char</td><td>Reused in Captive power plant</td></tr>
<tr><td>03</td><td>DRI accretion materials and refractory mass</td><td>Utilized in internal road and low-lying area filling</td></tr>
<tr><td>04</td><td>SMS Slag</td><td>Metallic part recovered and residue utilized in road making and land filling</td></tr>
</table></td></tr>
</table>

			05 | Blast furnace slag | Entire quantity sold to the Cement plant 06 | Mill scale and Scrap | Recycled in SMS
vii	Miscellanous	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 coal mines shall be created within the Unit.	In the existing complex, nearly 50 Km length of roads are there for movement of vehicular traffic. The details are given below: Total length within plant area : 50 Km Concrete roads completed : 38.5 Km Balance 11.5 Km work is in progress To control dust emissions following measures have been taken: 05 numbers of mechanized road sweepers has already been engaged. In addition, two more multi-utility vehicles engaged having facility for high pressure water jets, pressurized water sprinkling and water jet for cleaning tree leaves. Mist beam for dust suppression & Fire fighting facility. Tree plantation has been done in project completed area and avenue plantation using native species is being developed along the internal roads. Four mobile water tankers have been engaged currently for spraying water on non concreted roads of project areas. Two numbers of wheel washing systems have been installed and additional four has been procured and the same are under installation. Two numbers of parking facilities have been developed for parking of trucks carrying raw material.
vii	Statutory Compliance	The standards issued by the Ministry vide G.S.R.No. 277(E) dated 31st March, 2012 regarding integrated iron and steel plant shall be followed.	The standards issued by the Ministry vide G.S.R.No. 277(E) dated 31st March, 2012 regarding integrated iron and steel plant is being followed in existing plant and same will be implemented in the upcoming projects. All the monitoring report attached as **Annexure – III, IV, V, VI & X**
ix	Statutory Compliance	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16the November, 2009 shall be followed.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 is being followed in existing plant and same will be implemented in the

			upcoming projects. Ambient air Quality for the period Oct'22 to Mar'23 is enclosed as **Annexure-III.**
x	Air Quality Monitoring & Preservation	Gaseous emission levels including secondary fugitive emission from all the sources shall be controlled within the latest permission limits issued by the Ministry vide G.S.R414(E) dated 30th May, 2008 and regularly monitored. Guidelines/ code of Practice issued by the CPCB shall be followed.	In the existing units gaseous emission levels including secondary fugitive emission from all the sources has been controlled within the latest permission limits issued by the Ministry vide G.S.R414(E) dated 30th May, 2008 and regularly monitored. Guidelines/ code of Practice issued by the CPCB, Same will be followed. Stack emission result for the period Oct'22 to Mar'23 is enclosed as **Annexure - IV** and results of fugitive emission are enclosed as **Annexure- V.**
xi	Air Quality Monitoring & Preservation	Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emission during loading and unloading of the raw material and finished product.	• Vehicles carrying raw materials and finished products are being covered with tarpaulin. • Water sprinkling arrangement has been made at raw material handling areas to control dust emission during loading and unloading raw materials. • Mobile water sprinkling tankers are engaged for regular water sprinkling on raw material transporting roads to control fugitive dust. • Two nos. of Wheel washing system has been installed to clean the vehicle wheel and control the fugitive dust. • Five nos. of mechanized road sweeping machine are being used for dust extraction from the concrete road. • Five numbers of mist beams has been installed at RMHS stock yard area for control of fugitive dust. • Two nos. of multiutility vehicle has been engaged dust suppression, tree cleaning, mist beam for dust suppression
xii	Water Quality Monitoring & Preservation	'Zero' effluent discharge shall be strictly followed and no waste water shall be discharged outside the premises.	For 100% reuse and utilization of treated waste water RO plant of capacity 510 m^3/hr has been commissioned & the same is in Operation. All the 03 Nos. of existing STP's have been upgraded to meet the prescribed standards. All the STP's are operating satisfactorily. All the effluent water and storm water drains have been segregated throughout the plant.

			Up-gradation of ETP in CRM is completed.
xiii	Water Quality Monitoring & Preservation	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 Environment (Protection) Act, 1986 whichever are more stringent.	• Regular monitoring of influent and effluent surface, sub-surface and ground water is being carried out by the third party and regularly report is submitted to the OSPCB. • Monitoring results treated effluent for the period Oct22' to Mar'23 is enclosed as **Annexure-VI.** • Monitoring results of ground water quality is enclosed as **Annexure-VII.**
xiv	Waste Management	Proper handling, storage, utilization and disposal of all the solid waste shall be ensure and regular report regarding toxic metal content in the waste material and its composition, and use of solid/hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.	• Presently all the waste is segregated at the source and disposed as per the guide line of the OSPCB/CPCB. • Details of Solid waste generation and utilization is enclosed herewith as **Annexure- VIII.**
xv	Waste Management	A time bound action plan shall be submitted to reduce solid waste generated due the project related activity, its proper utilization and disposal.	• The solid waste generation due to project related activity are being segregated properly and disposed as per the guideline of the OSPCB/CPCB.
xvi	Waste Management	Utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 as amended. All the fly ash shall be provided to cement and brick manufacturer for further utilization and Memorandum of Understanding shall be submitted to the Regional Office of the Ministry, Bhubaneswar.	• The ash generated from CPP is being utilized in different area like fly ash brick manufacturing, low lying area filling, embankment rising and quarry void filling. In the year 2022-23 till we have utilized 100 % of fly ash generated in our plant.. • Fly ash is being supplied to 45 numbers of fly ash-based brick manufacturing units in and around Jharsuguda, Sambalpur, Sundargarh and Deogarh District of Odisha free of cost with transportation subsidy @150/Ton for maximum utilization of ash.
xvii	Risk Mitigation & Disaster Management	A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.	• Risk and Disaster Management incorporating the units proposed in expansion project will be submitted after the amendment of EC**.**

xviii	Greenbelt	Green belt shall be developed in at least 33% of the project area by planting native and broad leaved species in consultation with local communities as per the CPCB guidelines.	• As per the submitted revised action plan the plantation and greenbelt work is in progress. • In the year 2022-23 total 91468 nos. of plant planted in and around the plant.
xix	Public Hearing	All the commitments made to the public during Public Hearing/public consultation meeting shall be satisfactory implemented as adequate budget provision shall be made accordingly.	EC for the project was accorded in December 2016. Soon after the company went into NCLT from June 2017 hence no much progress was made to fulfill the commitments made during PH. Now after taking over the plant by JSW Steel in March 2021 activities to fulfill the commitments made in PH has been started on priority basis. The CSR activities and Peripheral Development undertaken for the year 2022-23 is enclosed herewith as **Annexure – IX.**
xx	Miscellaneous	An amount of Rs.458 crores shall be earmarked towards the Enterprise Social Commitment for a period of 10 years for implementing activities based on Public Hearing issues, local needs and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.	• Action Plan to undertake expenditure towards Enterprises Social Commitment has been submitted to IRO during inspection on 16.09.2022. • As directed Rs.495.7 crores have been earmarked towards the Enterprise Social Commitment and will be spent along with commencement of the project.
xxi	Miscellaneous	The proponent shall prepare a detailed CSR plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, sanitation, Health, Skill Development ad infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR plan will include the amount of 2 % retain annual profits as provided for in Clause 135 of	The details of CSR activities and Peripheral Development undertaken in FY 2022-23 is enclosed as **Annexure – IX**

		the Companies Act, 2013 which provides for 2 % of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the plan shall be submitted as part of the Compliance Report to RO. The details the the CSR plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.	
xxii	Corporate Environmental Responsibility	The company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.	Information on expenditure towards Enterprise Social Commitment has been submitted to IRO during inspection on 16.09.2022.
xxiii	Energy Preservation & measures	The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.	We have already provided solar street light in Village Salad. We assure to provide solar lights in more villages and also expedite installation of solar light in common area of the plant.
xxiv	Energy Preservation & measures	The Project proponent shall provide for LED lights in their offices and residential areas.	• LED lights is provided in all the offices and residential areas.
xxv	Human Health Environment	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	• Labour colony with all facilities and health care facility is provided. • 6 Nos. of canteens have been established within the plant at various locations for employees and workers. Construction of additional 06 canteens

		housing may be in the form of temporary structures to be removed after the completion of the project.	is in progress.

B. General Conditions:

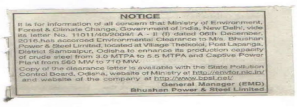
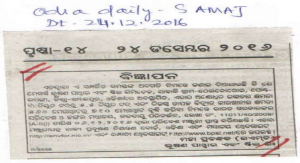
No	Env. Parameter	Condition Description	Compliance Status
I	Statutory Compliance	The Project authorities must strictly adhere to the stipulations made by the Odisha pollution Control Board and the State Government.	• All relevant stipulations made by Odisha State Pollution Control Board and State Government are being complied.
Ii	Statutory Compliance	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and climate Change (MOEFCC).	• No expansion or modification will be carried out without prior approval of Ministry of Environment Forest and Climate Change. • EC has been taken prior to all expansions or modification done till date.
Iii	Air Quality Monitoring & Preservation	At least four ambient air quality monitoring stations should be established in the downwind direction as well as where maximum ground level concentration of PM_{10}, $PM_{2.5}$, 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 at Bhubaneswar and the SPCB/CPCB once in six months.	Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant. ○ CAAQMS-1-Near Township ○ CAAQMS-2 Near Railway Gate ○ CAAQMS-3-Behind CRM ○ CAAQMS-4-Near ETP • All stations have been established in consultation with the regional office OSPCB. • The monitoring reports are being submitted to the Regional offices of Ministry as well as OSPCB regularly
Iv	Water Quality Monitoring & Preservation	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 form time to time. The treated wastewater shall be utilized for plantation purpose.	Presently three numbers of waste water treatment plants are in operation for treatment of waste water generating in the existing plant. ETP and BETP have been installed for treatment of process waste water from existing plant as per the list mentioned below

No	Name of facility	Capacity
01	Waste water Treatment plant-1	750 M3/hr
02	Waste water Treatment plant-2	750 M3/hr
03	Waste water Treatment plant-2	750 M3/hr
04	Effluent treatment Plant-CRM	500KLD

			<table><tr><td>05</td><td>Biological Effluent Treatment Plant</td><td>75 M3/hr</td></tr><tr><td>06</td><td>Sewage Treatment Plant-1</td><td>750 KLD</td></tr><tr><td>07</td><td>Sewage Treatment Plant-2</td><td>900 KLD</td></tr><tr><td>08</td><td>Sewage Treatment Plant-3</td><td>900 KLD</td></tr><tr><td>09</td><td>Reverse Osmosis Plant</td><td>510 M3/hr</td></tr></table> • RO System of capacity 510 m3/hr has been installed to achieve zero liquid discharge. • The entire treated water is being used inside the plant in various applications such as ash conditioning, sprinkling, horticulture, firefighting, etc
V	Noise Monitoring & amp;Prevention	The overall noise levels in and around the plant area shall be kept well within the standard 85 dB(A) 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 Rules, 1989 viz. 75 dB (A) day time and 70 dB(A) night time.	All the noise prone areas such as turbine houses and compressor houses have been provided with adequate silencer and acoustics enclosure for meeting the standard prescribed under EPA Rules. The ambient and work zone noise level monitoring results for the period from Oct'22 to Mar'23 is enclosed as **Annexure-X (A) & (B).**
vi	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	• An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours. • The OHC is having following facilities for providing health care to employees- • Essential drug delivery through pharmacy. • X ray services for diagnosis of musculoskeletal and internal abnormalities. • Pathology section for conducting bedside diagnosis and disease screening. • ECG facility to rule out cardiac abnormality. • Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury.

			• Minor OT to repair wound and Dressing of wounds and ulcers. • Clinic for diagnosis of common disease and injuries. • Basic and Advanced Ambulance services. • Facility for online training on preventable diseases. • Audiometric Booth for diagnosis of hearing losses. • As per the requirement of Factory Act 1948 all necessary record & documents are maintained.
vii	Water quality Monitoring and Preservation	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.	BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon. We have engaged M/s KRG Rain water foundation for further implementation of rain water harvesting facilities within our plant. They has recently conducted feasibility study in entire complex to assess rainwater harvesting potential. Very soon they will submit feasibility report with detailed plan, expenses, methodology etc. Based on the feasibility report we shall start construction of Rain Water harvesting Structures will be started and completed within 2 years.
vii	Miscellaneous	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.	Environmental protection measures & safeguards recommended in EIA /EMP report are being complied. Socio-economic development activities/programs like supply of drinking water, health care camps and community development programs are being carried out on regular basis and will be continued as per plan
ix	Miscellaneous	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry and Environment, Forest and Climate Change (MOEFCC) as well as the state Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the	The funds allocated for installation of pollution control equipment and implementing environmental protection measures is being judiciously utilized to fulfill the conditions stipulated by the Ministry of Environment and Forests as well as State pollution Control Board.

		Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	
x	Statutory Compliance	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad /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 out on the web site of the company by the proponent.	Information regarding issue of environmental clearance by the ministry was given to the local Panchayat. Acknowledge copy of the letters are enclosed as **Annexure – XI.**
xi	Statutory Compliance	The project proponent shall upload the status of compliance of the stipulated environmental 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 MOEFCC at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely, PM_{10},SO_2,NO_x (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.	Six monthly compliance report to the conditions the stipulated in EC along with monitoring results are uploaded in company's website http://www.jswbpsl.in. The compliance reports along with monitoring data in soft copy is being submitted at the Regional office of MoEF&CC through mail and hardcopy at OSPCB & CPCB. Display board for display of online emission monitoring results have been provided at main gate.
xii	Statutory Compliance	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 MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar/CPCB/SPCB shall monitor the stipulated conditions.	• Six monthly compliance reports along with monitoring data are regularly submitted at the Regional Office of MoEF&CC as well at OSPCB/CPCB. • Last six-monthly compliance with monitoring results is submitted vide letter no-JSWBPSL//MoEF&CC/22-23/058 on Dated- 30.11.2022
xiii	Statutory Compliance	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	Environmental statement in **Form – V** has been submitted to OSPCB and Regional Office MoEF&CC, Bhubaneswar for the financial year ending 31st March, 2022 vide our letter No-JSWBPSL/ENV/22-23/047 dated 24th September 2022 as per

		(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 Office of the MOEF&CC at Bhubaneswar by e-mail.	guidelines.
xiv	Miscellaneous	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, Forests and Climate change (MOEF&CC) 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 should be forwarded to the Regional office at Bhubaneswar.	Information regarding issue of EC was published in local news papers and copy of the letter has been submitted at OSPCB, Regional Office of MoEF&CC and at the offices of local Panchayat. INDIAN EXPRESS Dt. 24.12.2016  NOTICE Bhushan Power & Steel Limited Odia daily - SAMAJ Dt. 24.12.2016 
xv	Miscellaneous	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.	The date of financial closure for 5.5 MTPA is not applicable as it is proposed to revise the capacity and to amend the capacity of expansion from 3.0 MTPA to 4.5 MTPA in place of 5.5 MTPA. The date of closure of 4.5 MTPA shall be submitted within three months of receipt of EC for 4.5 MTPA

COMPLIANCE TO CONDITION LETTER
No.J-11011/40/2009-IA II(I) Dated 17.10.2012 for 3.0 MTPA

A. Specific Conditions:

No	Env. Parameter	Condition Description	Compliance Status
i	Statutory compliance	Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Govt. shall be ensured and regular reports submitted to the Ministry and its Regional Office at Bhubaneswar.	• All the conditions stipulated by Central & State Government Authorities are being complied with. • Half yearly compliance reports along with monitoring data are being submitted at OSPCB / CPCB & MoEF&CC regularly. • Last six monthly compliance report was submitted vide letter no-JSWBPSL/MoEF &CC/22-23/058 on dated 30.11.2022
ii	Air Quality Monitoring and Preservation	Efforts shall be made to 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 stacks shall be provided along with the sufficient air pollution control devices viz. Electrostatic precipitator (ESP),gas cleaning plant cyclone, multi-cyclone, wet scrubber, bag house, bag filters etc. shall be provide to keep the emission levels below 50 mg/Nm^3 by installing energy efficient technology. 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.	Adequate control measures have been adopted to control RSPM. • Five numbers of high pressure mist beam has been installed in Raw material handling stock yard area. • 06 numbers of Mobile water sprinkling tankers are being engaged for regular water sprinkling on haul roads and in construction areas for control of fugitive dust emissions. • 05 nos. of Mechanized road sweepers have been engaged for continuous cleaning of concrete roads inside the plant premises to control fugitive dust. • Fixed water sprinkling have been installed in stock yards, raw material handling areas and internal concrete roads for dust suppression. • 04 Numbers of Continuous Ambient Air Quality Monitoring System have been installed within plant in consultation with OSPCB to monitor the Ambient Air Quality. • 46 numbers of Continuous Emission Monitoring systems have been installed in all stacks of DRI, CPP, Iron & Steel making process Units. • Bag Filters and Dry Fog systems are installed in Iron ore crushing and screening areas. • Dry BF Gas Cleaning system and bag filters are provided in Blast furnace-1. ESP is provided for in plant de dusting of various units including DRI and Sinter plant. • ESP's are provided in DRI-WHRB, AFBC & CFBC Boilers of CPP and Sinter Plant. • Fumes treatment plant installed at SMS-1 and SMS-2. • Stack emission monitoring data for the period Oct'22 to Mar'23 is enclosed as **Annexure-IV**

			• A list of Air Pollution Control Devices installed is enclosed as **Annexure–II** • In the event of failure of any pollution control system, automatic interlocking facility has been provided with all units to hold the process and minimize the emission. • In the event of power failure in DRI automatically the DG starts and supply power to auxiliaries, hold the Process and minimize the emission. • Six monthly monitoring reports are being submitted to MoEFCC, CPCB and SPCB regularly.
iii	Air Quality Monitoring and Preservation	As proposed, electrostatic precipitator (ESP) shall be provided to Sinter Plant, WHRB, CFBC, DRI and Slag Cement Plants; bag house to Blast Furnace and ESP & bag filters to by-product recovery type of coke oven to control SPM levels within 50 mg/Nm^3. Fume extraction system with bag filters shall be provided to electric arc furnace and ladle furnace.	As mentioned in our Environment Management Plan ESPs and other Pollution Control systems have been installed to control dust emission in different units. The details are as follows. DRI/WHRB • There are 12 numbers of ESP installed at the Hot end of the DRI Kiln, 3 numbers ESP and 3 numbers of Bag filter for dedusting system at cold end of the DRI kiln. Captive Power Plant: • Two numbers of ESP installed at CPP 40 MW and 60MW AFBC Boilers, and 06 nos. of ESP installed in CFBC boilers of 3x130 MW CPP to keep the emission well within the limit Blast Furnace • One de dusting system have been installed in cast house of Blast furnace -1 followed by Dry Gas cleaning plant. In BF-2 two nos. of dedusting systems have been installed in Cast house and stock house to keep the emission level within the norms. Coke Oven • One dedusting system installed in Coke oven -2 for control of emission. Steel Melting Shop • Four nos. of fumes extraction and treatment plant along with bag filters have been installed to control the fugitive emission in the EAF and LF of SMS-I, Similarly in SMS-II one FTP have been installed . • In the proposed cement plant adequate pollution control system ESP/Bag filter will be installed.
iv	Air Quality Monitoring and Preservation	Hot gases from DRI kiln shall be passed through Dust Setting Chamber (DCS) to remove coarse solids and after Burning	• All the DRI Units have been equipped with DCS, ABC followed by independent waste heat recovery boilers (WHRB) for power generation.

		Chambers (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.	• Independent ESP's have been installed for all the DRI kilns. There are 12 numbers of ESPs have been installed in the DRI complex.
v	Statutory compliance	All the standards prescribed for the coke oven plants shall be followed as per the latest guidelines, Naphthalene scrubbing unit shall be provided to remove residual naphthalene from coke oven gas. Ammonia released in de-sulphuriziton section of coke oven plant shall be catalytically cracked to Nitrogen and Hydrogen. BF top gas shall be cleaned in dust catcher and gas cleaning plant (GCP) comprising of bag filters and used in furnace of CSP, BF, EAF, sinter plant, lime & dolo plant. Bag filters with adequate stack height shall be provided to lime and dolo plant. Proper and full utilization of coke oven gases in power plant using heat recovery steam generators shall be ensured and no flue gases shall be discharged into the air.	All efforts are being taken to comply with the prescribed standards and guidelines for the coke oven facilities. • The Coke oven-1 is of Non Recovery type. The hot gas of coke oven is being utilized in the power generation passing through waste heat recovery boilers (WHRB) feeding to two numbers of turbo generators which generate 16 MW power. • The Coke Oven Plant -2 (Recovery type) has been installed with adequate pollution control equipments like Pushing & Charging Emission Control system and Bag filter. Stack height has been designed for better dispersion of pollutants. • The byproduct plant is equipped with a naphthalene scrubbing unit and Desulphurization unit to remove residual naphthalene from coke oven gas. • The Coke oven gas is being utilized systematically and no flue gas is discharged into the atmosphere. • BF top Gas is cleaned in dust catcher and Gas cleaning plant and is being used in Tunnel Furnace of CSP, Sinter Plant, Lime/Dolo Plant, SMS, Wire and Rod Mill and Pellet plant.
vi	Statutory compliance	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 National Ambient Air Quality Emission standards issued by the Ministry vide G.S.R No. 826(E) dated 16th November 2009 are being followed. • Monitoring reports for the period Oct'22 to Mar'23 is enclosed as **Annexure-III.**
vii	Statutory compliance	All the standards prescribed for the coke oven plants shall be followed as per the latest guidelines. Proper and full utilization of coke oven gases in power plant using heat recovery steam generators shall be ensured and no flue gases shall be discharged into the air.	All the standards prescribed for the coke oven plants are being followed. • In coke oven -1 hot gas is being completely utilized in Waste Heat Recovery Boilers to generate 2x8 MW power. • In Coke Oven-2 De dusting and Pushing and Charging emission control system have been installed. • Biological effluent treatment plant (BETP) have been installed for treatment of effluent generate from byproduct plant. • The clean coke oven gas is being utilized in

<table>
<tr><td></td><td></td><td></td><td>coke oven battery heating, Tunnel furnace of CSP, Lime/Dolo plant and pellet plant.</td></tr>
<tr><td>viii</td><td>Air Quality Monitoring and Preservation</td><td>In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Bag filters shall be provided at coal mill, intermediate bin/separation building, product storage silo, day bin, iron ore circuit, load out, cooler discharge to control fugitive dust emission. Dust suppression system with water sprinklers shall be provided at raw material stock piles and loading/unloading point. Dust extraction system with bag filters shall be provided at all raw material transfer points, crusher house, junction towers and feed points. All conveyors shall be completely covered by GI sheets. All the roads shall be asphalted to control dust emissions.</td><td>Adequate control measures have been adopted to control fugitive dust generation
ESP's are provided in DRI-WHRB (12 nos.), AFBC.(02nos.) & CFBC(06 nos.) Boilers of CPP, Sinter Plant and pellet plant.
Installation of 09 nos. of Bag filters at various building and junction houses of RMHS are and Dry Fog systems are installed in Iron ore and coal circuit crushing and screening areas.
Fumes treatment plant has been installed at SMS-1(4 nos.) and SMS-2(01 no).
Dry BF Gas Cleaning system and bag filters are provided in Blast furnace-1. ESP is provided for in plant de dusting of various units including DRI and Sinter plant.
Fixed water sprinkler have been installed in stock yards, raw material handling areas and internal Concrete roads for dust suppression.
05 numbers of high pressure mist beam has been installed in Raw material handling stockyard area.
06 numbers of Mobile water sprinkling tankers are being engaged for periodical water sprinkling on all the internal roads within the plant premises.
05 nos. of Mechanized road sweepers have been engaged for continuous cleaning of concrete road inside the plant premises to control fugitive dust.
In the following units Fugitive emission is being monitored and report for the period Oct'22 to Mar'23 is enclosed as Annexure-V
<table>
<tr><th>No</th><th>Name of the units</th><th>Frequency</th></tr>
<tr><td>1</td><td>RMHS</td><td rowspan="9">Once in a month</td></tr>
<tr><td>2</td><td>DRI</td></tr>
<tr><td>3</td><td>Coke Oven</td></tr>
<tr><td>4</td><td>Power Plant</td></tr>
<tr><td>5</td><td>Pellet plant</td></tr>
<tr><td>6</td><td>Sinter plant</td></tr>
<tr><td>7</td><td>Blast Furnace</td></tr>
<tr><td>8</td><td>Steel melting shop</td></tr>
<tr><td>9</td><td>Lime plant</td></tr>
</table></td></tr>
<tr><td>ix</td><td>Air Quality Monitoring and Preservation</td><td>Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest</td><td>In all the existing units adequate air pollution control devices have been installed to keep gaseous emission within limit. Monitoring Report is attached as</td></tr>
</table>

		permissible limits issued by the Ministry and regularly monitored. Guidelines/code of practice issued by it CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R 414(E) dated 30th May.2008 shall be followed.	**Annexure-IV.**
x	Air Quality Monitoring and Preservation	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.	• Vehicles carrying raw materials and finished products are covered with tarpaulin. • Water sprinkling arrangements have been made at raw material handling areas to control dust emission during loading and unloading raw materials. • Mobile water sprinkling tankers have been engaged for regular water sprinkling on raw material transporting roads to control fugitive dust. • Two numbers of Wheel washing system have already been installed to clean the vehicle wheel and control the fugitive dust on road. • Four more nos. of Wheel washing system has been procured to installed in Raw material handling areas and the exit gate of the plant
xi	Water Quality Monitoring and Preservation	Total water requirement from Hirakud Dam shall not exceed 5,500 m^3/hr although 'Permission' for the drawl of 10,194 m^3/hr.water is accorded by the Water Resource Department. Govt. of Orissa vide letter dated 17th June, 2003. Efforts shall further be made to use maximum water from the rain water harvesting sources. As proposed, modified wet quenching system shall be provided to coke oven plant. Air cooled condensers and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent shall be treated and used for ash handing, dust suppression and green belt development. No effluent shall be discharged and 'Zero' discharge shall be adopted. Sanitary sewages shall be treated in septic tank followed by soak pit and used for green belt development.	• Presently 2427 M3/hr of water drawing from Hirakud Reservoir for our existing operating facilities. • Waste water is being treated in waste water treatment plants (WWTP-1,WWTP-2 and WWTP-3) and treated water reused within plant premises for developing green belt, fire fighting, process make up water for coal washery, iron ore beneficiation plant and pellet plant and ash conditioning at captive power plant. • The process effluent of CRM is being treated in effluent treatment plant of capacity 750 KLD and effluent from coke oven treated in BETP of capacity 75 M3/hr and reused within plant • All office buildings and plant toilets are provided with individual septic tanks and soak pits. • Three numbers of Sewage treatment plant has been provided of capacity STP-1-500 KLD, STP -2-900 KLD and STP-3-900 KLD for treatment of sewage in township maintain zero discharge. • To achieve ZLD we have installed 510 M3/hr Reverse Osmosis plant for maximize the utilization of the treated water.

xii	Water Quality Monitoring and Preservation	Effluent treatment plant (ETP) shall be provided for the treatment of Phenolic effluent from coke oven plant and the treated water shall be used for sprinkling at coal stockyard. Clarifier, sludge pond and filter press shall be provided in raw water treatment plant. DM plant water shall be neutralized in neutralization pit and the treated water shall be used for ash handling. Process wastewater shall be recycled /reused in the plant. Cooling tower blow down shall be in the plant for dust suppression and slag granulation, pig casting machine etc. Provision of separate drains for the process and storm water shall be kept.	• The phenolic effluent is being treated in BETP plant and treated effluent is being reused for quenching of hot coke in Coke Oven-2. • Neutralization pits have been provided in DM Plant for neutralizing the effluent and treated water is used in ash silos for ash conditioning. • Process effluent/wastewater generated from other processes such as Cold Rolling Mill Complex is being treated in Effluent Treatment Plant and treated wastewater is used for sprinkling on haul roads to control fugitive emissions.
xiii	Water Quality Monitoring and Preservation	All the wastewater from the coke oven plant containing, cyanide, phenol and COD etc. Shall be properly treated in the BOD plant. Continuous monitoring of Total Organic compounds (TOC) including cyanide, phenol and COD etc. shall be done at the outlet of ETP (BOD plant) and recovery of products like tar, ammonia, naphthalene etc shall be ensured.	• The Coke Oven -1 is non-recovery type. Water is only used for quenching which is collected in settling tanks and reused in the process of quenching. • The waste water containing cyanide, phenol and COD is being treated in BETP plant and treated effluent is being reused for quenching of hot coke in Coke oven-2. • Online monitoring system have been installed to monitor the treated water quality of the effluent generated from the BETP plant.
xiv	Water Quality Monitoring and Preservation	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	M/s KRG Rain water foundation has conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc. Based on the approved feasibility report the construction of Rain Water harvesting Structures will be started completed within about 2 years. BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon.
xv	Statutory compliance	'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.	As a measure of water conservation and also to ensure Zero liquid discharge, For 100% reuse and utilization of treated waste water RO plant of capacity 510 m^3/hr has been commissioned & the same is in Operation. All the 03 Nos. of existing STP's have been upgraded to meet the prescribed standards. All the STP's are operating satisfactorily. All the effluent water and storm water drains have been segregated throughout the plant. Up-gradation of ETP in CRM is under Commissioning

<table>
<tr><td>xvi</td><td>Statutory compliance</td><td>The water consumption shall not exceed 16 m^3/Ton of Steel as per prescribed standard.</td><td>Consumption of water in steel making areas is maintained below the prescribed standard. Specific water consumption for the year 2022-23 is 3.13 M3</td></tr>
<tr><td>xvii</td><td>Water Quality Monitoring and Preservation</td><td>Regular monitoring of influent and effluent surface, sub surface and ground water shall be ensured and treated wastewater 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 officer at Bhubaneswar, OPCB and CPCB</td><td>• Monitoring of treated effluent, treated waste water and ground water is being monitor regularly.
• Analysis report of ground water quality in the surrounding villages is enclosed as Annexure-VII.
• Treated effluent quality of ETP outlet , treated waste water quality WWTP-1, WWTP-2 WWTP-3 outlets and outlet of BETP for the period Oct'22 to Mar'23 is enclosed as Annexure-VI.
• Six monthly compliance with Monitoring reports is being submitted at MoEF&CC, OSCPB and CPCB.
• Last six monthly compliance status with monitoring report was submitted vide letter no-JSWBPSL/MOEF&CC/22-23/058 on dated 30.11.2022</td></tr>
<tr><td>xviii</td><td>Waste Management</td><td>Iron ore fines, process dust, and mill scales shall be recycled to sinter plant to produce sinter. Sludge and slag from electric arc furnace (EAF) shall also be recycled in the sinter plant. Scrap shall be reused in the steel melting shop (SMS).</td><td>• Iron ore fines, process flue dust, mill scales and EAF slag generating in the plant is being recycled through sinter plant & pellet plant.
• Iron ore fines are consumed for making pellets which is further used in DRI Kilns.
All the scraps are being recycled in the Steel melting shop.</td></tr>
<tr><td>xix</td><td>Waste Management</td><td>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 granulated and used in manufacturing. Portland slag cement (PSC) in the proposed cement plant. Scrap shall be used in steel melting shop (SMS) EAF & SMS slag kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass kiln accretions shall be properly disposed off in environment friendly manner. Tar sludge from coke oven decanter, waste oil and oil sludge shall be properly disposed as per Hazardous waste (Management & Handling) Rules, 1989 as</td><td>Details of wastes and utilization
<table>
<tr><th>No</th><th>Waste Description</th><th>Utilization /disposal</th></tr>
<tr><td>01</td><td>Coal fines</td><td>Reused in Captive power plant</td></tr>
<tr><td>02</td><td>DRI char</td><td>Reused in Captive power plant</td></tr>
<tr><td>03</td><td>DRI accretion materials and refractory mass</td><td>Utilized in internal road and low lying area filling</td></tr>
<tr><td>04</td><td>SMS Slag</td><td>Metallic part recovered and residue utilized in road making and land filling</td></tr>
<tr><td>05</td><td>Blast furnace slag</td><td>Entire quantity sold to the Cement plant</td></tr>
</table></td></tr>
</table>

		subsequently amended.	06 | Mill scale and Scrap | Recycled in SMS
xx	Waste Management	All the slag shall be used for land filling inside the plant or used as building material only after passing through Toxic chemical Leachability Potential (TCLP) test. Toxic slag shall be disposed in secured landfill as CPCB guidelines. Otherwise hazardous substances shall be recovered from the slag and output waste and be disposed in secured landfill as per CPCB guidelines.	Metallic part of the slag recovered reused in sinter plant and remaining slag is being used internal road making ,railway ballast etc.
xxi	Waste Management	Proper utilization of fly ash shall be ensured as per Fly ash Notification, 1999 and subsequent amendment in 2003 & 2010. All the fly ash and BF slag shall be fully utilized in manufacturing of Pozollona Portland Cement (PPC) and Pozollona Slag Cement (PSC)	• The ash generated from CPP is being utilized in different area like fly ash brick manufacturing, low lying area filling, embankment rising and quarry void filling. In the year 2022-23 we have utilized 100 % of fly ash generated in our plant. • Fly ash is being supplied to 45 numbers of fly ash based brick manufacturing units in and around Jharsuguda, Sambalpur, Sundargarh and Deogarh District of Odisha free of cost with transportation subsidy @150/Ton for maximum utilization of ash..
xxii	Waste Management	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 the composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Bhubaneswar, OPCB and CPCB.	The non-utilizable & non-hazardous solid waste is disposed in designated solid waste disposal site as per the guidelines of CPCB & OSPCB. Annual returns of hazardous waste are being regularly submitted to SPCB Odisha
xxiii	Waste Management	A time bound action plan shall be submitted for solid waste, its proper utilization and disposal.	Solid waste is disposed as per the action plan specified in our EMP Plan. The solid waste generated from various plant units are being recycled within the plant. Necessary steps are being taken for maximum utilization of Solid waste.
xxiv	Risk Mitigation and Disaster Management	A Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional at Bhubaneswar OPCB and CPCB with in 3 months of issue of environment clearance letter.	Risk and Disaster Management Plan prepared from the very beginning of the plant operation and were submitted at your good office along with our six monthly compliance reports from time to time with addition of some new units, new hazardous chemicals Revised and up dated risk & Disaster Management Plan along with mitigation measures and the same is followed as and when required. and their inventory changes in key personnel etc. To combat emergency in the plant a dedicated department with all sorts of facilities has been established.

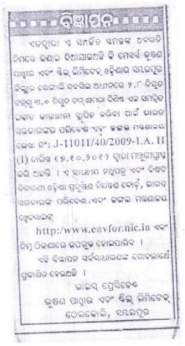
xxv	Greenbelt	As proposed, green belt shall be developed in 430 acres (33%) out of total 1300 acres in and around the plant as per the CPCB guidelines in consultation with DFO.	• We have constantly increased every year green coverage areas. • We have planted 91468 nos. of tree in Apr'22 to Mar'23 .
xxvi	Corporate Environmental Responsibility	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.	BPSL has implemented all recommendations made in the Charter of Corporate Responsibility for Environment Protection (CREP).
xxvii	Statutory compliance	Rehabilitation and Resettlement Plan for the project affected population including tribal shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Orissa Compensation paid in any case shall not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy,2007.	Rehabilitation and resettlement plan for displacement of families has already been implemented as per the policy of Government of Odisha.
xxviii	Miscellaneous	At least 5% of the total cost of the project shall be earmarked towards the corporate social responsibility and item wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program shall be ensured accordingly in a time bound manner.	Company is regularly contributing as per the demand raised by Rehabilitation & Periphery Development Advisory Committee (RPDAC) for taking up various peripheral development works by the District Administration.CSR activities for the year 2022-23 enclosed as **Annexure-XI**
xxix	Human Health Environment	The company shall provide housing for construction labor 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	Company has setup a separate labour colony for providing shelter to all temporary construction labors. Amenities such as toilets, wash rooms, drinking water, etc. is provided to them at the labour colony. Provision for free medical facility is provided to all workers at companies Occupational Health Center (OHC).

B. General Conditions:

No	Env. Parameter	Condition	Compliance Status
i	Statutory compliance	The project authorities must strictly adhere to the stipulations made by the Orissa pollution Control Board (OPCB) and the State Govt.	All relevant stipulations made by Odisha State Pollution Control Board and state government are being complied
ii	Statutory compliance	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forests.	No expansion or modification has been carried out without prior approval of Ministry of Environment Forest and Climate Change.
iii	Air Quality Monitoring and Preservation	The gaseous emissions from various process unit shall conform to the load/mass based standards notified by this Ministry on 19th May 1993 and standards prescribed from time to	• Gaseous emission level from various process conform to the load /mass based standard as notified by the Ministry on 19th May 1993 and standard prescribed from time to time.

		time. The Orissa Pollution Control Board (OPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	• 46 Nos. of Continuous Emission Monitoring systems have been installed in all major stacks of DRI, CPP, Iron & Steel making process Units. Stack emission monitoring data for the period Oct'22 to Mar'23 is enclosed as **Annexure-IV**. • In all the existing units adequate pollution control measures to maintain gaseous emission within prescribed standard. The list of Air Pollution control devices installed is enclosed as **Annexure-II.**
iv	Air Quality Monitoring and Preservation	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 NOx are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and OPCB, CPCB once in six months.	• Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant. ○ CAAQMS-1-Near Township ○ CAAQMS-2 Near Railway Gate ○ CAAQMS-3-Behind CRM ○ CAAQMS-4-Near ETP • All stations have been establish in consultation with the regional office OSPCB. • The monitoring report is being submitted in the Regional offices of Ministry as well as OSPCB regularly.
v	Air Quality Monitoring and Preservation	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measure like water sprinkling around the coal stockpiles and asphalting or concreting of the roads shall be done to control fugitive emissions.	To have control on fugitive emission following measures have been adopted • Adequate Air Pollution Control devices Equipment installed in all the existing units to maintain emission within limit. List of Pollution Control Devices installed is enclosed as **Annexure-II** • Five numbers of high pressure mist beams have been installed in Raw material handling stock yard area. • Bag Filters and Dry Fog systems are installed in Iron ore crushing and screening areas. • Fixed water sprinkling installed in stock yards, raw material handling areas and internal concrete roads for dust suppression. • 06 numbers of Mobile water sprinkling tankers are being engaged for regular water sprinkling on haul roads and in construction areas for control of fugitive dust emissions. • 05 Mechanized Road Sweepers have been engaged for continuous cleaning of concrete roads inside the plant premises to control fugitive dust. • Construction of internal roads is in progress. • All the conveyors belts and transfer points have been covered and enclosed.
vi	Water Quality Monitoring and Preservation	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 31st December, 1993 or as amended form time to time. The treated waste water shall be utilized	• Three numbers of waste water treatment plants are in operation for treatment of waste water generate from the plant. • Effluent Treatment Plant has been installed for treatment of process effluent generated from CRM complex. • Biological ETP has been installed for treatment of

		for plantation purpose.	effluent generate from Coke Oven-2. • The entire treated water is being used inside the plant in various applications such as ash conditioning, sprinkling, horticulture, firefighting, etc. • The monitoring reports of industrial waste water are being submitted to SPCB/CPCB/MoEF & CC at regular intervals.
vii	Noise Monitoring & Prevention	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measures including accosting 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.75dB(A)(day time) and 70dB(A)(night time)	• All the noise prone area such as turbine house and compressor house have been provided with adequate acoustics enclosure and silencer • No employee has been deployed full working hours at noise prone area. Whenever any employee goes for he/she uses earplug/earmuffs. • Noise level monitoring report for work zone and Ambient are for the period Oct'22 to Mar'23 is enclosed as **Annexure-X (A&B)**
viii	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	• An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours. • The OHC is having following facilities for providing health care to employees- • Essential drug delivery through pharmacy. • X ray services for diagnosis of musculoskeletal and internal abnormalities. • Pathology section for conducting bedside diagnosis and disease screening. • ECG facility to rule out cardiac abnormality. • Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury. • Minor OT to repair wound and Dressing of wounds and ulcers. • Clinic for diagnosis of common disease and injuries. • Basic and Advanced Ambulance services. • Facility for online training on preventable diseases. • Audiometry Booth for diagnosis of hearing losses. • As per the requirement of Factory Act 1948 all necessary record & documents is maintained.
ix	Miscellaneous	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.	M/s KRG Rain water foundation has recently conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc. Based on the approved Feasibility report the construction of Rain Water harvesting Structures will be started completed within about 2 years.
x	Corporate Environmental Responsibility	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	• As described in the EIA/EMP report all the Environmental protection measures implemented in the project. BPSL continuously undertaking various community developments activities under its socio-economic development programme. • These included construction /renovation of primary

		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.	and secondary schools in nearby villages, providing financial assistances to educational institutions, construction of roads, construction of temples, providing drinking water, etc. Company is regularly conducting free health camps in association with District Administration and provide free of cost medicines to the patients.
xi	Miscellaneous	As proposed. Rs.130.00 Crores and 14.00 Crores shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures .All the funds allocated shall be judiciously utilized to implement the conditions stipulated by the Ministry of environment and Forests as well as per the states Government. The funds so provided shall not be diverted for any other purpose.	• The funds allocated for installation of pollution control equipment and implementing environmental protection measures is being judiciously utilized to fulfill the conditions stipulated by the Ministry of Environment and Forests as well as State pollution Control Board.
xii	Statutory compliance	The Regional office of this Ministry at Bhubaneswar/CPCB/OSPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	• Six monthly compliance reports along with monitoring data are regularly submitted at the Regional Office of MoEF&CC as well at OSPCB/CPCB. • Last Six monthly compliance with monitoring report submitted vide letter no-JSWBPSL/MoEF&CC/22-23/058 on date 30.11.2022
xiii	Statutory compliance	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 OPCB 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 if 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 copy of the same shall be forwarded to the Regional office at Bhubaneswar.	• Information regarding issue of environmental clearance by the ministry was published in local Odia as well as English newspapers. Copies of the publications are as follows  NOTICE It has been brought to the notices "of all concern that M/s Bhushan Power & Steel Ltd. has been accordee permission by the Ministry of Environment & Forest, Government of India for establishment of enhance capacity from 2.8 mtpa to 3.00 mtpa integrated steel project at Rengali in Sambalpur district vide their letter No. J-11011/40 2009-IA. II(I) dtd. 17th October, 2012. Copies of document are available with State Pollution Control Board, Odisha and can be seen at http:// www.envfor.nic.in of the Ministry of Environment & Forest. Vice President Bhushan Power & Steel Ltd. Tehikola, Sambalpur, Odisha 
xiv	Statutory compliance	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any from whom	Information regarding issue of environmental clearance by the ministry was given at local panchayat.

		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.	
xv	Statutory compliance	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their web site 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 OPCB. The criteria pollutant levels namely, SPM, RSPM, SO_2, NO_x (ambient levels as well as sack emissions) or critical sectoral parameters like total Organic Compounds (TOC) including cyanide, phenol and COD etc. indicated for the projects shall be monitored and displayed at convenient location near the main gate of the company in the public domain.	• Six monthly compliance status report of the stipulated conditions has been uploaded in company's website https://www.jswbpsl.in/ and same along with monitoring data are regularly being submitted at the Regional Office of MOEF&CC as well at OSPCB/CPCB. • Last compliance report submitted vide letter no JSWBPSL/MoEF & CC/22-23/058 datd. 30.11.2022 • For display of the environmental parameters an electronic board has been installed at the main gate.
xvi	Statutory compliance	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environment conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional office of MOEF, the respective Zonal office of CPCB and the SPCB.	Six monthly compliance reports along with monitoring data are being submitted at the Regional Office of MOEF&CC, OSPCB, CPCB regularly. Last six-monthly compliance report was submitted vide letter no-JSWBPSL/MoEF&CC/22-23/058 on dated 30.11.2022
xvii	Statutory compliance	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.	Environmental statement in **Form – V** is being submitted at OSPCB Last Environment Statement for the financial year 2021-22 was submitted vide letter no-JSWBPSL/ENV/22-23/047 on dated 24.09.2022.

xviii	Miscellaneous	Project authorities shall inform the Regional office as well 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.	Complied

COMPLIANCE TO CONDITION LETTER
No.J-11011/40/2009-IA II(I) Dated 02.04.2010 for 2.8 MTPA

A. Specific Conditions:

No	Env. Parameter	Condition Description	Compliance Status
i	Statutory compliance	Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Govt. shall be ensured and regular reports submitted to the Ministry and its Regional Office at Bhubaneswar.	• All the conditions stipulated by Central & State Government Authorities are being complied. • Half yearly compliance reports along with monitoring data are being submitted at OSPCB / CPCB & MoEF&CC regularly. • Last six monthly compliance report was submitted vide letter no-JSWBPSL/MoEF &CC/22-23/058 on dated 30.11.2022
ii	Air Quality Monitoring and Preservation	Efforts shall be made to 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 stacks shall be provided along with the sufficient air pollution control devices viz. Electrostatic precipitator (ESP),gas cleaning plant cyclone, multi-cyclone, wet scrubber, bag house, bag filters etc. shall be provide to keep the emission levels below 50 mg/Nm^3 by installing energy efficient technology. 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.	Adequate control measures have been adopted to control RSPM. • Five numbers of high pressure mist beam has been installed in Raw material handling stock yard area. • 06 numbers of Mobile water sprinkling tankers are being engaged for regular water sprinkling on haul roads and in construction areas for control of fugitive dust emissions. • 05 nos. of Mechanized road sweepers have been engaged for continuous cleaning of concrete roads inside the plant premises to control fugitive dust. • Fixed water sprinkling have been installed in stock yards, raw material handling areas and internal concrete roads for dust suppression. • 04 Numbers of Continuous Ambient Air Quality Monitoring System have been installed within plant in consultation with OSPCB to monitor the Ambient Air Quality. • 46 numbers of Continuous Emission Monitoring systems have been installed in all stacks of DRI, CPP, Iron & Steel making process Units. • Bag Filters and Dry Fog systems are installed in Iron ore crushing and screening areas. • Dry BF Gas Cleaning system and bag filters are provided in Blast furnace-1. ESP is provided for in plant de dusting of various units including DRI and Sinter plant. • ESP's are provided in DRI-WHRB, AFBC & CFBC Boilers of CPP and Sinter Plant. • Fumes treatment plant installed at SMS-1 and SMS-2. • Stack emission monitoring data for the period

			Oct'22 to Mar'23 is enclosed as **Annexure-IV** • A list of Air Pollution Control Devices installed is enclosed as **Annexure–II** • In the event of failure of any pollution control system, automatic interlocking facility has been provided with all units to hold the process and minimize the emission. • In the event of power failure in DRI automatically the DG starts and supply power to auxiliaries, hold the Process and minimize the emission. • Six monthly monitoring reports are being submitted to MoEFCC, CPCB and SPCB regularly.
iii	Air Quality Monitoring and Preservation	As proposed, electrostatic precipitator (ESP) shall be provided to Sinter Plant, WHRB, CFBC, DRI and Slag Cement Plants; bag house to Blast Furnace and ESP & bag filters to by-product recovery type of coke oven to control SPM levels within 50 mg/Nm^3. Fume extraction system with bag filters shall be provided to electric arc furnace and ladle furnace.	As mentioned in our Environment Management Plan ESPs and other Pollution Control systems have been installed to control dust emission in different units. The details are as follows. DRI/WHRB • There are 12 numbers of ESP installed at the Hot end of the DRI Kiln, 3 numbers ESP and 3 numbers of Bag filter for dedusting system at cold end of the DRI kiln. Captive Power Plant: • Two numbers of ESP installed at CPP 40 MW and 60MW AFBC Boilers, and 06 nos. of ESP installed in CFBC boilers of 3x130 MW CPP to keep the emission well within the limit Blast Furnace • One de dusting system have been installed in cast house of Blast furnace -1 followed by Dry Gas cleaning plant. In BF-2 two nos. of dedusting systems have been installed in Cast house and stock house to keep the emission level within the norms. Coke Oven • One dedusting system installed in Coke oven -2 for control of emission. Steel Melting Shop • Four nos. of fumes extraction and treatment plant along with bag filters have been installed to control the fugitive emission in the EAF and LF of SMS-I, Similarly in SMS-II one FTP have been installed. • In the proposed cement plant adequate pollution control system ESP/Bag filter will be installed.

iv	Air Quality Monitoring and Preservation	Hot gases from DRI kiln shall be passed through Dust Setting Chamber (DCS) to remove coarse solids and after Burning Chambers (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 DRI Units have been equipped with DCS, ABC followed by independent waste heat recovery boilers (WHRB) for power generation. • Independent ESP's have been installed for all the DRI kilns. There are 12 numbers .of ESPs have been installed in the DRI complex.
v	Statutory compliance	All the standards prescribed for the coke oven plants shall be followed as per the latest guidelines, Naphthalene scrubbing unit shall be provided to remove residual naphthalene from coke oven gas. Ammonia released in de-sulphuriziton section of coke oven plant shall be catalytically cracked to Nitrogen and Hydrogen. BF top gas shall be cleaned in dust catcher and gas cleaning plant (GCP) comprising of bag filters and used in furnace of CSP, BF, EAF, sinter plant, lime & dolo plant. Bag filters with adequate stack height shall be provided to lime and dolo plant. Proper and full utilization of coke oven gases in power plant using heat recovery steam generators shall be ensured and no flue gases shall be discharged into the air.	All efforts are being taken to comply with the prescribed standards and guidelines for the coke oven facilities. • The Coke oven-1 is of Non Recovery type. The hot gas of coke oven is being utilized in the power generation passing through waste heat recovery boilers (WHRB) feeding to two numbers of turbo generators which generates 16 MW power. • The Coke Oven Plant -2 (Recovery type) has been installed with adequate pollution control equipments like Pushing & Charging Emission Control system and Bag filter. Stack height has been designed for better dispersion of pollutants. • The byproduct plant is equipped with naphthalene scrubbing unit and Desulphurization unit to remove residual naphthalene from coke oven gas. • The Coke oven gas is being utilized systematically and no flue gas discharged into atmosphere. • BF top Gas is cleaned in dust catcher and Gas cleaning plant and is being used in Tunnel Furnace of CSP, Sinter Plant, Lime/Dolo Plant, SMS, Wire and Rod Mill and Pellet plant.
vi	Statutory compliance	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 National Ambient Air quality Emission standards issued by the Ministry vide G.S.R No. 826(E) dated 16th November 2009 are being followed. • Monitoring reports for the period Oct'22 to Mar'23 is enclosed as **Annexure-III.**
vii	Statutory compliance	All the standards prescribed for the coke oven plants shall be followed as per the latest guidelines. Proper and full utilization of coke oven gases in power plant using heat recovery steam generators shall be ensured and no flue gases shall be discharged into the air.	All the standards prescribed for the coke oven plants are being followed. • In coke oven -1 hot gas is being completely utilized in Waste Heat Recovery Boilers to generate 2x8 MW power. • In Coke Oven-2 De dusting and Pushing and Charging emission control system have been installed.

<table>
<tr><td></td><td></td><td></td><td>• Biological effluent treatment plant (BETP) have been installed for treatment of effluent generate from byproduct plant.
• The clean coke oven gas is being utilized in coke oven battery heating, Tunnel furnace of CSP, Lime/Dolo plant and pellet plant.</td></tr>
<tr><td>viii</td><td>Air Quality Monitoring and Preservation</td><td>In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Bag filters shall be provided at coal mill, intermediate bin/separation building, product storage silo, day bin, iron ore circuit, load out, cooler discharge to control fugitive dust emission. Dust suppression system with water sprinklers shall be provided at raw material stock piles and loading/unloading point. Dust extraction system with bag filters shall be provided at all raw material transfer points, crusher house, junction towers and feed points. All conveyors shall be completely covered by GI sheets. All the roads shall be asphalted to control dust emissions.</td><td>Adequate control measures have been adopted to control fugitive dust generation
• ESP's are provided in DRI-WHRB (12 nos.), AFBC.(02nos.) & CFBC(06 nos.) Boilers of CPP, Sinter Plant and pellet plant.
• Installation of 09 nos. of Bag filters at various building and junction houses of RMHS are and Dry Fog systems are installed in Iron ore and coal circuit crushing and screening areas.
• Fumes treatment plant has been installed at SMS-1(4 nos.) and SMS-2(01 no).
• Dry BF Gas Cleaning system and bag filters are provided in Blast furnace-1. ESP is provided for in plant de dusting of various units including DRI and Sinter plant.
• Fixed water sprinkler have been installed in stock yards, raw material handling areas and internal Concrete roads for dust suppression.
• 05 numbers of high pressure mist beam has been installed in Raw material handling stockyard area.
• 06 numbers of Mobile water sprinkling tankers are being engaged for periodical water sprinkling on all the internal roads within the plant premises.
• 05 nos. of Mechanized road sweepers have been engaged for continuous cleaning of concrete road inside the plant premises to control fugitive dust.
• In the following units Fugitive emission is being monitored and report for the period Oct'22 to Mar'23 is enclosed as Annexure-V
<table>
<tr><th>No</th><th>Name of the units</th><th>Frequency</th></tr>
<tr><td>1</td><td>RMHS</td><td rowspan="9">Once in a month</td></tr>
<tr><td>2</td><td>DRI</td></tr>
<tr><td>3</td><td>Coke Oven</td></tr>
<tr><td>4</td><td>Power Plant</td></tr>
<tr><td>5</td><td>Pellet plant</td></tr>
<tr><td>6</td><td>Sinter plant</td></tr>
<tr><td>7</td><td>Blast Furnace</td></tr>
<tr><td>8</td><td>Steel melting shop</td></tr>
<tr><td>9</td><td>Lime plant</td></tr>
</table>
</td></tr>
</table>

ix	Air Quality Monitoring and Preservation	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 it CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R 414(E) dated 30th May.2008 shall be followed.	In all the existing units adequate air pollution control devices have been installed to keep gaseous emission within limit. Monitoring Report is attached as **Annexure-IV.**
x	Air Quality Monitoring and Preservation	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.	• Vehicles carrying raw materials and finished products are being covered with tarpaulin. • Water sprinkling arrangements have been made at raw material handling areas to control dust emission during loading and unloading raw materials. • Mobile water sprinkling tankers have been engaged for regular water sprinkling on raw material transporting roads to control fugitive dust. • Two numbers of Wheel washing system have already been installed to clean the vehicle wheel and control the fugitive dust on road. • Four more nos. of Wheel washing system has been procured to installed in Raw material handling areas and the exit gate of the plant
xi	Water Quality Monitoring and Preservation	Total water requirement from Hirakud Dam shall not exceed 5,500 m^3/hr although 'Permission' for the drawl of 10,194 m^3/hr.water is accorded by the Water Resource Department. Govt. of Orissa vide letter dated 17th June, 2003. Efforts shall further be made to use maximum water from the rain water harvesting sources. As proposed, modified wet quenching system shall be provided to coke oven plant. Air cooled condensers and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent shall be treated and used for ash handing, dust suppression and green belt development. No effluent shall be discharged and 'Zero' discharge shall be adopted. Sanitary sewages shall be treated	• Presently 2427 M3/hr of water drawing from Hirakud Reservoir for our existing operating facilities. • Waste water is being treated in waste water treatment plants (WWTP-1,WWTP-2 and WWTP-3) and treated water reused within plant premises for developing green belt, fire fighting, process make up water for coal washery, iron ore beneficiation plant and pellet plant and ash conditioning at captive power plant. • The process effluent CRM is being treated in effluent treatment plant of capacity 750 KLD and effluent from coke oven treated in BETP of capacity 75 M3/hr and reused within plant • All office buildings and plant toilets are provided with individual septic tanks and soak pits. • Three numbers of Sewage treatment plant has been provided of capacity STP-1-500 KLD,STP -2-900 KLD and STP-3-900 KLD for treatment

		in septic tank followed by soak pit and used for green belt development.	of sewage in township maintain zero discharge. • To achieve ZLD we have installed 510 M3/hr Reverse Osmosis plant for maximize the utilization of the treated water
xii	Water Quality Monitoring and Preservation	Effluent treatment plant (ETP) shall be provided for the treatment of Phenolic effluent from coke oven plant and the treated water shall be used for sprinkling at coal stockyard. Clarifier, sludge pond and filter press shall be provided in raw water treatment plant. DM plant water shall be neutralized in neutralization pit and the treated water shall be used for ash handling. Process wastewater shall be recycled /reused in the plant. Cooling tower blow down shall be in the plant for dust suppression and slag granulation, pig casting machine etc. Provision of separate drains for the process and storm water shall be kept.	• The phenolic effluent is being treated in BETP plant and treated effluent is being reused for quenching of hot coke in Coke oven-2. • Neutralization pits have been provided in DM Plant for neutralizing the effluent and treated water is used in ash silos for ash conditioning. • Process effluent/waste water generated from other processes such as Cold Rolling Mill Complex is being treated in Effluent Treatment Plant and treated wastewater is used for sprinkling on haul roads to control fugitive emissions.
xiii	Water Quality Monitoring and Preservation	All the wastewater from the coke oven plant containing, cyanide, phenol and COD etc. Shall be properly treated in the BOD plant. Continuous monitoring of Total Organic compounds (TOC) including cyanide, phenol and COD etc. shall be done at the outlet of ETP (BOD plant) and recovery of products like tar, ammonia, naphthalene etc shall be ensured.	• The Coke Oven -1 is non-recovery type. Water is only used for quenching which is collected in settling tanks and reused in the process of quenching. • The waste water containing cyanide, phenol and COD is being treated in BETP plant and treated effluent is being reused for quenching of hot coke in Coke oven-2. • Online monitoring system have been installed to monitor the treated water quality of the effluent generated from the BETP plant.
xiv	Water Quality Monitoring and Preservation	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	M/s KRG Rain water foundation has conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc. Based on the approved feasibility report the construction of Rain Water harvesting Structures will be started completed within about 2 years. BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon.
xv	Statutory compliance	'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.	As a measure of water conservation and also to ensure Zero liquid discharge, For 100% reuse and utilization of treated waste water RO plant of capacity

			510 m^3/hr has been commissioned & the same is in Operation. All the 03 Nos. of existing STP's have been upgraded to meet the prescribed standards. All the STP's are operating satisfactorily. All the effluent water and storm water drains have been segregated throughout the plant. Up-gradation of ETP in CRM is under Commissioning
xvi	Statutory compliance	The water consumption shall not exceed 16 m^3/Ton of Steel as per prescribed standard.	Consumption of water in steel making areas is maintained below the prescribed standard. Specific water consumption for the year 2022-23 is 3.13 M3
xvii	Water Quality Monitoring and Preservation	Regular monitoring of influent and effluent surface, sub surface and ground water shall be ensured and treated wastewater 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 officer at Bhubaneswar, OPCB and CPCB	• Monitoring of treated effluent, treated waste water and ground water is being monitor regularly. • Analysis report of ground water quality in the surrounding villages is enclosed as **Annexure-VII**. • Treated effluent quality of ETP outlet, treated waste water quality WWTP-1, WWTP-2 WWTP-3 outlets and outlet of BETP for the period Oct'22 to Mar'23 is enclosed as **Annexure-VI.** • Six monthly compliances with Monitoring reports is being submitted at MoEF&CC, OSCPB and CPCB. • Last six monthly compliance status with monitoring report was submitted vide letter no-JSWBPSL/MOEF&CC/22-23/058 on dated 30.11.2022
xviii	Waste Management	Iron ore fines, process dust, and mill scales shall be recycled to sinter plant to produce sinter. Sludge and slag from electric arc furnace (EAF) shall also be recycled in the sinter plant. Scrap shall be reused in the steel melting shop (SMS).	• Iron ore fines, process flue dust, mill scales and EAF slag generating in the plant is being recycled through sinter plant & pellet plant. • Iron ore fines are consumed for making pellets which is further used in DRI Kilns. All the scraps are being recycled in the Steel melting shop.
xix	Waste Management	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 granulated and used in manufacturing. Portland slag cement (PSC) in the proposed cement plant. Scrap shall	Details of wastes and utilization No | Waste Description | Utilization /disposal 01 | Coal fines | Reused in Captive power plant 02 | DRI char | Reused in Captive power plant 03 | DRI accretion materials and | Utilized in internal road and low lying area filling

		be used in steel melting shop (SMS) EAF & SMS slag kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass kiln accretions shall be properly disposed off in environment friendly manner. Tar sludge from coke oven decanter, waste oil and oil sludge shall be properly disposed as per Hazardous waste (Management & Handling) Rules, 1989 as subsequently amended.	<table><tr><td></td><td>refractory mass</td><td></td></tr><tr><td>04</td><td>SMS Slag</td><td>Metallic part recovered and residue utilized in road making and land filling</td></tr><tr><td>05</td><td>Blast furnace slag</td><td>Entire quantity sold to the Cement plant</td></tr><tr><td>06</td><td>Mill scale and Scrap</td><td>Recycled in SMS</td></tr></table>
xx	Waste Management	All the slag shall be used for land filling inside the plant or used as building material only after passing through Toxic chemical Leachability Potential (TCLP) test. Toxic slag shall be disposed in secured landfill as CPCB guidelines. Otherwise hazardous substances shall be recovered from the slag and output waste and be disposed in secured landfill as per CPCB guidelines.	Metallic part of the slag recovered reused in sinter plant and remaining slag is being used internal road making ,railway ballast etc.
xxi	Waste Management	Proper utilization of fly ash shall be ensured as per Fly ash Notification, 1999 and subsequent amendment in 2003 & 2010. All the fly ash and BF slag shall be fully utilized in manufacturing of Pozollona Portland Cement (PPC) and Pozollona Slag Cement (PSC)	• The ash generated from CPP is being utilized in different area like fly ash brick manufacturing, low lying area filling, embankment rising and quarry void filling. In the year 2022-23 we have utilized 100 % of fly ash generated in our plant. • Fly ash is being supplied to 45 numbers of fly ash based brick manufacturing units in and around Jharsuguda, Sambalpur, Sundargarh and Deogarh District of Odisha free of cost with transportation subsidy @150/Ton for maximum utilization of ash..
xxii	Waste Management	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 the composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Bhubaneswar, OPCB and CPCB.	The non-utilizable & non-hazardous solid waste is disposed in designated solid waste disposal site as per the guidelines of CPCB & OSPCB. Annual returns of hazardous waste are being regularly submitted to SPCB Odisha
xxiii	Waste Management	A time bound action plan shall be submitted for solid waste, its proper utilization and disposal.	Solid waste is disposed as per the action plan specified in our EMP Plan. The solid waste generate from various plant units are being recycled within the plant. Necessary steps are being taken for maximum utilization of Solid waste.
xxiv	Risk Mitigation and Disaster Management	A Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional at Bhubaneswar OPCB	Risk and Disaster Management Plan prepared from the very beginning of the plant operation and were submitted at your good office along with our six monthly compliance reports from time to time with

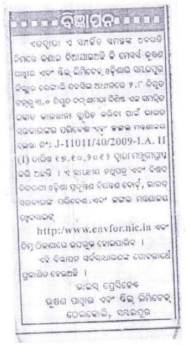
		and CPCB with in 3 months of issue of environment clearance letter.	addition of some new units, new hazardous chemicals Revised and up dated risk & Disaster Management Plan along with mitigation measures and the same is followed as and when required. and their inventory changes in key personnel etc. To combat emergency in the plant a dedicated department with all sorts of facilities has been established.
xxv	Greenbelt	As proposed, green belt shall be developed in 430 acres (33%) out of total 1300 acres in and around the plant as per the CPCB guidelines in consultation with DFO.	• We have constantly increased every year green coverage areas. • We have planted 91468 of tree in Apr'22 to Mar'23 .
xxvi	Corporate Environmental Responsibility	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.	BPSL has implemented all recommendations made in the Charter of Corporate Responsibility for Environment Protection (CREP).
xxvii	Statutory compliance	Rehabilitation and Resettlement Plan for the project affected population including tribal shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Orissa Compensation paid in any case shall not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy,2007.	Rehabilitation and resettlement plan for displacement of families has already been implemented as per the policy of Government of Odisha.
xxviii	Miscellaneous	At least 5% of the total cost of the project shall be earmarked towards the corporate social responsibility and item wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program shall be ensured accordingly in a time bound manner.	Company is regularly contributing as per the demand raised by Rehabilitation & Periphery Development Advisory Committee (RPDAC) for taking up various peripheral development works by the District Administration.CSR activities for the year 2022-23 enclosed as **Annexure-XI.**
xxix	Human Health Environment	The company shall provide housing for construction labor 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	Company has setup a separate labour colony for providing shelter to all temporary construction labors. Amenities such as toilets, wash rooms, drinking water, etc. is provided to them at the labour colony. Provision for free medical facility is provided to all workers at companies Occupational Health Center (OHC).

B. General Conditions:

No	Env. Parameter	Condition	Compliance Status
i	Statutory compliance	The project authorities must strictly adhere to the stipulations made by the Orissa pollution Control Board (OPCB) and the State Govt.	All relevant stipulations made by Odisha State Pollution Control Board and state government are being complied
ii	Statutory compliance	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forests.	No expansion or modification has been carried out without prior approval of Ministry of Environment Forest and Climate Change.
iii	Air Quality Monitoring and Preservation	The gaseous emissions from various process unit shall conform to the load/mass based standards notified by this Ministry on 19th May 1993 and standards prescribed from time to time. The Orissa Pollution Control Board (OPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	• Gaseous emission level from various process conform to the load /mass based standard as notified by the Ministry on 19th May 1993 and standard prescribed from time to time. • Continuous Emission Monitoring systems have been installed in 46 numbers major stacks of DRI, CPP, Iron & Steel making process Units. Stack emission monitoring data for the period Oct'22 to Mar'23 is enclosed as **Annexure-IV**. • In all the existing units adequate pollution control measures to maintain gaseous emission within prescribed standard. The list of Air Pollution control devices installed is enclosed as **Annexure-II.**
iv	Air Quality Monitoring and Preservation	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 NOx are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and OPCB, CPCB once in six months.	• Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant. ○ CAAQMS-1-Near Township ○ CAAQMS-2 Near Railway Gate ○ CAAQMS-3-Behind CRM ○ CAAQMS-4-Near ETP • All stations have been establish in consultation with the regional office OSPCB. • The monitoring report is being submitted in the Regional offices of Ministry as well as OSPCB regularly.
v	Air Quality Monitoring and Preservation	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measure like water sprinkling around the coal stockpiles and asphalting or concreting of the roads shall be done to control fugitive emissions.	To have control on fugitive emission following measures have been adopted • Adequate Air Pollution Control devices Equipment installed in all the existing units to maintain emission within limit. List of Pollution Control Devices installed is enclosed as **Annexure-II** • Five numbers of high pressure mist beam has been installed in Raw material handling stock yard area. • Bag Filters and Dry Fog systems are installed in Iron ore crushing and screening areas. • Fixed water sprinkling installed in stock yards, raw material handling areas and internal concrete roads for dust suppression.

			• 06 numbers of Mobile water sprinkling tankers are being engaged for regular water sprinkling on haul roads and in construction areas for control of fugitive dust emissions. • 05 Mechanized road sweepers have been engaged for continuous cleaning of concrete roads inside the plant premises to control fugitive dust. • Construction of internal roads is in progress. • All the conveyors belts and transfer points have been covered and enclosed.
vi	Water Quality Monitoring and Preservation	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 31st December, 1993 or as amended form time to time. The treated waste water shall be utilized for plantation purpose.	• Three numbers of waste water treatment plants are in operation for treatment of waste water generated from the plant. • Effluent Treatment Plant has been installed for treatment of process effluent generated from CRM complex. • Biological ETP has been installed for treatment of effluent generated from Coke Oven-2. • The entire treated water is being used inside the plant in various applications such as ash conditioning, sprinkling, horticulture, firefighting, etc. • The monitoring reports of industrial waste water are being submitted to SPCB/CPCB/MoEF & CC at regular intervals.
vii	Noise Monitoring & Prevention	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by providing noise control measures including accosting 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.75dB(A)(day time) and 70dB(A)(night time)	• All the noise prone area such as turbine house and compressor house have been provided with adequate acoustics enclosure and silencer • No employee has been deployed full working hours at noise prone area. Whenever any employee goes for he/she uses earplug/earmuffs. • Noise level monitoring report for work zone and Ambient are for the period Oct'22 to Mar'23 is enclosed as **Annexure-X (A&B).**
viii	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	• An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours. • The OHC is having following facilities for providing health care to employees- • Essential drug delivery through pharmacy. • X ray services for diagnosis of musculoskeletal and internal abnormalities. • Pathology section for conducting bedside diagnosis and disease screening. • ECG facility to rule out cardiac abnormality. • Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury. • Minor OT to repair wounds and Dressing of wounds and ulcers. • Clinic for diagnosis of common disease and injuries.

			• Basic and Advanced Ambulance services. • Facility for online training on preventable diseases. • Audiometry Booth for diagnosis of hearing losses. • As per the requirement of Factory Act 1948 all necessary record & documents is maintained.
ix	Miscellaneous	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.	M/s KRG Rain water foundation has recently conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc. Based on the approved Feasibility report the construction of Rain Water harvesting Structures will be started completed within about 2 years.
x	Corporate Environmental Responsibility	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.	• As described in the EIA/EMP report all the Environmental protection measures implemented in the project. BPSL continuously undertaking various community developments activities under its socio-economic development programme. • These included construction /renovation of primary and secondary schools in nearby villages, providing financial assistances to educational institutions, construction of roads, construction of temples, providing drinking water, etc. Company is regularly conducting free health camps in association with District Administration and provide free of cost medicines to the patients.
xi	Miscellaneous	As proposed. Rs.130.00 Crores and 14.00 Crores shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures .All the funds allocated shall be judiciously utilized to implement the conditions stipulated by the Ministry of environment and Forests as well as per the states Government. The funds so provided shall not be diverted for any other purpose.	• The funds allocated for installation of pollution control equipment and implementing environmental protection measures is being judiciously utilized to fulfill the conditions stipulated by the Ministry of Environment and Forests as well as State pollution Control Board.
xii	Statutory compliance	The Regional office of this Ministry at Bhubaneswar/CPCB/OSPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	• Six monthly compliance reports along with monitoring data are regularly being submitted at the Regional Office of MoEF&CC as well at OSPCB/CPCB. • Last Six monthly compliance with monitoring report submitted vide letter no-JSWBPSL/MoEF&CC/22-23/058 on date 30.11.2022
xiii	Statutory compliance	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the	• Information regarding issue of environmental clearance by the ministry was published in local Odia as well as English newspapers. Copies of the publications are as follows

		clearance letter are available with the OPCB 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 if 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 copy of the same shall be forwarded to the Regional office at Bhubaneswar.	 
xiv	Statutory compliance	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zilla 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.	Information regarding issue of environmental clearance by the ministry was given at local panchayat.
xv	Statutory compliance	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their web site 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 OPCB. The criteria pollutant levels namely, SPM, RSPM, SO_2, NO_x (ambient levels as well as sack emissions) or critical sectoral parameters like total Organic Compounds (TOC) including cyanide, phenol and COD etc. indicated for the projects shall be monitored and displayed at convenient location near the main gate of the company in the public domain.	• Six monthly compliance status report of the stipulated conditions has been uploaded in company's website https://www.jswbpsl.in/ and same along with monitoring data are regularly being submitted at the Regional Office of MOEF&CC as well at OSPCB/CPCB. • Last compliance report submitted vide letter no JSWBPSL/MoEF & CC/22-23/058 datd. 30.11.2022 • For display of the environmental parameters an electronic board has been installed at the main gate.
xvi	Statutory compliance	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environment conditions including results of monitored data	Six monthly compliance reports along with monitoring data is being submitted at the Regional Office of MOEF&CC, OSPCB, CPCB regularly. Last six-monthly compliance report was submitted vide letter

		(both in hard copies as well as by e-mail) to the respective Regional office of MOEF, the respective Zonal office of CPCB and the SPCB.	no-JSWBPSL/MoEF&CC/22-23/058 on dated 30.11.2022
xvii	Statutory compliance	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.	Environmental statement in Form – V is being submitted at OSPCB Last Environment Statement for the financial year 2021-22 was submitted vide letter no-JSWBPSL/ENV/22-23/047 on dated 24.09.2022.
xviii	Miscellaneous	Project authorities shall inform the Regional office as well 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.	Complied

COMPLIANCE TO CONDITIONS OF LETTER
No.J-11011/372/2006-IA II (I) Dated-29.03.2007 for 2.2 MTPA

A. Specific Condition:

No	Env. Parameter	Condition	Compliance status
i	Air Quality Monitoring and Preservation	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19thMay, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view in the nature of the industry and its size and location. At no time the emission level shall go beyond the prescribed standards. On-line continuous stack emission monitoring for all the major stacks will be carried out and reports submitted to the OSPCB & CPCB. The emission levels from all the sources shall be kept below 100 mg/Nm^3.Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit**.**	• Gaseous emission level from various processes conforms to the load /mass based standard as notified by the Ministry on 19th May 1993 and standard prescribed from time to time. • Continuous Emission Monitoring systems have been installed in 46 numbers major stacks of DRI, CPP, Iron & Steel making process Units. List of Continuous emission Monitoring System enclose as **Annexure-I** • Stack emission monitoring data for the period Oct22' to Mar'23 is enclosed as **Annexure-IV.** • In all the existing units adequate pollution control measures have been installed to maintain gaseous emission within prescribed standard. • The list of Air Pollution Control devices installed is enclosed as **Annexure-II** • In the event of power failure in DRI automatically the DG starts and supply power to auxiliaries, hold the process and minimize the emission.
ii	Statutory compliance	Continuous online ambient air quality monitoring stations shall be set-up at three locations around the project site and reports submitted to the OSPCB & CPCB.	Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant. . ○ CAAQMS-1-Near Township ○ CAAQMS-2 Near Railway Gate ○ CAAQMS-3-Behind CRM ○ CAAQMS-4 -Near ETP • All stations have been established in consultation with the regional office OSPCB. • Ambient Air Quality Monitoring data for the period Oct'22 to Mar'23 is enclosed as **Annexure – III**
iii	Air Quality Monitoring and Preservation	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Dust suppression system shall be provided to coal/raw material stockpiles. Bag house shall be provided to BF-dry cleaning system. Bag filters shall be provided to fume extraction system, RMP Crusher etc. ESP shall be provided to Pellet Plant, DRI Kilns, BF stock house, Sinter Plant, DRI – WHRB Stacks, AFBC, CFBC, Lime Plant Kiln, Dolo Plant Kiln and Ferro-Alloy Plant. Dry fog dust suppression system shall be provided to BF cast house. Further, specific measures like water sprinkling shall be carried out at the coal yard, wagon tippler and truck tippler etc. Fugitive emissions shall be controlled, regularly monitored	Adequate control measures have been adopted to control fugitive dust generation • ESP's have been provided in DRI-WHRB (12 nos.), AFBC (02nos.) & CFBC (06 nos.) Boilers of CPP, Sinter Plant and pellet plant. • Installation of 09 nos. of Bag filters at various building and junction houses of RMHS are and Dry Fog systems are installed in Iron ore and coal circuit crushing and screening areas. • Fumes treatment plant has been installed at SMS-1 (4 nos.) and SMS-2(01 no). • Dry BF Gas Cleaning system and bag filters have be provided in Blast furnace-1. • ESP has been provided for in plant de dusting of

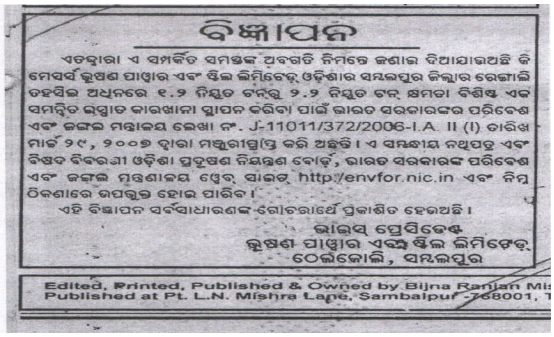
<table>
<tr><td></td><td></td><td>and records maintained.</td><td>various units including DRI and Sinter plant.
• Details of Air pollution Control Devices installed is enclosed as Annexure-II.
• Fixed water sprinkler have been installed in stock yards, raw material handling areas and internal Concrete roads for dust suppression.
• Six numbers of high pressure mist beam has been installed in Raw material handling stockyard area.
• Six numbers of Mobile water sprinkling tankers are being engaged for periodical water sprinkling on all the internal roads within the plant premises.
• Five numbers of Mechanized road sweepers have been engaged for continuous cleaning of concrete road inside the plant premises to control fugitive dust.
• In the following units fugitive emission is being monitored and report for the period Oct'22 to Mar'23 is enclosed as Annexure-V.
<table><tr><th>No</th><th>Name of the units</th><th>Frequency of monitoring</th></tr><tr><td>1</td><td>RMHS</td><td rowspan="9">Once in Month</td></tr><tr><td>2</td><td>DRI</td></tr><tr><td>3</td><td>Coke Oven</td></tr><tr><td>4</td><td>Captive Power Plant</td></tr><tr><td>5</td><td>Pellet plant</td></tr><tr><td>6</td><td>Sinter plant</td></tr><tr><td>7</td><td>Blast furnace</td></tr><tr><td>8</td><td>Steel melting shop</td></tr><tr><td>9</td><td>Lime plant</td></tr></table></td></tr>
<tr><td>iv</td><td>Water Quality Monitoring and Preservation</td><td>Total requirement of the water from Hirakud Reservoir shall not exceed 93,252 m^3/day as per the permission accorded by the Department of Water resources, Govt. of Orissa. All the treated wastewater shall be recycled & reuse either in the premises or for green belt development. No effluent shall be discharged outside the premises and "Zero" discharge shall be adopted. Domestic wastewater shall be treated in septic tank followed by soak pits.</td><td>• Presently 2427 M3/hr of water drawing from Hirakud Reservoir for our existing operating facilities.
• Waste water is being treated in waste water treatment plants (WWTP-1,WWTP-2 and WWTP-3) and treated water reused within plant premises for developing green belt, fire fighting, process make up water for coal washery, iron ore beneficiation plant and pellet plant and ash conditioning at captive power plant.
• The process effluent CRM is being treated in effluent treatment plant of capacity 500 KLD and effluent from coke oven treated in BETP of capacity 75 M3/hr and reused within plant
• All office buildings and plant toilets are provided with individual septic tanks and soak pits.
• Three numbers of Sewage treatment plant has been provided of capacity STP-1-750 KLD,STP</td></tr>
</table>

<table>
<tr><td></td><td></td><td></td><td>-2-900 KLD and STP-3-900 KLD for treatment of sewage in township maintain zero discharge.
• To achieve ZLD we have installed 510 M3/hr Reverse Osmosis plant for maximize the utilization of the treated water</td></tr>
<tr><td>v</td><td>Water Quality Monitoring and Preservation</td><td>Ground water monitoring around the solid waste disposal site/ secure landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at , CPCB and OSPCB.</td><td>Ground water monitoring in the surroundings villages and solid waste disposal area is regularly done. Report of ground water analysis is enclosed as Annexure – VII</td></tr>
<tr><td>vi</td><td>Waste Management</td><td>Slag from BF shall be granulated and sold to cement plants. SMS slag from IF, EAF and LF shall be used for internal road making and filling low lying areas. Scrap from SMS shall be recycled in the steel plant. Scale and debris from CSP and rolling mill shall be reused in the sinter plant itself. Dust from DRI, Pellet Plant and SMS shall be recycled to sinter plant. No char shall be disposed off and efforts shall be made to use in AFBC boiler.</td><td>Details of Solid waste utilization is as follows.
<table>
<tr><th>No</th><th>Units</th><th>Solid waste</th><th>Utilization</th></tr>
<tr><td>01</td><td>BF</td><td>BF Slag</td><td>The entire slag generating from BF is granulated and sold to cement manufacturers.</td></tr>
<tr><td>02</td><td>SMS</td><td>SMS slag</td><td>Slag is being crushed and the metallic content is recovered and recycled through Sinter Plant .The residue after recovery is used for internal road making and in leveling of low lined areas in the plant.</td></tr>
<tr><td>03</td><td>DRI</td><td>Char</td><td>Char generate from DRI unit is blended with coal and used in AFBC and CFBC boilers of Captive Power plant</td></tr>
<tr><td>04</td><td>CSP & Rolling Mill</td><td>Scales & derbies from CSP and Rolling mill</td><td>Scales and debris generating from rolling mill and SMS is recycled in Sinter Plant</td></tr>
<tr><td>05</td><td>Different Units</td><td>Scrap</td><td>Recycled In Steel melting shop</td></tr>
</table></td></tr>
</table>

vii	Waste Management	Possibilities shall be explored regarding use of Fly Ash from AFBC, CFBC boilers of CPP by cement and brick-manufacturing units in the nearby areas. Ash shall be utilized as per the 10 years action plan submitted. Bottom Ash shall be disposed off in a suitable designated landfill as per CPCB guidelines to prevent leaching to the sub-soil and underground aquifer.	• The ash generated from CPP is being utilized in different area like fly ash brick manufacturing, low lying area filling, embankment rising and quarry void filling. In the year 2022-23 we have utilized 100 % of fly ash generated in our plant. • Fly ash is being supplied to 45 numbers of fly ash based brick manufacturing units in and around Jharsuguda, Sambalpur, Sundargarh and Deogarh District of Odisha free of cost with transportation subsidy @150/Ton for maximum utilization of ash. • Proper protection is provided at the bottom of the landfill area to prevent any leaching to the sub-soil and underground aquifer.
viii	Water Quality Monitoring and Preservation	The company shall develop rainwater harvesting structure to harvest the rain water for utilization in the lean season besides recharging the ground water table.	BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon. M/s KRG Rain water foundation has recently conducted feasibility study in entire complex to assess rainwater harvesting potential and submit feasibility report with detailed plan, expenses, methodology etc. Based on the approved feasibility report the construction of Rain Water harvesting Structures will be started & completed within about 2 years.
ix	Greenbelt	Green belt of adequate width and density shall be provided to mitigate the effects of fugitive emission in at least 462 acres out of total 1,721 acres of land in and around the plant as per the CPCB guidelines in consultation with DFO.	• We have constantly increases the green coverage areas every year. • We have planted 91468 nos. of tree in Apr' 22 to Mar'23
x	Human Health Environment	Occupational Health Surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act. The company shall install CO detectors to detect leakage of CO from the BF. Cardiopulmonary Resuscitation facilities and mediated Oxygen cylinder facilities shall be provided.	• An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours. • The OHC is having following facilities for providing health care to employees- • Essential drug delivery through pharmacy. • X ray services for diagnosis of musculoskeletal and internal abnormalities. • Pathology section for conducting bedside diagnosis and disease screening. • ECG facility to rule out cardiac abnormality. • Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury. • Minor OT to repair wounds and Dressing of wounds and ulcers.

			• Clinic for diagnosis of common disease and injuries. • Basic and Advanced Ambulance services. • Facility for online training on preventable diseases. • Audiometry Booth for diagnosis of hearing losses. • As per the requirement of Factory Act 1948 all necessary record & documents are maintained
xi	Corporate Environmental Responsibility	All the recommendation of the Charter of Corporate Responsibility for Environmental Protection (CREP) issued for the integrated Iron and Steel Sectors shall be implemented.	Recommendations made in the Charter of Corporate Responsibility for Environment Protection (CREP) are being implemented as per the guidelines laid for the Integrated Iron & Steel Sector.
B	**General Conditions:**		
i	Statutory compliance	The project authorities must strictly adhere to the stipulations made by the Orissa pollution Control Board (OSPCB) and the State Govt.	All relevant stipulations made by Odisha State Pollution Control Board and state government are being complied.
ii	Statutory compliance	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment & Forests.	No expansion or modification has been carried out without prior approval of Ministry of Environment Forest and Climate Change.
iii	Air Quality Monitoring and Preservation	At least four ambient air quality monitoring stations shall be established in the down wind direction, as well as where max. Ground level concentrations of SPM, SO2 & NOx are anticipated in consultation with OSPCB. Data on ambient air quality and stack emissions should be regularly submitted to this Ministry including its Regional Office and the OSPCB/Central Pollution Control Board once in six months**.**	• Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant. . ○ CAAQMS-1-Near Township ○ CAAQMS-2 Near Railway Gate ○ CAAQMS-3-Behind CRM ○ CAAQMS-4-Near ETP • All stations have been established in consultation with the regional office OSPCB. • Ambient Air Quality Monitoring data for the period Oct'22 to Mar'23 is enclosed as **Annexure – III**

<table>
<tr>
<td>IV</td>
<td>Water Quality Monitoring and Preservation</td>
<td>Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated waste water should be utilized for plantation purpose.</td>
<td>
• Details of Waste water/effluent Treatment facilities
<table>
<tr><th>No</th><th>Name of facility</th><th>Capacity</th></tr>
<tr><td>1</td><td>Waste water Treatment plant-1</td><td>750 M3/hr</td></tr>
<tr><td>2</td><td>Waste water Treatment plant-2</td><td>750 M3/hr</td></tr>
<tr><td>3</td><td>Waste water Treatment plant-2</td><td>750 M3/hr</td></tr>
<tr><td>4</td><td>Effluent treatment Plant-CRM</td><td>500KLD</td></tr>
<tr><td>5</td><td>Biological Effluent Treatment Plant at Coke Oven-2</td><td>75 M3/hr</td></tr>
<tr><td>6</td><td>Sewage Treatment Plant-1</td><td>500 KLD</td></tr>
<tr><td>7</td><td>Sewage Treatment Plant-2</td><td>900 KLD</td></tr>
<tr><td>8</td><td>Sewage Treatment Plant-3</td><td>900 KLD</td></tr>
<tr><td>9</td><td>Reverse Osmosis Plant</td><td>510 M3/hr</td></tr>
</table>
The entire treated water is being used inside the plant in various applications such as ash conditioning, sprinkling, horticulture, fire fighting etc.
Analysis report of treated Effluent of effluent Treatment Plant (ETP), BETP & waste water of WWTP-1, WWTP-2 & WWTP-3 for the period of Oct'22 to Mar'23 is enclosed as Annexure-VI
</td>
</tr>
<tr>
<td>v</td>
<td>Noise Monitoring & Prevention</td>
<td>The overall noise levels in and around the plant area shall be kept well within the standards 85 dB(A) 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 Rules ,1989 viz 75 dBA (daytime) and 70 dBA (nighttime)</td>
<td>All the noise prone area such as turbine house and compressor house have been provided with adequate acoustics enclosure and silencer.
No employee has been deployed full working hours at noise prone area. Whenever any employee goes for he/she uses earplug/earmuffs.
Noise level monitoring report for work zone and Ambient are for the period Oct'22 to Mar'23 is enclosed as Annexure-X(A&B)</td>
</tr>
<tr>
<td>vi</td>
<td>Corporate Environmental Responsibility</td>
<td>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 healthcare etc.</td>
<td>
• Environmental protection measures & safeguards recommended in EIA /EMP report are being complied with.
• Socio-economic development activities/programmes like supply of drinking water, health care camps and community development programmes are being carried out on regular basis and will be continued as per plan
</td>
</tr>
<tr>
<td>vii</td>
<td>Statutory compliance</td>
<td>As mentioned in the EIA/EMP, Rs. 440.00 Crores and Rs. 55.0 crores earmarked towards the capital cost and recurring cost/annum for environmental pollution control measures shall be judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as</td>
<td>
• The funds allocated for installation of pollution control equipments and implementing environmental protection measures has been judiciously utilized to fulfill the conditions stipulated by the Ministry of Environment and Forests as well as the State pollution Control
</td>
</tr>
</table>

		State Government. The funds so provided shall not be diverted for any other purpose.	Board. • We ensure that funds earmarked for the environmental protection measures has not diverted for any other purpose.
viii	Statutory compliance	The Regional Office of this Ministry at / Central Pollution Control Board /Orissa State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and monitored data along with statistical interpretation shall be submitted them regularly.	• Six monthly compliance reports along with monitored data are regularly submitted at the Regional Office of MoEF&CC as well as at OSPCB/CPCB. • The last six-monthly report was submitted on dated 30.11.2022
ix	Statutory compliance	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 Orissa State Pollution Control Board / Committee 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.	• Information regarding issue of environmental clearance by the ministry was published in local newspapers.  ବିଜ୍ଞାପନ ଏତଦ୍ଦ୍ୱାରା ଏ ସମ୍ପର୍କିତ ସମସ୍ତଙ୍କ ଅବଗତି ନିମନ୍ତେ ଜଣାଇ ଦିଆଯାଉଅଛି ବି ମେସର୍ସ ଭୂଷଣ ପାୱାର ଏଣ୍ଡ ଷ୍ଟିଲ ଲିମିଟେଡ୍ ଓଡ଼ିଶାର ସମ୍ବଲପୁର ଜିଲ୍ଲାର ଗେଣ୍ଡାଜି ତହସିଲ ଅଧିନରେ ୧.୨ ନିୟୁତ ଟନ୍‌ରୁ ୨.୨ ନିୟୁତ ଟନ୍ କ୍ଷମତା ବିଶିଷ୍ଟ ଏକ ସମନ୍ୱିତ ଇସ୍ପାତ କାରଖାନା ସ୍ଥାପନ କରିବା ପାଇଁ ଭାରତ ସରକାରଙ୍କର ପରିବେଶ ଏବଂ ଜଙ୍ଗଲ ମନ୍ତ୍ରାଳୟ ଲେଖା ନଂ. J-11011/372/2006-I.A. II (I) ତାରିଖ ମାର୍ଚ୍ଚ ୨୯, ୨୦୦୭ ଦ୍ୱାରା ମଞ୍ଜୁରୀପ୍ରାପ୍ତି କରି ଅଛନ୍ତି। ଏ ସମ୍ବନ୍ଧୀୟ ନଥିପତ୍ର ଏବଂ ବିଷୟ ବିବରଣୀ ଓଡ଼ିଶା ପ୍ରଦୂଷଣ ନିୟନ୍ତ୍ରଣ ବୋର୍ଡ଼, ଭାରତ ସରକାରଙ୍କ ପରିବେଶ ଏବଂ ଜଙ୍ଗଲ ମନ୍ତ୍ରଣାଳୟ ୱେବ୍ ସାଇଟ୍ http:/envfor.nic.in ଏବଂ ନିମ୍ନ ଠିକଣାରେ ଉପଲବ୍ଧ ହୋଇ ପାରିବ। ଏହି ବିଜ୍ଞାପନ ସର୍ବସାଧାରଣଙ୍କ ଜ୍ଞାତାର୍ଥେ ପ୍ରକାଶିତ ହେଉଅଛି। ଭାଇସ୍ ପ୍ରେସିଡେଣ୍ଟ ଭୂଷଣ ପାୱାର ଏଣ୍ଡ ଷ୍ଟିଲ ଲିମିଟେଡ୍ ଟେଇଙ୍ଗୋଲି, ସମ୍ବଲପୁର Edited, Printed, Published & Owned by Bijna Ranjan Mi Published at Pt. L.N. Mishra Lane, Sambalpur-768001, T **News Paper Publication for 1.2 to 2.2 MTPA**
x	Statutory compliance	The Project Authorities should 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 date of commencing the land development work.	Complied

COMPLIANCE TO CONDITIONS OF LETTER
No.J-11011/228/2003-IA II Dated-12.05.2004 for 1.2 MTPA

Specific Condition:

No	Env. Parameter	Condition Description	Compliance Status
i	Air Quality Monitoring and Preservation	The gaseous and particulate emissions from various process units shall conform to standards prescribed by the state pollution Control Board. The company shall take appropriate measures to achieve the load /mass based standards prescribed from time to time . The State Board may specify more stringent standards for the relevant parameters keeping in view in the nature of the industry and its size and location. At no time the emission level shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	Gaseous emission level from various processes conforms to the load /mass-based standard as notified by the Ministry on 19th May 1993 and standard prescribed from time to time. In all the existing units adequate pollution control measures have been installed to maintain gaseous emission within prescribed standard. In the event of power failure in DRI automatically the DG starts and supply power to auxiliaries, hold the process and minimize the emission.
ii	Air Quality Monitoring and Preservation	In plant control measures for checking fugitive emissions from spillages, handling of raw materials and product shall be provided. Further specific measures such as ESP based dedusting system for sponge Iron plant, ESPs for DRI Kilns. Ventury scrubber and clarifier for BF stove gas cleaning , bag filters for BF dedusting stack. Bag filter for induction furnace, electric arc furnace and ladle furnace, ESPs for CPP and bag filter for raw material crusher area shall be provided. Data on fugitive emissions shall be regularly monitored and records maintained, Continuous stack monitoring system shall be installed in major stacks.	Adequate control measures have been adopted to control fugitive dust generation • ESP's have been provided in DRI-WHRB (12 nos.), AFBC (02nos.) & CFBC (06 nos.) Boilers of CPP, Sinter Plant and pellet plant. • Installation of 09 nos. of Bag filters at various building and junction houses of RMHS are and Dry Fog systems are installed in Iron ore and coal circuit crushing and screening areas. Fumes treatment plant has been installed at SMS-1 (4 nos.) and SMS-2(01 no). • Dry BF Gas Cleaning system and bag filters have been provided in Blast furnace 1. • ESP has been provided for in plant de dusting of various units including DRI and Sinter plant. • Details of Air pollution Control Devices installed is enclosed as **Annexure-II**. • Fixed water sprinkler have been installed in stock yards, raw material handling areas and internal Concrete roads for dust suppression. • Five numbers of high pressure mist beam has been installed in Raw material handling stockyard area. • 06 numbers of Mobile water sprinkling tankers are being engaged for periodical water

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<td>sprinkling on all the internal roads within the plant premises.
• 05 numbers of mechanized road sweepers have been engaged for continuous cleaning of concrete road inside the plant premises to control fugitive dust.
• In the following units fugitive emission is being monitored and report for the period Oct 2022 to March 2023 is enclosed as Annexure-V.

<table>
<tr><th>No</th><th>Name of the units</th><th>Frequency of monitoring</th></tr>
<tr><td>1</td><td>RMHS</td><td rowspan="9">Once in Month</td></tr>
<tr><td>2</td><td>DRI</td></tr>
<tr><td>3</td><td>Coke Oven</td></tr>
<tr><td>4</td><td>Captive Power Plant</td></tr>
<tr><td>5</td><td>Pellet plant</td></tr>
<tr><td>6</td><td>Sinter plant</td></tr>
<tr><td>7</td><td>Blast furnace</td></tr>
<tr><td>8</td><td>Steel melting shop</td></tr>
<tr><td>9</td><td>Lime plant</td></tr>
</table>
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<tr>
<td>iii</td>
<td>Water Quality Monitoring & Preservation</td>
<td>The plant shall be based on zero discharge concept. There shall be no discharge of effluent, which shall be fully recycled. As reflected in the EIA/EMP report the waste water from raw water treatment plant and filter backwash water ,after taking through settling tanks ,shall be used for moistening of ash, cooling of slag and horticulture. The DM water plant effluent shall also be taken to settling tank after neutralization .Cooling tower blow down shall be reused for service water system .Water from coal washery shall be treated in thickener and its overflow reused in the plant. The domestic waste water from township after treatment in STP shall be used for greenbelt development.</td>
<td>Presently 2427M3/hr of water drawing from Hirakud Reservoir for our existing operating facilities.
Details of Wastewater/effluent Treatment facilities is as follows
<table>
<tr><th>No</th><th>Name of facility</th><th>Capacity</th></tr>
<tr><td>01</td><td>Waste water Treatment plant-1</td><td>750 M3/hr</td></tr>
<tr><td>02</td><td>Waste water Treatment plant-2</td><td>750 M3/hr</td></tr>
<tr><td>03</td><td>Waste water Treatment plant-2</td><td>750 M3/hr</td></tr>
<tr><td>04</td><td>Effluent treatment Plant-CRM</td><td>500KLD</td></tr>
<tr><td>05</td><td>Biological Effluent Treatment Plant</td><td>75 M3/hr</td></tr>
<tr><td>06</td><td>Sewage Treatment Plant-1</td><td>500 KLD</td></tr>
<tr><td>07</td><td>Sewage Treatment Plant-2</td><td>900 KLD</td></tr>
<tr><td>08</td><td>Sewage Treatment Plant-3</td><td>900 KLD</td></tr>
<tr><td>09</td><td>Reverse Osmosis Plant</td><td>510 M3/hr</td></tr>
</table>
• The waste water is being treated in waste water treatment plants (WWTP-1,WWTP-2 and WWTP-3) and treated water reused within plant premises for developing green belt, fire</td>
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<tr><td></td><td></td><td></td><td>fighting, process make up water for, iron ore beneficiation plant and pellet plant and ash conditioning at captive power plant.
• The process effluent CRM is being treated in effluent treatment plant and effluent from coke oven treated in BETP of capacity 75 M3/hr and reused within plant
• All office buildings and plant toilets are provided with individual septic tanks and soak pits.
• Three numbers of Sewage treatment plant has been provided for treatment of sewage in township maintain zero discharge.
• In our endeavor to achieve Zero liquid discharge Reverse Osmosis plant of capacity 510 m3/hr has been installed and in operation.</td></tr>
<tr><td>iv</td><td>Waste Management</td><td>As reflected in the EIA/EMP report, solid waste generated in the form of slag from blast furnace(12800 TPA) shall be collected in the earmarked slag dump area and sold to cement plants, SMS slag from induction furnace and electrical arc furnace (183000TPA) shall be used for land filling or boulder, soling of roads, Scrap from SMS and other areas shall be recycled to the maximum possible extent .Dust from DRI unit and SMS shall be recycled or sold to outside parties. Ash from DR kilns and CPP shall be collected in earmarked ash dump areas, and provided to brick and cement manufacturers or used for back filling of abandoned mines.</td><td>Details of Solid waste
<table>
<tr><th>No</th><th>Units</th><th>Solid waste</th><th>Utilization</th></tr>
<tr><td>01</td><td>BF</td><td>BF Slag</td><td>The entire slag generating from BF is granulated and sold to cement manufacturers.</td></tr>
<tr><td>02</td><td>SMS</td><td>SMS slag</td><td>Slag is being crushed and the metallic content is recovered and recycled through Sinter Plant .The residue after recovery is used for internal road making and in leveling of low lined areas in the plant.</td></tr>
<tr><td>03</td><td>DRI</td><td>Char</td><td>Char generate from DRI unit is blended with coal and used in AFBC and CFBC boilers of Captive Power plant</td></tr>
<tr><td>04</td><td>CSP & Rolling Mill</td><td>Scales & derbies from CSP and Rolling mill</td><td>Scales and debris generating from rolling mill and SMS is recycled in Sinter Plant</td></tr>
<tr><td>05</td><td>Different Units</td><td>Scrap</td><td>Recycled In Steel melting shop</td></tr>
</table></td></tr>
</table>

v	Corporate Environmental Responsibility	All the recommendation of the Charter of Corporate Responsibility for Environmental Protection (CREP) for the integrated Iron and Steel Sectors shall be strictly implemented.	Recommendations made in the Charter of Corporate Responsibility for Environment Protection (CREP) are being implemented as per the guidelines laid for Integrated Iron & Steel Sector.
vi	Greenbelt	Green belt of adequate width and density shall be provided to mitigate the effects of fugitive emission all around the plant. A minimum 25% of the area shall be developed as green belt with local species in consultation with the DFO and as per CPCB's guidelines.	We have constantly increased every year green coverage areas. We have planted 91468 nos. of tree in April22 to March.2023 .
vii	Water Quality Monitoring & Preservation	The company shall undertake rainwater harvesting measures to harvest the rain water for their won utilization as well as to recharge the ground water table.	BPSL has two water reservoirs having capacity 200000 M3 and 134000 M3 which help in rain water harvesting during monsoon M/s KRG Rain water foundation has conducted feasibility study in entire complex to assess rainwater harvesting potential and submitted feasibility report with detailed plan, expenses, methodology etc. Based on the approved Feasibility report the construction of Rain Water harvesting Structures will be started and will be completed within about 2 years.
viii	Human Health Environment	Occupational Health Surveillance of the worker shall be done on a regular basis and records maintained as per the Factories Act. The company shall install CO detectors to detect leakage of CO from the MBF. Cardiopulmonary Resuscitation facilities and mediated Oxygen cylinder facilities shall be provided.	• An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours. • The OHC is having following facilities for providing health care to employees- • Essential drug delivery through pharmacy. • X ray services for diagnosis of musculoskeletal and internal abnormalities. • Pathology section for conducting bedside diagnosis and disease screening. • ECG facility to rule out cardiac abnormality. • Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury. • Minor OT to repair wound and Dressing of wounds and ulcers. • Clinic for diagnosis of common disease and injuries. • Basic and Advanced Ambulance services. • Facility for online training on preventable diseases. • Audiometric Booth for diagnosis of hearing losses.

			• As per the requirement of Factory Act 1948 all necessary record & documents are maintained.
ix	Statutory compliance	The company shall obtain necessary approvals for diversion of 59 ha of forest land from the concerned agencies.	Both stage –I and Stage –II clearance granted for diversion of 59 ha of forest Land.
B	**General Conditions:**		
No	**Env. Parameter**	**Condition Description**	**Compliance Status**
i	Statutory compliance	The project authorities shall strictly adhere to the stipulation made by the Orissa Pollution Control Board and the State Government	All relevant stipulations made by Odisha State Pollution Control Board and state government are being complied.
iii	Air Quality Monitoring & Preservation	At least four ambient air quality monitoring stations shall be established in the down wind direction, as well as where max. Ground level concentrations of SPM, SO2 & NOx are anticipated in consultation with OSPCB. Data on ambient air quality and stack emissions should be regularly submitted to this Ministry including its Regional Office and the OSPCB/Central Pollution Control Board once in six months.	Four numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant. . o CAAQMS-1-Near Township o CAAQMS-2 Near Railway Gate o CAAQMS-3-Behind CRM o CAAQMS-4-Near ETP All stations have been established in consultation with the regional office OSPCB. Ambient Air Quality Monitoring data for the period Oct 2022 to March 2023 is enclosed as **Annexure – III**
IV	Water Quality Monitoring & Preservation	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 31st December, 1993 or as amended from time to time.	Details of Waste water/effluent Treatment facilities No | Name of facility | Capacity 1 | Waste water Treatment plant-1 | 750 M3/hr 2 | Waste water Treatment plant-2 | 750 M3/hr 3 | Waste water Treatment plant-2 | 750 M3/hr 4 | Effluent treatment Plant-CRM | 500KLD 5 | Biological Effluent Treatment Plant at Coke Oven-2 | 75 M3/hr 6 | Sewage Treatment Plant-1 | 500 KLD 7 | Sewage Treatment Plant-2 | 900 KLD 8 | Sewage Treatment Plant-3 | 900 KLD 9 | Reverse Osmosis Plant | 510 M3/hr The entire treated water is being used inside the plant in various applications such as ash

			conditioning, sprinkling, horticulture, fire fighting etc. Analysis report of treated Effluent of effluent Treatment Plant (ETP) ,BETP & waste water of WWTP-1 ,WWTP-2 WWTP-3 for the period of Oct '22 to Mar'23 is enclosed as **Annexure-VI**
v	Noise Monitoring & Prevention	The overall noise levels in and around the plant area shall be kept well within the standards 85 dB(A) 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 Rules ,1989 viz 75 dB A (daytime) and 70 dB A (nighttime)	All the noise prone area such as turbine house and compressor house have been provided with adequate acoustics enclosure and silencer No employee has been deployed full working hours at noise prone area. Whenever any employee goes for he/she uses earplug/earmuffs. Noise level monitoring report for work zone and Ambient are for the period Oct'22 to Mar'23 is enclosed as **Annexure-X(A&B)**
vi	Human Health Environment	Proper housekeeping and adequate occupied health programmers shall be taken up. Occupational health surveillance program shall be done on a regular basis and records maintained.	• For proper House keeping 5s system implemented in the plant • An Occupational Health Centre (OHC) has been setup within the plant for pre-joining and periodical medical check-up of all workers including contract labours. • The OHC is having following facilities for providing health care to employees- • Essential drug delivery through pharmacy. • X ray services for diagnosis of musculoskeletal and internal abnormalities. • Pathology section for conducting bedside diagnosis and disease screening. • ECG facility to rule out cardiac abnormality. • Physiotherapy set up to manage pain and stiffness in musculoskeletal illness and injury. • Minor OT to repair wound and Dressing of wounds and ulcers. • Clinic for diagnosis of common disease and injuries. • Basic and Advanced Ambulance services. • Facility for online training on preventable diseases. • Audiometry Booth for diagnosis of hearing losses. • As per the requirement of Factory Act 1948 all necessary record & documents are maintained.

vii	Corporate Environmental Responsibility	The company shall comply with all the environment protection measures and safeguards recommended in the EIA/EMP report. Further, the company shall undertake socio-economic development activities in the surrounding villages like community development programmers, educational programmers, drinking water supply and health care etc	All the Environmental protection measures as suggested in EIA/EMP report have been implemented. • BPSL continuously undertaking various community developments activities under its social economic development programme. • These included construction /renovation of primary and secondary schools in nearby villages, providing financial assistances to educational institutions, construction of roads, construction of temples, providing drinking water in the periphery villages etc. • Company is regularly conducting free health camps in association with District Administration and provide free of cost medicines to the patients.
viii	Miscellaneous	A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring function should be set up under the control of senior executive.	A full-fledged Environment Management Department is being operated to carry out various monitoring function headed by Senior Executive. Apart from that a NABL accredited third party engaged for monitoring of Environmental Parameter.
ix	Miscellaneous	The project authorities shall provide adequate funds recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	The funds allocated for installation of pollution control equipment and implementing environmental protection measures has been judiciously utilized to fulfill the conditions stipulated by the Ministry of Environment and Forests as well as the State pollution Control Board. We ensure that funds earmarked for the environmental protection measures has not diverted for any other purpose.
x	Statutory compliance	The Regional Office of this Ministry at Bhubaneswar/ Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A Six-monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Six monthly compliance reports along with monitored data are regularly being submitted at the Regional Office of MoEF & CC as well as at OSPCB/CPCB. The last six-monthly report submitted on date 30th Nov2022

xi	Statutory compliance	The company 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 state Pollution Control Board/Committee and may also be seen at website of the Ministry of Environment & Forests at http:/envfor.nic.in This shall be advertised within seven days from the state of issue of clearance letter, at least in two local newspaper 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 Regional Office.	Information regarding issue of environmental clearance by the ministry was published in local newspapers.
xii	Statutory compliance	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.	Complied

LIST OF ANNEXURES

Annexure No	Description
Annexure-I	List of CEMS
Annexure-II	List of Air Pollution Control Devices
Annexure-III	Ambient Air Quality Monitoring Result (Oct'22 to Mar'23)
Annexure-IV	Stack Monitoring Result (Oct'22 to Mar'23)
Annexure-V	Fugitive Emission Monitoring Result (Oct'22 to Mar'23)
Annexure-VI	Treated Effluent Analysis Result (Oct'22 to Mar'23)
Annexure-VII	Ground Water Quality Result
Annexure-VIII	List of Solid Waste
Annexure-IX	CSR Activity-2022-23
Annexure-X(A&B)	Work Zone & Ambient Noise Monitoring Result (Oct22 to Mar'23)
Annexure-XI	Information letter to GP on grant of EC by the Ministry

Annexure - I

List of Continuous Emission Monitoring System

No	Station Id	Location	Parameter
1	CEMS-1	DRI-WHRB-1 Stack	PM
2	CEMS-2	DRI-WHRB-2 Stack	PM
3	CEMS-3	DRI-WHRB-3 Stack	PM
4	CEMS-4	DRI-WHRB-4 Stack	PM
5	CEMS-5	DRI-WHRB-5 Stack	PM
6	CEMS-6	DRI-WHRB-6Stack	PM
7	CEMS-7	DRI-WHRB-7Stack	PM
8	CEMS-8	DRI-WHRB-8Stack	PM
9	CEMS-9	DRI-WHRB-9 Stack	PM
10	CEMS-10	DRI-WHRB-10 Stack	PM
11	CEMS-11	DRI-WHRB-11 & 12 Stack	PM
12	CEMS-12	DRI-Dedusting 1&2 Stack	PM
13	CEMS-13	DRI-Dedusting 3&4 Stack	PM
14	CEMS-14	DRI-Dedusting 5&6 Stack	PM
15	CEMS-15	DRI-Dedusting 7&8 Stack	PM
16	CEMS-16	DRI-Dedusting 9 &10 Stack	PM
17	CEMS-17	DRI-Dedusting11&12 Stack	PM
18	CEMS-18	CPP 3x130MW UNIT-1	PM,SO2,NOx,Hg
19	CEMS-19	CPP 3x130MW UNIT-2	PM,SO2,NOx,Hg
20	CEMS-20	CPP 3x130MW UNIT-3(CFBC-5)	PM,SO2,NOx,Hg
21	CEMS-21	CPP3x130 MW Unit-3 (CFBC-6)	PM,SO2,NOx,Hg
22	CEMS-22	CPP 60 MW Stack	PM,SO2,NOx,Hg
23	CEMS-23	CPP 40 MW Stack	PM,SO2,NOx,Hg
24	CEMS-24	SMS-1 FTP-1	PM
25	CEMS-25	SMS-1 FTP-2	PM
26	CEMS-26	SMS-1 FTP-3	PM
27	CEMS-27	SMS-1 FTP-4	PM
28	CEMS-28	SMS-2 FTP	PM
29	CEMS-29	Pellet Plant processStack	PM,SO2,NOx
30	CEMS-30	Pellet Plant Dedusting	PM,
31	CEMS-31	Coke Oven -1 Stack-1	PM,SO2,NOx,CO
32	CEMS-32	Coke Oven-1 Stack-2	PM,SO2,NOx,CO
33	CEMS-33	Coke Oven -2 Process stack	PM ,SO2,NOx,CO
34	CEMS-34	Coke Oven -2 Dedusting Stack	PM
35	CEMS-35	BF-2 Casthouse Bagfilter Stack	PM,SO2,NOx,CO
36	CEMS-36	BF-2-Bagfilter connected to Stock House	PM
37	CEMS-37	BF-1Casthouse bagfilter stack	PM
38	CEMS-38	BF-1 GCP stack	PM
39	CEMS-39	Sinter plant-1 Charging Stack	PM,SO2,NOx
40	CEMS-40	Sinterplant-1 Discharging stack	PM
41	CEMS-41	Sinter plant-2 Process Stack	PM
42	CEMS-42	Sinter plant-2 Dedusting Stack	PM
43	CEMS-43	LCP-1 Stack	PM
44	CEMS-44	LCP-2 Stack	PM
45	CEMS-45	LCP-3 Stack	PM
46	CEMS-46	LCP-4 Stack	PM

Annexure-II

List of Air Pollution Control Device

S.N	Name Of the Unit	Pollution Control System	Capacity in (NM3/hr)	Stack height in mtr
DRI Plant				
1.	DRI/WHRB-1	Electro Static Precipitator	120000	76
2	DRI/WHRB-2	Electro Static Precipitator	120000	76
3	DRI/WHRB-3	Electro Static Precipitator	120000	76
4	DRI/WHRB-4	Electro Static Precipitator	120000	76
5	DRI/WHRB-5	Electro Static Precipitator	250000	76
6	DRI/WHRB-6	Electro Static Precipitator	250000	76
7	DRI/WHRB-7	Electro Static Precipitator	280000	76
8	DRI/WHRB-8	Electro Static Precipitator	280000	76
9	DRI/WHRB-9	Electro Static Precipitator	280000	76
10	DRI/WHRB-10	Electro Static Precipitator	280000	76
11	DRI/WHRB-11	Electro Static Precipitator	210000	76
12	DRI/WHRB-12	Electro Static Precipitator	210000	76
13	DRI Dedusting-5&6	Electro Static Precipitator	250000	45
14	DRI Dedusting 7&8	Electro Static Precipitator	250000	45
15	DRI De dusting 9&10	Electro Static Precipitator	350000	45
16	DRI De dusting 1&2	Bag filter	350000	45
17	DRI De dusting 3&4	Bag filter	350000	45
18	DRI De dusting 11&12	Bag filter	350000	45
Captive Power Plant				
19	CPP 40 MWAFBC-1	Electro Static Precipitator	143000	76
20	CPP 60 MWAFBC-2	Electro Static Precipitator	286000	95
21	CPP 3x130 MW Unit-1 CFBC-1	Electro Static Precipitator with hybrid Bag filter	650000	120
22	CPP 3x130 MW Unit-1 CFBC-2	Electro Static Precipitator	650000	120
23	CPP 3x130 MW Unit-2 CFBC-3	Electro Static Precipitator	650000	120
24	CPP 3x130 MW Unit-2 CFBC-4	Electro Static Precipitator	650000	120
25	CPP 3x130 MW Unit-3 CFBC-5	Electro Static Precipitator	650000	120
26	CPP 3x130 MW Unit-3 CFBC-6	Electro Static Precipitator	650000	120
Blast Furnace-1				
27	BF-Dry gas cleaning	Bag House, Gas Cleaning Plant	180000	30
28	BF-Cast house	Dust catcher Bag filter	220000	45
Blast Furnace-2				
29	BF-Stock House	Bag filter	610000	45
30	BF-Cast House	Bag filter	850000	45
Sinter Plant-1				
31	Sinter Plant Charging	Electro Static Precipitator	570000	75
32	Sinter plant Discharging	Electro Static Precipitator	450000	40

33	Sinter plant Dedusting	Electro Static Precipitator	190000	40
34	Sinter plant De dusting (Propertional Buiding)	Electro Static Precipitator	190000	40
Sinter plant -2				
35	Sinter plant Process	Electro static Precipitator	700000	120
36	Sinter plant Dedusting	Electro static Precipitator	600000	60
Coke Oven -2				
37	Pushing Emission Control System	De dusting System (Bag filter)	504000	45
Steel Melting Shop-1				
38	SMS-1 EAF& LF -1	Fume Treatment Plant-1 (Bag House)	15000000	45
39	SMS-1 EAF&LF-2	Fume Treatment Plant-1 (Bag House)	15000000	45
40	SMS-1 EAF&LF-3	Fume Treatment Plant-3(Bag House)	14310000	45
41	SMS EAF&LF-4	Fume Treatment Plant-4(Bag House)	14310000	45
Steel Melting Shop-2				
42	SMS-2 EAF & LF	Fumes Treatment Plant(Bag House)	2328000	45
RMHS				
43	Crushing & screening areas of RMPP-1 Ore circuit	09 nos. of Bag Filter & Dry Fog System	50000	30
Lime & Dolo Plant				
44	Lime Plant-1	Bag Filter	50000	50
45	Lime Plant-2	Bag Filter	50000	50
46	Lime Plant-3	Bag Filter	50000	50
CRM Complex				
47	Acid Regeneration Plant	Wet Scrubbers	11530	34
48	Pickling Plant	Wet Scrubbers	15716	32
Wire Rod & Bar Mill				
49	Re heating furnace	De dusting System/Bag filter	10000	85
50	De dusting	De dusting System/Bag filter	15000	34
Pellet Plant				
51	Wind box	Electro Static Precipitator	984000	45
52	Hood Exhaust	Electro Static Precipitator	420000	45
53	De dusting	Electro Static Precipitator	240000	45

Annexure-III

Summary of Ambient Air Quality
Monthly Average Value

Ambient Air Quality Monitoring Station -1 Near Township							
	Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	O_3	CO
Month	Standard	100 (µg/m^3)	60 (µg/m^3)	80 (µg/m^3)	80 (µg/m^3)	100(µg/m^3)	2 (µg/m^3)
October-22		68.50	37.25	18.12	25.2	6.5	0.52
November-22		69.50	39.45	18.50	25.5	7.5	0.56
December-22		67.70	37.40	16.50	24.50	8.50	0.52
January-23		65.50	37.50	17.60	24.7	8.5	0.6
February-23		66.80	38.90	16.80	25.4	7.9	0.53
March-23		69.80	40.00	17.30	25.8	8.3	0.55

Ambient Air Quality Monitoring Station -2 Near Railway Gate							
	Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	O_3	CO
Month	Standard	100 (µg/m^3)	0	80 (µg/m^3)	80 (µg/m^3)	100 (µg/m^3)	2 (µg/m^3)
October-22		68.50	36.70	16.70	20.70	8.90	0.36
November-22		66.70	36.50	15.56	23.50	7.78	0.39
December-22		69.40	38.80	17.50	26.90	6.27	0.38
January-23		70.60	39.78	18.50	23.70	7.12	0.43
February-23		71.60	37.20	17.67	24.90	7.80	0.38
March-23		70.30	40.60	18.50	17.30	7.56	0.40

Ambient Air Quality Monitoring Station -3 Behind CRM							
	Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	O_3	CO
Month	Standard	100 (µg/m^3)	60 (µg/m^3)	80 (µg/m^3)	80 (µg/m^3)	100 (µg/m^3)	2 (µg/m^3)
October-22		69.56	38.87	15.67	22.78	7.56	0.32
November-22		68.89	37.82	13.7	18.67	6.7	0.35
December-22		68.98	39.7	14.8	22.78	6.8	0.38
January-23		70.34	37.9	13.7	21.7	6.8	0.36
February-23		69.70	38.9	13	22.8	6	0.35
March-23		71.00	40.80	14.00	25	7	0.45

Ambient Air Quality Monitoring Station -4 Near ETP							
	Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	O_3	CO
Month	Standard	100 (µg/m^3)	60 (µg/m^3)	80 (µg/m^3)	80 (µg/m^3)	100 (µg/m^3)	2 (µg/m^3)
October-22		68.90	38.7	15	22.8	6	0.37
November-22		70.30	39.7	14.5	23.5	6.1	0.38

December-22		68.60	36.7	14.2	21.6	6.2	0.39
January-23		67.90	34.90	15.80	22.8	6.8	0.35
February-23		67.8	38.2	13.9	24.8	7	0.41
March-23		69.6	40.5	14.2	24.2	6.8	0.39

Annexure-IV

Stack Monitoring Report

Period from Oct-22 to Mar-23

S.N.	Stack Name		[Particulate Matter (mg/Nm3)]					
		Standard mg/Nm3	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
1	DRI/WHRB-A	50.00	12.32	15.49	13.4	10.7	19.1	21.9
2	DRI/WHRB-B	50.00	25.21	21.1	18.2	30.4	37.7	24.9
3	DRI-A & B -Dedusting	50.00	10.61	1633	18.0	25.5	20.2	10.9
4	DRI/WHRB-C	50.00	18.24	19.1	23.1	20.57	20.65	17.35
5	DRI/WHRB-D	50.00	14.18	8.5	10.9	8.3	13.4	17.9
6	DRI-C & D -Dedusting	50.00	12.14	16.6	15.5	39.4	18.7	15.5
7	DRI/WHRB-E	50.00	15.02	11.87	13.4	26.3	28.7	19.1
8	DRI/WHRB-F	50.00	18.06	24.53	13.9	18.8	18.0	19.6
9	DRI-E & F -Dedusting	50.00	5.87	7.03	6.7	11.3	11.5	10.7
10	DRI/WHRB-G	50.00	24.01	19.9	15.9	21.2	30.2	35.0
11	DRI/WHRB-H	50.00	11.06	11.0	10.6	19.8	33.3	16.1
12	DRI-G & H -Dedusting	50.00	9.08	9.47	8.8	16.0	22.7	19.5
13	DRI/WHRB-I	50.00	10.61	11.74	14.8	13.6	28.8	33.1
14	DRI/WHRB-J	50.00	11.71	10.97	11.8	13.6	29.5	28.4
15	DRI-I & J -Dedusting	50.00	11.45	13.85	13.3	17.5	22.4	21.5
16	DRI/WHRB-K & L	50.00	25.1	23	24	27.65	23.28	31.64
17	DRI-K & L -Dedusting	50.00	21	20.18	21.88	26.18	26.55	27.24
18	Power Plant 40MW	50.00	13.09	26.3	16.8	13.3	12.8	18.7
19	Power Plant 60MW	50.00	35.75	19.9	21.1	25.6	22.7	22.1
20	Power Plant 130MW-I	50.00	37.37	30.5	32.0	23.3	23.3	30.3
21	Power Plant 130MW-II	50.00	29.67	32.1	25.3	23.0	23.2	31.3
22	Power Plant 130MW-III (CFBC-5)	50.00	17.42	18.4	17.0	17.0	16.8	18.5
23	Power Plant 130MW-III(CFBC-6)	50.00	33.38	19.99	23.5	24.7	31.4	27.5
24	Sinter Plant -1 Charging stack	50.00	33.7	43.0	45.0	43.0	46.7	47.8
25	Sinter Plan - t Discharging Stack	50.00	23.4	43.2	36.9	34.7	29.3	29.6
26	Sinter Plant -2 charging stack	50.00	14.0	19.2	21.0	23.2	20.5	20.3
27	Sinter Plant -2 discharging stack	50.00	19.8	27.4	30.3	30.6	24.2	23.8
28	WHRB of coke oven Stack-I	50.00	24.13	20.2	27.8	20.4	19.2	15.0
29	WHRB of coke oven Stack-II	50.00	28.49	28.7	27.6	26.8	28.2	28.6
30	SMS-I-FTP-1	50.00	7.3	8.6	9.6	8.8	9.9	10.2
31	SMS-I,FTP-2	50.00	17.4	13.79	13.76	16.42	17.83	22.14
32	SMS-I FTP-3	50.00	7.91	10.82	12.91	15.18	12.92	13.03
33	SMS-I-FTP-4	50.00	13.99	8.5	8.9	8.5	14.9	17.5
34	SMS-II-FTP	50.00	16.5	13.69	10.98	8.74	18.79	20.64
35	Lime Kiln-I	50.00	42.0	38.0	39.0	42.0	45	48.0
36	Lime Kiln-II	50.00	44	42.0	43.0	45.0	40.0	45.0
37	Lime Kiln-III	50.00	40	41.0	45.0	43.0	42.0	43.0
38	Blast Furnace GCP stak	50.00	9.48	11.6	12.5	12.0	14.0	26.4
39	Blast Furnace-1 Cast house De-dusting	50.00	41.3	37.7	25.6	34.1	38.9	18.14
40	Blast Furnace-2 Cast house De-	50.00	28.3	25.9	26.16	26.45	27.02	27.06
41	Pellet Plant De-dusting	50.00	25.4	22.7	22.6	24.9	21.7	16.3
42	Pellet Plant Wind Box	50.00	24.57	25.0	29.3	45.4	26.7	37.4
43	Coke Oven-2 ,Process Stack	50.00	32.08	34.64	34.95	33.53	32.69	32.94
44	Coke Oven-2 ,Dedusting Stack	50.00	21.8	17.09	24.28	21.38	19.81	18.31

Annexure-V

Fugitive Emission Results
(Oct' 22 to Mar'23)

No	Sampling Location	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Standard in (µg/m3)
1	Blast Furnace-I,Cast House	1520	1245	1340	1280	1560	1768	3000
2	Blast Furnace-II Caste House	1078	1123	1125	1260	1345	1567	
3	Coke oven-I, Location-1	1123	1234	1546	1356	1435	1259	
4	Coke Oven-I, Location-2	1345	1456	1245	1360	1435	1549	
5	Coke Oven-II, Location-1	1320	1367	1480	1589	1576	1654	
6	Coke Oven-II, Location-2	1320	1432	1645	1600	1567	1765.00	
7	Day Bin areaDRI 1 & 2	1459	1546	1600	1645	1768	1756	2000
8	PSB & Char Discharging area DRI 1 & 2	1456	1897	1789	1678	1894	1978	
9	Day Bin area of DRI 3 & 4	1564	1500	1478	1680	1786	1790	
10	PSB & Char Discharging area DRI 3 & 4	1546	1456	1500	1580	1790	1895	
11	Day Bin area of DRI 5 & 6	1560	1579	1565	1680	1695	1765	
12	PSB & Char Discharging area DRI 5 & 6	1686	1868	1590	1445	1510	1678	
13	Day Bin area of DRI 7 & 8	1756	1675	1437	1598	1678	1723	
14	PSB & Char Discharging area DRI 7 & 8	1789	1678	1756	1453	1400	1789	
15	Day Bin area of DRI 9 & 10	1389	1420	1567	1580	1534	1675	
16	PSB & Char Discharging area DRI 9 & 10	1765	1645	1590	1500	1654	1765	
17	Daybin area of DRI 11 & 12	1568	1453	1470	1423	1654	1690	
18	PSB & Char Discharge area of DRI 11 &12	1423	1450	1530	1500	1650	1786	
19	Lime Plant Transfer point	1667	1890	1567	1654	1743	1867	2000
20	Lime Plant Kiln Area	1490	1654	1498	1543	1678	1856.00	
21	Lime Plant Delivery Building	1435	1234	1538	1654	1609	1734.000	
22	Sinter Plant-1 Location-1	1456	1546	1512	1709	1689	1876	2000
23	Sinter Plant-1 Location-2	1234	1678	1435	1765	1543	1765	
24	SMS-I EAF 1 & 2 area	1654	1543	1423	1546	1768	1750.000	

25	SMS-I EAF 3 & 4 area	1543	1323	1756	1546	1678	1790	3000
26	SMS-II,EAF-I Area	1234	1323	1456	1543	1453	1675	
27	Pellet Plant, Location-1	1453	1234	1345	1235	1564	1567	2000
28	Pellet plant Location-2	1567	1678	1432	1543	1657	1456	
29	Tube mill Location-1	987	1034	978	890	1056	1120	
30	Tube mill Location-2	990	1045	970	876	1034	1109	
31	CRM Location -1	1123	1234	1098	1008	1298	1178	
32	CRM Location-2	987	876	980	890	1076	1123	
33	RMHS-1	1567	1456	1678	1789	1690	1867	2000
34	RMHS-2	1567	1456	1590	1680	1598	1789	
35	RMHS-3	1680	1590	1689	1600	1587	1695	
36	RMHS-4	1456	1490	1345	1234	1567	1796	
37	WRM Bright Bar	980	1100	1089	990	1087	1250	
38	WRM RH Furnace area	789	890	987	985	1089	1190	
39	CSP Caster area	987	1178	1178	1200	1189	1200	
40	CSP Tunnel furnace area	890	1189	1090	1150	1234	1290	

Annexure-VI

Treated Effluent water Analysis Result (ETP)
(Oct-22 to Mar-23)

SI. No	Parameters	Unit	General Standard	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
1	pH	-	6 to 9	7.06	6.71	6.78	7.32	7.95	7.2
2	Total Suspended Solids as TSS	mg/l	100	20.92	23.44	21.98	15.04	6.6	31.72
3	Total disolve solid	mg/l	2100	890	825	850	880	839	790
4	BOD (3 days at 27˚C)	mg/l	30	7.14	7.01	6.04	5.73	4.85	16.69
5	COD	mg/l	250	109.45	118.71	103.39	85.34	8.19	94.11
6	Oil & Grease	mg/l	10	2	2.1	2	2.2	2.1	2.2
7	Ammonical nitrogen (as N)	mg/l	50	ND	ND	ND	ND	ND	ND
8	Iron (as Fe)	mg/l	3	0.2	0.25	0.27	0.25	0.26	0.27
9	Total Chromium as Cr	mg/l	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
10	Cyanide (as CN)	mg/l	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
11	Phenol	mg/l	<1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Treated Waste Water Analysis Result (WWTP-I)
(Oct'22 to Mar'23)

S..N	Parameters	Unit	General Standard	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
1	pH	-	6 to 9	7.34	7.22	7.13	7.52	7.58	7.41
2	Total Suspended Solids as TSS	mg/l	100	41.82	55.53	50.35	59.51	45.07	28.99
3	Total disolve solid	mg/l	2100	769	690	680	690	699	730
4	BOD (3 days at 27˚C)	mg/l	30	9.16	9.11	8.76	9.73	9.83	9.51
5	COD	mg/l	250	48.88	52.16	50.69	57.76	55.44	52.6
6	Oil & Grease	mg/l	10	1.9	2	2.5	1.8	1.7	1.9
7	Iron (as Fe)	mg/l	3	0.19	0.25	0.27	0.16	0.15	0.14

Treated Waste Water Analysis Result (WWTP-II)
(Oct'22 to Mar'23)

S.N	Parameters	Unit	General Standard	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
1	pH	-	6 to 9	6.9	6.8	6.96	7.16	6.89	6.9
2	Total Suspended Solids as TSS	mg/l	100	29.47	22.41	16.93	19.4	19.31	16.81
3	Total disolve solid	mg/l	2100	760	700	712	698	700	702
4	BOD (3 days at 27˚C)	mg/l	30	8.67	8.57	8.47	8.66	8.66	8.66
5	COD	mg/l	250	102.38	78.28	73.85	89.68	75.36	76.74
6	Oil & Grease	mg/l	10	2.1	2.4	3.5	2	2.8	2.5
7	Iron (as Fe)	mg/l	3	0.29	0.25	0.3	0.28	0.26	0.29

Treated Waste Water Analysis Result (WWTP-III)
(Oct'22 to Mar'23)

S.N	Parameters	Unit	General Standard	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
1	pH	-	6 to 9	6.87	7.04	6.96	6.85	6.72	6.8
2	Total Suspended Solids as TSS	mg/l	100	17.31	14.51	14.85	13.52	14.41	13.37
3	Total disolve solids	mg/l	2100	760	710	680	685	760	834
4	BOD (3 days at 27˚C)	mg/l	30	11.65	11	12.86	11.15	10.43	10.06
5	COD	mg/l	250	94.57	81.8	90.91	77.92	75.36	71.1
6	Oil & Grease	mg/l	10	3	3.1	3.9	2.5	2.6	2
7	Iron (as Fe)	mg/l	3	0.15	0.16	0.2	0.17	0.16	0.15

Treated Effluent Water Analysis Result (BETP-)
(Oct-22 to Mar-2023)

SI. No	Parameters	Unit	General Standard	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
1	pH	-	6 to 9	6.85	6.74	7.22	7.45	7.48	7.56

2	Total Suspended Solids as TSS	mg/l	100	53.25	56.71	60.13	63	64.23	67.3
3	Total disolve solids	mg/l	2100	978	890	920	930	987	940
4	BOD (3 days at 27˚C)	mg/l	30	26.77	25.51	23.18	22.86	23.16	24.49
5	COD	mg/l	250	162.32	162.3	147.59	114.11	119.55	130.37
6	Oil & Grease	mg/l	10	4	4	4.5	3.2	2	1.9
7	Ammonical nitrogen (as N)	mg/l	50	13	14	12	11	18	15
8	Iron (as Fe)	mg/l	3	1	1.25	1.22	1.27	1.11	1
9	Total Chromium as Cr	mg/l	2	<0.05	<0.07	<0.05	<0.08	<0.08	<0.07
10	Cyanide (as CN)	mg/l	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
11	Phenol	mg/l	<1.0	<0.06	<0.08	<0.05	<0.07	<0.07	<0.08

Annexure-VII

Summary of Ground water Quality

Period from Oct'22 to Mar'23

No	Parameter	Unit	Standard as per IS 10500:2012	GW -1	GW -2	GW -3	GW- 4	GW-5
1	Colour	Hazen	5	<5	< 5	< 5	< 5	< 5
2	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	1	<1.0	<1.0	<1.0	<1.0	<1.0
5	pH Value	--	6.5 -8.5	6.9	7.15	7.2	7.2	7.3
6	Dissolved Solids	mg/l	500	281	256	245	267	276
7	Residual, free Chlorine	mg/l	0.2	ND	ND	ND	ND	ND
8	$CaCO_3$)	mg/l	200	87	82	88	82	84
9	Calcium (as Ca)	mg/l	75	32.5	29.6	27.2	29.5	31
10	Magnesium (as Mg)	mg/l	30	2.5	4.4	4.2	4.5	4
11	Alkalinity	mg/l	200	60	65	61.5	64.2	62
12	Chloride (as Cl)	mg/l	250	25	20	25.5	23.6	24.8
13	Fluoride (as F)	mg/l	1	0.3	0.24	0.25	0.22	0.31
14	Sulphate (as SO_4)	mg/l	200	13.6	12.8	12.12	11.2	12
15	Nitrate (as NO_3)	mg/l	45	0.6	0.59	0.61	0.58	0.61
16	Chromium (as Cr^{+6})	mg/l	BDL	BDL	BDL	BDL	BDL	BDL
17	Phenolic Compounds (as C_6H_5OH)	mg/l	0.001	BDL	BDL	BDL	BDL	BDL
18	Iron (as Fe)	mg/l	1	0.3	0.31	0.29	0.28	0.25
19	Cyanide (as CN)	mg/l	0.05	BDL	BDL	BDL	0.09	BDL
20	Copper (as Cu)	mg/l	0.05	BDL	BDL	BDL	BDL	BDL
21	Manganese (as Mn)	mg/l	0.01	BDL	BDL	BDL	BDL	BDL
22	Mercury (as Hg)	mg/l	0.001	BDL	BDL	BDL	BDL	BDL
23	Cadmium (as Cd)	mg/l	0.003	BDL	BDL	BDL	BDL	BDL
24	Selenium (as Se)	mg/l	0.01	BDL	BDL	BDL	BDL	BDL
25	Arsenic (as As)	mg/l	0.01	BDL	BDL	BDL	BDL	BDL
26	Lead (as Pb)	mg/l	0.01	BDL	BDL	BDL	BDL	BDL
27	Zinc (as Zn)	mg/l	5	0.31	0.3	0.28	0.3	0.35
28	Aluminium as(Al)	mg/l	0.03	BDL	BDL	BDL	BDL	BDL
29	Boron (as B)	mg/l	0.5	BDL	BDL	BDL	BDL	BDL

N.B-GW1-Thekoloi Tube well,GW2-Sripura Tube well,GW-3-Lapanga Village,GW4-Dhuben Chapper village,GW-5-Derba village tube well

Annexure-VIII

Details of Solid waste

No	Units	Solid waste	Utilization
01	BF	BF Slag	The entire slag generating from BF is granulated and sold to cement manufacturers.
02	SMS	SMS slag	Slag is being crushed and the metallic content is recovered and recycled through Sinter Plant .The residue after recovery is used for internal road making and in leveling of low lined areas in the plant.
03	DRI	Char	Char generate from DRI unit is blended with coal and used in AFBC and CFBC boilers of Captive Power plant
04	CSP & Rolling Mill	Scales & derbies from CSP and Rolling mill	Scales and debris generating from rolling mill and SMS is recycled in Sinter Plant
05	Different Units	Scrap	Recycled In Steel melting shop
06	Captive Power Plant	Ash	The ash generated from CPP is being utilized in different area like fly ash brick manufacturing, low lying area filling, embankment rising and exhausted quarry void filling.

Annexure-IX

CSR EXPENDITURE FY 2022-23

S.No	Thematic Head	Key Iterventions	Alloted Budget Rs in Crores	Actual Rs in Crores	Ongoing Projects(Rs In Crores)
1	Enhance Skils & rural livelihoos through nurturing of supportive ecosystems & innovations	Solar Strict Light in Public Places	1.36	1.08	0.28
2	General community infrastructure support & wel fare initiatives	Upgrading sambal pur Busstand. Building Farmer's Market Building Community Toilets Building Community Centre	9.59	7.37	2.22
3	Educational infrastructure & Systems strengthening	School & Anganwadi upgradation Udan scholarship Life Skill education School Bus facility for students	14.95	10.32	4.63
4	Public health infrastructure,capacity building & support programs	Mobile medical unit Trauma Centre Development Upgradation of Public Health Infra Ambulance deployment Community Health Services	4.56	1.55	3.01
5	Integrated water resources management & sanitation Initiatives	Provision of Drinking water WASH interventions Waste management	3.43	2.90	0.52
6	Sports Promotion & institution building	Sports infrastructure Tournaments Sports Kits for Youth	0.15	0.15	0.00
7	Admin & Capacity Build expenses	Admin cost	0.970	0.970	0.00
	Total		**35.01**	**24.340**	**10.66**

Annexure-X(A)

Workzone Noise Monitoring Result (Oct-22 to Mar-23)

Sl.No.	Name of the Unit	Location	Average Noise Level in dB(A)						
			Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Standard as per factory Act 1950
1	DRI -A	Kiln main drive	76.00	73.00	74.60	72	74.10	75.00	
		Lobe comp. House (Inside)	81.20	80.00	82.00	80.00	79.00	81.20	
		Lobe comp. House (Outside)	75.00	76.30	68.60	72	69.00	73.50	
2	DRI-B	Kiln main drive	75	74.20	79.80	71	72.80	77.70	
		Lobe comp. House (Inside)	77.5	74.40	76.30	77.9	75.00	72.00	
		Lobe comp. House (Outside)	72	76.00	80.00	76	77.00	75.50	
3	DRI-C	Kiln main drive	72.50	70.40	68.90	72.40	70.60	68.4	
		Lobe comp. House (Inside)	73.00	70.50	77.20	82.70	77.10	74.6	
		Lobe comp. House (Outside)	68.50	67.00	77.00	70.00	72.00	76.0	
4	DRI-D	Kiln main drive	72.00	75.0	68.00	69.00	72.00	68.0	
		Lobe comp. House (Inside)	78.00	70.0	74.60	72.50	74.00	77.5	
		Lobe comp. House (Outside)	70.00	72.6	73.00	72.00	74.60	71.0	
5	DRI-E	Kiln main drive	75.00	71.0	73.00	70.00	72.00	69.0	
		Lobe comp. House (Inside)	82.00	77.0	72.00	74.00	75.00	72.0	
		Lobe comp. House (Outside)	70.00	68.0	71.40	72.00	73.00	72.6	
6	DRI-F	Kiln main drive	70.50	71.6	73.00	72.00	70.00	71.0	
		Lobe comp. House (Inside)	80.00	75.0	82.00	81.00	78.00	75.0	
		Lobe comp. House (Outside)	74.00	70.0	68.00	67.00	69.00	70.0	
7	DRI-G	Kiln main drive	72.00	76.0	71.00	74.00	75	76.0	
		Lobe comp. House (Inside)	82.70	80.5	79.00	79.50	82	81.0	
		Lobe comp. House (Outside)	72.00	70.0	71.00	68.00	69.8	72.0	
8	DRI-H	Kiln main drive	72.0	69.0	71.00	72.00	70	72.0	
		Lobe comp. House (Inside)	79.0	80.0	78.00	78.00	77	78.0	
		Lobe comp. House (Outside)	70.0	77.0	68.00	65.00	68.00	69.0	
9	DRI-I	Kiln main drive	72.00	80.0	81.00	75.00	80.00	82.0	
		Lobe comp. House (Inside)	80.00	75.0	78.00	77.00	76.00	78.0	
		Lobe comp. House (Outside)	75.00	70.0	65.00	69.00	70.50	68.2	
10	DRI-J	Kiln main drive	72.00	68.0	72.00	70.00	67.00	68.0	
		Lobe comp. House (Inside)	79.50	77.3	75.00	77.00	80.00	81.0	
		Lobe comp. House (Outside)	75.90	67.8	67.15	62.40	71.15	73.1	

11	DRI-K	Kiln main drive	71.80	68.5	72.90	71.90	70.00	69.5
		Lobe comp. House (Inside)	81.00	79.0	77.00	76.00	74.60	74.7
		Lobe comp. House (Outside)	74.00	73.0	70.00	71.00	68.00	66.0
12	DRI-L	Kiln main drive	77.30	72.5	71.65	73.75	72.25	79.3
		Lobe comp. House (Inside)	76.00	75.0	78.00	75.00	72.00	74.0
		Lobe comp. House (Outside)	65.00	68.0	65.00	69.00	67.00	68.0
13	130 MW Power Plant	Turbine-1	80.00	77	82	78	77.00	76.00
		Turbine-2	81.50	77.4	78.9	75.6	80.50	76.00
		Turbine-3	82.80	77.6	78.9	81	79.8	82.00
		Boiler-1	79.00	78.9	77.60	76.80	77.90	76.0
		Boiler-2	80.60	76	79.7	80.5	77.8	78.70
		Boiler-3	80.60	77.9	78.6	81.5	80.6	79.50
		Boiler-4	80.00	77	81	77	77	78.00
		Boiler-5	82.00	80	78	77	78	76.00
		Boiler-6	78.05	75.7	77.00	76.00	77.00	78.0
		Feed Pump Area	79.00	75	70	68.00	72	67.00
14	100 MW Power Plant	Turbine Area (40 MW)	79	77	81	79.00	78	80.00
		Turbine Area (60 MW)	81.7	78.6	79.8	80	77.8	78.80
		Feed Pump Area	77.00	78.0	75.00	74.00	77.00	75.0
		Boiler Area	80.00	81	79	78	79.0	78.00
15	Blast Furnace-I	Cast House	80	77	79	73	75	76.00
		Blower House Turbo (Blower-2)	82	81	78	79	76	81.00
		Blower House Motorized (Blower-3)	70.0	65.0	62.00	66.00	71.00	73.0
		Gas Cleaning Plant	80	75	68	67.00	70	72.70
		Stock House	75	76	68	65.00	72.0	70.00
16	Blast Furnace-II	Cast House	83.00	75	76	70.0	72	70.00
		Blower House Turbo (Blower-2)	80.00	81.0	75.00	78.00	76.90	77.0
		Blower House Motorized (Blower-3)	67	70	78	77	76	75.60
		Gas Cleaning Plant	78	70	72.00	70	72.8	71.60
		Stock House	78.00	76	68.00	69	65.0	76.00
17	Sinter Plant	Blower House	75.00	68.0	72.00	79.00	82.00	79.0
		Flux Charging area	77.00	70.0	76.00	70.00	72.00	72.0
		Proportional Building	73	68	72.0	70	71.7	69.00
18	Coke Oven-1	Battery Area	76	64	66	68	70	65.00
		Coke Cutting & Screening Building	77.0	68	72	79	75	69.00

19	Coke Oven-2	Battery Area	75.0	72.0	74	73.00	75.00	71.0
		By-Product (Exhauster Area)	74.00	72.0	70	75	72	70.00
20	RMPP - I	Truck Tippling	67.00	70.0	69	68	73	72.00
		Stacking	71	67.00	68	73	72.0	71.00
		Coal Crushing Screening	67.0	70.00	68	67.40	72.00	71.0
		Ore Crushing & Screening	65	76.00	67	77	76	78.00
21	RMPP - II	Stacking & Reclaming -3	70.6	68.70	69	75	68	72.00
		Stacking & Reclaming -4	72	68.00	72	66	70	77.00
		Stacking & Reclaming -5	67.0	70.00	72	73.00	74.00	70.0
22	RMPP-III	Infron of Office	62	63.00	65	62	65	66.00
		Coal reclaiming area	70	72.00	70	69	71	68.00
		Belt press crushing area	75	70.00	72	68	70	60.00
23	Coal Washery -I	Infront of office	66.0	65.00	70	65.00	72.00	65.0
		Near Silo	62	69.00	65	65	70.00	72.00
24	Coal Washery -II	Infront of office	65.0	62.00	66	68.00	68.00	72.00
		Near Silo	68	66.00	65	67	68.00	70.00
25	Lime Plant	Blower House	84.0	78.00	80	85.00	81.00	78.0
		Kiln Area	78	77.00	79	78	77.0	80.00
		Lime Sizing Area	81	78.00	77	82	77.0	80.00
26	Pellete Plant	Mill Area (Addittive Mixing)	81.7	78.00	77.5	82	76	76.00
		Balling Disc Area	75.0	72.00	75	72.00	70.00	76.0
		Indurating machine Area	79.5	75.00	77	80	74	69.00
		Screening Area	64.8	70.00	72	68	78	77.00
		Updraught drying fan Area	69	68.00	70	68	71	72.00
		Wind Box Recuperation fan Area	72.00	68.00	69	70.00	71.00	70.0
		Cooling Air fan Area	68	72.00	70	68	72.0	68.00
		Dedusting ID fan Area	70	71	70	71	70.8	72.00
27	Oxygen Plant	Air Filtration Area	78.00	77	79	80	77	75.00
		Air Compressor Area	82.00	81.0	82	84.00	80.00	81.0
		Cooling Water System Area	79.00	78	79	77	78	77.00
		Air Purification Area	77.00	78	75	72	76	75.00
		Air Separation Area	73.00	70.4	72	76	72	75.00
		Distribution Area	76.00	74.0	75	77.00	75.00	70.0
		EAF - 1 Area	81	84	80	82	79	81.00
		EAF-2 Area	82	80	79	80	81	79.00
		EAF-3 Area	80	81	78	77	80	76.00

28	SMS - I	EAF-4 Area	76.0	80.0	81	79.00	77.00	78.0
		LAF 1& 2 Area	77.00	78.00	81	77.00	76.00	72.0
		LAF 3 & 4 Area	74.00	72.00	73	71.00	72.00	68.0
		Near Office	72.00	70.00	69	70.00	68.00	70.0
29	SMS - II	EAF Area	80.00	78.00	79	80.00	81.00	79.0
		LRF Area	70.00	68.00	73	74.00	77.00	75.0
		VD Area	71.80	76.00	76	75.00	78.00	75.0
		Caster Area	75.00	77.00	78	78.00	75.00	73.0
		Near Office	68.00	72.00	70	75.00	69.00	71.0
		Near Laboratory	69.00	68.00	70	69.00	68.00	67.0
30	Air Compressor Station	60MW+40MW (In side)	78.00	74.00	77	75.00	71.00	77.0
		CPP 3x130 MW UNIT 1 & 2 (inside)	81.00	76.00	80	79.00	77.00	72.0
		CPP 3x130 MW UNIT -3 (inside)	83.00	77.00	85	81.00	78.00	82.0
		CSP (Inside)	84.00	82.00	83	79.00	80.00	79.0
		Blast Furnace (in side)	82.00	80.00	81	82.00	79.00	78.0
		Pillet Plant (in side)	75.0	72.00	80	79.0	76.0	76.0
31	CSP	Down Coiler	75.0	68.00	75	70.0	72.0	73.0
		Mill Strand	77	74.00	72	77.00	75	77.00
32	CRM	Compressor House (IS)	80	81.00	77	76.00	77.00	78.00
		Mill No-2	80	78.00	79	81.00	79.00	78.00
		Near Corrugation Machine	80	81.00	79	77.00	75.00	78.00
		Near Chromating unit	80	75.00	60	71.00	73.00	75.00
33	WRM	Near Combination Air fan	70	72	71	68	70	67.00
		Compressor House (is)	73	72	70	72	68	72

Annexure-X (B)

Ambient Noise Monitoring Result (Oct'22 to Mar'23)

	Monitoring Location							
	North East Side Boundary Near Township		**North West Side Boundary Near Main Gate**		**South West Side Boundary Near ETP**		**South East Side Boundary Near Railway Gate**	
Month/Standard	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
	75 dB (A) Leq	70 dB (A) Leq	75 dB (A) Leq	70 dB (A) Leq	75 dB (A) Leq	70 dB (A) Leq	75 dB (A) Leq	70 dB (A) Leq
Oct-22	72.0	65.0	76.4	66.8	66.9	62.0	65.0	59.4
Nov-22	64.4	60.0	65.1	60.2	67.3	58.4	69.4	62.0
Dec-22	65.5	60.2	67.5	59.0	65.8	61.0	67.7	60.1
Jan-23	64.5	58.8	64.7	56.8	67.9	58.0	64.8	59.7
Feb-23	64.5	58.3	63.3	60.0	65.2	58.0	64.5	58.2
Mar-23	64.2	58.0	65.8	57.0	63.7	58.5	65.1	60.0

ANNEXURE - XI

Bhushan Power & Steel Ltd.
Vill. : Thelkoloi, P.O.: Lapanga - 768212
Teh. : Rengali, Dist-Sambalpur (Odisha)
INDIA

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T +91 (0)663 2535203 / 216
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F +91 (0)663 2562011 / 039
orissa@bpsl.net, www.bpsl.net
CIN : U27100DL1999PLC108350

Bhushan POWER & STEEL

24th December, 2016

The Sarpanch
Khinda Grampanchayat
Sambalpur
Odisha

Subject: Information regarding accordance of Environmental Clearances

Dear Sir,

Inviting your kind reference on the above mentioned subject

We would like to inform you that Ministry of Environment Forest & Climate Change ,Government of India, New Delhi has issued the Environmental clearance to our proposal for expansion existing Steel plant (Crude steel) capacity from 3.0 MTPA to 5.5 MTPA along with CPP from 560 MW to 710 MW vide its letter no:J-11011/40/2009-IA-II(I) dated 6th December 2016.

It is requested to kindly put up a copy of the letter in the display board of your office for information to general public

Thanking You,

Yours Faithfully,

For, M/s Bhushan Power & Steel Ltd

24/12/16

RANJIT KUMAR GHOSH
General Manager

Recd. ... Pr.
28/12/16
Sarpanch
Khinda Gram Panchayat

Encl: Copy of EC letter as stated above

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F +91 (0)663 2562011 / 039
onssa@epsl.net, www.bpsl.net
CIN : U27100DL1999PLC108350

24th December, 2016

The Sarpanch
Lapanga Grampanchayat
Sambalpur
Odisha

Subject: Information regarding accordance of Environmental Clearances

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Thanking You.

Yours Faithfully,

For, M/s Bhushan Power & Steel Ltd

24/12/16

RANJIT KUMAR GHOSH
General Manager

Encl: Copy of EC letter as stated above

Ravi Gupta
Sarpanch
Lapanga Gram Panchayat
Sarpanch Lapanga Panchayat.