Bhushan POWER & STEEL

Bhushan Power & Steel Limited
(A JSW Group Company)
Village : Thelkoloi, Post : Lapanga, Teh. : Rengali
Dist. : Sambalpur - 768 212, Odisha, INDIA
T +91(0)663 6636000
Website : www.jsw.in, CIN : U27100DL1999PLC108350

JSWBPSL/ENV/25-26/073 **Date:22.11.2025**

To,
The Deputy 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 April'25 toSeptember'25) on stipulated conditions of Environmental clearance for 4.5 MTPA, Integrated Steel Plant of M/s Bhushan Power & Steel Limited located at village Thelkoloi, Post Lapanga, Tehsil Rengali, District Sambalpur, Odisha.

Reference. -EC for 4.5 MTPA file no. IA-J-11011/40/2009-IA-II(I) Dated 13/01/2023 and amended on dated -18/07/2023.

Dear Sir,
Inviting your kind attention on the above-mentioned subject.
As per EIA notification 2006 and its subsequent amendments, we have mailed soft copies of the half yearly (April'25 to Sept'25)compliance status report of the environmental clearances of 4.5 MTPA, of Bhushan Power & Steel Limited located at village-Thelkoloi, Post-Lapanga, Tehsil- Rengali ,District- Sambalpur ,Odisha to the mail id roez.bsr-mef@nic.in on 22.11.2025 from email id-environment.bpsl@jsw.in

In case of non-receipt through email, request you to inform us, so that we will be obliged to submit hardcopies in your good office.

Thanking You,
Yours faithfully
For **Bhushan Power & Steel Limited**

Saurabh Singh
HOD -Environment

Hard copies submitted by post to:

1. The Member Secretary, SPCB, Parivesh Bhawan, A/118, Nilakanthanagar,Unit-VIII, Odisha, Bhubaneswar-751012
2. The Member Secretary, CPCB, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.

No.....Dt.....
S.P.C.B. BOARD
BHUBANESWAR
Received 25/11/25

Bhushan Power & Steel Limited
(A JSW Group Company)
Village : Thelkoloi, Post : Lapanga, Teh. : Rengali
Dist. : Sambalpur - 768 212, Odisha, INDIA
T +91(0)663 6636000
Website : www.jsw.in, CIN : U27100DL1999PLC108350

JSWBPSL/ENV/25-26/073 **Date:22.11.2025**

To,
The Deputy 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 April'25 toSeptember'25) on stipulated conditions of Environmental clearance for 4.5 MTPA, Integrated Steel Plant of M/s Bhushan Power & Steel Limited located at village Thelkoloi, Post Lapanga, Tehsil Rengali, District Sambalpur, Odisha.

Reference. -EC for 4.5 MTPA file no. IA-J-11011/40/2009-IA-II(I) Dated 13/01/2023 and amended on dated -18/07/2023.

Dear Sir,

Inviting your kind attention on the above-mentioned subject.

As per EIA notification 2006 and its subsequent amendments, we have mailed soft copies of the half yearly (April'25 to Sept'25)compliance status report of the environmental clearances of 4.5 MTPA, of Bhushan Power & Steel Limited located at village-Thelkoloi, Post-Lapanga, Tehsil- Rengali ,District- Sambalpur ,Odisha to the mail id roez.bsr-mef@nic.in on 22.11.2025 from email id-environment.bpsl@jsw.in

In case of non-receipt through email, request you to inform us; so that we will be obliged to submit hardcopies in your good office.

Thanking You,
Yours faithfully
For **Bhushan Power & Steel Limited**

Saurabh Singh
HOD -Environment

Hard copies submitted by post to:

1. The Member Secretary, SPCB, Parivesh Bhawan, A/118, Nilakanthanagar,Unit-VIII, Odisha, Bhubaneswar-751012
2. The Member Secretary, CPCB, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.

COMPLIANCE STATUS TO THE ENVIRONMENT CLEARANCE
EC ID No.- EC23A008OR181742, File No. - IA-J-11011/40/2009-IA-II(I) dtd. 13/01/2023
EC ID No.-EC23A1001OR5404024A, File No. - IA-J-11011/40/2009-IA-II(IND-I) dtd.18/07/23

A. Specific Condition:

S. N	Conditions	Compliance Status
i	This Environmental clearance is granted subject to outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted and agreed
ii	The Committee deliberated upon the latest certified compliance report of IRO, MoEF & CC as well as action plan submitted by PP with respect to the observations reported by IRO, MoEF & CC. The PP shall strictly comply with the commitments made and the action plan submitted to comply with partially complied conditions. The timely implementation must be ensured by IRO, MoEF& CC as per the Action Plan submitted by the project proponent.	We undertake to comply with the conditions.
iii	The PP shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management and risk mitigation measures relating to the project shall be implemented.	BPSL has implemented the environmental protection measures proposed in the documents submitted to the Ministry and recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures related to the project.
iv	The project proponent shall utilize modern technologies for capturing carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.	BPSL has taken adequate measures to reduce GHG emissions. Project pertaining to energy conservation like PCI, TRT in blast furnace, reduction of fuel rate in BF, RB-1& 2 coal use in DRI, Replacement of conventional light with LED light, steam trap installation in steam circuit, LPG consumption reduction, Gas flaring loss reduction etc. For capturing CO2, greenery development in our plant, township is under progress. For implementation of CCUS technology, the feasibility is being discussed in group level.

v	The activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit	Issues raised during the last public hearing were addressed. Action has been taken against the conditions for betterment of livelihood through CSR.
vi	The project proponent shall abide by all orders and judicial pronouncements, made from time to time w.r.t. OSPCB directions under Section 31(A) of Air(P&CP) Act,1981 and 33(A) of Water(P&CP) Act, 1974 amended thereafter issued vide Letter No. 6989/IND_I_CON-4650, dated 07.05.2021, Letter No-11377/IND-I-CON-4650 dated 07/08/2021 and Letter No-17816/IND-CON-4650, dated-12/11/2021.	Complied.
vii	The PP shall strictly comply with the commitments made and the action plan submitted to comply with partially complied conditions reported by IRO in the certified compliance report.	Complied.
viii	The PP shall strictly fulfil commitments made in PH as per the action plan committed by December 2023.	Complied
ix	Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.	The rejects and middling's & tailing of coal washery is completely used in captive power plant within the plant.
x	Tailings from Iron Ore washing plant shall be dewatered in filter press and stored dry maximum for a period of 30 days inside the plant premises.	A deep bed paste thickener is installed for dewatering of water from the tailing generating from Iron Ore Beneficiation Plant. The recovered water is reused in the plant and the tailing is directly disposed of in tailing pond in paste form. Tailing is not stored inside plant premises tailing is also utilized in sinter plant.
xi	**Solid waste utilization**	
a	Maximum 90 days of slag storage area shall be permitted inside the plant.	Noted, the BF slag is sold to cement manufacturers and sent through rake within 30 days. EAF slag is being crushed, high iron bearing material is being utilized in EAF, medium

		iron bearing material is being utilized in sinter plant and low iron bearing material is being utilized for low-lying area filling and road construction before its due time.
b	PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.	Slag crusher plant of capacity 300 TPH have been installed. The recovered metal is recycled through SMS & Sinter Plant. The nonmetallic residue used in-house for road construction and out construction works.
c	PP shall recycle/reuse 100 % solid waste generated in the plant.	Efforts are made to recycle 100% of solid waste generated in the plant. 100% of the Fly ash is utilized in brick manufacturing units and filling abandoned sone quarry. ESP dust, Bag filter dust, GCP dust and ARP residue etc. are reused for sinter making and nearby cement plant.
d	Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.	As part of carbon recovery, the elemental carbon present in flue dust is being utilized in Sinter plant. Utilization through Cement plant is being explored
e	Used refractories shall be recycled as far as possible	All the used refractories are sold to recyclers.
xii	**Sinter Plant**	
a	Sinter cooler waste recovery system shall be installed to generate steam or power.	Noted for compliance. BPSL has planned to utilize waste heat from sinter to coke moisture reduction.
b	Equipped with MEROS technology to reduce emission of SO2, NOx and heavy metals.	Noted
xiii	Producer gas plant shall not be established by the proponent.	Producer gas plant is not envisaged in the plant.
xiv	**Coke Oven Plant**	
a	Coke Dry Quenching (CDQ) shall be installed.	We have taken offers from various technology providers. The technical discussion is going on for supply and installation of Coke Dry Quenching System in existing Recovery Type Coke Oven.

b	Coke Oven Gas shall be desulfurized.	Coke oven gas desulfurization plant already installed at Recovery Type Coke Oven.
c	Tar sludge shall be mixed with coal and reused.	Complied.
xv	BF shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.	Complied. The installation and commissioning of TRT has been completed in BF 2. Presently we are operating 02 nos. of Blast Furnaces at our plant. BF 1 of capacity 1008 m3 has already equipped with Dry GCP. BF 2 of capacity 2015 m3 is already equipped with Wet GCP. Adequate ventilation system as per standards is provided at Cast house and stock house of both the Blast Furnaces. Slag granulation plant is installed in both the Blast Furnace.
xvi	Secondary fume extraction system shall be installed on converters of Steel Melting Shop.	The Existing SMS consists of EAF. Primary and secondary fume extraction systems are already in place at SMS. Converters are not envisaged in the plant.
xvii	Basic Oxygen Furnace (BOF) gas shall be cleaned dry.	BOF is not envisaged in the plant
xviii	The waste Heat Recovery system for charge preheating shall be included for 75 T Electric Arc Furnace.	Noted for compliance.
xix	Submerged Arc Furnace and Electric Arc Furnace shall be closed type with 4th hole extraction system.	Complied. The existing EAF installed at our plant are closed type and 4th hole extraction system.
xx	85-90 % of billets/slabs shall be rolled directly in hot stage. Only 10-15 % rolling shall be done through RHF using only Light Diesel Oil or Mixed BF/CO gas.	Complied. 100% of slab is rolled directly in hot stage and 100% of billet is rolled through RHF by using BF & CO gas.
xxi	Cold Rolling Mill (CRM), color coating and galvanizing plants shall have CETP to treat and recycle the treated water from CRM complex. Sludge generated at CRM ETP shall be sent to TSDF.	Complied. Dedicated ETP of capacity 1200 KLD has been constructed for treatment of effluent generating from CRM complex. The treated water of ETP is completely reused at Iron Ore Beneficiation Plant

		and RO plant feed. The sludge of CETP is sent to TSDF setup by M/s. Re sustainability Limited
xxii	Acid recovery plant shall be included to recover acid from pickling lines.	Complied Already we have installed adequate capacity of ARP for recovery of acid from pickling lines.
xxiii	Dust emission from Steel Plant stacks shall not exceed 30 mg/Nm3.	Noted for compliance. All new air pollution control equipment proposed in the project are designed for emission below 15 mg/Nm3.
xxiv	Water requirement for the plant shall be met from Back Water Reservoir of Hirakud Dam. Ground water abstraction is not permitted.	Complied. We are not abstracting any ground water.
xxv	Three tier Green Belt shall be developed covering at least 33% of the total project area by September, 2024 with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.	Noted for compliance. BPSL has earmarked 643.6 Acres of land out of our total 1950.25 Acres of plant area for development of three tire greenbelt. Already we have completed greenbelt developments over 400 Acres. The greenbelt development work is in progress.
xxvi	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	Noted for compliance. All the vacant areas within the plant are covered with greenery. The internal roads are made of concrete.
xxvii	Specific water consumption in the steel plant shall be less than 6.0 m3/t of finished product.	Complied.
xxviii	Performance tests shall be conducted on all pollution control systems every year and the report shall be submitted to the Regional Office of the MoEF&CC.	Complied. Performance evaluation of all pollution control equipment is being done every year. Performance Evaluation job completed by NIT Rourkela and report submitted bearing letter no-JSWBPSL/ENV/25-26/015 dtd.20.05.2025.
xxix	Dedicated railway siding within the steel plant complex shall be established by the	Complied.

	proponent by December,2023 for the transportation of materials as committed.	Railway siding has already been established within our integrated steel plant complex.
xxx	As committed by the PP, they shall prepare and submit the plan to conserve the nearby lakes and shall develop Lake Fronts for two number of lakes nearby.	Complied. Every year we are renovating the existing ponds in the peripheral villages.
xxxi	A parking area for trucks/dumpers shall be provided within the steel plant. No truck/dumper shall be parked outside the steel plant premises.	Complied. A dedicated truck parking area has been developed over 15 Acres within our plant premises. We do not allow any truck or dumper for parking outside our plant
xxxii	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.	Complied with. The entire electronic waste generating in the plant is being disposed of through vendors authorized by OSPCB/CPCB

B.General Conditions:

I. Statutory compliance

Sl. No.	Conditions	Compliance Status
i	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislation, etc., as may be applicable to the project.	Complied. BPSL has obtained all the statutory approvals/consent/permission required for the setting up and operation of the plant.

II. Air quality monitoring and preservation:

Sl. No.	Conditions	Compliance Status
i	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Complied. BPSL has installed 06 nos. of Continuous Ambient Air Quality Monitoring Station (CAAQMS). 48 nos. of continuous emission monitoring system (CEMS) have been installed at all the process stacks to monitor stack emission continuously. The CEMS and CAAQMS has been connected to the server of CPCB & OSPCB. Regular calibration of all analyzers is being done by approved NABL accredited laboratories. The monitoring result of Ambient Air, Stack emission analysis result for the period April'25 to Septrember'25 is enclosed as **Annexure-III & IV**
ii	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Complied. Fugitive emission monitoring at various locations throughout the plant is being carried out as per the plan. The fugitive Emission Monitoring result for the period April'25 to September' 25 is enclosed as **Annexure-V.**
iii	Sampling facilities at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.	Complied Sampling facilities such as port holes and platform have been provided at all the process stacks for manual monitoring of emission as per guidelines.
iv	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Complied. Based on the recommendations by M/s Mecon. Installation of APC has been planned to comply with the conditions.
v	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Complied Leakage detection systems have been installed in all the bag filters of the plant.

		Mechanized bag cleaning is also done for better maintenance of bags.
vi	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Complied. Adequate numbers of road sweeping machines have been engaged for regular cleaning of internal concrete roads. Reputed vendors have been engaged in mechanized housekeeping with sufficient nos. of mobile equipment and vacuum cleaners for shop floors and cleaning of roofs.
vii	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/agglomeration.	Complied. The ore, coal, coke, and lime fines collected in APC devices and vacuum cleaners are processed and recycled through the Sinter plant.
viii	The project proponent uses leak proof trucks/dumpers carrying coal and other raw materials and covers them with tarpaulin.	Complied The maximum raw material required for the plant is transported through rail. The remaining raw material which is transported through road is carried by good condition trucks & dumpers and are properly covered by tarpaulin.
ix	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).	A chain conveyor is already installed at our recovery type coke oven.
x	Land-based APC system shall be installed to control coke pushing emissions.	Complied An adequate APC system has been installed at the coke oven to control pushing emissions.
xi	Monitor CO, HC and O2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.	Complied Online CO, HC and O2 monitors have been installed at coke oven-2 batteries for detection of combustion efficiency and cross leakages in the combustion chamber.
xii	Vapor absorption system shall be provided in place of vapor compression system for cooling	Complied

	of coke oven gas in case of recovery type coke ovens.	The recovery type of coke oven installed at our plant is equipped with a vapor absorption system.
xiii	Wind shelter fence and chemical spraying shall be provided on the raw material stockpiles.	Mist cannons are provided in raw material stockpiles. Four nos. of dry fog system installed in all 4 nos. of wagon tippler of RMHS. Truck tipplers have been equipped with high pressure dust suppression system. 550 nos. of additional water sprinkler installed to reduce dust from the stockpiles, internal roads and other dust prone areas.
xiv	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Complied All the oil cellars are provided with a sufficient ventilation system.

III. Water quality monitoring and preservation:

Sl. No.	Conditions	Compliance Status
i	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Complied Continuous Effluent Quality Monitoring System (CEQMS), as per CPCB guideline, is provided at the outlet of BETP of coke oven, outlet of CRM ETP, and outlets of all 03 Nos. of wastewater treatment plants. All the installed CEQMS are connected to the servers of CPCB and OSPCB for real time data transmission. Besides, we have engaged NABL accredited laboratory for manual collection and analysis of treated water quality every month. The effluent quality analysis result is enclosed as **Annexure-VI**

ii	The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Complied. Pre and post monsoon monitoring of ground is being done half yearly in the peripheral village areas through Labs recognized under Environment (Protection) Act, 1986 and having NABL accreditation. The Ground Water analysis result is enclosed as **Annexure-VII.**
iii	The project proponent shall provide the ETP for coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time as amended from time to time;	Complied Biological ETP capacity 1800 KLD has been installed and in operation at By-Product Plant of Coke oven-2. It is designed to meet the standard prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated Iron & Steel).
iv	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Complied. Three STP has been installed to comply with the prescribed standard for treatment of domestic wastewater generated from guest house, canteens, and quarters. Individual septic tanks with soak pits have been provided in offices and workshops within the plant.
v	Garland drains and collection pits shall be provided for each stockpile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	Complied Garland drains with settling tanks have been provided at stock yards for arresting runoff during rainy days and water pollution.
vi	Tyre washing facilities shall be provided at the entrance of the plant gates.	Complied 06 numbers of Wheel washing facilities have been installed at material inward and outward gates, RMHS area and CPP ash handling area.
vii	Treated water from ETP of COBP shall not be used for coke quenching.	Noted for compliance. COBP treated water will be further treated in MBR- High pH RO and followed by Mechanical vapor Re compressor Technology. The plant capacity is 100 m3/hr. The project work of ROZLD is under progress and expected to be completed very soon. The

		treated water will be used as makeup water for cooling towers.
viii	Water meters shall be provided at the inlet to all unit processes in the steel plants.	Complied. Water meters have been provided at the inlet of all the process units of the plant for regular monitoring of water consumption by individual units.

IV. Noise monitoring and prevention:

Sl.No.	Conditions of EC	Compliance Status
i	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and the report in this regard shall be submitted to the Regional Officer of the Ministry as a part of a six-monthly compliance report.	Regular monitoring is being done, and the reports are submitted to the Regional Office of MoEF & CC, Bhubaneswar along with six-monthly compliance reports.

V. Energy Conservation measures

Sl. No.	Conditions	Compliance Status
i	Use torpedo ladle for hot metal transfer as far as possible. If ladles are not used, provide covers for open top ladles.	Complied. Only torpedo ladles are used to transfer hot metal from Blast Furnace to SMS.
ii	Restrict Gas flaring to < 1%.	Complied
iii	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, streetlights, parking around project area and maintain the same regularly;	Noted for Compliance.
iv	Provide LED lights in their offices and residential areas.	Complied LED Lights have been provided in all the offices, plant shops and residential areas.

v	Ensure installation of regenerative type burners on all reheating furnaces.	Complied

VI- Waste Management

Sl. No.	Conditions of EC	Compliance Status
i	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.	Complied Oil collection pits are provided at all the cellars. Collection tray under coil at coil storage area is provided. The oiling of cold rolled coils is done through Electrostatic sprayers to avoid spillage.
ii	Kitchen waste shall be composted or converted to biogas for further use.	Organic waste converter of capacity 500 Kg/Day has been installed for converting kitchen waste generating from all canteens, guest houses and staff quarters to compost. The compost generated is being utilized for horticulture development.

VII. Greenbelt

S.N	Conditions	Compliance Status
i	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.	GHG emission is being calculated daily as per WSA guidelines. The same also is calculated shop-wise monthly as per CBAM guidelines. Detailed decarbonization road map has been prepared up to FY2050.

ii	Project proponent shall submit a study report on Decarbonization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames",when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.	We have prepared decarbonization road map and are working on the implementation of projects to reduce CO2 emissions.

VIII. Public hearing and Human health issues

Sl. No.	Conditions	Compliance Status
i	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt 10 villages, namely Thelkoli, Dhubenchapal (Gontiapada), Banjiberna, Siripura, Kheruwal, Sradhapali, Maliatika, Khadiapali, Sunamal, Derba villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed by the PP.	Noted for compliance. As per the provisions of Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020 and commitment made by us we have already continued community development activities in the 10 villages namely Thelkoli, Dhubenchapal (Gontiapada), Banjiberna, Siripura, Kheruwal, Sradhapali, Maliatika, Khadiapali, Sunamal and Derba..
ii	Emergency preparation plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Complied
iii	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.	Complied.

iv	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Complied.

IX. Environment Management

S. N.	Conditions of EC	Compliance Status
i	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures / conditions. The company shall have defined system of reporting infringements / deviation EC Identification No. - EC23A008OR181742 File No. - IA-J-11011/40/2009-IA-II(I) Date of Issue EC - 13/01/2023 Page 11 of 16 / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	Complied
ii	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of a senior Executive, who will directly report to the head of the organization.	Complied. Separate Environmental Cell has been established having qualified persons headed by Senior Executive reporting directly to the head of the organization.

X. Miscellaneous

Sl. No.	Conditions of EC	Compliance Status
i	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be	Complied

	displayed in the project proponent's website permanently.	
ii	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied
iii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Complied
iv	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Complied
v	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied with. We regularly submit a soft copy of the six-monthly compliance status of EC conditions at the Regional Office of MoEF&CC.
vi	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied We submit Environmental statements in Form-V as per the guidelines to Odisha State Pollution Control Board. The same has been updated in the company's website.

vii	The project proponent 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, commencing the land development work and start of production operation by the project.	Complied
viii	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitments made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Complied. We follow all the commitments and recommendations made in the EIA/EMP report, commitments made during Public Hearing and during their presentation to the Expert Appraisal Committee.
ix	The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left-over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.	Complied
x	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Complied We will not go for any expansion or modification without prior approval from the Ministry of Environment, Forests and Climate Change (MoEF &CC).
xi	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Complied. We will extend full cooperation to the officers of the Regional Office MoEF&CC during inspection and monitoring.

8	The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.	Noted and agreed.
9	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	Noted and agreed
10	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted and agreed.
11	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Noted and agreed

LIST OF ATTACHMENT /ANNEXURE

Annexure No/Attachment	Description
Attachment-1	Status of Action plans per MoEF &CC.O.M.Dtd 30/09/2020
Annexure-I	List of CEMS
Annexure-II	List of Air Pollution Control Devices
Annexure-III	Ambient Air Quality Monitoring Result (Apr'25 to Sept'25)
Annexure-IV	Stack Monitoring Result (Apr'25 to Sept'25)
Annexure-V	Fugitive Emission Monitoring Result (Apr'25 to Sept'25)
Annexure-VI	Treated Effluent Analysis Result (Apr'25 to Sept'25)
Annexure-VII	Ground Water Quality Result
Annexure-VIII	List of Solid Waste
Annexure-IX	CSR Activity (Apr'25 to Sept'25)
Annexure-X (A&B)	Work Zone & Ambient Noise Monitoring Result (Apr'25 to Sept'25)

Attachment – 1

STATUS OF ACTION PLAN AS PER MoEF&CC, O.M. DATED 30/09/2020.

Sl. No.	Area	Year 2022	Year 2023	Year 2024	Total BudgetIn Crores	Status of Implementation as on 30.09.2024 Status as on 31.10.2025
1	Road Infrastructure	Construction of road in Derba (Repairing 3 km) and Thelkoloi service road (1km)	Construction of road in Sripura (2 km) and Khadiapalli (1km)	Construction of road in Dubhenchaper (3 km) and Lapanga (1km)	7.0	Thelkoloi Service Road Repairing has been Completed Repairing of Road at Derba is under construction Construction of Road at Lapanga is under construction Roads at Sripura, Khariapali & Dubhenchaper has been completed
2	Rainwater harvesting	Construction of village pond at Lapanga	Construction of village pond at Dhubenchapper	Construction of village pond at Khariapalli	1.5	Construction/Renovation of village pond at Lapanga has been completed. Construction/Renovation of village pond at Dhubenchapper is Complete. Construction/Renovation of village pond at Khadiapali is Complete. In addition, waterbody development was conducted at following ponds as well: a. Brahmanpada Pond, Thelkoloi b. Chuhuri Pond, Dhubenchhapal c. Bansimal Pond, Bansimal d. Binova Nagar Pond, Lapanga

						e. Rohidaspada Pond, Lapanga f. Saharapada Pond g. Khadiapali Pond, Khadiapali h. Neru Pond, Banjberna i. Banjiberna Pond, Banjiberna j. Dantamura Pond k. Landupali Pond l. Old Khinda Pond m. Das Pond, Lapanga n. Jugipali Pond, Salad o. Barikpali Pond, Salad p. Ghuhuri Kata Pond, Sripura q. Talipada Pond, Derba r. Kumdapada Pond, Derba s. Gountiyapada Pond, Dhubenchhapal t. Ramchandrapur Pond, Sripura u. Gariakata Pond, Sripura v. Nagamata Pond Thelkoloi x. Kinaloi Pond y. Tabdabahal Pond z. Mauli Pond, Paulepada, Dhubenchapper aa. Bhue Pond, Paulepada, Dhubenchapper ab. Demul Pond, Khadiapali ac. Tumapada pond, Ghichamura ad. Sunamal pond, Sripura
3	Healthcare facilities	Healthcare facility for local people in vicinity of the plant to address respiratory, skin, ENT issues etc. related to environmental pollution – Commencement of construction of building	Completion of construction	Procurement of equipment and engagement of medical staff (operational expenditure like staff salary and consumables to be borne by BPSL)	30.0	Mobile medical unit is operational in the peripheral villages. Company has setup a dispensary at Thelkoloi Village for community. The dispensary is operational. In addition, the company has established 1st Trauma Care Center of Western Odisha at

						District Headquarter Hospital, Jharsuguda in partnership with District Administration for the benefit of critical cases.
4	Drinking water & sanitation	Allocation of funds towards government drinking water mission and Sanitation in the close vicinity. The approved programmed would be communicated to MoEFCC through 6 monthly compliance report	-	-	5.0	We are providing drinking water through tankers to 10 nos. of peripheral villages and will continue to provide the same till Har Ghar Jal Yojana is implemented by Govt under "Har Ghar Jal Yojna", schedule to be done end 2024. Water Sanitation & Hygiene (WaSH) Programme in convergence with Dist. Govt. is operational focusing on following aspects, 1. Establishment of Piped Drinking Water Facilities in Village 2. Ensuring ODF+ Villages 3. Solid Waste Management

5	Vocational training arrangements for women and youth	Vocational training courses arrangements for women through various Govt departments/ NGOsTailoring, beautician and mushroom cultivation etc. - 200 women Vocational Training courses for local youth through local ITIs for following trade Electrician, Welder Fitter Electrician Mason Moto winding Machining etc for about 100 local youth	Tailoring, beautician and mushroom cultivation course - additional 200 women Electrician, welding, fitting and machining course for additional 100 local youth	Tailoring, beautician and mushroom cultivation course - additional 200 women Electrician, welding, fitting and machining course for additional 100 local youth.	1.7	Skill training center on Tailoring has been established at Thelkoloi Village for the women of peripheral villages. Women trained will be attached to the upcoming sewing production unit. Skill training on other livelihood program (Mushroom, Poultry, Floriculture, Fishery etc.) is under progress under Holistic Livelihood program.
6	Education	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Thekoloi Hugh School and Dhubenchapper upper Primary school, Sripura High School & Bir Surendra Sai High School	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Bisadhi Upper Thekoloi Upper Primary School, Lapanga High School, Saraswati Sishu Vidya Mandir & Sripura Upper Primary School	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Bisadhi Upper Primary School, Bir Surendra Sai Upper Primary School, Lapanga Upper Primary School & Sripura Upper Primary School	3.0	Renovation of following schools are complete: Thelkoloi High School is complete. Construction for additional section is complete. Dhubenchapper Primary School. Sripura Primary & Middle School Bisadihi Primary School Thelkoloi Upper Primary School Lapanga High School Lapanga Primary & Upper Primary School

						Saraswati Sishu Vidya Mandir School In addition, renovation of other peripheral schools done at Lapanga & Gihcamura panchayat. Library setup in 12 schools has been done. Partnership with GoO for MO school civil/ Infrastructural development for 60 schools of Sambalpur. Const. of Bi-Cycle Stand Shed at Special School for Deaf & MR Brundamal, Jharsuguda
7	Electrification/ Solar Street Lighting	Solar LED lights at Lapanga, Thelkoloi - 50 each village	Solar LED lights at Dhubenchapper , Derba - 50 each village	Solar LED lights at Khariapalli, Khinda - 50 each village	1.8	Installation of Solar LED lights under progress. Installation Status till Mar'25: Lapanga GP – 55 Nos. Thelkoloi GP – 53 Nos. Ghichamura GP –38 Nos. Khinda GP– 10 Nos. Installation in other areas: Sarda – 25 Nos. Bomaloi GP – 4 Nos. Hirma GP – 4 Nos. Additional installation of Solar LED lights till Oct'25: Lapanga GP – 20 Nos. Thelkoloi GP – 13 Nos. Ghichamura GP – 15 Nos. Khinda GP– 10 Nos. Sripura GP- 1 No. Installation in other areas: Bomaloi GP – 3 Nos. Hirma GP – 3 Nos.

						Nishanbhanga – 22 Nos. Jhankarpali – 3 Nos
				TOTAL	**50.0**	

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
19	CEMS-19	CPP 3x130MW UNIT-2	PM,SO2,NOx
20	CEMS-20	CPP 3x130MW UNIT-3(CFBC-5)	PM,SO2,NOx
21	CEMS-21	CPP3x130 MW Unit-3 (CFBC-6)	PM,SO2,NOx
22	CEMS-22	CPP 60 MW Stack	PM,SO2,NOx
23	CEMS-23	CPP 40 MW Stack	PM,SO2,NOx
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
32	CEMS-32	Coke Oven-1 Stack-2	PM,SO2,NOx
33	CEMS-33	Coke Oven -2 Process stack	PM ,SO2,NOx
34	CEMS-34	Coke Oven -2 Dedusting Stack	PM
35	CEMS-35	BF-2 Casthouse Bagfilter Stack	PM,SO2,NOx
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
47	CEMS-47	SMS-2 ZPF FTP	PM ,SO2,NOx
48	CEMS-48	250 TPH CFBC Boiler	PM ,SO2,NOx

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	210000	76
2	DRI/WHRB-2	Electro Static Precipitator	210000	76
3	DRI/WHRB-3	Electro Static Precipitator	210000	76
4	DRI/WHRB-4	Electro Static Precipitator	210000	76
5	DRI/WHRB-5	Electro Static Precipitator	210000	76
6	DRI/WHRB-6	Electro Static Precipitator	210000	76
7	DRI/WHRB-7	Electro Static Precipitator	210000	76
8	DRI/WHRB-8	Electro Static Precipitator	210000	76
9	DRI/WHRB-9	Electro Static Precipitator	210000	76
10	DRI/WHRB-10	Electro Static Precipitator	210000	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	350000	45
14	DRI Dedusting 7&8	Electro Static Precipitator	350000	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 MW AFBC-1	Electro Static Precipitator	143000	76
20	CPP 60 MW AFBC-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
27	250 TPH CFBC Boiler	Electro Static Precipitator	576792	105
Blast Furnace-1				
28	BF-Dry gas cleaning	Bag House, Gas Cleaning Plant	180000	30
29	BF-Cast house	Dust catcher Bag filter	220000	45
Blast Furnace-2				
30	BF-Stock House	Bag filter	610000	45
31	BF-Cast House	Bag filter	850000	45
Sinter Plant-1				
32	Sinter Plant Charging	Electro Static Precipitator	570000	75
33	Sinter plant Discharging	Electro Static Precipitator	450000	40

34	Sinter plant Dedusting	Electro Static Precipitator	190000	40
35	Sinter plant De dusting (Propertional Buiding)	Electro Static Precipitator	190000	40
Sinter plant -2				
36	Sinter plant Process	Electro static Precipitator	700000	120
37	Sinter plant Dedusting	Electro static Precipitator	600000	60
Coke Oven -2				
38	Pushing Emission Control System	De dusting System (Bag filter)	504000	45
39	Pre Crusher Building	De dusting system(bagfilter)	28000	30
40	Coal blending bin Building	De dusting system(bagfilter)	40000	30
41	Coal crushing building	De dusting system(bagfilter)	25000	30
42	Coal mixing building	De dusting system(bagfilter)	3500	30
43	Coke Treatment Building	De dusting system(bagfilter)	50000	30
Steel Melting Shop-1				
44	SMS-1 EAF& LF -1	Fume Treatment Plant-1 (Bag House)	15000000	45
45	SMS-1 EAF&LF-2	Fume Treatment Plant-1 (Bag House)	15000000	45
46	SMS-1 EAF&LF-3	Fume Treatment Plant-3(Bag House)	14310000	45
47	SMS EAF&LF-4	Fume Treatment Plant-4(Bag House)	14310000	45
Steel Melting Shop-2				
48	SMS-2 EAF & LF	Fumes Treatment Plant(Bag House)	2328000	45
49	SMS-2 ZPF & LF	Fumes Treatment Plant(Bag House)	1000000	45
RMHS				
50	Crushing & Screening areas of RMPP-1 Ore circuit	09 nos. of Bag Filter & Dry Fog System	50000	30
Lime & Dolo Plant				
51	Lime Plant-1	Bag Filter	50000	50
52	Lime Plant-2	Bag Filter	50000	50
53	Lime Plant-3	Bag Filter	50000	50
54	Lime plant- 4	Bag filter	120000	49
55	Lime plant-5	Bag filter	120000	49
56	Lime Plant-6	Bag Filter	120000	49
57	De dusting -1	Bag filter	27800	35
58	Dedusting -2	Bag Filter	58400	35
59	Dedusting-3	Bag filter	46400	38
60	Dedusting-4	Bag filter	8000	35

CRM Complex				
61	Acid Regeneration Plant-1	Wet Scrubbers	11530	34
62	Acid Regeneration Plant-2	Wet Scrubbers	11530	34
63	Acid Regeneration Plant-3	Wet Scrubbers	11530	34
64	Acid Regeneration Plant-4	Wet Scrubbers	11530	34
65	Pickling Plant-I(stack-I)	Wet Scrubbers	15716	32
66	Pickling Plant-I(Stack-II)	Wet Scrubbers	15716	32
67	Pickling Plant-II(Stack-I)	Wet Scrubbers	15716	32
68	Pickling Plant-II(Stack-II)	Wet Scrubbers	15716	32
Pellet Plant				
69	Wind box	Electrostatic Precipitator	984000	45
70	Hood Exhaust	Electrostatic Precipitator	420000	45
71	De dusting	Electrostatic 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	CO	O_3
Standard	100 ($\mu g/m^3$)	60 ($\mu g/m^3$)	80 ($\mu g/m^3$)	80 ($\mu g/m^3$)	2 ($\mu g/m^3$)	100($\mu g/m^3$)
April-25	78.2	40.6	33.9	34.1	0.84	<5.0
May-25	76.8	40.2	31.7	35.2	0.79	<5.0
June-25	75.9	39.4	30.8	34.8	0.78	<5.0
July-25	74.2	38.6	30.4	32.8	0.73	<5.0
August-25	70.9	33.2	27.5	29.1	0.61	<5.0
September-25	68.4	34.6	18.9	22.5	0.56	<5.0

Ambient Air Quality Monitoring Station -2 Near Railway Gate

Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO	O_3
Standard	100 ($\mu g/m^3$)	60 ($\mu g/m^3$)	80 ($\mu g/m^3$)	80 ($\mu g/m^3$)	2 ($\mu g/m^3$)	100($\mu g/m^3$)
April-25	91.6	46.2	30.2	41	0.74	20.1
May-25	87.2	45.7	31.5	38.8	0.78	<5.0
June-25	86.8	44.8	30.9	37.6	0.7	<5.0
July-25	85.8	43.8	28.6	35.4	0.7	<5.0
August-25	80.6	38.2	25.4	29.2	0.65	<5.0
September-25	77.4	31.6	20.6	22.4	0.58	<5.0

Ambient Air Quality Monitoring Station -3 Behind CRM

Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO	O_3
Standard	100 ($\mu g/m^3$)	60 ($\mu g/m^3$)	80 ($\mu g/m^3$)	80 ($\mu g/m^3$)	2 ($\mu g/m^3$)	100($\mu g/m^3$)
April-25	80.6	41.8	35.2	39.8	0.82	<5.0

May-25	84.6	47.2	37.5	39.2	0.79	<5.0
June-25	83.2	46.4	36.8	39.4	0.55	<5.0
July-25	78.5	40.2	32	36.2	0.52	<5.0
August-25	74.2	37	27.5	31.1	0.46	<5.0
September-25	71.9	34	17.7	25.8	0.55	<5.0
Ambient Air Quality Monitoring Station -4 Near ETP						
Pollutant	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_X**	**CO**	**O_3**
Standard	**100 ($\mu g/m^3$)**	**60 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**2 ($\mu g/m^3$)**	**100($\mu g/m^3$)**
April-25	81.2	43.1	22.4	34.6	0.6	<5.0
May-25	79.8	44.2	24.1	35.4	0.68	<5.0
June-25	77.5	43.7	23.7	34.6	0.58	<5.0
July-25	70.8	37.4	20.4	32.7	0.55	<5.0
August-25	69.9	34.2	19.7	24.3	0.51	<5.0
September-25	76.6	44.2	15.8	23.1	0.46	<5.0

Annexure-IV

Stack Monitoring Report

April'25 to Sept'25

S.N.	Units	Stack Name		[Particulate Matter (mg/Nm3)]					
			Standard mg/Nm3	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25
1	DRI	DRI/WHRB-1	50.00	26.00	23.20	39.00	26.00	32.00	34.00
2		DRI/WHRB-2	50.00	21.00	25.70	32.00	30.00	36.00	32.00
3		DRI/WHRB-3	50.00	20.00	22.40	26.00	34.00	32.00	29.00
4		DRI/WHRB-4	50.00	19.00	20.10	30.00	25.00	27.00	26.00
5		DRI/WHRB-5	50.00	21.00	18.70	34.00	37.00	32.00	33.00
6		DRI/WHRB-6	50.00	13.00	17.40	27.00	25.00	32.00	28.00
7		DRI/WHRB-7	50.00	19.00	26.20	22.00	25.00	28.00	22.00
8		DRI/WHRB-8	50.00	23.00	21.40	29.00	30.00	33.00	29.00
9		DRI/WHRB-9	50.00	20.00	22.80	30.00	29.00	34.00	41.00
10		DRI/WHRB-10	50.00	27.00	26.60	22.00	32.00	28.00	28.00
11		DRI/WHRB-11&12	50.00	32.00	43.80	32.00	35.00	30.00	34.00
12		DRI De-dusting 1&2	50.00	41.00	32.30	36.00	40.00	37.00	41.00
13		DRI De-dusting 3&4	50.00	33.00	39.80	46.00	38.00	42.00	39.00
14		DRI De-dusting 5& 6	50.00	41.00	42.60	38.00	46.00	43.00	44.00
15		DRI De-dusting 7&8	50.00	39.60	44.20	42.10	41.00	44.00	41.00
16		DRI De-dusting 9&10	50.00	42.00	32.70	35.00	40.00	44.00	47.00
17		DRI De-Dusting 11&12	50.00	39.00	36.80	41.00	41.00	38.00	42.00
18	CPP	CPP 3X130 MW Unit 1	50.00	42.00	38.20	35.00	46.00	39.00	42.00
19		CPP 3X130 MW Unit 2	50.00	43.00	31.30	42.00	39.00	44.00	46.00
20		CPP 3X130 MWUnit-3 CFBC 5	50.00	41.00	42.50	45.00	45.00	42.00	39.00
21		CPP3X130 MW Unit-4 CFBC 6	50.00	38.00	37.70	38.00	45.00	46.00	41.00
22		CPP 60 MW	50.00	SD	SD	34.00	21.00	41.00	44.00
		CPP40 MW	30.00	SD	SD	24.00	26.00	27.00	25.00
23		250TPH CFBC Boiler	30.00				28.00	26.00	28.00
24	SMS-1	FTP-1	50.00	19.00	17.90	28.00	32.00	26.00	28.00
25		FTP-2	50.00	15.00	16.50	33.00	25.00	38.00	41.00
26		FTP-3	50.00	17.00	18.30	25.00	34.00	37.00	35.00
27		FTP-4	50.00	18.00	21.80	31.00	31.00	31.00	29.00
28	SMS-2	FTP	50.00	27.00	32.70	34.00	28.00	27.00	31.00
		ZPF	30.00	23.00	26.50	22.00	26.00	28.00	27.00
29	Pellet plant	Pellet plant process stack	50.00	31.00	34.80	36.00	42.00	40.00	37.00
30		Pellet plant dedusting stack	50.00	38.00	36.70	45.00	40.00	42.00	32.00

31	Coke Oven-1	Coke_Oven 1_WHRB_1_and_2	50.00	35.00	42.60	42.00	42.00	39.00	35.00
32		Coke_Oven 1_WHRB_3_and_4	50.00	37.00	39.20	46.00	35.00	33.00	34.00
33	Coke Oven-2	Coke_Oven_2_Process_Stack	50.00	28.00	34.90	28.00	32.00	38.00	39.00
34		Coke_Oven_2_Dedusting	50.00	27.00	29.60	32.00	35.00	37.00	33.00
35	Blast Furnace-2	BF_2_Cast_House	50.00	31.00	33.90	37.00	45.00	45.00	44.00
36	Blast Furnace-1	BF_1_Cast_House	50.00	32.00	31.40	32.00	36.00	38.00	41.00
37	Sinter Plant-1	Charging stack	50.00	30.00	35.90	33.00	43.00	45.00	47.00
38		Discharging	50.00	32.10	34.30	37.00	39.00	41.00	38.00
39	Sinter Plant-2	Process stack	50.00	37.00	38.90	38.00	36.00	31.00	33.00
40		De dusting	50.00	29.00	33.40	43.00	46.00	42.00	38.00
41	LCP	LCP-1	50.00		42.30	32.00	37.00	37.00	38.00
42		LCP-2	50.00	44.00	46.40	38.00	42.00	41.00	42.00
43		LCP-3	50.00	43.00	43.20	41.00	46.00	43.00	44.00
44		LCP-4	50.00	29.00	27.80	27.00	26.00	24.00	28.00
45		LCP-5	30.00	28.00	26.40	26.00	28.00	26.00	31.00
46		LCP-6	30.00	23.80	23.20	22.60	25.00	24.00	22.00

Annexure-V

Fugitive Emission Results (microgram/m3) (Apr'25 to Sept''25)								
Sl No	Department	Location	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25
1	Coke Oven-1	L-94 , 002 Conveyor Belt line	1948	1251	1514	1537	1626	695
2		Silo area	1966	1048	1768	623	1632	765
3		Mixing Building	1345	798	1452	1530	1895	456
4		Battery Area	1484	1785	1045	405	845	511
5		Coal Tower area	928	828	782	854	1946	436
6		Coke oven -1 office	302	163	120	120	132	75
7	Coke Oven-2	Mixture building	1895	1145	1045	1157	1692	872
8		BETP area	1635	1366	426	408	428	358
9		JT 01 (25BC 01)	1327	632	527	1208	1860	535
10		JT 01 (25BC 02)	558	1758	605	1516	1902	640
11		Control room	117	128	122	130	134	105
12	Blast Furnace-1	Cast house-A	ND	1452	1550	1660	1520	1710
13		Near pump house	442	321	442	1690	235	285
14		PCI area	1108	1045	1108	1450	222	378
15		Control room	138	106	122	98	116	115
16	Blast Furnace-2	Cast house -A	ND	ND	1482	1480	1998	1752
17		PCI area	844	ND	802	1722	972	411
18		Pump house	261	ND	348	362	417	308
19		Control room	126	ND	132	88	128	84
20	SMS-1	Furnace -1	1752	1834	1642	1386	1264	721
21		Furnace -2	1834	1551	1731	1048	1156	843
22		Furnace -3	978	1634	1448	1415	1676	765
23		Furnace -4	1241	1326	972	1123	1328	692
24		Furnace -1&2 slag pit area	1637	1935	1234	875	773	842
25		Furnace - 3&4 slag pit area	1370	1285	1355	1014	648	617
26		Control room	122	124	126	132	120	88
27	SMS-2	Furnace -1	1258	524	SD	SD	202	484
28		Furnace -2	1092	321	1258	1463	1521	372
29		Furnace -1 slag pit area	1445	695	365	652	238	358
30		Furnace -2 slag pit area	1854	1526	1092	842	165	382
31		Control Room	136	106	122	98	95	102
32	Sinter Plant-1	Primary Screening building	ND	ND	1696	1442	1388	1062
33		Secondary Screening building	ND	ND	1245	1063	1853	1238
34		secondary mixing Drum	ND	ND	1953	1421	1640	1412
35		Control Room	ND	ND	98	102	118	113
36	Sinter Plant-2	Primary Screening building	1258	1452	1242	1876	1735	1535
37		Secondary Screening building	981	1014	1136	1245	1382	1741
38		Primary mixing Building	863	895	968	1164	1284	1248
39		Control room	118	162	112	127	108	108
40	Pellet Plant	Indurating Building	836	1255	1382	1218	1235	1156
41		Dosing & mixing Buildng (HLO1-GL81-MA01) Head End	712	1082	1146	1043	750	698
42		Dosing & mixing Buildng (HLO1-GL81-MA01) Tail End	1018	1208	1304	1267	854	814
43		Additive Storage area	1757	1254	1352	1408	1015	938
44		Pump house	325	1834	452	411	1327	242

45		Pellet plant office	136	129	120	97	105	86
46	Benification	Grinding Building	636	751	685	718	615	535
47		JIG Building	528	530	610	592	502	448
48		Screbber Building	1204	1308	1218	1304	1024	978
49		Fines Building	875	869	927	1038	864	766
50		22 Belt Line	682	718	638	523	435	417
51		Controll room	164	172	125	111	102	82
52	Power plant(3x130) MW	1 no ESP area	721	695	888	1214	652	926
53		2 no ESP area	604	512	762	1011	321	468
54		3 no ESP area	881	740	1248	721		518
55		4 no ESP area	542	508	981	576	504	603
56		5 no ESP area	1235	825	1056	1248	392	498
57		6 no ESP area	496	611		1262	442	535
58		1 no Boiler area	1571	528	975	871	298	711
59		2 no Boiler area	514	492	728	1351	392	693
60		3 no Boiler area	1157	487	1238	935		805
61		4 no Boiler area	529	441	856	873	324	745
62		5 no Boiler area	836	602	1025	972	335	736
63		6 no Boiler area	552	518		725	405	678
64		Control Room	98	86	79	85	77	78
65	Power Plant 100 MW	AFBC-1 Boiler area	952	582	611	865	877	ND
66		AFBC-1 ESP area	876	611	664	911	634	ND
67		AFBC-2 Boiler area	1042	598	592	626	518	435
68		AFBC-2 ESP area	975	705	603	820	492	345
69		WHRB-1 Boiler area	751	875	925	1082	385	505
70		WHRB-1 ESP area	578	786	868	718	866	308
71		WHRB-2 Boiler area	642	835	742	1685	795	188
72		WHRB-2 ESP area	583	842	876	628	812	372
73		WHRB-3 Boiler area	562	963	928	964	726	538
74		WHRB-3 ESP area	964	1054	651	523	688	392
75		WHRB-4 Boiler area	1025	987	486	651	562	ND
76		WHRB-4 ESP area	745	1123	456	755	624	ND
77		Control Room	113	128	101	118	107	89
78	250TPH Boiler	DCF Floor (20mtr)	1018	936	1045	928	1726	1876
79		ESP area	607	586	789	843	1818	1637
80		Hopper 20mtr	804	914	1154	1076	1226	1114
81		Boiler area	526	837	635	580	812	976
82		Control room	176	127	110	105	102	80
83	RMHS	Conveyor belt 21C1	1561	1681	1048	1870	485	536
84		Conveyor belt 20C1	1457	1495	1436	1711	305	711
85		Conveyor belt 20C2	1274	1351	1240	1673	545	605
86		Wagon Tippler # 2	1778	1805	1328	1825	668	762
87		Wagon Tippler # 3	1514	1677	1944	872	724	816
88		Railway yard	1406	1211	1775	1511	475	560
89		Barel area	1672	1708	1625	1408	420	438
90		Limestone screening area	1227	1868	1320	1425	328	628
91		RMPP-2&5 office	206	202	132	135	128	102
92		T2C1 Discharge point	1872	1852	ND	1569	1742	1638
93		T3C1 Receiving Point	1765	1604	ND	1452	1872	1573

94		T3C1 Discharge Point	1436	1745	ND	1631	1824	1708
95		T3AC1 Receiving Point	820	976	ND	795	892	726
96		T3AC1 Discharge Point	1804	1727	ND	1411	1537	1465
97	CRM	Gate No-12	456	443	385	328	314	358
98		Between CTL 3 &CTL 7	463	378	392	306	282	305
99		Tube Coil Packing Area	385	426	406	333	224	265
100		Narrow Section	346	448	376	402	265	248
101		TLL	411	376	334	368	192	206
102		CRS	428	390	358	347	158	162
103		NSPM	376	332	345	323	232	192
104		GP-6 Entry Area	328	302	376	376	213	234
105		FG Area	442	362	382	339	222	215
106		CCL -2	335	343	345	309	150	178
107		CRM canteen	220	222	135	116	112	104
108		CCL Exit	312	318	368	292	142	185
109		G.P -2 Entry Area	370	361	360	365	230	220
110		GP-2 pot area	356	337	405	354	198	308
111		Finishing Area	321	408	386	422	235	260
112		GP -1 Entry Area	319	302	344	342	194	218
113		GP -1 Exit Area	338	311	318	462	240	272
114		GP -1 Pot Area	342	340	298	438	207	198
115		G.P- 2 Exit Area	318	327	365	411	205	226
116		CRM office	98	114	125	116	103	85
117	WRM	Billet cold charging	458	512	462	438	285	286
118		Furnace exit	402	459	397	425	328	275
119		Intermidiate Mill	395	392	379	466	374	306
120		Cooling bed entry	438	432	438	384	357	314
121		Cooling bed exit	442	444	414	368	265	295
122		Furnace Area	465	472	440	487	366	321
123		Rough Mill	392	437	438	517	382	342
124		Pre-Finish Lubrication	478	491	490	398	307	289
125		Easy down	436	426	425	382	289	306
126		WRM office	108	102	165	98	104	96
127	Bright Bar	H&T Line	392	176	378	345	392	362
128		Bright Bar Office	208	378	190	117	125	101
129		Quarantine Area	402	190	364	284	482	422
130		Hot Meterial Area	368	364	404	324	521	496
131		Wooden Block	445	404	507	361	456	431
132		Furnace Area	562	507	548	438	504	601
133		Finishing Area shed-1	1054	548	978	792	782	705
134		Finishing Area shed-2	863	978	795	672	704	836
135		Finishing Area shed-3	711	795	723	608	692	678
136		Finishing Area shed-4	685	723	610	518	621	633
137	CSP	Tunnel Furnace A zone-2	505	520	520	493	285	204
138		Tunnel Furnace A zone-8	548	498	498	478	328	219
139		CSP mill FM area	492	518	518	435	374	243
140		CSP coiler area	468	467	467	440	357	211
141		Main Pump house	395	382	382	308	265	232
142		Caster Scale pit	384	395	395	332	366	308
143		Tunnel Furnace B zone-1	517	475	475	452	382	228

144		Roll Shop PCC room	463	440	440	484	307	152
145		Control room	276	188	188	116	98	82
146	Tube Mill	Mill no 7 to 14 dispach area	438	521	508	406	393	411
147		Mill no 1 to 6 dispach area	475	478	672	397	408	406
148		Vehecle parking area	504	535	482	457	444	297
149		Mill 7 operation area	462	492	495	392	378	338
150		Between mill 15 & 16	557	468	442	385	365	385
151		Mass sliding	498	582	436	428	426	392
152		Galvanising area	471	486	452	315	320	426
153		Between Mill 7 & 8	450	446	435	376	346	432
154		SMS road side	385	323	372	218	250	245
155		Tube mill Office	142	125	118	110	118	105
156	DRI 1 & 2	Day bin area	511	635	456	537	540	457
157	DRI 1	Cooler inlet slip seal	612	1870	1568	1472	875	1264
158	DRI - 2	cooler inlet slip seal	1318	1285	961	845	1785	975
159	DRI 1 & 2	Control room	124	135	142	111	106	118
160	DRI - 3	Cooler inlet slip seal	1075	1418	1214	624	1721	1442
161	DRI - 4	Cooler inlet slip seal	1238	1255	850	450	1283	1281
162	DRI - 3 & 4	Control room	128	122	114	111	104	115
163	DRI -5	cooler outlet slip seal	938	1056	1805	503	1726	721
164	DRI -6	cooler inlet slip seal	1142	926	1135	815	1581	1044
165	DRI -5 & 6	Control room	261	176	118	156	105	98
166	DRI -8	Cooler outlet slip seal	1288	1772	662	1646	1145	938
167	DRI -7 & 8	Control Room	131	116	125	106	110	118
168	DRI -9	Cooler inlet slip seal	1325	1234	1675	1853	1775	1905
169	DRI -10	Cooler inlet slip seal	1320	1525	1838	1378	1505	1385
170	DRI -9 &10	Control room	126	152	131	124	110	98
171	DRI -11 & 12	Control room	123	137	122	132	135	108
172	Lime Plant	Entrance Road of LCp	625	678	682	411	358	582
173		Service Road Plaza& LCP kiln	821	714	704	521	404	608
174		Zero level RBC phase-1	536	930	689	865	748	942
175		Zero level new RBC	711	876	728	1002	972	854
176		Conveyor belt LCPC-BFC1 to 6 tail end	1635	1721	1751	1742	1973	1852
177		Conveyor belt LCPC-BFC1 to 6 head end	1804	1831	1887	1563	1855	1772
178		Mechanical office	121	111	125	114	122	93

Annexure-VI

Treated Effluent/ Wastewater Quality

SN	Sampling Location	Parameter	Standard as per CTO	April'25	May'25	June'25	July'25	Aug'25	Sept'25
1	WWTP-1 Outlet	pH	6.5 to 9.0	7.12	7.24	7.33	7.49	7.35	7.32
		TSS mg/l	<100	12	13.5	14	18	20.7	23
		TDS mg/l	<2100	540	624	740	860	1052	1140
		COD mg/l	<250	44.8	47.8	50.2	53.8	56	71.7
		O&G mg/l	<10	<5.0	<5.0	<5.0	<5.0	<5.0	5.6
		Fe mg/l	<1.0	0.36	0.27	0.35	0.23	0.89	0.54
2	WWTP-2 Outlet	pH	6.5 to 9.0	6.87	7.01	7.11	7.29	7.18	7.12
		TSS mg/l	<100	8	8.5	9	12	16	18
		TDS mg/l	<2100	612	712	764	916	980	968
		COD mg/l	<250	27.4	28.3	26.1	32.1	36	43.8
		O&G mg/l	<10	<5.0	<5.0	<5.0	<5.0	<5.0	5.1
		Fe mg/l	<1.0	0.3	0.29	0.22	0.43	0.47	0.84
3	WWTP-3 Outlet	pH	6.5 to 9.0	6.93	7.04	7.19	7.22	7.31	7.43
		TSS mg/l	<100	14	15	16	21	24	29
		TDS mg/l	<2100	580	596	620	760	920	1120
		COD mg/l	<250	33.3	35.1	32.1	36.1	36	51.8
		O&G mg/l	<10	<5.0	<5.0	<5.0	<5.0	<5.0	6.3
		Fe mg/l	<1.0	0.58	0.3	0.44	0.47	0.33	0.7
4	CRM ETP Outlet	pH	5.5 to 9.0	7.14	7.26	7.34	7.48	7.42	7.53
		TSS mg/l	<100	10	12	13	18	20	28
		Phenol mg/l	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		Cyanide mg/l	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
		BOD mg/l	<30	6.43	7	7.26	7.69	11	10.6
		COD mg/l	<250	32.1	36.7	38.2	36.1	36	51.8
		Total Ammoniacal Nitrogen mg/l	<50	1.16	2.3	1.71	2.27	2.26	3.33
		O&G mg/l	<10	<5.0	<5.0	<5.0	<5.0	<5.0	5.3
		TDS mg/l	<2100	240	280	312	372	428	460
		Fe mg/l	<3.0	0.63	0.75	0.62	0.46	1.26	0.89
		Cr mg/l	<2.0	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
5	Coke Oven-2 BETP Outlet	pH	5.5 to 9.0	6.96	6.91	6.97	7.09	7.12	7.2
		TSS mg/l	<100	14	15	18	22	25	30
		Phenol mg/l	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

		Cyanide mg/l	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
		BOD mg/l	<30	8.91	10.2	11.3	12.5	12.3	12.8
		COD mg/l	<250	44	53.4	57.8	62.2	48	59.8
		Total Ammoniacal Nitrogen mg/l	<50	8.69	7.46	6.82	7.39	8	8.32
		O&G mg/l	<10	7.5	6.4	5.9	6.2	5.3	5.6
		TDS mg/l	<2100	1652	1710	1640	1740	1680	1740
		Fe mg/l	<3.0	1.52	0.17	0.26	0.27	0.76	0.96
		Cr mg/L	<2.0	<0.1	0.1	<0.10	<0.1	<0.1	<0.1

Annexure-VII

Ground Water Quality									
No	Parameter	Unit	Standard as per IS 10500:2012	Bishidhi Village (Hand Pump)	Thelkoloi Village Tube Well	Sripura Village Tube Well	Lapanga Village, Hand pump	Dhubanchapal Village , Tube Well	Gumkarma Village Hand pump
1	Color	Hazen	5	1	1	1	1	1	<1.0
2	pH	--	6.5 - 8.5	8.05	7.95	7.45	7.19	7.98	7.79
3	Turbidity	NTU	1	1.32	1.14	1.34	1.21	<1.0	1.5
4	TDS	mg/l	500	472	412	476	447	432	492
5	Boron	mg/l	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
6	Calcium	mg/l	75	29.1	27.5	32.3	32.3	33.9	42
7	Chloride	mg/l	250	70.3	70.3	51.3	24.7	89.3	56
8	Copper	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
9	Fluoride	mg/l	1	<0.1	<0.1	<0.1	0.14	<0.1	<0.1
10	RFC	mg/l	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
11	Iron	mg/l	1	0.78	0.34	0.68	<0.05	0.51	0.62
12	Magnesium	mg/l	30	18.7	19.6	15.7	15.7	21.6	12.42
13	Manganese	mg/l	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Nitrate	mg/l	45	15.4	40.2	25.6	14.8	20.6	15.3
15	Phenolic Compounds	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16	Selenium	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
17	Sulphate	mg/l	200	20.4	29.8	19.2	11.4	35.6	20.2
18	Total Alkalinity	mg/l	200	103	115	111	119	127	104
19	Total Hardness	mg/l	200	149	149	145	145	174	156
20	Znic	mg/l	5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
21	Cadmium	mg/l	0.003	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
22	Cyanide	mg/l	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
23	Lead	mg/l	0.01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
24	Mercury	mg/l	0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
25	Total Arsenic	mg/l	0.01	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
26	Cr	mg/l	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
27	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
28	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
29	MBAS	mg/l	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
30	Minarl Oil	mg/l	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Annexure-VIII

Details of Solid Waste

No	Units	Solid waste	Utilization
01	Blast Furnace	BF Slag	The entire slag generating from BF is granulated and sold to cement manufacturers.
02	Steel Melting Shop	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	Steel Melting Shop	FTP dust from EAF/LF	Recycle through pellet/sinter plant
04	DRI	Char	Char generated from DRI unit is blended with coal and used in AFBC and CFBC boilers of Captive Power plant.
06	Sinter plant	ESP dust	Recycled in sinter/pellet plant.
07	CSP & Rolling Mill	Scales & derbies from CSP and Rolling mill	Scales and debris generated from rolling mill and SMS is recycled in Sinter Plant.
08	Different Units	Scrap	Recycled in Steel melting shop
09	Captive Power Plant	Ash	The ash generated from CPP is being utilized in different area like fly ash brick manufacturing, low lying area filling, exhausted quarry void filling and Road Construction.

Annexure-IX

CSR EXPENDITURE FOR THE YEAR 2025-26 (1st April - 31st October 2025)

S.No.	Programme Head	Key Interventions	Budget (Rs. In Crore)	Actual (Rs. In Crore)	Ongoing Projects (Rs. In Crore)
1	Educational infrastructure & systems strengthening	Bridging Critical Infrastructure Gap	1.52	0.71	0.81
		Early Childhood Care & Education			
		Therapy & Education for special children with disabilities - Mannat Center			
		Hamara Gaon Project			
		JSW School Bus			
		Support to Thelkoloi High School - Teacher Honorarium			
2	General community infrastructure support & welfare initiatives	Development of community infrastructures	3.61	0.52	1.32
		Development of Townhall			
		Streetlights at public places			
3	Enhance Skills & rural livelihoods through nurturing of supportive ecosystems & innovations	Agri Livelihood Programme	1.49	0.82	0.63
		Women Enterprise Development Programme			
		Sewing Production Center (Tarang Tailoring Unit)			
		Sewing Training Center			
4	Waste management & sanitation initiatives	Waste collection & management	2.08	0.54	1.49
		Integrated WaSH Programme			
		Operation of community toilets			
5	Integrated water resources management	Drinking water for communities	0.72	0.28	0.44
6	Public health infrastructure, capacity building & support programs	Community Dispensary	1.26	0.51	0.74
		Mobile Medical Unit			
		Community Ambulance			
		Provision of nutritional support for tuberculosis patients under PMTBMA			
7	Sports promotion & institution building	Promotion of sports through local tournaments	0.13	0.02	0.08
8	Project Management Cost		0.5	0.11	0.33
		Grand Total	**11.31**	**3.51**	**5.84**

Education Programme- ECCE, Hamara Gaon and Mannat Centre







Development of Schools & AWCs




JSW School Bus






Community Infrastructure





Sewing Training & Production Center





Women Empowerment & Enterprise Development









Agri-based Livelihood Programme







Water Sanitation & Hygiene (WaSH) and Waste collection & management









Drinking Water Provision





Health & Nutrition- MMU, Community Dispensary and Community Ambulance












TB Kits Distribution






Sports





Annexure-X(A)

Workzone Noise Monitoring Result									
Sl. No.	Name of the Unit	Location	25-Apr	26-Apr	27-Apr	28-Apr	29-Apr	30-Apr	Standard as per CTO
			dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
1	DRI -1	Kiln main drive	84.700	84.600	84.800	S/D	85.000	84.800	
		Lobe comp. House (Inside)	83.300	84.000	83.900	S/D	82.700	84.000	
		Lobe comp. House (Outside)	84.450	80.300	84.200	S/D	84.050	83.500	
2	DRI -2	Kiln main drive	84.250	82.200	83.600	82.000	83.600	83.600	
		Lobe comp. House (Inside)	84.400	81.200	84.400	84.750	84.200	84.750	
		Lobe comp. House (Outside)	83.300	83.300	84.350	81.250	81.200	83.300	
3	DRI -3	Kiln main drive	84.350	84.400	84.200	83.900	83.350	83.900	
		Lobe comp. House (Inside)	83.200	85.000	84.350	84.000	80.000	83.650	
		Lobe comp. House (Outside)	81.300	81.500	83.700	83.500	81.200	84.750	
4	DRI -4	Kiln main drive	82.300	81.200	84.400	81.200	85.000	84.700	
		Lobe comp. House (Outside)	83.750	84.350	84.100	81.200	82.200	81.700	
5	DRI -5	Kiln main drive	82.200	84.200	83.200	81.450	84.350	84.700	
		Lobe comp. House (Inside)	80.100	83.800	84.000	81.900	84.000	83.600	
		Lobe comp. House (Outside)	79.900	80.100	85.000	80.800	81.100	81.600	
6	DRI -6	Kiln main drive	81.200	83.600	83.700	S/D	84.750	82.400	
		Lobe comp. House (Inside)	82.250	82.200	84.600	S/D	81.200	83.600	
		Lobe comp. House (Outside)	84.550	83.600	84.100	S/D	82.550	83.750	
7	DRI -7	Kiln main drive	79.700	84.400	83.400	83.450	84.900	83.300	
		Lobe comp. House (Inside)	82.200	85.000	81.450	83.600	84.400	80.100	
		Lobe comp. House (Outside)	81.200	83.300	80.700	80.550	81.200	79.950	
8	DRI -8	Kiln main drive	84.250	83.350	84.350	81.250	83.900	81.700	
		Lobe comp. House (Inside)	83.700	80.400	81.300	84.400	84.000	84.700	
		Lobe comp. House (Outside)	81.900	83.350	80.200	81.200	83.900	84.000	
9	DRI -9	Kiln main drive	83.750	82.450	84.400	84.700	83.600	83.300	
		Lobe comp. House (Outside)	84.250	81.800	81.150	81.550	81.200	82.650	
10	DRI -10	Kiln main drive	82.200	S/D	83.300	83.600	83.600	81.700	
		Lobe comp. House (Inside)	84.400	S/D	82.400	80.900	84.000	84.850	
		Lobe comp. House (Outside)	83.600	S/D	81.500	83.100	83.200	85.000	
11	DRI -11	Kiln main drive	84.400	82.350	83.400	83.400	84.400	82.000	
		Lobe comp. House (Inside)	83.600	84.700	80.400	83.300	84.350	84.100	
		Lobe comp. House (Outside)	84.250	83.050	84.450	81.100	81.200	83.800	
12	DRI -12	Kiln main drive	82.600	83.500	83.300	83.650	83.600	84.400	
		Lobe comp. House (Inside)	84.500	80.400	82.200	83.600	84.200	83.600	
		Lobe comp. House (Outside)	84.300	84.400	84.100	80.200	83.150	84.950	
		Turbine-2	84.400	84.400	82.200	83.600	84.700	84.400	
		Turbine-3	83.300	85.000	80.900	84.400	85.000	84.700	
		Boiler-1	82.150	83.400	84.000	80.700	84.900	83.900	
		Boiler-2	83.500	82.200	83.300	84.700	83.600	82.400	
		Boiler-3	84.200	83.900	84.600	83.900	84.700	84.750	
		Boiler-4	83.600	84.650	84.700	85.000	80.900	80.900	
		Boiler-5	81.200	80.600	83.300	84.700	83.600	83.600	
		Boiler-6	80.400	82.200	80.400	81.200	84.000	80.700	
14	CPP 100 MW	Turbine Area (40 MW)	82.200	84.400	S/D	83.600	84.000	83.300	
		Turbine Area (60 MW)	84.000	84.700	S/D	84.400	83.300	83.400	
		Feed Pump Area	83.500	80.900	S/D	84.700	82.350	83.350	
		Boiler Area	80.800	84.650	S/D	83.700	84.900	84.400	
		Blower House Turbo (Blower-2)	84.400	S/D	84.400	84.400	85.000	84.700	
		Blower House Motorized (Blower-3)	82.500	S/D	83.600	84.700	80.900	83.600	
		Gas Cleaning Plant	83.600	S/D	84.000	83.900	82.200	80.300	
		Stock House	83.200	S/D	82.650	83.350	81.200	82.200	

16	ast Furnace	Cast House	85.000	S/D	82.100	84.300	84.700	81.700
		Blower House Turbo (Blower-2)	84.900	S/D	83.700	85.000	84.900	84.400
		Blower House Motorized (Blower-3)	82.400	85.000	84.000	84.000	85.000	83.900
		Gas Cleaning Plant	81.450	83.300	83.300	84.700	83.950	83.350
		Stock House	83.850	80.400	83.350	82.700	84.350	84.350
17	Sinter Plant-2	Blower House	83.700	81.400	84.700	83.300	81.090	84.000
		Flux Charging area	80.700	82.200	85.000	84.350	81.900	83.300
		Proportional Building	84.600	84.400	84.700	84.700	83.600	82.500
18	Coke Oven-1	Battery Area	74.250	81.150	84.300	78.150	78.950	82.600
		Coke Cutting & Screening Building	79.100	84.500	83.450	80.900	84.700	81.100
		By-Product (Exhauster Area)	81.200	83.700	84.300	84.000	84.700	84.100
20	RMPP - I	Truck Tippling	78.100	81.200	81.250	81.600	81.700	81.450
		Stacking	78.300	82.550	82.200	82.600	81.850	84.200
		Coal Crushing Screening	79.950	82.200	81.400	84.100	83.800	85.000
		Ore Crushing & Screening	81.650	83.300	80.400	84.400	84.700	81.200
21	RMPP - II	Stacking & Reclaming -3	80.500	80.900	84.000	81.800	83.900	84.500
		Stacking & Reclaming -4	84.050	83.600	83.600	82.450	83.600	84.800
		Stacking & Reclaming -5	84.650	83.200	81.700	82.350	84.650	82.850
22	RMPP-III	Infron of Office	76.550	78.600	78.100	78.100	78.100	79.000
		Coal reclaiming area	79.400	83.700	81.150	83.200	81.150	83.600
23	Coal Washery -	Infront of office	71.200	81.200	79.600	78.150	78.950	78.450
		Near Silo	S/D	83.600	83.600	83.600	84.400	83.200
24	Coal Washery - II	Infront of office	77.100	82.200	81.600	80.050	77.950	71.750
25	Lime Plant	Blower House	84.400	82.500	85.000	83.300	80.900	83.300
		Lime Sizing Area	80.300	S/D	83.600	81.200	80.900	84.400
		Balling Disc Area	81.600	80.700	84.400	82.400	84.700	84.000
		Indurating machine Area	83.600	83.600	83.900	82.050	83.600	84.400
		Screening Area	80.400	80.400	84.100	84.600	84.700	84.700
		Updraught drying fan Area	83.300	83.600	83.300	84.400	84.400	81.000
		Wind Box Recuperation fan Area	81.150	81.350	81.200	83.100	80.200	81.600
		Cooling Air fan Area	84.250	80.900	84.250	83.600	84.750	83.650
27	Oxygen Plant-1	Air Filtration Area	80.600	80.800	84.000	84.000	83.600	84.900
		Air Compressor Area	81.400	83.600	84.200	83.300	82.200	83.600
		Air Purification Area	84.567	84.400	83.600	80.700	84.433	84.467
		Air Separation Area	84.733	83.600	84.700	81.400	84.000	84.700
		Distribution Area	81.267	81.000	83.900	83.567	84.867	84.500
		EAF-2 Area	84.000	81.100	83.600	82.200	83.550	84.700
		EAF-3 Area	83.100	79.900	84.900	82.200	82.350	85.000
		EAF-4 Area	81.700	82.250	83.600	83.350	84.600	84.700
		LF 3&4 Area	80.200	82.900	84.700	83.300	80.900	82.200
		Near Office	81.100	82.200	81.100	81.100	78.100	81.200
29	SMS - II	EAF Area	84.400	81.400	81.500	81.200	81.200	83.300
		LRF Area	83.600	83.900	84.700	83.350	83.200	82.200
		VD Area	80.700	84.250	81.200	84.100	84.900	83.600

		Near Office	84.600	81.100	82.200	81.200	81.250	83.300
		Near Laboratory	80.700	79.950	81.100	79.100	82.300	78.600
30	Air Compressor Station	CPP 100 MW(Inside)	83.300	83.300	83.600	84.000	84.700	84.700
		CPP 3x130 MW UNIT 1 & 2 (inside)	80.800	80.400	84.700	84.900	83.600	84.700
		CPP 3x130 MW UNIT -3 (inside)	83.600	80.700	84.600	83.000	82.700	84.600
		CSP (Inside)	84.400	84.400	83.300	81.650	84.250	84.600
		Blast Furnace (in side)	83.600	83.600	82.200	84.000	83.600	84.600
		Pellet Plant (in side)	83.300	83.400	81.100	81.100	78.450	81.700
31	CSP	Mill Strand	80.900	80.040	80.400	83.300	84.000	81.600
		Down Coiler	84.400	83.900	83.600	84.400	81.700	84.600
32	CRM	Compressor House (IS)	80.400	83.500	83.000	83.000	83.600	80.900
		Mill area	84.500	84.400	84.700	83.300	83.300	83.900
		Near Corrugation Machine	84.300	81.400	84.700	84.300	84.000	80.700
		Near Chromating unit	81.200	83.600	84.400	81.900	85.000	84.300
33	WRM	Near Combination Air fan	85.000	S/D	83.900	82.700	83.350	85.000
		Compressor House (is)	81.900	84.400	80.400	84.000	84.400	84.400

Annexure-X (B)

Ambient Noise Monitoring Result (April'25 to Sept'25)								
	Monitoring Location							
	North East Side Boundary Near CRM		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
Apr-25	73.1	68.1	70.7	55.9	72.1	51.7	70.5	56.3
May-25	70.9	67.7	73.8	58.6	72.5	52.7	71.2	60.2
Jun-25	71.1	63.3	71.8	59.9	70.4	60.3	69.2	64.1
Jul-25	71.7	59.8	72.8	60.9	73.2	66.5	74.5	69.3
Aug-25	70.5	67.1	70.4	62.2	72.4	67.2	73.3	68.4
Sep-25	72.2	67.7	71.1	63.9	73.2	68.8	72.7	65.8