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/25-26/018 **Date:31.05.2025**

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 October'24 to March'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 reference on the above-mentioned subject.

As per EIA notification 2006 and its subsequent amendments, we have mailed soft copies of the half yearly (Oct'24 to Mar'25)compliance status report of the environmental clearances of 4.5 MTPA, of our Integrated steel plant 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 31.05.2025 from email id-s.saurabh@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 for compliance.
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. An action plan has already been initiated to ensure 100 % compliance within the committed time.
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 of 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	Issues raised during the last public hearing were addressed. Action has been taken against the

	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	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 with.
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 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 for compliance.
xiii	Producer gas plant shall not be established by the proponent.	Producer gas plant is not envisaged in the project.
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 with.

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 with. 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 proposed project
xvii	Basic Oxygen Furnace (BOF) gas shall be cleaned dry.	BOF is not envisaged in the proposed project
xviii	The waste Heat Recovery system for charge preheating shall be included for 75 T Electric Arc Furnace.	Noted for compliance. The feasibility of the proposed system is under discussion.
xix	Submerged Arc Furnace and Electric Arc Furnace shall be closed type with 4th hole extraction system.	Complied with. 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 with .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 with. 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 with. 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.Study by third party initiated (M/s Mecon ltd) for the total air

		existing pollution control facility. Recommendations of the expert will be implemented.
xxiv	Water requirement for the plant shall be met from Back Water Reservoir of Hirakud Dam. Ground water abstraction is not permitted.	Complied with. Presently 2950 M3/hr of water drawing from Hirakud Reservoir for our existing operating facilities. 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 development over 375 Acres. The greenbelt development work is in progress. As committed, we shall complete green belt development work over 33% of plant area as per the plan. We have planted 58828 nos. of tree and distributed 1800 nos. of fruit bearing sapling in periphery community in the year 2024-25 .
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 with.
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 with. Performance evaluation of all pollution control equipment is being done every year. Performance Evalution 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 proponent by December,2023 for the transportation of materials as committed.	Complied with.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 with. 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	Complied with.

	truck/dumper shall be parked outside the steel plant premises.	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 legislations, etc., as may be applicable to the project.	Complied with. 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 with. 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. All the installed 05 nos. of CAAQMS, 48 nos. of CEMS and 05 nos. of CEQMS are connected to the server of CPCB & OSPCB. Regular calibration of all analyzers is done by approved NABL accredited laboratories. The monitoring result of Ambient Air, Stack emission analysis result for the period October24 to March'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 with. Fugitive emission monitoring at various locations throughout the plant being carried out as per the plan. The fugitive Emission Monitoring result for the period Oct'24 to Mar' 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 with. 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 with. 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 with. 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 with. Adequate numbers of road sweeping machines have been engaged for regular cleaning of internal concrete roads. Reputed vendors have been engaged for mechanized maintaining 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 with. 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 with. The maximum raw material required for the plant is transported through rail. The remaining raw material which is transported through road are 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 with. 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 with. 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 of coke oven gas in case of recovery type coke ovens.	Complied with. 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 has equipped with high pressure dust suppression system.500 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 with. 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 with. 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 with. 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 with. 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 with. Three nos. of STP capacity 700, 900 & 900 KLD as prescribed standard have been installed for treatment of domestic wastewater generating 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 with. 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 with. Six Tyre washing facilities have been installed at material inward and outward gates.
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 with. 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.	Noted for compliance. Adequate noise control devices have been installed in noise generating units such as compressors, blowers and turbine houses to meet the prescribed noise level. 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 with.Only torpedo ladles are used to transfer hot metal from Blast Furnace to SMS.
ii	Restrict Gas flaring to < 1%.	Noted for compliance. The entire Coke Oven and Blast Furnace gas generated is being consumed in various reheating furnaces of the mills, pellet plant. SMS, LCP. Gas flaring is restricted during normal operation. Surplus BFG being consumed in 250 TPH dual fired CFBC boiler.
iii	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;	Noted for Compliance.
iv	Provide LED lights in their offices and residential areas.	Complied with .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.	Noted for compliance. As advise we shall replace the burners with oxyfuel burners in reheating furnaces.

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 with. 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.	Noted for compliance. 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.	Noted for compliance. GHG emission is being calculated daily as per WSA guidelines. The same also is calculated shop-wise monthly as per CBAM guidelines. The detailed decarbonization road map prepared upto FY2030.
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.	Life cycle assessment study of the products initiated. Sphera has completed the LCA study. We have prepared decarbonization road map and are working on the implementation of the projects to reduce CO2 emission. Some projects lists are given below. 1. Dual fired (Gas, Coal) 250 TPH Boiler for utilization of BF & CO gas. 2. Coal dryer in DRI to reduce moisture content of coal. 3. Commissioning of Zero Power furnace. 4. VFD installation in WHRB ID fans (6 nos. DRI 1to 6) of DRI. 5. Increase of PCI rate in BF-1 &2(205 kg/thm) 6.Steam trap replacement, repairing and installation new one (total 200 nos.).

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	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..

	Panchayat and the District Administration as committed by the PP.	
ii	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Complied with. Emergency preparedness plan and Disaster management plan have been prepared and the same is being implemented. Mock drills are being conducted as per the plan.
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 with. We have already provided the necessary PPE as per norms to all workers according to their work function. Jeans jackets are mandatory in the shop where heat hazard is. On the furnace are aluminum jackets being provided during lancing and sampling etc. Heat shield is installed on the furnace area to protect against radiation hazard. Heat stress analysis for workers working in high temperatures has been completed.
iv	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Complied with. Occupational health checkup of all workers is being done as per norms on yearly basis and records are maintained

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.	BPSL Environment Policy approved by the Board of Directors is already in place. The environment policy has been prepared to have proper checks and balances focusing any infringements/deviation/violation of the environmental / forest / wildlife norms.

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.	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 displayed in the project proponent's website permanently.	Complied with. we have intimated the public about the grant of EC through publication in various District and State level newspapers in vernacular language within the stipulated time. We shall also upload the EC onto our company website after receipt of the same. attached scanned copy.
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 with. The copy of the EC has been submitted to all Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government for display within the stipulated time.
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 with.
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 with. The monitoring results of pollutants namely PM10, SO2, NOx in ambient air and stack emissions is displayed to public through digital display board installed at the main gate. The monitoring data is also uploaded on our website on a half-yearly basis.
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	Complied with. We regularly submit a soft copy of the six-monthly compliance status of

	and Climate Change at environment clearance portal.	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 with. We are regularly submitting Environmental statements in Form-V as per the guidelines to Odisha State Pollution Control Board. The last environmental statement submitted at OSPCB bearing letter no-JSWBPSL/ENV/24-25/052dtd. 21/09/2024.
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 with.
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.	We are committed to abide by 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.	Noted for compliance.
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 with. 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 with. 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 compliance
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 for compliance
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 for Compliance
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 for compliance.
12	This issues with approval of the competent authority.	

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 (Oct'24 to Mar'25)
Annexure-IV	Stack Monitoring Result (Oct'24 to Mar'25)
Annexure-V	Fugitive Emission Monitoring Result (Oct'24 to Mar'25)
Annexure-VI	Treated Effluent Analysis Result (Oct'24 to Mar'25)
Annexure-VII	Ground Water Quality Result
Annexure-VIII	List of Solid Waste
Annexure-IX	CSR Activity (Apr'24 to Mar'25)
Annexure-X (A&B)	Work Zone & Ambient Noise Monitoring Result (Oct'24 to Mar'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 Budget in Cr.	Status of Implementation as on 31.03.2025
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	Completion of construction	Procurement of equipment and engagement	30.0	Mobile medical unit is operational in the peripheral villages.

		address respiratory, skin, ENT issues etc. related to environmental pollution – Commencement of construction of building		of medical staff (operational expenditure like staff salary and consumables to be borne by BPSL)		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.
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.
				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,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
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**	**O_3**	**CO**
Standard	**100 ($\mu g/m^3$)**	**60 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**100($\mu g/m^3$)**	**2 ($\mu g/m^3$)**
October-24	84.00	43.60	17.50	26.90	14.80	0.42
November-24	88.40	38.70	21.40	32.60	21.40	0.43
December-24	86.60	39.20	22.50	34.20	22.50	0.46
January-25	89.40	40.20	24.30	36.10	22.70	0.49
February-25	81.80	38.90	22.30	35.40	23.10	0.44
March-25	78.60	38.60	33.40	38.60	<5.0	0.85
Ambient Air Quality Monitoring Station -2 Near Railway Gate						
Pollutant	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_X**	**O_3**	**CO**
Standard	**100 ($\mu g/m^3$)**	**60 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**100 ($\mu g/m^3$)**	**2 ($\mu g/m^3$)**
October-24	63.00	40.90	18.70	21.40	12.40	0.32
November-24	89.90	43.00	25.60	36.80	28.90	0.39
December-24	91.00	27.80	26.50	35.40	27.80	0.63
January-25	92.20	45.70	28.70	37.40	27.20	0.72
February-25	88.60	41.50	29.70	38.70	28.60	0.74
March-25	89.40	42.60	28.60	43.40	<5.0	0.78
Ambient Air Quality Monitoring Station -3 Behind CRM						
Pollutant	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_X**	**O_3**	**CO**
Standard	**100 ($\mu g/m^3$)**	**60 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**100 ($\mu g/m^3$)**	**2 ($\mu g/m^3$)**
October-24	88.00	44.20	21.80	26.70	20.90	0.41
November-24	91.10	46.40	27.70	34.90	23.40	0.56
December-24	94.80	47.60	31.50	36.70	24.80	0.63

January-25	89.80	36.70	31.80	39.40	<5.0	0.77
February-25	84.30	37.40	32.30	37.60	<5.0	0.78
March-25	83.60	38.90	34.60	39.40	<5.0	0.87
Ambient Air Quality Monitoring Station -4 Near ETP						
Pollutant	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_X**	**O_3**	**CO**
Standard	**100 ($\mu g/m^3$)**	**60 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**80 ($\mu g/m^3$)**	**100 ($\mu g/m^3$)**	**2 ($\mu g/m^3$)**
October-24	81.80	43.80	26.40	28.90	21.10	0.38
November-24	91.00	37.80	19.90	21.60	24.10	0.43
December-24	86.20	42.90	19.60	32.40	24.70	0.47
January-25	92.10	36.40	21.60	34.80	<5.0	0.62
February-25	88.40	35.80	20.80	33.20	<5.0	0.58
March-25	86.80	37.60	21.20	35.80	<5.0	0.58

Annexure-IV

Stack Monitoring Report

Oct'24 to Mar'25

S.N.	Units	Stack Name		[Particulate Matter (mg/Nm3)]					
			Standard mg/Nm3	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25
1	DRI	DRI/WHRB-1	50.00	15.04	17.71	21.10	20.60	28.79	27.00
2		DRI/WHRB-2	50.00	16.56	16.30	22.60	18.90	11.94	18.00
3		DRI/WHRB-3	50.00	17.44	12.77	19.90	18.00	11.80	24.00
4		DRI/WHRB-4	50.00	15.37	11.59	20.60	21.00	10.04	18.00
5		DRI/WHRB-5	50.00	18.46	16.65	18.50	14.40	10.44	18.20
6		DRI/WHRB-6	50.00	14.99	15.78	17.60	20.00	12.39	14.00
7		DRI/WHRB-7	50.00	12.60	18.00	22.40	18.40	13.20	17.00
8		DRI/WHRB-8	50.00	27.22	17.03	23.90	22.80	13.21	21.00
9		DRI/WHRB-9	50.00	19.91	19.23	20.80	20.10	19.88	21.00
10		DRI/WHRB-10	50.00	10.54	11.74	24.40	23.40	11.70	26.00
11		DRI/WHRB-11&12	50.00	23.55	25.92	19.90	18.70	42.80	35.00
12		DRI De-dusting 1&2	50.00	37.10	37.69	18.40	34.00	40.00	42.00
13		DRI De-dusting 3&4	50.00	15.67	10.27	22.60	39.00	35.00	34.00
14		DRI De-dusting 5& 6	50.00	30.61	25.77	18.80	45.00	40.90	43.00
15		DRI De-dusting 7&8	50.00	15.40	19.34	21.40	32.00	38.20	38.00
16		DRI De-dusting 9&10	50.00	29.67	41.14	22.50	47.00	42.80	44.00
17		DRI De-Dusting 11&12	50.00	20.44	24.79	19.70	37.00	33.70	35.00
18	CPP	CPP 3X130 MW Unit 1	50.00	16.43	22.35	46.90	32.10	24.38	46.00
19		CPP 3X130 MW Unit 2	50.00	34.66	42.00	44.80	31.40	31.88	41.00
20		CPP 3X130 MWUnit-3 CFBC 5	50.00	17.96	29.57	43.30	40.60	44.01	43.00
21		CPP3X130 MW Unit-4 CFBC 6	50.00	25.61	27.97	44.20	41.10	32.68	35.20
22		CPP 60 MW	50.00	10.36	15.07	46.30	48.10	14.82	33.60
23		CPP40 MW	50.00	17.17	16.14	42.50	40.60	14.20	22.80
24	SMS-1	FTP-1	50.00	24.95	21.52	32.00	38.40	14.85	18.00
25		FTP-2	50.00	10.66	19.64	28.00	27.40	12.27	13.00
26		FTP-3	50.00	12.05	19.46	33.00	32.40	13.60	14.00
27		FTP-4	50.00	13.67	13.86	27.00	26.00	15.72	17.00
28	SMS-2	FTP	50.00	24.08	24.16	25.00	22.00	24.18	26.00
		ZPF	30.00	14.72	14.87	27.30	26.40	24.00	21.00
29	Pellet plant	Pellet plant process stack	50.00	39.1	33.9	43.50	42.30	30.15	34.00
30		Pellet plant dedusting stack	50.00	32.45	31.75	33.40	32.80	29.80	36.00
31	Coke Oven-1	Coke_Oven_WHRB_1_and_2	50.00	17.47	21.52	42.10	40.10	20.70	33.00
32		Coke_Oven_WHRB_3_and_4	50.00	23.67	25.66	37.60	36.30	24.03	36.00
33	Coke Oven-2	Coke_Oven_2_Process_Stack	50.00	22.44	22.48	18.90	17.90	22.09	26.00
34		Coke_Oven_2_Dedusting	50.00	30.03	29.40	22.70	21.80	19.80	21.00
35	Blast Furnace-2	BF_2_Cast_House	50.00	11.45	13.34	33.20	32.10	29.20	31.00
36	Blast Furnace-1	BF_1_Cast_House	50.00	25.87	26.97	30.80	28.80	26.20	33.00
37	Sinter Plant-1	Charging stack	50.00	28.79	23.61	28.70	26.70	29.26	29.20
38		Discharging	50.00	23.47	34.60	32.70	30.70	27.90	32.40
39	Sinter Plant-2	Process stack	50.00	15.51	17.03	44.20	42.40	16.92	38.00
40		De dusting	50.00	17.18	13.43	18.80	19.40	17.60	31.00
41	LCP	LCP-1	50.00	SD	SD	SD	SD	25	SD
42		LCP-2	50.00	SD	17.6	42.1	30.1	39.08	47.00
43		LCP-3	50.00	16.87	13.39	37.7	42	33.47	46.00
44		LCP-4	50.00	10.59	19.69	39.4	38.7	22.89	31

Annexure-V

Fugitive Emission Results (Oct'24 to Mar'25)								
No	Sampling Location	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Standard in (µg/m3)
1	Blast Furnace-I,Cast House (Pass A)	945	1065	1652	1248	1134	1345	
2	Blast Furnace-I,Cast House (Pass B)	714	1265	1141	1605	1459	1956	
3	Blast Furnace-I,PCI Area	1511	1846	908	785	854	911	
4	Blast Furnace-II,Cast House (Pass A)	548	1234	803	1154	1243	1476	
5	Blast Furnace-II,Cast House (Pass B)	1152	1463	1395	1892	1820	1250	
6	Blast Furnace-II,PCI Area	1761	1184	1166	946	767	803	3000
7	Coke oven-I, Secondary Coal Crushing Building	2423	1725	2250	1975	2365	2458	
8	Coke oven-I, Primary Coal Crushing Building	2415	2258	2135	2048	2334	2098	
9	Coke Oven-I, Coke cutting Building	1862	2689	1145	1043	985	1044	
10	Coke Oven-II, Secondary Coal Crushing Building	2423	2338	2485	2336	2582	2150	
11	Coke Oven-II, Primary Coal Crushing Building	1658	1751	1548	1325	1168	1456	
12	Coke Oven-II, Coke cutting Building	1458	1800	1560	1426	1248	1583	
13	Day Bin area DRI 1 & 2	472	524	498	486	508	547	
14	PSB & Char Discharging area DRI 1 & 2	1896	1368	1111	1675	1315	1322	
15	Day Bin area of DRI 3 & 4	602	476	518	465	492	535	
16	PSB & Char Discharging area DRI 3 & 4	1211	1146	1908	1765	1708	1882	
17	Day Bin area of DRI 5 & 6	548	486	515	535	535	661	
18	PSB & Char Discharging area DRI 5 & 6	1896	1246	1255	1718	1520	858	2000
19	Day Bin area of DRI 7 & 8	608	512	492	623	592	492	
20	PSB & Char Discharging area DRI 7 & 8	1465	1750	1945	1754	1260	1976	

21	Day Bin area of DRI 9 & 10	566	582	542	582	576	730	
22	PSB & Char Discharging area DRI 9 & 10	1652	1150	1803	1396	1811	1856	
23	Daybin area of DRI 11 & 12	492	568	485	506	608	718	
24	PSB & Char Discharge area of DRI 11 &12	1428	1751	1616	1869	1892	905	
25	Lime Plant Transfer point	1544	1679	1758	1942	1843	1721	2000
26	Lime Plant Kiln Area	1964	1221	1755	1856	1408	1645	
27	Lime Plant Delivery Building	1862	628	1922	1108	1084	1282	
28	Lime unloading point	1720	1512	1425	1345	1780	1341	
29	Sinter Plant-1 Flux crushing area	SD	1562	SD	SD	SD	SD	2000
30	Sinter Plant-1 primary Mixing building	SD	752	SD	SD	SD	SD	
31	Sinter Plant-1 Propertional building area	SD	895	SD	SD	SD	SD	
32	Sinter Plant-1 Flux crushing area	SD	1625	SD	SD	SD	SD	
33	Sinter Plant-2 primary Mixing building	752	548	620	660	718	756	
34	Sinter Plant-2 Propertional building area	976	715	832	806	943	860	
35	SMS-I EAF 1 & 2 area	2952	2106	2375	2150	2372	2650	3000
36	SMS-I EAF 3 & 4 area	2230	2337	2144	2163	2238	2185	
37	SMS-II,EAF-I Area	2473	2244	2170	2896	2792	2368	
38	SMS-II,EAF-II Area	2521	2526	1856	2952	1560	2521	
39	Pellet Plant, Additive grinding area	2256	2882	2535	2357	2423	2638	
40	Pellet plant dosing and mixing area	1467	1754	1677	1385	1254	1105	

Annexure-VI

Treated Effluent/ Wastewater Quality

SN	Sampling Location	Parameter	Standard as per CTO	Oct'24	Nov'24	Dec'24	Jan'25	Feb'25	Mar'25
1	WWTP-1 Outlet	pH	6.5 to 9.0	7.25	7.64	7.02	7.11	6.85	6.99
		TSS mg/l	<100	33	10	11.0	12.5	7.50	8.0
		TDS mg/l	<2100	1110	868	1856	1820	1760	424
		COD mg/l	<250	14	18.5	62.2	68.6	42.8	50.8
		O&G mg/l	<10	<1.4	<1.4	<5.0	<5.0	<5.0	<5.0
		Fe mg/l	<1.0	0.85	0.60	0.87	0.84	0.21	0.31
2	WWTP-2 Outlet	pH	6.5 to 9.0	8.16	7.50	7.12	7.15	6.65	6.61
		TSS mg/l	<100	14	4	12	13.5	9.00	7.0
		TDS mg/l	<2100	954	1364	892	796	824	460
		COD mg/l	<250	13.5	14.9	29.9	32.1	30.8	29.4
		O&G mg/l	<10	<1.4	<1.4	<5.0	<5.0	<5.0	<5.0
		Fe mg/l	<1.0	0.19	0.19	0.12	0.14	0.25	0.27
3	WWTP-3 Outlet	pH	6.5 to 9.0	7.59	7.06	7.91	7.76	6.75	6.87
		TSS mg/l	<100	9	6	15.5	16.5	10.5	12.0
		TDS mg/l	<2100	852	806	1040	1108	946	448
		COD mg/l	<250	6.6	22.5	23.1	31.0	27.6	31.0
		O&G mg/l	<10	<1.4	<1.4	<5.0	<5.0	<5.0	<5.0
		Fe mg/l	<1.0	0.90	0.30	0.22	0.19	0.55	0.49
4	CRM ETP Outlet	pH	5.5 to 9.0	6.89	6.96	8.02	8.12	6.77	7.02
		TSS mg/l	<100	6	11	24.5	25.5	6.50	8.0
		Phenol mg/l	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		Cyanide mg/l	<0.2	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01
		BOD mg/l	<30	3.27	8.2	6.88	7.24	5.88	7.56
		COD mg/l	<250	9.3	16.4	31.1	32.1	29.2	28.6
		Total Ammoniacal Nitrogen as NH3-N mg/l	<50	7.7	<1.0	0.61	1.21	1.82	1.18
		O&G mg/l	<10	<1.4	<1.4	<5.0	<5.0	<5.0	<5.0
		TDS mg/l	<2100	2076	1868	1276	1208	1864	184
		Fe mg/l	<3.0	<0.05	<0.05	<0.1	0.22	0.55	0.80
		Total chromium mg/l	<2.0	<0.05	<0.05	<0.1	<0.1	0.35	<0.1
5	Coke Oven-2 BETP Outlet	pH	5.5 to 9.0	7.41	7.22	7.31	7.38	5.91	6.64
		TSS mg/l	<100	88	37	8.50	9.00	14.0	11.0
		Phenol mg/l	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		Cyanide mg/l	<0.2	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01

		BOD mg/l	<30	23.6	54	16.4	23.7	18.2	9.0
		COD mg/l	<250	72	104	69.7	74.6	58	47.6
		Total Ammoniacal Nitrogen as NH3-N mg/l	<50	15.8	12.3	14.6	13.3	10.9	9.45
		O&G mg/l	<10	<1.4	<1.4	<5.0	<5.0	<5.0	<5.0
		TDS mg/l	<2100	1398	1378	1184	1216	750	1770
		Fe mg/l	<3.0	2.8	2.4	1.8	1.5	2.29	1.93
		Total Chromium mg/l	<2.0	<0.05	<0.05	<0.10	<0.1	<0.1	<0.1

Annexure-VII

Ground Water Quality

No	Parameter	Unit	Standard as per IS 10500:2012	GW -1 Thelkoli	GW-2 Sripura	GW -3 Lapanga	GW- 4 Dhuben Chapper	GW-5 Gumkarma
1	Colour	Hazen	5	<1.0	<1.0	<1.0	<1.0	<1.0
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	8.32	8.41	7.98	8.45	8.11
6	Dissolved Solids	mg/l	500	472	392	410	452	421
7	Residual, free Chlorine	mg/l	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
8	Total Hardness (as $CaCO_3$)	mg/l	200	152	176	181.3	192	166.6
9	Calcium (as Ca)	mg/l	75	38.4	40	41	36.8	44
10	Magnesium (as Mg)	mg/l	30	13.6	18.5	18.9	24.3	13.5
11	Alkalinity	mg/l	200	175	108	112.1	125	129
12	Chloride (as Cl)	mg/l	250	43.4	71	68	136	72
13	Fluoride (as F)	mg/l	1	<0.1	<0.1	<0.1	<0.1	<0.1
14	Sulphate (as SO_4)	mg/l	200	31.2	11.1	13.4	57	24.2
15	Nitrate (as NO_3)	mg/l	45	6.17	4.5	5.8	21.9	18.4
16	Chromium (as Cr^{+6})	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
17	Phenolic Compounds (as C_6H_5OH)	mg/l	0.001	<0.05	<0.05	<0.05	<0.05	<0.05
18	Iron (as Fe)	mg/l	1	0.44	0.35	0.62	0.68	0.82
19	Cyanide (as CN)	mg/l	0.05	<0.01	<0.01	<0.01	<0.01	<0.01
20	Copper (as Cu)	mg/l	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
21	Mercury (as Hg)	mg/l	0.001	<0.004	<0.004	<0.004	<0.004	<0.004
22	Cadmium (as Cd)	mg/l	0.003	<0.03	<0.03	<0.03	<0.03	<0.03
23	Selenium (as Se)	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001
24	Arsenic (as As)	mg/l	0.01	<0.004	<0.004	<0.004	<0.004	<0.004
25	Lead (as Pb)	mg/l	0.01	<0.2	<0.2	<0.2	<0.2	<0.2
26	Zinc (as Zn)	mg/l	5	<0.03	<0.03	<0.03	<0.03	<0.03
27	Boron (as B)	mg/l	0.5	<0.1	<0.1	<0.1	<0.1	<0.1

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

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 2024-25					
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 ECCE & ISO Anganwadi Program Udaan scholarship for students from economically weaker sections	3.07	2.23	0.17
2	General community infrastructure support & welfare initiatives	Development of community infrastructures Development of Townhall Streetlights at public places	7.37	4.58	2.33
3	Enhance Skills & rural livelihoods through nurturing of supportive ecosystems & innovations	Agri Livelihood Programme Women Enterprise Development Programme Sewing Training Center	2.85	1.81	1.01
4	Waste management & sanitation initiatives	Waste collection & management Integrated WaSH Programme Development of community toilets	2.06	1.87	0.07
5	Integrated water resources management	Drinking water for communities Waterbody Development	1.05	1.01	0.04
6	Public health infrastructure, capacity building & support programs	Community Dispensary Mobile Medical Unit Community Ambulance Construction of Mortuary	1.64	1.50	0.07
7	Sports promotion & institution building	Promotion of sports through local tournaments	0.20	0.06	0.9
8	Project Management Cost				
		Grand Total	**18.25**	**13.07**	**4.59**

Education

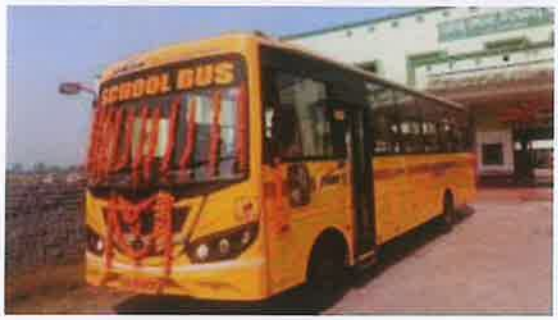



Development of Schools & AWCs

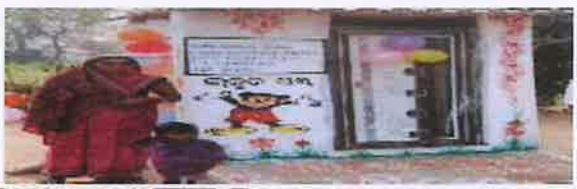
Udaan & Umeed scholarship (DIZ & IIZ)

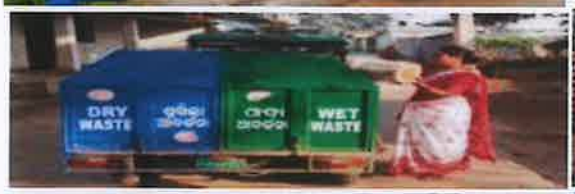
Support to Schools

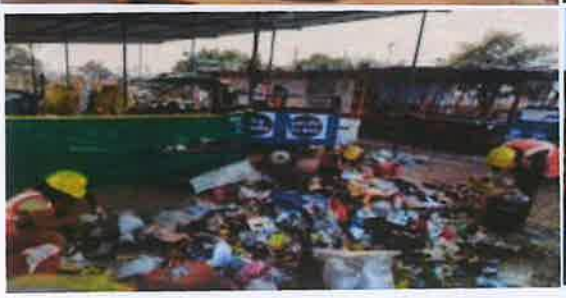
JSW School Bus

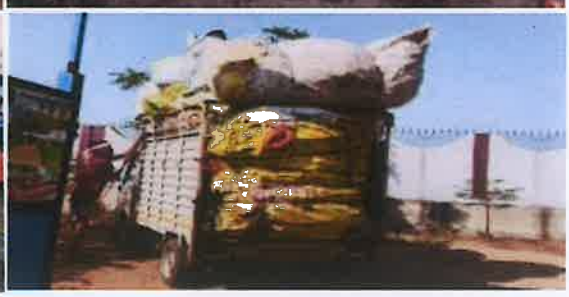


Water Sanitation & Hygiene (WaSH)

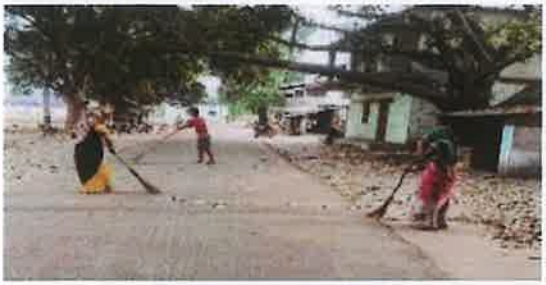








Sanitation and Drinking Water Provision



Agri-based Livelihood Programme

Women Empowerment & Enterprise Development

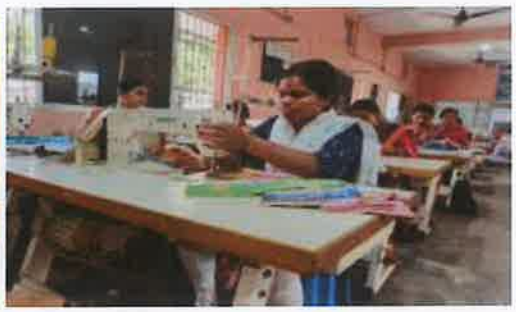




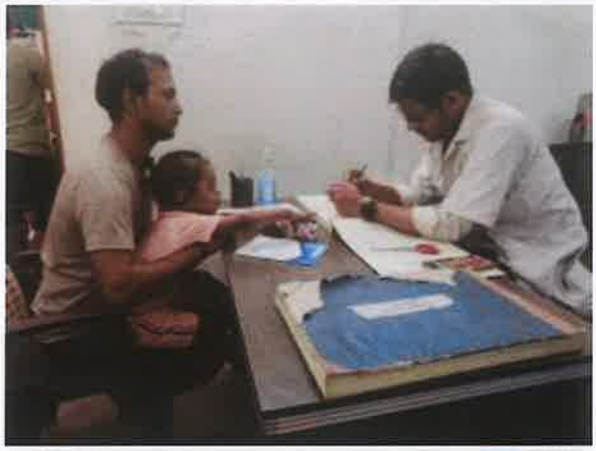



. Sewing Training & Production Center

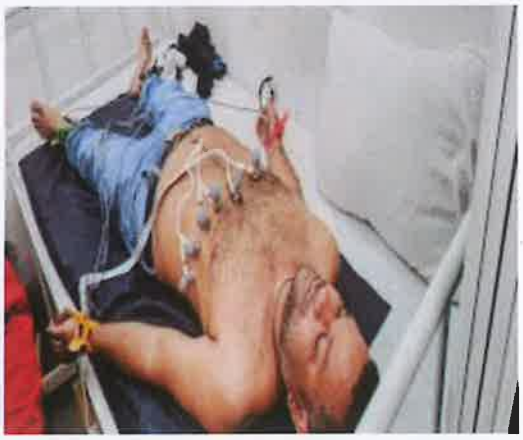




Health & Nutrition



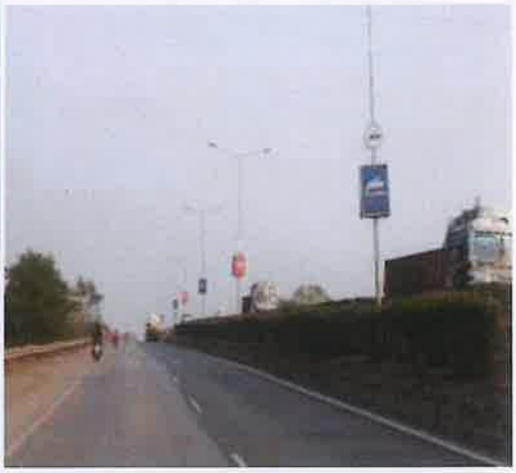


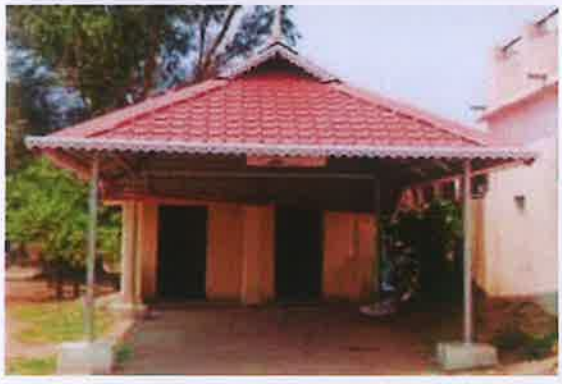



Community Ambulance

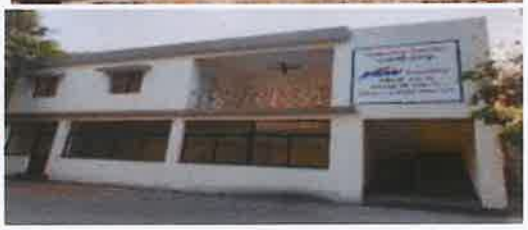
Trauma Care Center (Mortuary)

Community Infrastructure Development

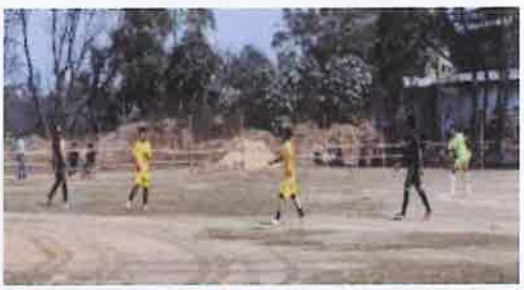


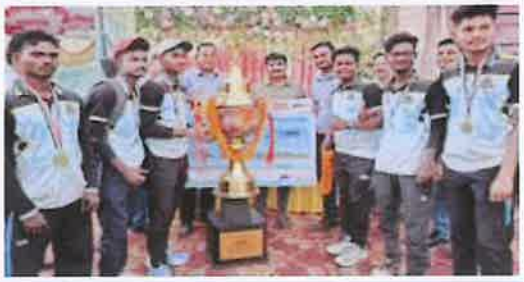




Sports




Annexure-X(A)

Workzone Noise Monitoring Result (Oct'24 to Mar'25)

Sl.No.	Name of the Unit	Location	Average Noise Level in dB(A)						Standard as per factory Act 1950
			Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	
1	DRI -1	Kiln main drive	81.2	81.60	80.90	83.10	83.90	82.60	
		Lobe comp. House (Inside)	82.40	82.40	82.30	52.4	82.10	84.60	
		Lobe comp. House (Outside)	82.9	83.60	84.20	80.90	80.60	80.20	
2	DRI-2	Kiln main drive	83.10	80.10	80.60	81.70	82.70	83.40	
		Lobe comp. House (Inside)	80.60	80.60	81.50	82.8	81.90	81.90	
		Lobe comp. House (Outside)	84.1	81.30	81.90	81.90	83.40	83.40	
3	DRI-3	Kiln main drive	82.60	80.90	82.40	80.70	82.60	82.70	
		Lobe comp. House (Inside)	83.30	82.70	82.70	82.50	81.60	83.40	
		Lobe comp. House (Outside)	82.1	82.60	80.90	81.4	81.50	82.00	
4	DRI-4	Kiln main drive	83.90	81.60	83.80	79.9	83.00	81.30	
		Lobe comp. House (Inside)	81.90	80.90	81.60	79.80	84.50	80.90	
		Lobe comp. House (Outside)	80.30	79.60	80.80	80.4	82.50	82.60	
5	DRI-5	Kiln main drive	84.20	79.10	83.70	84.20	82.70	83.50	
		Lobe comp. House (Inside)	84.9	80.60	81.20	82.40	83.90	81.00	
		Lobe comp. House (Outside)	83.4	83.60	83.00	83.70	81.40	84.70	
6	DRI-6	Kiln main drive	83.10	84.00	84.00	84.2	80.90	82.70	
		Lobe comp. House (Inside)	83.5	83.50	82.90	83.40	83.70	83.90	
		Lobe comp. House (Outside)	84.10	84.20	80.70	81.60	82.40	81.50	
7	DRI-7	Kiln main drive	84.6	84.60	80.60	82.40	82.7	83.40	
		Lobe comp. House (Inside)	83.3	82.60	84.60	82.7	80.9	80.60	
		Lobe comp. House (Outside)	83.60	82.50	81.90	81.00	79.8	80.40	
8	DRI-8	Kiln main drive	84.60	84.10	83.70	83.9	80.8	80.40	
		Lobe comp. House (Inside)	82.80	80.70	81.90	82.40	83.4	83.90	
		Lobe comp. House (Outside)	83.90	80.60	83.40	81.60	81.80	80.10	
9	DRI-9	Kiln main drive	84.10	84.70	84.20	82.90	79.30	82.60	
		Lobe comp. House (Inside)	82.6	83.60	82.90	81.40	83.50	80.40	
		Lobe comp. House (Outside)	83.30	82.90	83.50	83.70	84.10	83.70	
10	DRI-10	Kiln main drive	81.90	83.40	80.00	81.50	79.80	81.90	
		Lobe comp. House (Inside)	84.90	81.50	81.60	83.90	84.60	83.50	
		Lobe comp. House (Outside)	82.60	82.40	81.30	84.60	83.50	81.10	
		Kiln main drive	83.70	82.60	82.60	82.70	84.70	83.40	

11	DRI-11	Lobe comp. House (Inside)	84.9	81.90	83.40	81.50	80.20	82.20
		Lobe comp. House (Outside)	81.40	80.60	81.60	83.90	80.90	80.60
12	DRI-12	Kiln main drive	82.4	84.20	84.10	83.40	83.40	83.40
		Lobe comp. House (Inside)	83.1	83.50	83.70	83.10	81.50	81.90
		Lobe comp. House (Outside)	84.40	81.00	82.90	81.3	82.70	83.30
13	CPP 3x130 MW	Turbine-1	84.70	83.60	80.9	82.9	80.60	84.60
		Turbine-2	82.80	81.4	80.4	83.70	80.90	83.90
		Turbine-3	83.80	81.60	81.5	81.60	82.6	82.40
		Boiler-1	80.70	82.6	80.60	81.40	81.40	86.50
		Boiler-2	82.60	80.6	84.5	82.60	83.4	81.70
		Boiler-3	83.40	82.60	83.10	84.30	83.4	80.90
		Boiler-4	82.50	83.40	81.20	82.40	80.10	82.40
		Boiler-5	84.10	84.5	80.8	83.4	83.60	83.10
		Boiler-6	84.60	81.60	82.60	82.40	81.90	84.00
		Feed Pump Area	82.70	83.70	82.4	81.90	80.70	81.60
14	CPP 100 MW	Turbine Area (40 MW)	83.9	84.7	81.90	80.40	82.40	82.40
		Turbine Area (60 MW)	81.4	82.10	81.40	87.6	83.90	83.30
		Feed Pump Area	82.70	84.00	82.60	80.40	81.40	82.70
		Boiler Area	84.90	82.3	80.70	81.60	80.40	81.90
15	Blast Furnace-I	Cast House	82.6	82.90	82.4	82.40	80.90	83.10
		Blower House Turbo (Blower-2)	82.40	81.60	81.9	83.40	81.40	81.30
		Blower House Motorized (Blower-3)	83.90	84.00	80.80	80.90	83.50	83.60
		Gas Cleaning Plant	81.7	83.6	81.50	83.00	81.60	84.60
		Stock House	82.50	82.6	82.9	84.60	83.60	82.50
16	Blast Furnace-II	Cast House	81.40	81.20	81.5	84.10	81.70	81.00
		Blower House Turbo (Blower-2)	84.20	80.50	80.40	83.40	82.60	83.60
		Blower House Motorized (Blower-3)	84.20	80.60	79.60	80.70	83.4	82.90
		Gas Cleaning Plant	80.70	82.7	84.60	82.9	84.60	84.70
		Stock House	81.40	81.6	81.50	81.50	82.10	80.30
17	Sinter Plant	Blower House	82.50	82.90	84.30	83.00	83.90	79.90
		Flux Charging area	81.3	83.10	81.40	84.20	82.40	81.60
		Proportional Building	`80.3	82.60	83.70	41.9	82.4	82.40
18	Coke Oven-1	Battery Area	84.1	81.4	81.90	83.4	80.9	82.40
		Coke Cutting & Screening Building	81.60	82.3	82	81.70	81.6	83.70
19	Coke Oven-2	Battery Area	80.60	79.60	80.4	83.50	84.00	83.60
		By-Product (Exhauster Area)	79.9	80.30	80.70	81.50	83.9	82.00

20	RMPP - I	Truck Tippling	81.3	83.90	83.10	83.6	82.1	81.30
		Stacking	82.5	81.40	81.50	80.4	83.40	82.40
		Coal Crushing Screening	81.60	84.60	82.9	83.50	80.70	83.30
		Ore Crushing & Screening	83.6	83.60	81.90	81.4	83.2	83.90
21	RMPP - II	Stacking & Reclaming -3	83.40	81.80	80.7	83.9	79.8	83.10
		Stacking & Reclaming -4	81.60	82.60	83.6	82.7	80.6	84.20
		Stacking & Reclaming -5	80.9	84.10	80	82.60	81.40	86.40
22	RMPP-III	Infron of Office	83.00	83.90	82.60	83.2	83.40	81.20
		Coal reclaiming area	81.2	82.70	81.50	84.1	80.70	80.50
		Belt press crushing area	80.6	81.90	84.7	83.2	83.8	82.40
23	Coal Washery -I	Infront of office	81.3	83.60	83.1	81.9	82.20	79.80
		Near Silo	82.40	82.40	82.10	83.1	80.90	80.00
24	Coal Washery - II	Infront of office	81.40	82.10	83.4	84.5	83.40	82.60
		Near Silo	79.90	82.60	80.80	82.6	82.90	83.00
25	Lime Plant	Blower House	80.60	81.4	80.30	81.4	83.40	84.60
		Kiln Area	81.50	81.7	81.6	82.6	81.00	82.40
		Lime Sizing Area	81.60	82.5	83.80	83	84.00	83.00
26	Pellete Plant	Mill Area (Addittive Mixing)	80.60	81.90	81.90	81.4	83.5	81.40
		Balling Disc Area	82.80	82.60	82.70	84.6	81.60	82.70
		Indurating machine Area	81.4	83.40	80.60	81.4	84.2	84.00
		Screening Area	82.90	84.20	81.60	80.9	82.40	83.10
		Updraught drying fan Area	80.6	80.90	82.40	83.4	83.70	81.30
		Wind Box Recuperation fan Area	81.70	79.50	82.40	83.70	81.90	82.00
		Cooling Air fan Area	80.10	81.00	81.90	81.5	83.70	82.60
		Dedusting ID fan Area	80.80	80.4	83.40	83.4	82.60	83.40
27	Oxygen Plant	Air Filtration Area	81.30	81.6	84.6	81.00	80.90	82.40
		Air Compressor Area	82.6	80.9	82.4	80.60	82.40	83.90
		Cooling Water System Area	83.7	81.5	83.5	82.30	83.7	84.70
		Air Purification Area	80.2	81.6	82.9	83.10	81.90	52.00
		Air Separation Area	80.50	82.9	79.8	82.70	84.20	81.90
		Distribution Area	81	81.5	83.6	83.40	83.60	84.00
28	SMS - I	EAF - 1 Area	83.40	80.9	84.5	80.90	82.4	82.40
		EAF-2 Area	79.8	82.4	82.1	82.40	81	83.50
		EAF-3 Area	81.40	83.50	82.00	82.40	83.60	82.80
		EAF-4 Area	81.60	81.4	83.4	83.40	80.40	86.40
		LF 1&2 Area	82.60	80.90	81.8	80.30	82.70	84.90
		LF 3&4 Area	81.20	84.20	83.00	84.60	83.90	83.10

		Near Office	80.8	81.60	82.40	83.20	80.40	86.40
29	SMS - II	EAF Area	81.2	82.60	81.50	81.60	82.70	82.60
		LRF Area	80.6	83.60	82.7	83.50	83.40	81.60
		VD Area	80.40	81.00	81.6	80.60	80.90	82.40
		Caster Area	82.9	82.90	80.60	83.40	80.40	83.70
		Near Office	81.40	83.60	81.90	82.90	83.40	84.00
		Near Laboratory	82.00	84.20	83.70	81.00	79.80	79.80
30	Air Compressor Station	CPP 100 MW(Inside)	81.60	80.60	82.50	83.70	84.30	81.40
		CPP 3x130 MW UNIT 1 & 2 (inside)	81.50	79.90	80.60	82.30	82.60	81.90
		CPP 3x130 MW UNIT -3 (inside)	82.40	81.60	81.90	81.60	84.60	84.60
		CSP (Inside)	83.70	82.50	79.90	83.40	81.30	81.60
		Blast Furnace (in side)	82.00	80.60	84.5	82.90	80.60	82.50
		Pellet Plant (in side)	83.10	83.40	81.40	84.20	83.70	80.90
31	CSP	Down Coiler	82.60	81.60	82.70	82.40	81.90	81.60
		Mill Strand	83.80	82.40	81.9	83.00	82.40	82.70
32	CRM	Compressor House (IS)	81.5	84.20	82.4	79.60	82.30	84.00
		Mill area	81.60	84.30	81.6	82.60	84.70	82.60
		Near Corrugation Machine	82.8	82.60	83.5	83.40	80.90	82.10
		Near Chromating unit	81.2	81.00	82.90	81.50	81.40	83.40
33	WRM	Near Combination Air fan	79.8	83.60	81.70	82.60	83.70	80.90
		Compressor House (is)	80.2	82.90	80.6	83.70	81.9	84.50

Annexure-X (B)

Ambient Noise Monitoring Result (Oct'24 to Mar'25)

Month/Standard	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	
	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-24	73.2	68.4	74.2	67.7	72.5	65.4	73.3	66.8
Nov-24	74.1	67.7	73.3	68.4	72.1	66.9	72.6	65.9
Dec-24	73.6	67.1	73.8	67.7	71.9	67.2	71.9	68.4
Jan-25	74.4	66.8	72.9	68.4	74.6	68.3	74.5	67.2
Feb-25	74.3	69.1	74.6	69.3	73.3	64.9	73.3	65.3
Mar-25	73.9	64.7	72.9	69.6	72.9	65.8	72.6	65.2