

JSWBPSL/ENV/24-25/063**26th November'2024.**

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

Subject: Six Monthly Compliance Report (From April'24 to September'24) 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 letter 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 compliance status report of the environmental clearances of 4.5 MTPA capacity of our Integrated Steel Plant of Bhushan Power & Steel Limited located at village- Thelkoloi, Post-Lapanga, Tehsil- Rengali ,District- Sambalpur ,Odisha for the period from April'2024 to September'2024 to the mail id roez.bsr-mef@nic.in on dated 26.11.2024 from the mail id- akul.senapati@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**



Akul Senapati

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.

Half Yearly Compliance Report
Bhushan Power & Steel Limited , Sambalpur Works
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COMPLIANCE STATUS TO THE ENVIRONMENT CLEARANCE

EC Identification No.-EC23A1001OR5404024A, File No. - IA-J-11011/40/2009-IA-II(IND-I) Dated.18/07/23

A. SPECIFIC CONDITIONS:

Sl. No.	Condition Description	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
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 confirm to comply with partially complied conditions within the committed time. The present compliance status of the observation is enclosed as Attachment-1
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.	We have 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. Balance are under implementation.
iv	The project proponent shall utilize modern technologies for capturing of 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 several measures to reduce Carbon di oxide emission: Energy conservation technology like PCI, TRT in blast furnace, reduction of fuel rate in BF, RB-1 coal use in DRI, Replacement of conventional light with LED light, steam trap installation in steam circuit, LPG consumption reduction, Gas flaring loss reduction, coal dryer in DRI 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	We will fulfill and complete all the issues raised during the

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	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	public hearing within the committed time.
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. We have completed implementation of all the measures directed by OSPCB vide its 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 and compliance report submitted to the Board.
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.	We confirm to comply with partially complied conditions within the committed time. Refers to the Attachment-1
viii	The PP shall strictly fulfill commitments made in PH as per the action plan committed by December 2023.	We will fulfill and complete all the issues raised during public hearing within the committed time.
ix	Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.	Noted
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. Some part of the tailing is being 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

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		area filling and road construction.
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 is given to brick manufacturing units and also used in-house for road making.
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 of abandoned stone quarry . ESP dust, Bag filter dust, GCP dust and ARP residue is reused for sinter making. Some part of the waste is being utilized through nearby cement plant.
d	Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.	The elemental carbon present in flue dust is being utilized in Sinter plant. Utilization through Cement plant is being explored
e	Used refractory shall be recycled as far as possible	The entire used refractories are sold to recyclers.
xii	Sinter Plant	
a	Sinter cooler waste recovery system shall be installed to generate process steam or power.	Planned to utilize for coke moisture reduction.
b	Equipped with MEROS technology to reduce emission of SO ₂ , NO _x and heavy metals.	Feasibility study for installation of MEROS technology at existing Sinter plants have been started
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 offer from various technology provider. The technical discussion is going on for supply and installation of Coke Dry Quenching System in existing Recovery Type Coke Oven. It is planned to complete installation of the same by March 2026.
b	Coke Oven Gas shall be desulfurized.	Coke oven gas desulfurization plant already installed at our Recovery Type Coke Oven.
c	Tar sludge shall be mixed with coal and reused.	The practice is already in place. The entire tar sludge is reused along with coal.

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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.	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 Furnaces. The installation and commissioning of TRT has been completed in BF 2.
xvi	Secondary fume extraction system shall be installed on converters of Steel Melting Shop.	Converters are not envisaged in the proposed project. The Existing SMS consists of EAF. Primary and secondary fume extraction system is already in place at SMS.
xvii	Basic Oxygen Furnace (BOF) gas shall be cleaned dry.	BOF is not envisaged in the proposed project
xviii	Waste Heat Recovery system for charge preheating shall be included for 75 T Electric Arc Furnace.	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.	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.	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.	Dedicated CETP 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 (A unit of Ramky Enviro Engineers Limited)
xxii	Acid recovery plant shall be included to recover acid from pickling lines.	Already we have installed 04Nos. of ARP for recovery of acid from pickling lines. A new updated ARP has been under construction.
xxiii	Dust emission from Steel Plant stacks shall not exceed 30 mg/Nm3 .	All new air pollution control equipment's proposed in the project are designed for emission below 10 mg/Nm3. Study by third party initiated (M/s Mecon Ltd) for the total air pollution control facility. Recommendation of the expert will be implemented stage wise.
xxiv	Water requirement for the plant shall be met	Presently 2927 M3/hr of water drawing from Hirakud

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	from Back Water Reservoir of Hirakud Dam. Ground water abstraction is not permitted.	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.	We have 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 340 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 44365 nos. of tree and distributed 1800 nos of fruit bearing sapling in periphery community in the year 2024-25 till September2024.
xxvi	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	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.	The specific water consumption of our plant is less than the target provided.
xxviii	Performance test shall be conducted on all pollution control systems every year and the report shall be submitted to Regional Office of the MoEF&CC.	Performance evaluation tests of all pollution control equipment are being done every year. Presently the Performance evolution work is under progress by NIT Rourkela
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.	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.	Every year we renovate the existing lakes of 8 to 10 peripheral villages. Last year we have renovated the ponds.
xxxi	Parking area for trucks/dumpers shall be provided within the steel plant. No truck/dumper shall be parked outside the steel plant premises.	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	The entire electronic waste generating in the plant is being

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	in the industry.	disposed off through vendors authorized by OSPCB/CPCB
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B. GENERAL CONDITIONS:

I. Statutory compliance

Sl. No.	Conditions of EC	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.	Noted. We shall obtain all the statutory approvals/consent/permission required for setting up and operation of the plant.

II. Air quality monitoring and preservation:

Sl. No.	Conditions of EC	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.	We have already installed 05 Nos. of Continuous Ambient Air Quality Station (CAAQS). For installation of one more CAAQMS work is under progress. We shall complete the installation by March 25. 48 nos. of continuous emission monitoring system (CEMS) have been installed at all the process stacks to monitor stack emission continuously. All the installed 04 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 are done by approved NABL accredited laboratories. The monitoring result of Ambient Air, Stack emission analysis result for the period April'24 to Sept'24 is enclosed as Annexure-III & IV

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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.	For Fugitive emission monitoring at various locations throughout the plant presently is being done on monthly basis by in house laboratory. Stack emission, waste treated water, ambient air quality monitoring is being done through NABL accredited 3rd party laboratory. For fugitive emission we will follow the condition stipulated The fugitive Emission Monitoring result for the period April 24 to September 24 is enclosed as Annexure-V .
iii	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.	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.	Study has been initiated to find out the requirement of the pending dust extraction and suppression system with detailed calculation of the ventilation volume, layout of the system and feasibility etc. The work is under progress by M/S Mecon for the entire plant. Based upon the recommendation & severity level, the proposed additional system will be installed.
v	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	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.	08 nos. 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.	The ore, coal, coke, and lime fines collected in APC devices and vacuum cleaners are processed and recycled through Sinter & Pellet plant.
viii	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.	Maximum raw material required for the plant is transported through rail. The remaining raw material which are transported through road are carried by good condition trucks & dumpers and are properly

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		covered by tarpaulin.
ix	Facilities for pillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).	Chain conveyor is already installed at our recovery type coke oven.
x	Land-based APC system shall be installed to control coke pushing emissions.	Adequate APC system has been installed at coke oven to control pushing emission.
xi	Monitor CO, HC and O2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakage in the combustion chamber.	Online CO, HC and O2 monitors have been installed at coke oven-2 battery 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 overgas in case of recovery type coke ovens.	The recovery type coke oven installed at our plant is equipped with 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 stock piles. We have Installed 04 nos. of dry fog system at all 4 nos. of wagon tippler of RMHS. Dust suppression system revamping project of the 12 truck tipplers completed .500 nos. of additional water sprinkler installed to reduce dust from the stock piles, internal roads .
xiv	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	All the oil cellars are provided with sufficient ventilation system.

III. Water quality monitoring and preservation:

Sl. No.	Conditions/FEC	Compliance Status

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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.	CEQMS as per standard of CPCB is provided at outlet of BETP of coke oven, outlet of CRM ETP, and out lets of all 03 Nos. of wastewater treatment plants. All the installed CEQMS are connected to the server of CPCB and OSPB for real time data transmission. Also, we have engaged NABL accredited laboratory for manual collection and analysis of treated water quality on monthly basis. 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.	Pre and post monsoon monitoring of ground is being done on half yearly basis within the plant area and in the peripheral village areas through Labs recognized under Environment (Protection) Act, 1986 and having NABL accredited laboratories. 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;	BETP of capacity 1800 KLD have been installed at Coke Oven and By-Product Plant. It is designed to meet the standard 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;
iv	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	03 Nos. of STP of capacity 700, 900 & 900 KLD as per prescribed standard has been installed for treatment of domestic waste water. Individual septic tank with soak pits have been provided in offices and workshops within the plant.
v	Garland drains and collection pits shall be	Garland drains with settling tank has been provided

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	provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	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.	05 Nos. of Tyre washing facility has been installed at material inward and outward gates. One more facilities installation is under progress.
vii	Treated water from ETP of COBP shall not be used for coke quenching.	COBP treated water will be further treated in MBR-High pH RO and followed by Mechanical vapour Re compressor Technology. The PO has already released to the vendor. The plant is in Engineering stage. The commissioning of the plant will be done with in 14 months. The plant capacity is 100 m3/hr. The treated water will be used as makeup water of cooling towers.
viii	Water meters shall be provided at the inlet to all unit processes in the steel plants.	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 report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Adequate noise control devices have been installed at noise generating units such as compressor, blower and turbine houses to meet the prescribed noise level. A third-party noise study has been done and final report submitted. As per the recommendation we will implement the engineering solution to reduce noise level in shop floors. Regular monitoring is being done and the reports are submitted to the Regional Office of MoEF & CC, Bhubaneswar along with Six-monthly compliance report.

V. Energy Conservation measures

Sl. No.	Conditions of EC	Compliance Status

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i	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.	Only torpedo ladles are used hot metal transfer from Blast Furnace to SMS.
ii	Restrict Gas flaring to < 1%.	Noted, The entire CO and BF gas generating in the plant 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 newly commissioned 250 TPH dual fired 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;	The feasibility study has been conducted by JSW Energy team to install the solar panel. Planned to procure green certificate to comply RPO.
iv	Provide LED lights in their offices and residential areas.	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.	As directed, we shall gradually replace the burners of all reheating furnaces with regenerative type burners.

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.	Oil collection pits are provided at all the cellars. Collection tray under coil at coil storage area is provided. 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.	Composting Machine of capacity 500 Kg/Day has been installed for converting kitchen waste generating from all canteens, guest houses and staff quarters. The compost generated is being utilized for horticulture development.

VII. Greenbelt

Sl. No.	Conditions of EC	Compliance Status

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i	The projectproponent 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 are being calculated on a daily basis as per WSA guidelines. Same also is being calculated shop wise on a monthly basis as per CBAM guidelines. The details decarbonization road map prepared upto FY2030 includes carbon sequestration by trees.
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 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. M/S Sphera has completed the LCA study. We are working on very aggressive way to meet the group level target of the decarbonization. We have prepared decarbonization road map and working on the implementation of the projects to reduce CO2 emission. Some projects list 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 1 to 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 of EC	Compliance Status
i	The projectproponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/17-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity company shall adopt 10 villages, namely Theloli, Dhubenchapal (Gontiapada), Banjiberna, Siripura, Kheruwal, Sradhapali, Maliatika, Khadiapali, Sunamal, Derba villages based on socio-economic survey and undertake community developmental activities in	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 started undertaking community development activities in the 10 villages namely Thelkoli, Dhubenchapal (Gontiapada), Banjiberna, Siripura, Kheruwal, Sradhapali, Maliatika, Khadiapali, Sunamal and Derba..

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	consultation with the village 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.	Emergency preparedness plan and Disaster management plan has been prepared and the same is being implemented. Mock drill 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.	We have already provided the necessary PPE as per norms to all workers according to their work function. Jeans jacket is mandatory on the shop where heat hazard is there. On the furnace aluminum jacket is 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 temperature has been completed. Study has been conducted by 3 rd party expert(CIH CSP) on hot areas. The recommendations are under implementation.
iv	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Occupational health checkup of all workers are done as per norms on yearly basis and records are maintained

IX. Environment Management

Sl. No.	Conditions of EC	Compliance Status
i	The company shall have a well laid down environmental policy duly approved 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-	The Company 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.

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	monthly report.	
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 senior Executive, who will directly to the head of the organization.	Separate Environmental Cell have 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.	Noted, 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 in 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.	The copy of EC have 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	We regularly upload the half-yearly compliance status of EC condition on our company website.

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	basis.	
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.	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 and Climate Change at environment clearance portal.	We are regularly submitting the soft copy of 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.	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/24-25/052 dtd. 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.	Noted, we shall inform the Regional Office as well as the Ministry. CTE granted by the OSPCB bearing letter no-15404/IND-II-CTE-6021, Date-04.10.2023.
viii	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment 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, commitment made during Public Hearing and that 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, as directed we will put all the environment related expenditure, 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. We will 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.

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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).	Noted, 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.	We will extend full cooperation to the officers of 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
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
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

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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
12	This issues with approval of the competent authority.	

ANNEXURE – 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 Crores	Status of Implementation as on 30.09.2024
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: Brahmanpada Pond, Thelkoloi

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						<p>Chuhuri Pond, Dhubenchhapal Bansimal Pond, Bansimal Binova Nagar Pond, Lapanga Rohidaspada Pond, Lapanga Saharapada Pond Khadiapali Pond, Khadiapali Neru Pond, Banjberna Banjiberna Pond, Banjiberna Dantamura Pond Landupali Pond Old Khinda Pond Das Pond, Lapanga Jugipali Pond, Salad Barikpali Pond, Salad Ghuhuri Kata Pond, Sripura Talipada Pond, Derba Kumdapada Pond, Derba Gountiyapada Pond, Dhubenchhapal Ramchandrapur Pond, Sripura Gariakata Pond, Sripura Nagamata Pond Thelkoloi Kinaloi Pond Tabdabahal Pond</p>
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	<p>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.</p>

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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	<p>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.</p> <p>Water Sanitation & Hygiene (WaSH) Programme in convergence with Dist. Govt. is operational focusing on following aspects,</p> <ol style="list-style-type: none"> 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	<p>Vocational training courses arrangements for women through various Govt departments/ NGOs Tailoring, beautician and mushroom cultivation etc. - 200 women</p> <p>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</p>	<p>Tailoring, beautician and mushroom cultivation course - additional 200 women</p> <p>Electrician, welding, fitting and machining course for additional 100 local youth</p>	<p>Tailoring, beautician and mushroom cultivation course - additional 200 women</p> <p>Electrician, welding, fitting and machining course for additional 100 local youth.</p>	1.7	<p>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.</p> <p>Skill training on other livelihood program (Mushroom, Poultry, Floriculture, Fishery etc.) is under progress under Holistic Livelihood program.</p>

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6	Education	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Thekoloi High 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: Thekoloi High School is complete. Construction is under progress for additional section. Dhubenchapper Primary School. Sripura Primary & Middle School Bisadihi Primary School Thekoloi 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, Thekoloi - 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'24: Lapanga GP – 33 Nos. Thekoloi GP – 37 Nos. Ghichamura GP – 14 Nos. Khinda GP– 4 Nos. Installation in other areas: Bomaloi GP – 4 Nos. Hirma GP – 4 Nos.
TOTAL					50.0	

LIST OF/ATTACHMENT ANNEXURE

Annexure No/Attachment	Description
Attachment-1	Compliance status based on monitoring report No=101-595/22/EPE dtd.16.09.22. From IRO,MoEF & CC,Bhubaneswar
Attachment-2	Status of Action plans per MoEF &CC.O.M.Dted 30/09/2020
Annexure-I	List of CEMS
Annexure-II	List of Air Pollution Control Devices
Annexure-III	Ambient Air Quality Monitoring Result (Apr'24 to Sept'24)
Annexure-IV	Stack Monitoring Result (Apr'24 to Sept'24)
Annexure-V	Fugitive Emission Monitoring Result (Apr'24 to Sept'24)
Annexure-VI	Treated Effluent Analysis Result (Apr24 to Sept'24)
Annexure-VII	Ground Water Quality Result
Annexure-VIII	List of Solid Waste
Annexure-IX	CSR Activity (April'24 to Sept'24)
Annexure-X (A&B)	Work Zone & Ambient Noise Monitoring Result (Apr'24 to Sept'24)

Attachment-1

**Compliance Status based on Monitoring report No 101-595/22/EPE dated 16.09.22 from IRO,
MoEF& CC, Bhubaneswar**

Sl. No	Observation	Compliance Status
01	The project authorities are requested to provide information on the R&R plan to this office along with the implementation schedule	The information has been submitted bearing our letter no- JSWBPSL/ENV/MoEF& CC/027 dated-27/11/2023
02	Progress made with respect to proposed rainwater harvesting system may be submitted to this office.	We have two fresh water reservoirs having capacity 200000 M3 and 134000 M3 inside our plant which help in rain water harvesting during monsoon. Rain water collected in these reservoirs is being utilized as replacement of fresh make up water. We have 03 nos. of blow down water collection tanks of having capacity 3000 m3, 3840 m3, 3800 m3. Rain water is being collected on the empty part of the tank and same is being treated and utilized for ore beneficiation, fire fighting, dust suppression, horticulture development, RO water plant feed water.
03	All the roads within the plants have been damaged due to weathering and movement of vehicles. The roads within the plant area need to be made concrete or black topped for reducing the fugitive emission. For reducing dispersion of the dust from the roads it is viewed that the project authorities after metaling the roads may use the air of vacuum cleaners which will sweep the roads intermittently through mechanized means. All the roads should have the facility for spraying of water through jets so as to reduce fugitive emission (Specific condition No-vii)	The following below mentioned actions taken: a) We have converted the mud/slag road to new concrete road of 46 KM inside our plant boundary. b) 08 nos. of mechanized road vacuum sweeper has been engaged for cleaning of roads on 24x7 hours basis. c) 03 nos. of multi utility vehicle has been engaged for water sprinkling, high pressure water jet cleaning, fire fighting, mist canon and tree washing facility. d) 05 no of auto wheel washing systems installed and under operation to reduce road dust. e) 500 water sprinklers installed in stockpiles and connected road to stockpiles area to protect the dust become fugitive.

04	An action plan along with implementation schedule for the installation of reverse osmosis plant, which is reported to be under commissioning stage for utilization of 100% treated effluent /waste along with CETP, which is to be installed for collection and treatment of wastewater. (specific condition No-xii)	One RO water plant of capacity 7700 m3/day of permeate production is commissioned and under continuous operation. New Effluent Treatment Plant of capacity 1200m3/day has commissioned in Cold rolling Mill and under continuous operation. Coke Oven-2(Recovery type) MBR-RO-MVR project of capacity 100m3/hr is under civil erection phase.
05	The status of compliance the commitments made to the public during public Hearing /Public consultation meeting should be submitted to the office (specific condition No.xix)	The action plan already submitted .Maximum points attended and some pending points are under implementation.
06	It is requested that information on expenditure towards enterprise social commitment and constitution of committee should be submitted to this office (specific condition no.xx and xxii)	All the details submitted.
07	Detected information on the CSR activities carried out should be submitted along with budgetary provision(specific condition no.xxi)	In line with the policy of CSR, JSW Foundation, which is the apex body for carrying out CSR activities in the JSW Group is carrying out the need based assessment with involvement of stake holders and implementing the activities in phases. The CSR expenditure for the period Apr24 toSeptember'24 enclosed as Annexure-IX .
08	It has been observed that during the lunch hours the workers in the plant are taking their lunch along with the road sides under the tree sheds. The project authorities may contemplate on constructing facilities with proper lighting and aeration and sitting space for the workforce to have their lunch and relaxation with better facilities. (specific condition no.xxv)	14 no New canteens Facilities has been developed inside the plant area and 04 no in township for taking lunch and relaxation for the worker.
09	Housekeeping needs improvement within plant	a) Regular mechanized cleaning of roads is being done through 08 no of Road sweeper of mechanized housekeeping facility. . b) The implementation of 5-S system has made significant improvement in workplace environment. c) Individual shops deployed dedicated house keeping

		<p>team with mechanized housekeeping facility.</p> <p>d) Dedicated waste material yard for storing, shorting and segregation of the waste material is prepared.</p>
10	Plantation of trees in all the vacant areas and also along with road side may be taken up by the project authorities.	<p>Tree plantation along the roads, within the open area within the plant has been completed.</p> <p>Action plan for balance plantation in the adjoining area has been submitted and work is under progress.</p>
11	Details of occupational health surveillance carried out in last year should be provided along with findings ,if any ,need to be submitted to this office (General Condition No-vi)	Executive health checkup is being conducted in Apollo Hospital and M/s Vikash Hospital for the employees on a yearly basis. Also inhouse testing facility has developed in occupational health Centre and same is being conducted for the employee, associates and contractor on a half yearly basis.
12	A detailed water budget of the plant should be submitted to this office.	The detailed water budget is given in attachment.
13	It is requested to submit information on development of rain water harvesting structure to this office (General condition No-vii)	<p>We have two fresh water reservoirs having capacity 200000 M3 and 134000 M3 inside our plant which help in rain water harvesting during monsoon.</p> <p>Rain water collected in these reservoirs is being utilized as replacement of fresh make up water. We have 03 nos. of blow down water collection tanks of having capacity 3000 m3,3840 m3,3800 m3.Rain water is being collected on the empty part of the tank and same is being treated and utilized for ore beneficiation, fire fighting ,dust suppression, horticulture development, RO water plant feed water.</p>
14	It is requested to submit detailed information (item wise)on the expenditure for environmental pollution control measures(General condition No-ix)	Submitted. The budget has not been diverted for other purposes.
15	The url address of the company's website regarding uploading of monthly reports should be submitted to this office (General condition No.xi)	<p>Environment compliance uploaded on website viz http://www.jswbpsl.in/compliances.html and CSR information uploaded on website viz http://www.jswbpsl.in/csr.html.</p> <p>Status will be updated regularly</p>
16	A copy of the environmental statement in form V should be submitted to this office (General condition no-xiii)	<p>http://www.jswbpsl.in/compliances.html.</p> <p>Environment Statement for the 23-24 has submitted on 30th September24</p>
17	It is requested that the date of financial closure, final approval and date of commencing of the land development work of the project should be submitted to this office	Financial closure for 4.5 MTPA will be submitted.

Attachment – 2**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 Crores	Status of Implementation as on 30.09.2024
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	<p>Thelkoloi Service Road Repairing has been Completed</p> <p>Repairing of Road at Derba is under construction</p> <p>Construction of Road at Lapanga is under construction</p> <p>Roads at Sripura, Khariapali & Dubhenchaper has been completed</p>
2	Rainwater harvesting	Construction of village pond at Lapanga	Construction of village pond at Dhubenchapper	Construction of village pond at Khariapalli	1.5	<p>Construction/Renovation of village pond at Lapanga has been completed.</p> <p>Construction/Renovation of village pond at Dhubenchapper is Complete.</p> <p>Construction/Renovation of village pond at Khadiapali is Complete.</p> <p>In addition, waterbody development was conducted at following ponds as well:</p> <ul style="list-style-type: none">a. Brahmanpada Pond, Thelkoloib. Chuhuri Pond, Dhubenchhapalc. 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
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	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	<p>Mobile medical unit is operational in the peripheral villages.</p> <p>Company has setup a dispensary at Thelkoloi Village for community. The dispensary is operational.</p> <p>In addition, the company has established 1st Trauma Care Center of</p>

		of construction of building				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	<p>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.</p> <p>Water Sanitation & Hygiene (WaSH) Programme in convergence with Dist. Govt. is operational focusing on following aspects,</p> <ol style="list-style-type: none"> 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	<p>Vocational training courses arrangements for women through various Govt departments/ NGOs Tailoring, beautician and mushroom cultivation etc. - 200 women</p> <p>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</p>	<p>Tailoring, beautician and mushroom cultivation course - additional 200 women</p> <p>Electrician, welding, fitting and machining course for additional 100 local youth</p>	<p>Tailoring, beautician and mushroom cultivation course - additional 200 women</p> <p>Electrician, welding, fitting and machining course for additional 100 local youth.</p>	1.7	<p>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.</p> <p>Skill training on other livelihood program (Mushroom, Poultry, Floriculture, Fishery etc.) is under progress under Holistic Livelihood program.</p>
6	Education	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Thelkoloi High 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 Thelkoloi Upper Primary School, Lapanga High School, Saraswati Sishu	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	<p>Renovation of following schools are complete:</p> <p>Thelkoloi High School is complete. Construction is under progress for additional section.</p> <p>Dhubenchapper Primary School.</p> <p>Sripura Primary & Middle School</p> <p>Bisadihi Primary School</p> <p>Thelkoloi Upper Primary School</p> <p>Lapanga High School</p>

			Vidya Mandir & Sripura Upper Primary School			<p>Lapanga Primary & Upper Primary School</p> <p>Saraswati Sishu Vidya Mandir School</p> <p>In addition, renovation of other peripheral schools done at Lapanga & Gihcamura panchayat.</p> <p>Library setup in 12 schools has been done.</p> <p>Partnership with GoO for MO school civil/ Infrastructural development for 60 schools of Sambalpur.</p>
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	<p>Installation of Solar LED lights under progress.</p> <p>Installation Status till Mar'24: Lapanga GP – 33 Nos. Thelkoloi GP – 37 Nos. Ghichamura GP – 14 Nos. Khinda GP– 4 Nos.</p> <p>Installation in other areas: Bomaloi GP – 4 Nos. Hirma GP – 4 Nos.</p>
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,SO ₂ ,NO _x ,Hg
19	CEMS-19	CPP 3x130MW UNIT-2	PM,SO ₂ ,NO _x ,Hg
20	CEMS-20	CPP 3x130MW UNIT-3(CFBC-5)	PM,SO ₂ ,NO _x ,Hg
21	CEMS-21	CPP3x130 MW Unit-3 (CFBC-6)	PM,SO ₂ ,NO _x ,Hg
22	CEMS-22	CPP 60 MW Stack	PM,SO ₂ ,NO _x ,Hg
23	CEMS-23	CPP 40 MW Stack	PM,SO ₂ ,NO _x ,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,SO ₂ ,NO _x
30	CEMS-30	Pellet Plant Dedusting	PM,
31	CEMS-31	Coke Oven -1 Stack-1	PM,SO ₂ ,NO _x
32	CEMS-32	Coke Oven-1 Stack-2	PM,SO ₂ ,NO _x
33	CEMS-33	Coke Oven -2 Process stack	PM ,SO ₂ ,NO _x
34	CEMS-34	Coke Oven -2 Dedusting Stack	PM
35	CEMS-35	BF-2 Casthouse Bagfilter Stack	PM,SO ₂ ,NO _x
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,SO ₂ ,NO _x
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 ,SO ₂ ,NO _x
48	CEMS-48	CPP 250 TPH Boiler	PM ,SO ₂ ,NO _x

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 MWAFCB-1	Electro Static Precipitator	143000	76
20	CPP 60 MWAFCB-2	Electro Static Precipitator	286000	95
21	CPP 3x130 MW Unit-1 CFBC-1	Electro Static Precipitator with hybrid Bag filter	650000	120
22	CPP 3x130 MW Unit-1 CFBC-2	Electro Static Precipitator	650000	120
23	CPP 3x130 MW Unit-2 CFBC-3	Electro Static Precipitator	650000	120
24	CPP 3x130 MW Unit-2 CFBC-4	Electro Static Precipitator	650000	120
25	CPP 3x130 MW Unit-3 CFBC-5	Electro Static Precipitator	650000	120
26	CPP 3x130 MW Unit-3 CFBC-6	Electro Static Precipitator	650000	120
Blast Furnace-1				
27	BF-Dry gas cleaning	Bag House, Gas Cleaning Plant	180000	30
28	BF-Cast house	Dust catcher Bag filter	220000	45
Blast Furnace-2				
29	BF-Stock House	Bag filter	610000	45
30	BF-Cast House	Bag filter	850000	45
Sinter Plant-1				
31	Sinter Plant Charging	Electro Static Precipitator	570000	75
32	Sinter plant Discharging	Electro Static Precipitator	450000	40

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

CRM Complex				
59	Acid Regeneration Plant-1	Wet Scrubbers	11530	34
60	Acid Regeneration Plant-2	Wet Scrubbers	11530	34
61	Acid Regeneration Plant-3	Wet Scrubbers	11530	34
62	Acid Regeneration Plant-4	Wet Scrubbers	11530	34
63	Pickling Plant-I(stack-I)	Wet Scrubbers	15716	32
64	Pickling Plant-I(Stack-II)	Wet Scrubbers	15716	32
65	Pickling Plant-II(Stack-I)	Wet Scrubbers	15716	32
66	Pickling Plant-II(Stack-II)	Wet Scrubbers	15716	32
Pellet Plant				
67	Wind box	Electro Static Precipitator	984000	45
68	Hood Exhaust	Electro Static Precipitator	420000	45
69	De dusting	Electro Static Precipitator	240000	45

Summary of Ambient Air Quality Monthly Average Value

Ambient Air Quality Monitoring Station -1 Near Township							
Month	Pollutant	PM ₁₀	PM _{2.5}	SO ₂	NO _x	O ₃	CO
	Standard	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)	100(µg/m ³)	2 (µg/m ³)
April-24		58.50	40.20	18.90	38.40	8.80	0.88
May-24		57.30	38.90	22.40	32.10	11.40	0.32
June-24		55.90	37.70	23.10	33.40	17.90	0.28
July-24		56.40	39.80	19.80	31.70	10.50	0.39
August-24		60.20	40.10	26.40	29.80	17.40	0.64
September-24		58.90	38.60	20.40	34.60	12.60	0.54
Ambient Air Quality Monitoring Station -2 Near Railway Gate							
Month	Pollutant	PM ₁₀	PM _{2.5}	SO ₂	NO _x	O ₃	CO
	Standard	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)	100 (µg/m ³)	2 (µg/m ³)
April-24		53.90	38.70	19.70	42.40	13.70	0.38
May-24		62.80	39.40	21.40	40.80	14.80	0.44
June-24		59.70	36.80	22.60	38.70	8.90	0.51
July-24		55.20	39.10	18.90	39.60	17.40	0.36
August-24		57.40	34.40	21.40	35.40	15.30	0.48
September-24		58.80	40.20	23.30	42.10	13.10	0.32
Ambient Air Quality Monitoring Station -3 Behind CRM							
Month	Pollutant	PM ₁₀	PM _{2.5}	SO ₂	NO _x	O ₃	CO
	Standard	100 (µg/m ³)	60 (µg/m ³)	80 (µg/m ³)	80 (µg/m ³)	100 (µg/m ³)	2 (µg/m ³)
April-24		59.60	44.20	25.40	42.10	13.70	0.42
May-24		62.50	40.80	28.10	40.90	12.90	0.38
June-24		55.90	38.90	26.30	38.80	14.80	0.46

July-24		58.70	37.40	20.80	36.90	12.20	0.39
August-24		59.60	39.10	23.30	41.20	13.90	0.32
September-24		61.10	36.60	25.40	37.70	16.40	0.44
Ambient Air Quality Monitoring Station -4 Near ETP							
	Pollutant	PM₁₀	PM_{2.5}	SO₂	NO_x	O₃	CO
Month	Standard	100 (µg/m³)	60 (µg/m³)	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	2 (µg/m³)
April-24		57.70	38.10	22.70	37.40	12.10	0.41
May-24		59.80	37.90	26.40	35.50	11.40	0.48
June-24		61.10	41.10	21.90	31.90	10.90	0.42
July-24		56.90	37.80	25.40	36.40	13.70	0.43
August-24		58.80	40.20	26.80	30.20	12.90	0.33
September-24		59.40	38.90	23.90	31.10	11.80	0.36

Stack Monitoring Report

April'24 to September'24

S.N.	Units	Stack Name	Standard mg/Nm3	[Particulate Matter (mg/Nm3)]					
				Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
1	DRI	DRI/WHRB-1	50.00	18.67	44.67	28.65	23.65	32.55	27.93
2		DRI/WHRB-2	50.00	15.52	24.60	48.15	22.83	22.34	11.54
3		DRI/WHRB-3	50.00	10.61	11.40	12.03	25.60	13.96	12.45
4		DRI/WHRB-4	50.00	9.18	40.90	20.78	21.50	10.93	12.33
5		DRI/WHRB-5	50.00	37.40	42.38	SD	17.46	17.67	17.98
6		DRI/WHRB-6	50.00	32.50	26.74	21.41	SD	10.53	13.99
7		DRI/WHRB-7	50.00	13.39	29.36	28.65	18.28	14.06	15.92
8		DRI/WHRB-8	50.00	16.69	37.44	34.25	19.23	13.99	21.78
9		DRI/WHRB-9	50.00	16.36	29.63	27.96	17.79	16.42	10.91
10		DRI/WHRB-10	50.00	16.19	44.41	31.23	15.82	14.96	15.01
11		DRI/WHRB-11&12	50.00	21.52	33.65	23.88	33.49	28.45	24.00
12		DRI De-dusting 1&2	50.00	23.88	44.42	36.07	45.96	36.26	35.84
13		DRI De-dusting 3&4	50.00	23.23	39.50	45.45	44.61	42.90	38.40
14		DRI De-dusting 5& 6	50.00	43.10	45.53	23.51	18.37	32.84	30.08
15		DRI De-dusting 7&8	50.00	15.99	36.77	45.34	10.83	13.83	8.67
16		DRI De-dusting 9&10	50.00	28.28	45.73	36.97	26.27	28.22	30.72
17		DRI De-Dusting 11&12	50.00	25.72	46.56	20.76	30.98	26.35	32.93
18	CPP	CPP 3X130 MW Unit 1	50.00	26.52	38.83	47.90	11.51	13.48	11.74
19		CPP 3X130 MW Unit 2	50.00	10.98	43.30	23.94	24.81	24.49	20.07
20		CPP 3X130 MWUnit-3 CFBC 5	50.00	29.30	48.34	47.27	34.62	37.31	9.60
21		CPP3X130 MW Unit-3 CFBC 6	50.00	42.50	40.42	32.25	22.37	24.74	23.94
22		CPP 60 MW	50.00	47.40	33.50	37.99	10.98	13.14	10.77
23		CPP40 MW	50.00	25.50	23.77	SD	47.27	16.65	20.17
24	SMS-1	FTP-1	50.00	36.30	18.97	19.49	17.07	17.51	23.41
25		FTP-2	50.00	16.20	12.52	13.27	11.24	11.34	11.20
26		FTP-3	50.00	13.20	9.40	17.25	11.51	15.66	12.20
27		FTP-4	50.00	13.25	21.20	15.66	12.37	13.73	13.57
28	SMS-2	FTP	50.00	18.20	18.59	15.53	14.81	22.79	24.24
		ZPF	30.00	-	-	-	28.36	14.78	14.81
29	Pellet plant	Pellet plant process stack	50.00	40.6	41.9	30.95	47.63	41.32	40.89
30		Pellet plant dedusting stack	50.00	44.50	47.58	48.82	47.01	35.48	28.66
31	Coke Oven-1	Coke_Oven_WHRB_1_and_2	50.00	42.80	41.81	42.47	45.32	11.74	10.94
32		Coke_Oven_WHRB_3_and_4	50.00	25.80	38.74	46.29	39.16	24.30	22.93
33	Coke Oven-2	Coke_Oven_2_Process_Stack	50.00	24.28	24.25	24.10	22.43	22.21	19.67
34		Coke_Oven_2_Dedusting	50.00	12.83	21.30	23.28	12.19	23.11	27.99
35	Blast Furnace-2	BF_2_Cast_House	50.00	10.34	15.90	27.48	19.18	12.46	9.01
37	Blast Furnace-1	BF_1_Cast_House	50.00	17.89	19.42	24.39	22.53	23.54	26.78
38		BF_1_GCP_Stack	50.00	23.13	22.98	22.27	23.08	20.88	20.02
39	Sinter Plant-1	Charging stack	50.00	35.50	25.33	26.25	44.68	30.07	28.13
40		Discharging	50.00	17.36	46.30	18.92	47.71	20.98	18.59
41	Sinter Plant-2	Process stack	50.00	27.77	17.08	15.18	14.51	15.23	15.87
42		De dusting	50.00	25.59	13.30	18.76	28.18	40.58	18.59
43	LCP	LCP-1	50.00	45.23	46.72	47.33	37.3	43.4	45.70
44		LCP-2	50.00	48.7	44.75	48.63	42.6	SD	SD
45		LCP-3	50.00	38.9	43.98	45.37	43.47	47.7	20.84
46		LCP-4	50.00	42	44.98	46.73	46.73	26.15	26.15

Fugitive Emission Results (April'24 to September'24)								
No	Sampling Location	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Standard in (ug/m3)
1	Blast Furnace-I,Cast House (Pass A)	1642	1572	1735	869	1781	871	3000
2	Blast Furnace-I,Cast House (Pass B)	1518	2204	573	1356	1495	1685	
3	Blast Furnace-I,PCI Area	1389	735	1643	792	1328	1263	
4	Blast Furnace-II,Cast House (Pass A)	1435	720	1143	1248	1837	976	
5	Blast Furnace-II,Cast House (Pass B)	1247	1145	1526	856	1431	1654	
6	Blast Furnace-II,PCI Area	1749	1836	1465	1860	1378	1187	
3	Coke oven-I, Secondary Coal Crushing Building	2247	2562	2255	2136	1965	1564	
	Coke oven-I, Primary Coal Crushing Building	2019	2118	1963	1385	2130	1348	
4	Coke Oven-I, Coke cutting Building	875	926	1104	942	875	1032	
5	Coke Oven-II, Secondary Coal Crushing Building	2641	2589	1975	2674	2318	2024	
	Coke Oven-II, Primary Coal Crushing Building	2059	2234	2142	2385	1940	1757	
6	Coke Oven-II, Coke cutting Building	975	899	769	1074	1069	981.00	
7	Day Bin area DRI 1 & 2	541	331	325	466	345	328	2000
8	PSB & Char Discharging area DRI 1 & 2	748	685	812	738	872	712	
9	Day Bin area of DRI 3 & 4	658	446	495	511	517	463	
10	PSB & Char Discharging area DRI 3 & 4	1125	1015	751	879	763	985	
11	Day Bin area of DRI 5 & 6	742	547	544	472	446	602	
12	PSB & Char Discharging area DRI 5 & 6	965	883	858	996	942	728	
13	Day Bin area of DRI 7 & 8	698	744	486	544	442	512	
14	PSB & Char Discharging area DRI 7 & 8	1586	1449	804	1120	872	946	
15	Day Bin area of DRI 9 & 10	769	736	512	445	478	514	

16	PSB & Char Discharging area DRI 9 & 10	1102	882	842	848	1026	743	
17	Daybin area of DRI 11 & 12	568	439	498	506	516	592	
18	PSB & Char Discharge area of DRI 11 & 12	1325	1125	510	1265	1115	932	
19	Lime Plant Transfer point	1498	1824	1753	1635	1396	1455	
20	Lime Plant Kiln Area	1259	1100	1852	1735	1238	1486	2000
21	Lime Plant Delivery Building	812	697	612	835	718	725	
	Lime unloading point	896	509	982	715	1975	613	
22	Sinter Plant-1 Flux crushing area	1255	1325	1411	1059	1123	1205	
	Sinter Plant-1 primary Mixing building	1244	845	1126	SD	1683	1395	2000
23	Sinter Plant-1 Proportional building area	1396	1476	1511	SD	1886	1825	
24	Sinter Plant-1 Flux crushing area	969	1356	1425	1211	1366	1247	
25	Sinter Plant-2 primary Mixing building	1142	631	985	1136	1062	956	
26	Sinter Plant-2 Proportional building area	1486	1576	1896	1796	1634	1050	
27	SMS-I EAF 1 & 2 area	2042	820	2130	972	2400	2325	3000
28	SMS-I EAF 3 & 4 area	1142	652	952	1562	1965	1466	
29	SMS-II, EAF-I Area	896	542	782	981	1199	1255	
30	SMS-II, EAF-II Area	1325	665	956	1685	1625	1465	
31	Pellet Plant, Additive grinding area	1812	1454	1875	1720	1695	1865	2000
32	Pellet plant dosing and mixing area	1347	1978	1863	1466	1776	1662	
33	Iron Ore Benefication- Grinding unit	1105	547	711	658	1642	1163	
34	Tube mill- Galvanizing area	652	356	458	592	561	582	
35	Tube mill Location-Despatch area	448	395	405	412	368	403	
36	CRM -Tube coil packing area	396	363	356	382	432	392	
37	CRM Location- Narro Section	423	318	334	361	392	356	

38	RMHS-RMPP-1, Bunker Area	852	723	675	965	1563	1430	2000
39	RMHS-RMPP-2, Bunker Area	1100	912	1425	1786	1620	962	
40	RMHS-RMPP-3, Bunker Area	1359	1354	1124	1623	1290	1360	
41	RMHS-RMPP4, Bunker Area	1952	1868	1462	1580	1535	1620	
42	RMHS-RMPP5, Bunker Area	1245	1308	1695	1750	1825	1545	
43	WRM Bright Bar	569	429	465	417	443	457	
44	WRM RH Furnace area	356	320	325	388	439	420	
45	CSP Caster area	532	451	496	458	488	512	
46	CSP Tunnel furnace area	596	476	434	518	512	475	
47	3x130 MW Power plant Ash silo Area	1356	1240	1348	1751	1177	1264	
48	3x130 MW Power plant ESP Area	612	513	496	546	442	415	2000
49	3x130 MW Power plant Bunker Area	964	851	982	1282	1053	1420	

Treated Effluent water Analysis Result (ETP)
(April-24 to Sept-24)

Sl. No	Parameters	Unit	General Standard	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
1	pH	-	6.5 to 8.5	7.17	6.74	7.07	7.18	7.2	6.83
2	Total Suspended Solids as TSS	mg/l	100	5	8	7	8	4	6
3	Total dissolve solid	mg/l	2100	2005	2080	2020	2005	1148	1440
4	BOD (3 days at 27°C)	mg/l	30	8.5	5.5	6.5	10	3.74	4.6
5	COD	mg/l	250	30	20	20	30	9.9	12.6
6	Oil & Grease	mg/l	10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
7	Ammonical nitrogen (as N)	mg/l	50	<1.0	<1.0	<1.0	<0.56	0.28	8.8
8	Iron (as Fe)	mg/l	3	0.05	0.08	0.07	0.06	0.01	1.04
9	Total Chromium as Cr	mg/l	2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
10	Cyanide (as CN)	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
11	Phenol	mg/l	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Treated Waste Water Analysis Result (WWTP-I)
(April-24 to Sept-24)

S..N	Parameters	Unit	General Standard	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
1	pH	-	6.5 to 8.5	6.79	6.53	7.06	6.92	7.08	6.97
2	Total Suspended Solids as TSS	mg/l	100	10	15.4	8	5	9	5
3	Total dissolve solid	mg/l	2100	2015	1735	2005	2030	988	1670
4	BOD (3 days at 27°C)	mg/l	30	3	7.5	3.5	3	8.4	4
5	COD	mg/l	<250	10	30	10	10	10.9	9.2
6	Oil & Grease	mg/l	10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
7	Iron (as Fe)	mg/l	3	0.3	0.4	0.2	0.22	0.39	0.86

Treated Waste Water Analysis Result (WWTP-II)
(April-24 to Sept-24)

S..N	Parameters	Unit	General Standard	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
1	pH	-	6.5 to 8.5	6.65	6.72	6.92	6.81	7.07	6.9
2	Total Suspended Solids as TSS	mg/l	100	8	4.3	7	5	6	10
3	Total dissolve solid	mg/l	2100	1530	1780	1890	1420	1572	968
4	BOD (3 days at 27°C)	mg/l	30	8.5	5	15	5.6	<2.0	4.7
5	COD	mg/l	250	30	20	50	20	11.9	10.7
6	Oil & Grease	mg/l	10	<1.0	<1.0	<1.0	<1.0	<1.0	3.6
7	Iron (as Fe)	mg/l	3	0.12	0.28	0.16	0.13	0.51	0.32

Treated Waste Water Analysis Result (WWTP-III)
(April-24 to Sept-24)

S..N	Parameters	Unit	General Standard	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
1	pH	-	6.5 to 8.5	6.6	6.53	6.57	6.62	7.17	7.19
2	Total Suspended Solids as TSS	mg/l	100	6	8.7	5	5	8	9
4	BOD (3 days at 27°C)	mg/l	30	20	5	24	<3	2.8	7
3	Total dissolve solids	mg/l	2100	1742	1760	1760	1025	682	844
5	COD	mg/l	250	60	20	80	<5	10.9	9.2
6	Oil & Grease	mg/l	10	<1.0	<1.0	<1.0	<1	<1.0	<1.0
7	Iron (as Fe)	mg/l	3	0.24	0.21	0.19	0.1	0.63	0.39

Treated Effluent Water Analysis Result (BETP-)
(April-24 to Sept-24)

Sl. No	Parameters	Unit	General Standard	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
1	pH	-	6.5 to 8.5	7	7.32	7.09	6.97	7.21	6.83
2	Total Suspended Solids as TSS	mg/l	100	18	15	16	12	<2.5	16
3	Total dissolve solids	mg/l	2100	2010	1820	2050	2070	1150	576
4	BOD (3 days at 27°C)	mg/l	30	25	24	19	20	23	17.3
5	COD	mg/l	250	170	160	100	140	36	66
6	Oil & Grease	mg/l	10	5.5	3.2	5	3.7	<1.0	<1.0
7	Ammonical nitrogen (as N)	mg/l	50	2.24	2.52	2	3.64	11.67	10.2
8	Iron (as Fe)	mg/l	3	1.54	1.81	1.41	1.88	0.54	1.35
9	Total Chromium as Cr	mg/l	2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
10	Cyanide (as CN)	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
11	Phenol	mg/l	<1.0	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Ground Water Quality

No	Parameter	Unit	Standard as per IS 10500:2012	GW -1 Theikoli	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	<0.1	<0.1	<0.1	<0.1	<0.1
5	pH Value	--	6.5 -8.5	6.64	6.68	7.28	6.88	6.78
6	Dissolved Solids	mg/l	500	480	490	492	52	108
7	Residual, free Chlorine	mg/l	0.2	<0.05	<0.05	<0.05	<0.05	<0.05
8	Total Hardness (as CaCO ₃)	mg/l	200	180	195	195	35	65
9	Calcium (as Ca)	mg/l	75	40.02	46.09	48.09	10.02	16.03
10	Magnesium (as Mg)	mg/l	30	19.1	19.1	19.1	2.4	6.08
11	Alkalinity	mg/l	200	190	160	140	20	40
12	Chloride (as Cl)	mg/l	250	75	105	105	12.5	15
13	Fluoride (as F)	mg/l	1	0.71	0.72	0.68	0.34	0.68
14	Sulphate (as SO ₄)	mg/l	200	44.1	62.5	80.4	4.64	18.4
15	Nitrate (as NO ₃)	mg/l	45	7.24	11.8	10.5	2.15	5.21
16	Chromium (as Cr ⁺⁶)	mg/l	0.01	<0.005	<0.005	<0.005	<0.005	<0.005
17	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
18	Iron (as Fe)	mg/l	1	0.1	0.09	0.07	0.03	
19	Cyanide (as CN)	mg/l	0.05	<0.02	<0.02	<0.02	<0.02	<0.02
20	Copper (as Cu)	mg/l	0.05	<0.01	<0.01	<0.01	<0.01	<0.01
21	Manganese (as Mn)	mg/l	0.1	0.05	0.05	0.05	0.02	0.02
22	Mercury (as Hg)	mg/l	0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
23	Cadmium (as Cd)	mg/l	0.003	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
24	Selenium (as Se)	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001
25	Arsenic (as As)	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001
26	Lead (as Pb)	mg/l	0.01	<0.005	<0.005	<0.005	<0.005	<0.005
27	Zinc (as Zn)	mg/l	5	0.09	0.08	0.07	0.06	0.04
28	Aluminium as(Al)	mg/l	0.03	<0.001	<0.001	<0.001	<0.001	<0.001
29	Boron (as B)	mg/l	0.5	0.07	0.05	0.06	0.03	0.03

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 generate 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 generating 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, embankment rising and exhausted quarry void filling.

CSR EXPENDITURE FOR THE YEAR 2024-25 Till September 2024

SI No	Programme Head	Thematic Head	Budget	Actual
1	Community infra development	Community Development	5,29,59,309	3,20,838
2	Community infra- Townhall	Community Development	2,00,00,000	
3	Program Support-Comm Devp	Community Development	54,91,872	11,46,417
4	Community Based Outreach Activities	Health & Nutrition	98,00,278	22,62,583
5	Developing Public Health Facility	Health & Nutrition	35,00,000	
6	Access to Drinking Water	Water	72,21,600	25,76,776
7	Integrated Water Resource Managem	Water	60,00,000	18,97,440
8	Integrated WaSH Programme	Sanitation	84,95,411	16,66,885
9	Solid Waste Management Prog	Waste Management	1,33,59,198	25,13,389
10	JSW Udaan Scholarship	Education	30,00,000	
11	Quality Education- New Programmes	Education	60,56,556	5,34,331
12	Early Childhood Care & Education	Education	60,00,000	27,83,575
13	School Bus for Students	Education	10,70,507	0
14	School Infrastructure Project	Education	64,29,493	12,84,252
15	Mo School	Education	35,67,655	
16	Promotion of Rural Sports	Sports Promotion	22,59,425	
17	Women Empowerment Prog	Women Livelihood	74,00,000	20,87,815
18	Garment manufacturing Centers	Women Livelihood	85,01,859	13,47,500
19	Climate resilient Agri - Agri and Allied	Agri Livelihood	1,17,40,575	49,98,813
		Total	18,28,53,738	2,54,20,614

Agri-based Livelihood Programme



Paddy line transplanting at Dantamura



SRI paddy field at Khinda

Women Empowerment & Enterprise Development



Kharif vegetable farming at Sripura



Poultry farm at Bisadihi



Floriculture, Banjiberna



Inauguration ceremony of Co-operative Society

Sewing Training Center



Sewing training ongoing



Sewing training certificate facilitation program

Early Childhood Care & Education



Nutrition and Hygienic Practices at Anganwadi Centers



Udaan & Umeed scholarship (DIZ & IIZ)



Library Setup in DIZ Schools



Handing over of setup



Govt. High
School, Thelkoloji

Jagadwadi Shrihari
Vidya Mandir, Lapanga

Govt. High School,
Sripura

Mobile Health Medical Unit



MMU Camp at Sripura Village

Lab Test in MMU

Community Dispensary



Doctor Consultation & Diagnosis

Patient going through Lab Test

Water Sanitation & Hygiene (WaSH)



MRF Centre Sripura





Steps of Waste Management

Sanitation and Drinking Water Provision



Sanitation of DIZ Area



Drinking water Supply in DIZ Area

Development of Waterbodies



Construction of female changing room and Bathing step at Khadiapali (Ongoing)

Community Development



Installation of streetlight from Prasanna Panda Chowk to Biju Pattanaik Chowk (Ongoing)



Construction of
Community Center at Bansimal

Construction of additional rooms in
Sahayata Old Age Home (Ongoing)



Installation of Dhubenchhapal (Completed)

Workzone Noise Monitoring Result (April-24 to September-24)

Sl.No.	Name of the Unit	Location	Average Noise Level in dB(A)						Standard as per factory Act 1950
			Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	
1	DRI -A	Kiln main drive	84.1	83.45	82.65	82.10	84.60	83.70	
		Lobe comp. House (Inside)	83.70	83.80	83.45	83.7	81.70	84.90	
		Lobe comp. House (Outside)	84.4	82.50	84.90	81.70	84.50	83.60	
2	DRI-B	Kiln main drive	84.10	83.50	83.50	83.20	84.20	84.70	
		Lobe comp. House (Inside)	81.40	82.65	84.90	82.45	84.70	82.20	
		Lobe comp. House (Outside)	84.55	82.60	83.45	83.60	83.60	83.50	
3	DRI-C	Kiln main drive	83.30	82.70	82.30	81.10	84.40	84.70	
		Lobe comp. House (Inside)	82.30	82.50	83.40	83.50	84.05	81.40	
		Lobe comp. House (Outside)	83.35	83.80	81.20	83.45	83.70	84.50	
4	DRI-D	Kiln main drive	82.40	83.55	83.50	81.45	82.40	84.70	
		Lobe comp. House (Inside)	83.40	84.45	84.60	82.40	83.90	83.30	
		Lobe comp. House (Outside)	81.40	83.40	82.40	83.7	83.50	83.40	
5	DRI-E	Kiln main drive	84.90	83.45	81.50	81.20	84.55	81.35	
		Lobe comp. House (Inside)	82.45	84.40	83.45	82.30	81.70	84.90	
		Lobe comp. House (Outside)	83.45	80.40	82.40	83.50	81.70	83.60	
6	DRI-F	Kiln main drive	84.50	84.50	83.45	82.65	84.40	82.70	
		Lobe comp. House (Inside)	82.25	82.40	81.35	82.40	83.60	84.70	
		Lobe comp. House (Outside)	84.50	81.70	83.45	81.30	84.70	82.40	
7	DRI-G	Kiln main drive	83.45	83.50	84.50	82.50	82.5	83.60	
		Lobe comp. House (Inside)	81.35	82.65	84.00	81.35	84.4	83.30	
		Lobe comp. House (Outside)	83.50	83.30	82.30	83.50	84.9	82.90	
8	DRI-H	Kiln main drive	83.40	83.50	83.60	82.35	81.7	84.00	
		Lobe comp. House (Inside)	79.80	81.65	83.50	81.40	84.2	78.90	
		Lobe comp. House (Outside)	83.60	84.40	82.40	83.40	84.40	83.70	
9	DRI-I	Kiln main drive	82.80	83.35	84.50	81.30	83.90	84.90	
		Lobe comp. House (Inside)	84.6	82.25	82.30	83.50	83.40	83.70	
		Lobe comp. House (Outside)	84.20	83.40	83.50	83.40	84.90	82.30	
10	DRI-J	Kiln main drive	83.50	83.60	83.40	82.00	84.20	82.20	
		Lobe comp. House (Inside)	84.70	82.40	82.40	79.80	85.00	83.30	
		Lobe comp. House (Outside)	84.40	81.20	83.50	83.70	83.70	83.40	
		Kiln main drive	78.90	82.30	82.40	81.40	84.00	84.20	

11	DRI-K	Lobe comp. House (Inside)	84.65	82.40	83.45	82.40	84.40	84.70
		Lobe comp. House (Outside)	83.50	81.35	83.50	83.50	84.40	83.60
12	DRI-L	Kiln main drive	84.65	81.70	82.40	80.20	84.60	84.20
		Lobe comp. House (Inside)	84.4	83.45	81.30	81.50	84.30	84.70
		Lobe comp. House (Outside)	84.70	80.95	84.50	83.45	83.20	81.40
13	CPP 3x130 MW	Turbine-1	83.70	84.04	82.2	83.3	80.95	81.00
		Turbine-2	84.20	83.45	84.6	83.40	82.95	82.20
		Turbine-3	84.40	84.30	82.2	84.30	83.25	83.30
		Boiler-1	84.30	83.9	81.40	S/D	84.60	82.90
		Boiler-2	84.40	84.6	82.2	S/D	83.6	82.20
		Boiler-3	83.50	84.40	84.40	81.30	83.4	84.50
		Boiler-4	84.90	83.70	83.30	83.50	84.90	81.10
		Boiler-5	82.65	84.7	82.4	84.4	83.60	83.90
		Boiler-6	82.40	83.60	83.90	82.20	84.40	83.25
		Feed Pump Area	83.40	84.40	83.4	84.20	81.10	83.50
14	CPP 100 MW	Turbine Area (40 MW)	84.2	84.6	83.50	81.70	83.30	83.50
		Turbine Area (60 MW)	84.6	84.50	83.40	84.5	81.40	83.40
		Feed Pump Area	82.60	84.60	84.20	82.90	81.70	84.40
		Boiler Area	84.10	83.3	85.00	83.10	83.30	84.50
15	Blast Furnace-I	Cast House	82.6	84.20	84.2	84.20	83.60	84.70
		Blower House Turbo (Blower-2)	83.60	83.40	83.45	83.60	84.60	83.90
		Blower House Motorized (Blower-3)	84.90	82.55	84.90	84.60	82.20	81.50
		Gas Cleaning Plant	82.4	84.4	81.30	84.60	84.60	82.50
		Stock House	81.40	83.75	84.5	81.25	84.20	81.15
16	Blast Furnace-II	Cast House	84.20	84.40	84.45	82.20	83.90	81.10
		Blower House Turbo (Blower-2)	81.60	84.60	84.40	83.45	83.60	84.40
		Blower House Motorized (Blower-3)	82.65	83.70	83.50	83.80	81.7	83.35
		Gas Cleaning Plant	83.30	84.6	83.90	84.6	83.60	84.25
		Stock House	82.35	84.6	84.50	81.40	84.30	82.70
17	Sinter Plant	Blower House	83.40	84.50	81.90	83.30	81.40	84.30
		Flux Charging area	82.45	83.50	84.40	84.80	83.30	84.90
		Proportional Building	83.45	84.50	83.60	82.15	83.4	84.50
18	Coke Oven-1	Battery Area	84.2	83.3	82.60	81.15	79.85	81.20
		Coke Cutting & Screening Building	83.30	83.45	82.55	82.30	80.8	83.70
19	Coke Oven-2	Battery Area	84.50	82.50	84.5	81.25	81.20	84.50
		By-Product (Exhauster Area)	82.05	84.60	82.40	81.10	78.55	84.40

20	RMPP - I	Truck Tippling	84.55	83.40	82.60	80.55	81.35	84.20
		Stacking	84.35	83.80	83.40	82.35	84.45	81.80
		Coal Crushing Screening	82.70	84.50	81.4	83.25	84.75	83.50
		Ore Crushing & Screening	81.45	84.30	83.60	82.15	81.8	83.25
21	RMPP - II	Stacking & Reclaming -3	84.20	83.35	83.35	S/D	82.45	84.05
		Stacking & Reclaming -4	84.80	83.50	80.4	S/D	81.5	79.90
		Stacking & Reclaming -5	82.5	83.50	82.55	S/D	82.50	81.70
22	RMPP-III	Infron of Office	84.40	82.45	81.20	81.8	78.70	80.35
		Coal reclaiming area	84.5	83.40	84.60	84.2	81.20	83.40
		Belt press crushing area	84.3	84.60	84.7	84.4	83.5	S/D
23	Coal Washery -I	Infront of office	84.4	82.40	83.75	81.65	81.55	82.70
		Near Silo	83.70	83.60	83.30	83.3	81.40	84.40
24	Coal Washery -II	Infront of office	82.20	81.70	81.25	82.05	80.10	81.10
		Near Silo	83.85	83.60	83.70	82.6	83.85	84.00
25	Lime Plant	Blower House	83.40	82.3	84.40	83.6	83.50	84.40
		Kiln Area	84.60	84.4	83.6	84	83.30	82.50
		Lime Sizing Area	82.20	82.5	84.10	81.05	83.60	84.50
26	Pellete Plant	Mill Area (Additive Mixing)	80.30	82.45	84.50	83.475	84.4	82.50
		Balling Disc Area	80.40	84.30	81.40	82.85	79.80	81.40
		Indurating machine Area	84.2	82.40	81.60	82	81.25	84.30
		Screening Area	81.70	82.20	82.20	S/D	81.10	80.65
		Updraught drying fan Area	83.3	82.50	84.40	83.45	82.60	83.05
		Wind Box Recuperation fan Area	80.30	84.30	84.40	81.20	81.60	83.70
		Cooling Air fan Area	84.40	82.00	84.00	83.0	84.00	83.20
		Dedusting ID fan Area	82.40	84	83.40	84.0	81.50	84.20
27	Oxygen Plant	Air Filtration Area	84.50	84	81.7	82.20	84.00	84.20
		Air Compressor Area	84.6	83.6	83.6	84.20	84.70	85.00
		Cooling Water System Area	84.5	84.4	84.3	84.40	84.4	83.70
		Air Purification Area	84.55	83.9	81.4	84.30	83.40	84.40
		Air Separation Area	83.40	84.4	83.3	84.20	83.30	82.20
		Distribution Area	82.95	82.5	84.3	82.30	81.40	83.20
28	SMS - I	EAF - 1 Area	83.70	83.3	81.7	83.50	81.7	84.70
		EAF-2 Area	84.3	83.3	84.7	82.70	81.4	83.60
		EAF-3 Area	83.40	84.50	82.50	84.60	81.70	84.70
		EAF-4 Area	84.50	81.9	83.6	84.40	79.80	81.40
		LF 1&2 Area	83.50	81.60	84.6	84.20	81.60	82.20
		LF 3&4 Area	81.40	84.50	84.70	84.40	79.10	83.40

		Near Office	82.45	80.45	82.20	82.05	80.00	81.40
29	SMS - II	EAF Area	84.65	84.40	83.70	83.60	82.20	84.10
		LRF Area	81.3	83.40	82.7	83.90	83.70	81.70
		VD Area	84.50	82.40	83.7	82.20	79.10	82.20
		Caster Area	84.7	83.50	84.40	83.70	83.70	83.30
		Near Office	81.20	82.30	83.50	83.70	81.15	82.30
		Near Laboratory	82.30	83.50	84.50	79.75	72.25	83.40
30	Air Compressor Station	CPP 100 MW(Inside)	83.45	82.25	83.40	83.30	83.60	84.40
		CPP 3x130 MW UNIT 1 & 2 (inside)	83.65	81.70	82.40	83.70	84.20	81.90
		CPP 3x130 MW UNIT -3 (inside)	82.55	83.70	83.30	83.30	84.60	83.70
		CSP (Inside)	83.50	82.20	82.30	83.30	84.40	83.40
		Blast Furnace (in side)	81.50	82.70	84.7	83.40	84.60	85.00
		Pellet Plant (in side)	82.35	82.40	83.30	84.00	83.30	84.10
31	CSP	Down Coiler	82.00	84.40	84.50	83.70	84.70	83.90
		Mill Strand	83.50	83.30	83.1	84.00	83.30	82.40
32	CRM	Compressor House (IS)	81.4	82.40	83.75	81.40	83.30	83.20
		Mill area	82.10	84.10	83.3	82.20	83.75	81.75
		Near Corrugation Machine	84.5	83.40	83.4	82.20	79.70	81.40
		Near Chromating unit	84.3	79.70	83.30	82.20	81.15	82.40
33	WRM	Near Combination Air fan	81.45	79.90	84.40	82.70	83.30	82.70
		Compressor House (is)	82.35	82.20	82.9	82.20	83.7	81.40

Annexure-X (B)

Ambient Noise Monitoring Result (April'24 to Sept'24)								
	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
Month/Standard	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-24	68.4	63.8	70.1	65.1	67.4	61.6	64.2	61.7
May-24	66.7	62.9	66.7	64.3	68.1	62.2	66.3	62.8
Jun-24	69.3	63.3	64.9	63.9	66.3	63.1	67.1	63.1
Jul-24	65.4	61.7	68.8	61.7	65.8	61.4	63.8	60.4
Aug-24	66.9	62.1	69.7	63.2	66.9	63.5	65.1	62.1
Sep-24	64.8	60.4	65.2	60.7	67.7	65.1	67.9	66.1