

Half Yearly Compliance Report**2022****01 Jun(01 Oct - 31 Mar)****Acknowledgement**

Proposal Name	Revised configuration of modernization-cum-expansion of 7.0 MTPA Bhilai Steel Plant by Mis Steel Authority of India Limited (SAIL) located at Bhilai, District Durg, Chhattisgarh- Amendment in Environment Clearance - regarding.		
Name of Entity / Corporate Office	Ms.Uma Katoch		
Village(s)	N/A		
District	DURG		
Proposal No.	IA/CG/IND/260774/2022 dtd 11/03/2022.	Category	Industrial Projects - 1
Plot / Survey / Khasra No.	N/A	Sub-District	N/A
State	CHHATTISGARH	Entity's PAN	*****7062F
MoEF File No.	F. No. IA-J-1101112812007-IA 11 (I)	Entity name as per PAN	STEEL AUTHORITY OF INDIA LTD

Compliance Reporting Details

Reporting Year	2022
Remarks (if any)	April 2024 to September 2024
Reporting Period	01 Jun(01 Oct - 31 Mar)

Details of Production and Project Area

Name of Entity / Corporate Office	Ms.Uma Katoch	
	Project Area as per EC Granted	Actual Project Area in Possession
Private	3284.75	6286.75
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	3284.75	6286.75

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Coke from Coke Oven Battery,	Million Tons per Annum (MTPA)	31/07/2025	3.94	3.73	3.94
2	Hot Metal from Blast Furnace	Million Tons per Annum (MTPA)	31/07/2025	7.5	5.98	7.5
3	Bars and Rods from BAR and ROD Mills	Million Tons per Annum (MTPA)	31/07/2025	0.9	0.89	0.9
4	Crude Steel From Steel Melting Shops	Million Tons per Annum (MTPA)	31/07/2025	7.0	5.67	7.0
5	Refractories from Refractory Material Plant	Million Tons per Annum (MTPA)	31/07/2025	1.58	0.70	1.58
6	Sinters from Sinter Plant	Million Tons per Annum (MTPA)	31/07/2025	9.772	8.7	9.772
7	Rail and Structures from RSM	Million Tons per Annum (MTPA)	31/07/2025	2.20	0.437	2.20
8	Power and Steam from PBS	MW	31/07/2025	94	26.9	94
9	Plates from Plate Mill	Million Tons per Annum (MTPA)	31/07/2025	1.65	1.13	1.65
10	Merchant Products from Merchant Mill	Million Tons per Annum (MTPA)	31/07/2025	0.85	0.655	0.85
11	Wire Rods Products from Wire Rod Mill	Million Tons per Annum (MTPA)	31/07/2025	0.70	0.458	0.70
12	Oxygen from Oxygen Plant	Tons per Day (TPD)	31/07/2025	2350	542	2350

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	Corporate Environmental Responsibility	All CER activities as committed in the reply to the ADS letter dated 02.01.2019 shall be completed in the financial year 2019-20.
PPs Submission: Complied BSP has initiated action for completion of all identified CER activities/projects committed in the reply to the ADS letter dated 02.01.2019. Due to the prevalence of COVID pandemic (1st wave from March to November-2020 and 2nd wave from March to June-2021) there has been delay in completion of the projects. However presently the CER projects are progressing well and likely to be completed by December-2021. A detailed status report on CER activities enclosed at Flag-C		Date: 02/05/2025
2	WASTE MANAGEMENT	100 % SMS -Slag utilization shall be ensured after conditioning /steam curing.
PPs Submission: Complied About 55 percent the BOF slag is presently being recycled back in to steel making process and also utilized in Road Making and filling of the low lying areas. BSP has also started selling BOF slag to the interested buyers (Cement Plants other Construction industries) since April-2021. A pilot scale study on Development of process for steam maturing of BOF slag at BSL was taken up by SAIL. The matured BOF slag can be utilised as an aggregate in cement concrete, as rail track ballast and for road making etc. SAIL came out with the final report wherein optimum process parameters have been frozen. The proposition for steam maturing facility on commercial scale is under consideration. Number of other R and D efforts are being taken-up by SAIL in association with other agencies, which are still in nascent stage. After the completion of these studies, exploring the options for commercial scale/bulk utilization of BOF slag will be taken-up. BSP has given an assignment to NIT-Raipur for Assessing the suitability of Twin Hearth Furnace(THF) Steel Slag as pavement material and feasibility of THF Steel slag in construction of the rural roads. NIT Raipur has submitted the final report in June-2021. The report was submitted to CECB and will be shared with all agencies involved in road making to promote the use of steel slag in Road making and other infrastructure projects.		Date: 02/05/2025
3	GREENBELT	Scheme for decommissioning of SMS-1 and its utilities along with green belt development in that area shall be submitted within six months to the Ministry and Regional Office of the MoEF&CC.
PPs Submission: Complied SMS-1 phased-out in March-2021 Decommissioning plan along with greenbelt development will be submitted to MoEF&CC.		Date: 02/05/2025
4	GREENBELT	Scheme for green belt development in the remaining area for covering 33% of total project area shall be submitted to the Regional office of the MoEF&CC.
PPs Submission: Complied BSP has planted 4412482 nos of trees in an area covering about 1840 hectares till March-2021. In the year 2021-22(April-March) BSP has planted 7080 trees within the plant premises and township covering an area of about 15-20 hectares. In the year 2021-22 BSP has been planted 67080 Trees. 60,000 saplings planted at Township and its surrounding area of Bhilai. Work awarded to C.G. Van Vikas Nigam. Till Sep.-2021 about 6000 trees have been planted. Further Green belt required to be developed to meet the 33 percentage criteria is about 280 Hectares . (However by excluding the two reservoirs/cooling ponds area of 1100 hectares from the total area of the project, BSPs green belt coverage comes to 35.48 Percentage.		Date: 02/05/2025
5	AIR QUALITY MONITORING AND PRESERVATION	Standard Operating Procedures (SOPs) shall be developed for performance monitoring of pollution control devices and performance monitoring should get conducted every year internally and every third year through accredited third party,

PPs Submission: Complied Standard Operating Procedures (SOPs) are developed for performance monitoring of pollution control devices and performance monitoring every year internally Performance monitoring of pollution control devices at every three year through an accredited third party will also be conducted.		Date: 02/05/2025
6	MISCELLANEOUS	In the Environmental Policy the hierarchy of reporting environmental non-compliances and emergencies should be clearly mentioned and submitted to the Regional Office of the MoEF&CC.
PPs Submission: Complied The policy followed at SAIL for reporting environmental non-compliances and emergencies has already been submitted to MoEFCC-New Delhi.		Date: 02/05/2025
7	WASTE MANAGEMENT	Solid waste management as committed in the reply to the ADS letter dated 02.01.2019 shall be complied.
PPs Submission: Complied Solid waste management as committed in the reply to the ADS letter dated 02.01.2019 will be complied.		Date: 02/05/2025
General Conditions		
Sr.No.	Condition Type	Condition Details
1	Statutory compliance	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (prevention & Control of Pollution) Act 1974 from the concerned State pollution control Board/ Committee.
PPs Submission: Complied Online application for Consent to Establish has been submitted to Chhattisgarh Environment Conservation Board (CECB) on 22/07/2019 The Consent to Establish was granted by CECB Ref.no. 8779/TS/CECB/2021,dated 08/01/2021 for Five Years.		Date: 02/05/2025
2	Statutory compliance	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
PPs Submission: Complied No ground water will be used for the project.		Date: 02/05/2025
3	Statutory compliance	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules,2016 as amended from time to time.
PPs Submission: Complied BSP has obtained the Authorization for the handling of the Hazardous Waste Generated in the Plant from Chhattisgarh Environment Conservation Board which is valid up to 16/04/2024. Copy of the authorization is enclosed at Flag-D		Date: 02/05/2025
4	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission 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.
PPs Submission: Complied 31 nos of CEMs have been installed covering all the process stacks and connected to SPCB and CPCB online servers and calibration of this system is being carried-out from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.		Date: 02/05/2025
5	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
PPs Submission: Complied Fugitive emissions are being monitored every quarter and report submitted to regulatory agencies.		Date: 02/05/2025
6	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/ criterion parameters relevant to the main pollutants released (e.g- PM10 and PM2.5 in reference to PM emission, and SOx and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions
PPs Submission: Complied 4 nos of Continuous Ambient Air Quality monitoring stations have been installed within and outside the plant area covering upwind and downwind directions Twelve air pollutants, as per the National Ambient Air quality standards-2009, namely, PM10, PM2.5, Carbon Monoxide (CO), Sulphur Dioxide (SO2), Nitrogen Dioxide (NO2), Ammonia (NH3), ground level Ozone (O3), Lead, Arsenic, Nickel, Benzene and Benzo (a) Pyrene are being measured (Note : Benzene and Benzo (a) Pyrene is measured offline)		Date: 02/05/2025
7	AIR QUALITY MONITORING AND PRESERVATION	The cameras shall be installed at suitable locations for 24X7 recording of battery emissions on the both sides of coke oven batteries and videos shall be preserved for at least one-month recordings.
PPs Submission: Complied Cameras have been installed at Coke ovens for recording of battery emissions		Date: 02/05/2025
8	AIR QUALITY MONITORING AND PRESERVATION	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions
PPs Submission: Complied Sampling facilities at process stacks and at quenching towers have been provided as per CPCB guidelines for manual monitoring of emissions		Date: 02/05/2025
9	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report,

PPs Submission: Complied Copies of monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions (October-2021 to March-2022) is enclosed at Flag-E		Date: 02/05/2025
10	AIR QUALITY MONITORING AND PRESERVATION	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.
PPs Submission: Complied Air Pollution Control (APC) systems have been provided for all the dust generating points including fugitive dust from all vulnerable sources. The stack and fugitive emissions monitored are meeting the standards..		Date: 02/05/2025
11	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
PPs Submission: Complied Diligent maintenance of Bags is being done and are replaced whenever there are leakages.		Date: 02/05/2025
12	AIR QUALITY MONITORING AND PRESERVATION	Secondary emission control system shall be provided at SMS Converters.
PPs Submission: Complied Secondary emission control system has been provided for SMS-3 Converters.		Date: 02/05/2025
13	AIR QUALITY MONITORING AND PRESERVATION	Pollution control system in the steel plant shall be provided as per the CREP Guidelines of CPCB.
PPs Submission: Complied The Pollution control system as per the guidelines of CREP have been provided BOD plant for the treatment of effluents of COCCD Secondary emission control system has been provided for SMS-3 Converters Cast house Defuming systems have been provided for BF-8 and BF-7		Date: 02/05/2025
14	AIR QUALITY MONITORING AND PRESERVATION	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads. shop floors, roofs, regularly.
PPs Submission: Complied Vacuum cleaners are being used to clean plant roads. Shop floor etc, regularly.		Date: 02/05/2025
15	AIR QUALITY MONITORING AND PRESERVATION	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.
PPs Submission: Complied Iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices are being recycled back to the process after appropriate treatment. A briquetting/ agglomeration plant on BOO basis will be installed in next 3 years for increasing the utilization of process sludges/dusts		Date: 02/05/2025
16	AIR QUALITY MONITORING AND PRESERVATION	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

PPs Submission: Complied At BSP railway wagons are being used for transportation of 95 Percent of the raw materials like coal and Iron ore. For internal transportation of raw materials leak proof trucks/dumpers are being used after proper covering.		Date: 02/05/2025
17	AIR QUALITY MONITORING AND PRESERVATION	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility)
PPs Submission: Complied Facilities for spillage collection are provided for coal and coke on wharf of coke oven batteries		Date: 02/05/2025
18	AIR QUALITY MONITORING AND PRESERVATION	Land-based APC system shall be installed to control coke pushing emissions
PPs Submission: Complied Land-based APC system has been installed to control coke pushing emissions in Coke oven Battery-11.		Date: 02/05/2025
19	AIR QUALITY MONITORING AND PRESERVATION	Monitor CO, HC and Oz in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber
PPs Submission: Complied Monitor CO, and O2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber are being measured.		Date: 02/05/2025
20	AIR QUALITY MONITORING AND PRESERVATION	Vapour absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens
PPs Submission: Complied The installation of the system shall be explored in future based on feasibility		Date: 02/05/2025
21	AIR QUALITY MONITORING AND PRESERVATION	In case concentrated ammonia liquor is incinerated, adopt high temperature incineration to destroy Dioxins and Furans. Suitable NOx control facility shall be provided to meet the prescribed standards
PPs Submission: Complied Regular monitoring of coke oven stack emissions is being done and The Gaseous emissions from Coke ovens are meeting the standards.		Date: 02/05/2025
22	AIR QUALITY MONITORING AND PRESERVATION	The coke oven gas shall be subjected to desulphurization if the sulphur content in the coal exceeds 1%.
PPs Submission: Complied At BSP the imported coal has sulphur content less than 1 Percentage.		Date: 02/05/2025
23	AIR QUALITY MONITORING AND PRESERVATION	Wind shelter piles. fence and chemical spraying shall be provided on the raw material stock piles
PPs Submission: Complied Water sprinklers are installed for control of dust at raw material stock piles		Date:

		02/05/2025
24	AIR QUALITY MONITORING AND PRESERVATION	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars
PPs Submission: Complied Ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars are installed.		Date: 02/05/2025
25	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install Dry Gas Cleaning Plant with bag filter for Blast Furnace and-SMS convertor- (to be decided on case to case basis depending on type and size of plant)
PPs Submission: Complied At BSP consultant MECON has recommended wet gas cleaning systems for BFs and SMS convertors as the Dry Gas Cleaning Plant are not feasible.		Date: 02/05/2025
26	AIR QUALITY MONITORING AND PRESERVATION	Dry quenching (CDQ) system shall be installed along with power generation facility from waste heat recovery from hot coke
PPs Submission: Complied Dry quenching (CDQ) system along with power generation facility for waste heat recovery from hot coke has been installed for Coke Oven Battery-11.		Date: 02/05/2025
27	WATER QUALITY MONITORING AND PRESERVATION	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 3ts(March 2012 {Integrated iron & Steel}; G.S.R 414(E) dated 30 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 recognised under Environment (Protection) Act 1986 or NABL accredited laboratories
PPs Submission: Complied continuous effluent monitoring systems have been installed for all three plant outlets Viz Outlet-A, B and C and are connected to SPCB and CPCB online servers Calibration of the systems is being carried-out regularly.		Date: 02/05/2025
28	WATER QUALITY MONITORING AND PRESERVATION	The project Proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometer /sampling wells in the plant and adjacent areas through labs recognised under Environment (protection) act, 1986 and NABL accredited laboratories.
PPs Submission: Complied Ground water quality monitoring at least twice a year (pre and post monsoon) in the adjacent areas through labs recognised under Environment (protection) act, 1986 and NABL accredited laboratories is being carried-out		Date: 02/05/2025
29	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

PPs Submission: Complied Monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality reports (October-2021 to March-2022) are enclosed (Flag-F)		Date: 02/05/2025
30	WATER QUALITY MONITORING AND PRESERVATION	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.
PPs Submission: Complied At BSP ETP for coke oven and by-product plant has been installed and is working effectively and meeting the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (integrated iron and Steel)		Date: 02/05/2025
31	WATER QUALITY MONITORING AND PRESERVATION	Adhere to 'Zero Liquid Discharge'
PPs Submission: Complied BSP has three outlets carrying plant effluent (Outlet-A , B and C). Effluent from outlet-A (About 5000 m3/Hr) is already being recycled and the recycling schemes for Outlet-B (450 m3/hr) and Outlet-C (2500 m3/hr) are in advanced stage of completion.		Date: 02/05/2025
32	WATER QUALITY MONITORING AND PRESERVATION	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
PPs Submission: Complied A 30 MLD sewage recycling plant has been installed for treatment of recycling of domestic sewage generated in the Township.		Date: 02/05/2025
33	WATER QUALITY MONITORING AND PRESERVATION	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off
PPs Submission: Complied Garland drains and collection pits have been provided at the Raw Material handling area to check the water pollution due to surface run off		Date: 02/05/2025
34	WATER QUALITY MONITORING AND PRESERVATION	Tyre washing facilities shall be provided at the entrance of the plant gates
PPs Submission: Complied Complied.		Date: 02/05/2025
35	WATER QUALITY MONITORING AND PRESERVATION	CO2 injection shall be provided in GCP of SMS to reduce pH in circulating water to ensure optimal recycling of treated water for converter gas cleaning
PPs Submission: Complied At SMS, pH in circulating water of GCPs is being maintained through addition of Use of Dispersant Surfactant. The option of CO2 injection is also being explored.		Date: 02/05/2025
36	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall practice rainwater harvesting to maximum possible extent

PPs Submission: Complied At present rain water harvesting is being done from the rooftops of Plate Mill and Machine Shop-II area. Approx. 71500 m3 rain water is channelized to Maroda-I reservoir through storm water drains. Recharge pits were constructed near 73 existing borewell to arrest the over flow /excess water. Rain Water Harvesting structure were installed at T A Building, Bhilai Niwas, Bhilai Technical Institute, S.S School Sector-VII and G.S.S School-V. 5 Recharge ponds were dug in Bhilai Township (Sector-3 near FSNL, Sector-3 near BTI Hostel, Sector-5 behind Andhra Bhawan, Hospital Sector near D-23, Jayanti Stadium) with recharge bore well at middle bottom of pond at two locations. 1 big recharge pond of about 1 lac m3 capacity was made Behind Bhilai Institute of Technology (BIT) near Bhilai House with bore well at Centre.		Date: 02/05/2025
37	WATER QUALITY MONITORING AND PRESERVATION	Treated water from ETP of CCIBP shall not be used for coke quenching
PPs Submission: Complied At COB11 dry quenching system has been installed.		Date: 02/05/2025
38	WATER QUALITY MONITORING AND PRESERVATION	Water meters shall be provided at the inlet to all unit processes in the steel plants
PPs Submission: Complied Water meters are installed at strategic locations to measure water flow to the process plants.		Date: 02/05/2025
39	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water
PPs Submission: Complied Water consumption in the steel plant is being reduced through adoption of local recycling systems for all the Modernization units (URM,BRM, SMS-3 and BF-8). The effluents from older units are being recycled back to cooling pond after treatment for re-use as industrial water.		Date: 02/05/2025
40	Noise Monitoring & Prevention	Noise monitoring and prevention
PPs Submission: Complied Regular noise monitoring is done at all the potential high noise generating areas like BFs, Power plants, Rolling Mills etc . Acoustic enclosures, silencers etc have been provided at all the high noise zones to prevent workmen to the high noise exposure.		Date: 02/05/2025
41	Noise Monitoring & Prevention	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report
PPs Submission: Complied Noise level survey is being carried as per the prescribed guidelines and report in this regard is enclosed (Flag-G)		Date: 02/05/2025
42	Noise Monitoring & Prevention	The ambient noise levels should conform to the standards prescribed under E(P)A Rules. 1986 viz.75 dB(A) during day time and 70 dB(A) during night time
PPs Submission: Complied Regular Noise monitoring is being done at different locations of township (Market area, schools, hospitals, residential area) and ambient noise levels are meeting the standards (Flag-G)		Date: 02/05/2025
43	ENERGY PRESERVATION	The project proponent shall provide TRTs to recover energy from

	MEASURES	top gases of Blast Furnaces
PPs Submission: Complied At new BF-8, TRTs to recover energy from top gases of Blast Furnace has been installed.		Date: 02/05/2025
44	ENERGY PRESERVATION MEASURES	Coke Dry Quenching (CDQ shall be provided for coke quenching for both recovery and non-recovery type coke ovens
PPs Submission: Complied At new Coke oven Battaery-11, Coke Dry Quenching (CDQ) has been installed		Date: 02/05/2025
45	ENERGY PRESERVATION MEASURES	Waste heat shall be recovered from Sinter Plants coolers and Sinter Machines
PPs Submission: Complied Waste heat recovery systems have been installed for Sinter Plants coolers and Sinter Machines of SP-3.		Date: 02/05/2025
46	ENERGY PRESERVATION MEASURES	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles
PPs Submission: Complied At new BF-8, torpedo ladle is being used for hot metal transfer		Date: 02/05/2025
47	ENERGY PRESERVATION MEASURES	Use hot charging of slabs and billets/blooms as far as possible
PPs Submission: Complied Hot charging of slabs and billets/blooms is being done at Rolling mills.		Date: 02/05/2025
48	ENERGY PRESERVATION MEASURES	Waste heat recovery systems shall be provided in all units where the flue gas or process gas exceeds 300oC
PPs Submission: Complied Waste heat recovery systems have been installed at Sinter Plants, Coke ovens, Blast Furnaces, Power Plants		Date: 02/05/2025
49	ENERGY PRESERVATION MEASURES	Explore feasibility to install WHRS at Waste Gases from BF stoves; Sinter Machine; Sinter Cooler, and all reheating firm aces and if feasible shall be installed
PPs Submission: Complied Waste heat recovery systems have been installed at Sinter Plants, Coke ovens, Blast Furnaces, Power Plants. WHRS systems have also been installed in new units under Modernization In future more such units will be installed based on feasibility.		Date: 02/05/2025
50	ENERGY PRESERVATION MEASURES	Restrict Gas flaring to < 1%
PPs Submission: Complied Complied/Noted.,		Date: 02/05/2025
51	ENERGY PRESERVATION MEASURES	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

PPs Submission: Complied 2x100 Kw solar power generation on roof tops of Bhilai Niwas has been installed and provision for online monitoring and recording of the power generation has also been developed.		Date: 02/05/2025
52	ENERGY PRESERVATION MEASURES	Provide LED lights in their offices and residential areas
PPs Submission: Complied Extensive use of LED lights in their offices and residential areas is being practiced.		Date: 02/05/2025
53	ENERGY PRESERVATION MEASURES	Ensure installation of regenerative type burners on all reheating furnaces
PPs Submission: Complied regenerative type burners are being used for all reheating furnaces		Date: 02/05/2025
54	WASTE MANAGEMENT	An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/ I shall be installed to use slag as river sand in construction industry
PPs Submission: Complied All the BF-Granulated slag generated in BSP is being supplied to Cement Industry. In future if and when there is shortage of demand from Cement Industry BSP will offer the slag to construction industry through a viable mechanism.		Date: 02/05/2025
55	WASTE MANAGEMENT	In case of Non-Recovery coke ovens, the gas main carrying hot flue gases to the boiler, shall be insulated to conserve heat and to maximise heat recovery
PPs Submission: Complied NA, At BSP the coke ovens are of recovery type.		Date: 02/05/2025
56	WASTE MANAGEMENT	Tar Sludge and waste oil shall be blended with coal charged in coke ovens (applicable only to recovery type coke ovens)
PPs Submission: Complied At BSP Tar Sludge is being blended with coal charged in coke ovens and waste lubrication oil is being treated in a separate oil reclamation unit and recycled back after recovery/regeneration. The skimmed oil is being sold to authorized recyclers		Date: 02/05/2025
57	WASTE MANAGEMENT	Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed
PPs Submission: Complied Presently BSP is in the process of setting-up a sludge briquetting plant where all the sludges generated from the processes will be used. However BSP will also explore the process of recovery of elemental carbon from GCP sludges in future.		Date: 02/05/2025
58	WASTE MANAGEMENT	Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS
PPs Submission: Complied At BSP recovery of scrap, metallic and flux is being done. The recovered scrap , iron fines, Lime fines, Mill scales is being recycled to BF and Sinter plants.		Date: 02/05/2025
59	WASTE MANAGEMENT	Used refractories shall be recycled as far as possible

PPs Submission: Complied Being done.		Date: 02/05/2025
60	WASTE MANAGEMENT	SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway hack ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant
PPs Submission: Complied At BSP SMS/BOF slag is being processed into different size fractions and recycled back to Sinter and BF as replacement of flux. BSP is also exploring methodologies for use of BOF slag for road making, railway ballast and other applications. We are seeking the services of Centre for Construction Development and Research National Council for Cement and Building Materials for exploring alternative applications for BOF slag. BSP has given an assignment to NIT-Raipur for assessing the suitability of steel slag as pavement material and feasibility of Steel slag in construction of the rural roads. The final report submitted in June-2021 is being shared with all govt and pvt agencies involved in Construction/road making activities to promote its use as construction/pavement material. Other Central R and D initiatives in SAIL for BOF slag and BF Slag utilization: Pilot scale project on steam maturing of BOF Slag at BSL, Bokaro Field trial on assessing suitability of weathered BOF slag as rail track ballasts at BSL, Bokaro Supply of Air Cooled BF slag for construction of road under Four Laning Project of NH-32 at WB Feasibility study on suitability of BOF Slag for use in cement industry through The Centre for Construction Development and Research of National Council for Cement and Building Materials (NCCBM), under the administrative control of Ministry of Commerce and Industry, Government of India, Study on use of BOF slag as soil ameliorating agent in agriculture through Indian Agricultural Research Institute (IARI), New Delhi. Use of steel slag in Open Graded Asphalt Friction Courses (OGAFC) through Department of Civil Engineering, IIT Guwahati		Date: 02/05/2025
61	WASTE MANAGEMENT	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office
PPs Submission: Complied 100 percent utilization of fly ash as per Fly-ash rules is being followed at BSP. At BSP fly ash generation is very less as the boilers are run mostly on By-product gases generated from steel plant operations. The limited quantity of ash generated is being used for reclamation of low lying areas within the plant premises as per the fly-ash rules.		Date: 02/05/2025
62	WASTE MANAGEMENT	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
PPs Submission: Complied Being Complied.		Date: 02/05/2025
63	WASTE MANAGEMENT	The waste oil, grease and other hazardous waste like acidic sludge from pickling, galvanising chrome plating mills etc. shall be disposed of as per the Hazardous & Other waste (Management & Trans boundary Movement) Rules, 2016. Coal tar sludge / decanter shall be recycled to coke ovens
PPs Submission: Complied The acid sludge and other hazardous wastes are disposed of as per the Hazardous and Other waste (Management and Trans boundary Movement) Rules, 2016. Coal tar sludge / decanter is being recycled to coke ovens or sold to authorized recyclers.		Date: 02/05/2025

64	WASTE MANAGEMENT	Kitchen waste shall be composted or converted to biogas for further use
PPs Submission: Complied Kitchen waste is composted and used for Horticulture as manure.		Date: 02/05/2025
65	GREENBELT	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
PPs Submission: Complied BSP has planted 4412482 nos of trees in an area covering about 1840 hectares till March-2021. In the year 2021-22(April-March), BSP has planted 7080 trees within the plant premises and township covering an area of about 15-20 hectares. In the year 2021-22 BSP has been planted 67080 Trees. 60,000 saplings planted at Township and its surrounding area of Bhilai. Work awarded to C.G. Van Vikas Nigam. Till Sep.-2021 about 6000 trees have been planted. Further Green belt required to be developed to meet the 33 percent criteria is about 280 Hectares . (However by excluding the two reservoirs/cooling ponds area of 1100 hectares from the total area of the project, BSPs green belt coverage comes to 35.48 percentage.		Date: 02/05/2025
66	GREENBELT	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.
PPs Submission: Complied BSP maintains its GHG emissions inventory and also the emission data is submitted to world steel association(WSA) every year under its commitment as member under Climate		Date: 02/05/2025
67	PUBLIC HEARING	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented
PPs Submission: Complied At BSP all departments have prepared their own Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan. The documents are approved by Factory Inspector. Regular mock-drills are organized to check the effectiveness of the EPP/DMPs and are updated based on the mock drill review and also based on recommendations from expert agencies engaged to review the safety management of BSP		Date: 02/05/2025
68	PUBLIC HEARING	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 of Factory Act
PPs Submission: Complied National occupation Health Centre (NOHC) set-up at BSP regularly carry out heat stress analysis for the workmen who work in high temperature work zone . All the workmen are mandatorily provided with Personal Protection Equipment(PPE) as per the norms of Factory Act		Date: 02/05/2025
69	PUBLIC HEARING	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project
PPs Submission: Complied Complied (At BSP major expansion job has already been completed)		Date: 02/05/2025
70	PUBLIC HEARING	Occupational health surveillance of the workers shall be done on a

		regular basis and records maintained as per the Factories Act
PPs Submission: Complied Being Complied. Occupational health surveillance of the workers is being done regularly.		Date: 02/05/2025
71	Corporate Environmental Responsibility	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility
PPs Submission: Complied BSP has initiated action for completion of all identified CER activities/projects committed in the reply to the ADS letter dated 02.01.2019. Due to the prevalence of COVID pandemic there has been delay in completion of the projects. However, presently the CER projects are progressing well and likely to be completed by June-2021. A detailed status report on CER activities enclosed at Flag-C		Date: 02/05/2025
72	Corporate Environmental Responsibility	The Company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation/ violation of the environmental / forest/ wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental / forest/ wildlife norms/ conditions and / or shareholders /stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six –monthly report
PPs Submission: Complied BSP has well laid down environmental policy duly approve by the Board of Directors. An SOP for reporting of the non-compliance / infringements to Board of Directors (BoD) is also being followed. Accordingly, Complying to MoEFCC OM dtd. 26th April 2011, status of statutory compliances is reported to Board on quarterly basis and in case of non-compliance received by statutory authorities it is reported to Board along with action plan in the next board meeting. The Board Meetings are held once every month. All the Environment and related Clearances and status of compliances are shown on companys website. Other information: As per the Annexure-IV of the Department of Public Enterprises (DPE) Guidelines on Corporate Governance and Part-A of the Schedule-II of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, detailed information in respect of fatal or serious accidents, dangerous occurrences, any material effluent or pollution problems, is placed before the Board of Directors of SAIL. As per the Part-A of Schedule-III of Securities Exchange Board of India (SEBI)s (Listing Obligations and Disclosure Requirements) Regulations, 2015, occurrence of emergency, accidents, etc., if material in nature, is disclosed to the Stock Exchanges through Board of Directors within 24 hours.		Date: 02/05/2025
73	Corporate Environmental Responsibility	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
PPs Submission: Complied BSP has a separate Environmental Department with well-equipped laboratory. Adequate Qualified executive and non-executive personnel have been posted to the department and Lab The department is headed by a senior officer of the rank of General Manger who reports to Executive Director (works). At corporate level a separate environment management Division has been set-up . At corporate level the division is headed by Executive Director who reports to Director (technical)		Date: 02/05/2025
74	Corporate Environmental Responsibility	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
PPs Submission: Complied Environmental Audits under EMS:ISO:14001 are being carried-out every year through external agencies. The Last Audi was carried-out by M/s.TUV-Nord in August-2020.		Date: 02/05/2025

75	Corporate Environmental Responsibility	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Iron and Steel plants shall be implemented
PPs Submission: Complied Complied		Date: 02/05/2025
76	MISCELLANEOUS	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
PPs Submission: Complied Complied. Environmental clearance granted to BSP has been placed in the web portal of SAIL.		Date: 02/05/2025
77	MISCELLANEOUS	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
PPs Submission: Complied Complied		Date: 02/05/2025
78	MISCELLANEOUS	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half yearly basis
PPs Submission: Complied Complied		Date: 02/05/2025
79	MISCELLANEOUS	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
PPs Submission: Complied Complied. The monitoring data is being displayed at the Company's main gate and in a public place/market area located in Township through large electronic Display Boards. The monitored data is also placed in Company's web portal		Date: 02/05/2025
80	MISCELLANEOUS	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
PPs Submission: Complied Complied		Date: 02/05/2025
81	MISCELLANEOUS	The project proponent shall submit the environmental statement for each financial year in Form-Y 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
PPs Submission: Complied Complied		Date: 02/05/2025
82	MISCELLANEOUS	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
PPs Submission: Complied Complied		Date: 02/05/2025
83	MISCELLANEOUS	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government
PPs Submission: Complied Complied		Date: 02/05/2025
84	MISCELLANEOUS	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
PPs Submission: Complied Complied		Date: 02/05/2025
85	MISCELLANEOUS	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)
PPs Submission: Complied Will be Complied/agreed		Date: 02/05/2025
86	MISCELLANEOUS	Concealing factual data or submission of false /fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment(Protection) Act, 1986
PPs Submission: Complied Agreed		Date: 02/05/2025
87	MISCELLANEOUS	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory
PPs Submission: Complied Agreed		Date: 02/05/2025
88	MISCELLANEOUS	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions
PPs Submission: Complied Agreed		Date: 02/05/2025

89	MISCELLANEOUS	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
PPs Submission: Complied Agreed		Date: 02/05/2025
90	MISCELLANEOUS	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
PPs Submission: Complied Agreed		Date: 02/05/2025
91	MISCELLANEOUS	Any appeal against this EC 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
PPs Submission: Complied Agreed		Date: 02/05/2025
92	Corporate Environmental Responsibility	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of, action plan shall be reported to the Ministry/ Regional Office along with the Six Monthly Compliance Report.
PPs Submission: Complied Complied. A detailed action plan for implementation of EMPs along allocation of funds has been prepared and progress is being monitored on regular basis. Copy of the progress of implementation of action plan is enclosed (Flag-H)		Date: 02/05/2025
93	MISCELLANEOUS	Safety mock drill for gas pipeline maintenance shall be conducted every six months and reported to the Regional Office of MoEF and CC. The project proponent shall arrange to provide training to employees on 'behavioral safety'.
PPs Submission: Complied Agreed		Date: 02/05/2025
Visit Remarks		
Last Site Visit Report Date:		N/A
Additional Remarks:		
Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be		

considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.

