

JSWBPSL/ENV/23-24/040.
19th September 2023.

To,
The Member Secretary,
Odisha State Pollution Control Board,
A/118, Nilakantha Nagar,
Unit –VIII, Bhubaneswar – 751012. Odisha.

Subject - Submission of Annual Environmental Statement for the financial year ending
31st March 2023 for M/s Bhushan Power & Steel Limited, vill-Thelkoloj, Po-
Lapanga, Tehsil-Rengali, District-Sambalpur. Pin-768212

Reference - Rule -14 of Environment (Protection) Rule 1986.

Dear Sir,

Inviting your kind reference on the subject mentioned above.

Please find enclosed herewith the Environmental Statement in Form-V dully filled under Rule -
14 of the Environment (Protection) Rule 1986 of M/s Bhushan Power & Steel limited for the
year 2022-23.

If you require any further information / clarification, we shall submit the same immediately.

Thanking You,

Yours faithfully,
For Bhushan Power & Steel Limited



Ranjit Kumar Ghosh
AVP – Environment

Encl. - As stated above.

Cc to- 1. The Additional Director General of Forest (C), Ministry of Environment, Forest &
& Climate Change, Eastern Regional Office (EZ), A/3, Chandrasekharpur,
Bhubaneswar, Pin-751023

2. Regional Officer, Odisha State Pollution Control Board, Sambalpur.

**ENVIRONMENTAL STATEMENT
FOR THE YEAR 2022-23**

BHUSHAN POWER & STEEL LIMITED

**Submitted by:
ENVIRONMENT MANAGEMENT DEPARTMENT
JSWBPSL, Sambalpur Works
Vill-Thekoloji, Po-Lapanga, Tehsil- Rengali
Dist-Sambalpur-768212-Odisha**

PART-A

GENERAL INFORMATION ABOUT THE PLANT

BHUSHAN POWER & STEEL LIMITED

Annual Environmental Statement -2022-23

1	Name and address of the owner/occupier of the industry operation or process.	Shri Anil Kumar Singh President & WTD cum Occupier M/s. Bhushan Power & Steel Limited Village-Thekoloji, Po-Lapanga, Tehsil-Rengali District- Sambalpur, Odisha, Pin-768212		
1.a	Authorized person for the occupier	Shri Ranjit Kumar Ghosh Associate Vice-President - Environment M/s. Bhushan Power & Steel Limited Village-Thekoloji, Po-Lapanga, Tehsil-Rengali District- Sambalpur, Odisha, Pin-768212		
2	Industry category	Red Category		
3.a	Production capacity	3.0 MTPA		
3.b	Units	Sl.no	Plant Units	Installed Capacity
		01	Sponge Iron (DRI Kiln)	(12× 500 TPD)
		02	Coal Washery (2 nos.)	1×1.0+1×3.5MTPA
		03	Steel Melting Shop-I Electric Arc Furnace (EAF) Ladle Furnace Billet Caster Single continuous thin slab caster	 (2×90T) + (2 ×100T) (2×90T) + (2 ×100T) (1×2)+(1×4) Strand (2×1) Strand
		04	Steel Melting Shop-II Electric Arc Furnace (EAF) Ladle Furnace Billet Caster	 (1×70T) (1×70 T) 1×3 Strand
		05	Captive Power Plants (CPP)	1×40 MW 1×60 MW 3×130 MW
		06	Blast Furnace-I	1×1008 m ³
		07	Blast Furnace-II	1×2015 m ³

BHUSHAN POWER & STEEL LIMITED

Annual Environmental Statement -2022-23

		08	Sinter Plant - 1	1×105 m ²
		09	Sinter Plant-2	1×450 m ²
		10	Coke Oven – 1 (Non recovery Type)	1×0.45 MTPA
		11	Coke Oven –2 (Recovery Type)	1×1.0 MTPA
		12	Oxygen Plant	1×400) +1×660 TPD
		13	CSP (Hot Rolling Mill)	1.8 MTPA
		14	Lime and Dolo Plant	3×300 TPD
		15	Wire & Rod Mill Complex (WRM)	0.45 MTPA
		16	Pipe & Tube Mill	0.20 MTPA
		17	Iron Ore Beneficiation Plant	1200 TPH
		18	Pellet Plant	3.5 MTPA
		19	Cold Rolling Mill	1.0MTPA
			Galvanizing /Galvalume Unit	0.50 MTPA
			Color Coating Unit	0.45 MTPA
4	Year of Establishment (Commercial Production Declared)	March-2005		
5	Date of the Last Environmental Statement Submitted	24 th of September 2022.		

PART-B

WATER AND RAWMATERIAL CONSUMPTION

BHUSHAN POWER & STEEL LIMITED*Annual Environmental Statement -2022-23*i. Water consumption m³/d:

Type of water	Water Consumption in m ³	
	During the previous financial year (2021-22)	During the current financial year (2022-23)
Industrial	21489259	21254946
Domestic	1632265	1586222

ii. Process water consumption per unit of product

Name of Product	Process Water Consumption per unit of product out put	Process Water Consumption per unit of product out put
	During the current Financial Year 2021-22	During the current Financial Year 2022-23
Crude Steel	3.4 M ³ /MT	2.76 M ³ /MT

ii) Raw Material Consumption -2022-23

Sl no	Raw Material	UOM	Quantity
1	PCI Coal	MT	386731
2	Thermal Coal	MT	2072399
3	DRI Coal	MT	1458723
4	Anthracite Coal	MT	92156
5	Coking Coal	MT	1817584
6	Iron Ore fines	MT	6351369
9	Pellet (Chips)	MT	55034
10	Lime stone	MT	883311
11	Lime Stone fines	MT	158213
16	DOLOMITE(10 x 40 mm)	MT	120347
17	Dolomite	MT	169983
18	Dolo fines	MT	87797

PART-C

POLLUTION DISCHARGED TO ENVIRONMENT/UNIT OF OUTPUT

A-WATER

Water-

The yearly average of water quality parameters being monitored at the outlets is as below.

Parameter	Concentration of pollutants discharge (mg/l)
pH	7.12
TSS	33.74
Oil & Grease	2.49
COD	84.05
BOD	19.99

The characteristic of water quality parameters are being monitored at the individual out let of treatment plant is given below

Parameter	pH	TSS mg/l	Oil & Grease mg/l	COD mg/l	BOD mg/l
WWTP-1	7.24	43.29	1.94	40.40	9.35
WWTP-2	7.04	26.93	2.53	69.19	8.61
WWTP-3	6.95	16.46	2.85	81.17	11.19
ETP	7.28	22.76	1.92	82.56	11.53
BETP	7.13	59.30	3.21	146.97	59.30

B-AIR

Quantity of pollutants measured around the plant is given below

Ambient Air Quality Monitoring: National Ambient Air Quality Monitoring Program (NAAQM)

Guidelines for sampling and Measurement of notified Ambient Air Quality Parameters (NAAQMS2009)

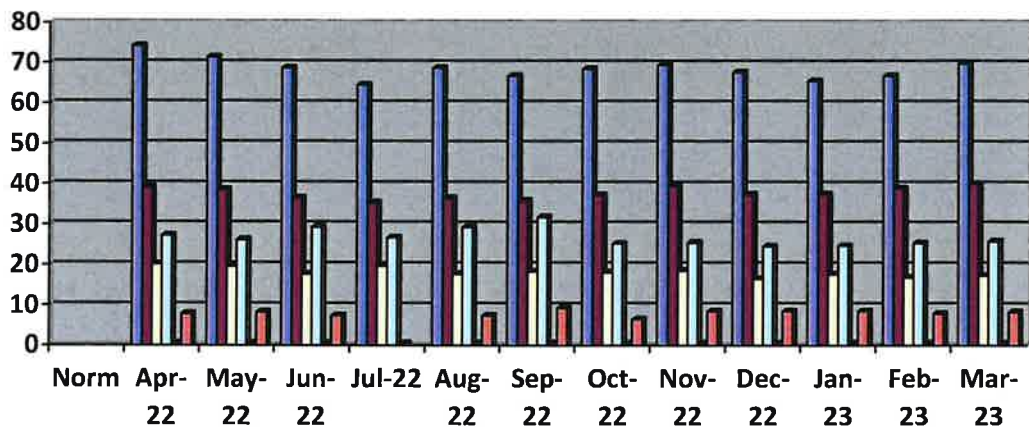
Under the provisions of the Air(Prevention & Control of Pollution)Act 1981,the CPCB has notified fourth version of national Ambient Air quality Standards(NAAQMS)2009.

Ambient Air is being monitored at 4 station- FY 2022-23

- 1.Near Township
- 2.Near railway gate
3. Behind CRM
- 4.Near ETP

Ambient Air Quality Report Near Town Ship-2022-23

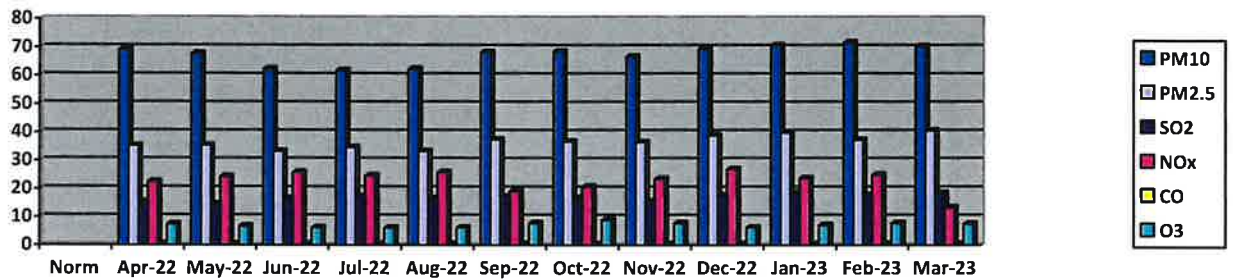
Parameter	Norm	April22	May22	June22	July22	Aug22	Sept22	Oct22	Nov22	Dec22	Jan23	Feb23	Mar23
PM10	100µg/m3	74.23	71.40	68.80	64.60	68.80	66.8	68.50	69.50	67.70	65.50	66.80	69.80
PM2.5	60 µg/m3	39.23	38.60	36.5	35.40	36.50	35.90	37.25	39.45	37.40	37.50	38.90	40
SO2	80 µg/m3	20.15	19.60	17.70	19.70	17.70	18.30	18.12	18.50	16.50	17.60	16.80	17.30
NOx	80 µg/m3	27.23	26.20	29.30	26.7	29.3	31.8	25.2	25.50	24.50	24.7	25.4	25.8
CO	4000 µg/m3	0.57	0.61	0.58	0.62	0.58	0.64	0.52	0.56	0.52	0.60	0.53	0.55
O3	100 µg/m3	7.9	8.3	7.40	7.2	7.4	9.3	6.5	8.50	8.5	8.5	7.9	8.3



BHUSHAN POWER & STEEL LIMITED
Annual Environmental Statement -2022-23

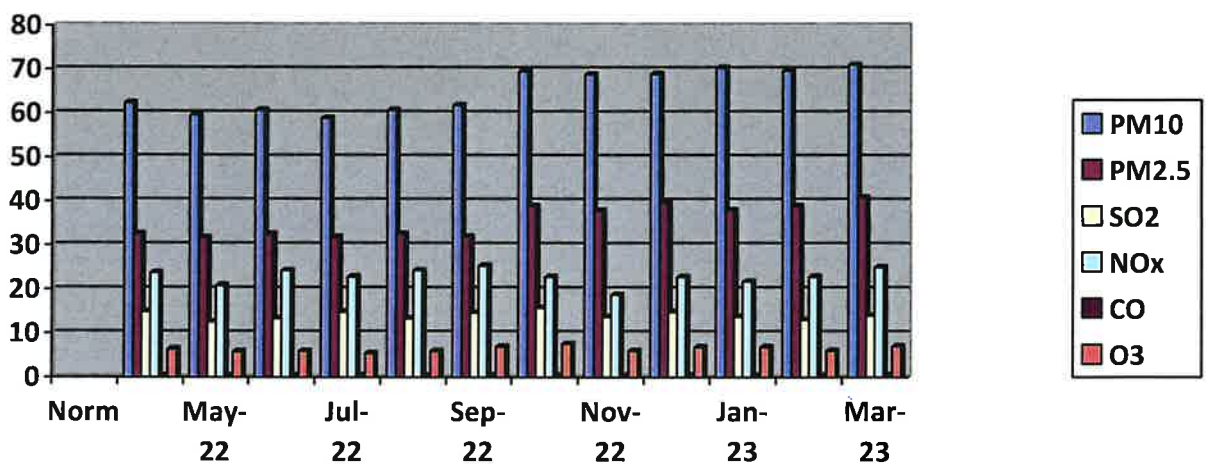
Ambient Air Quality Report-Near Railway Gate-2022-23

Parameter	Norm	April22	May 22	June22	July22	Aug.22	Sept22	Oct22	Nov.22	Dec22	Jan23	Feb23	Mar23
PM10	100µg/m3	69.23	67.80	62.30	61.80	62.30	68.30	68.5	66.70	69.40	70.60	71.60	70.30
PM2.5	60 µg/m3	35.19	35.40	33.20	34.60	33.20	37.30	36.70	36.50	38.80	39.78	37.20	40.60
SO2	80 µg/m3	15.36	14.60	16.50	17.20	16.50	17.20	16.70	15.56	17.50	18.50	17.67	18.50
NOx	80 µg/m3	22.54	24.30	25.80	24.60	25.80	19.20	20.70	23.50	26.90	23.70	24.90	13.30
CO	4000 µg/m3	0.36	0.35	0.37	0.41	0.37	0.41	0.36	0.39	0.38	0.43	0.38	0.40
O3	100 µg/m3	7.47	6.80	6.20	6.10	6.20	7.80	8.90	7.78	6.27	7.12	7.80	7.56



Ambient Air Quality Report-Behind CRM-2022-23

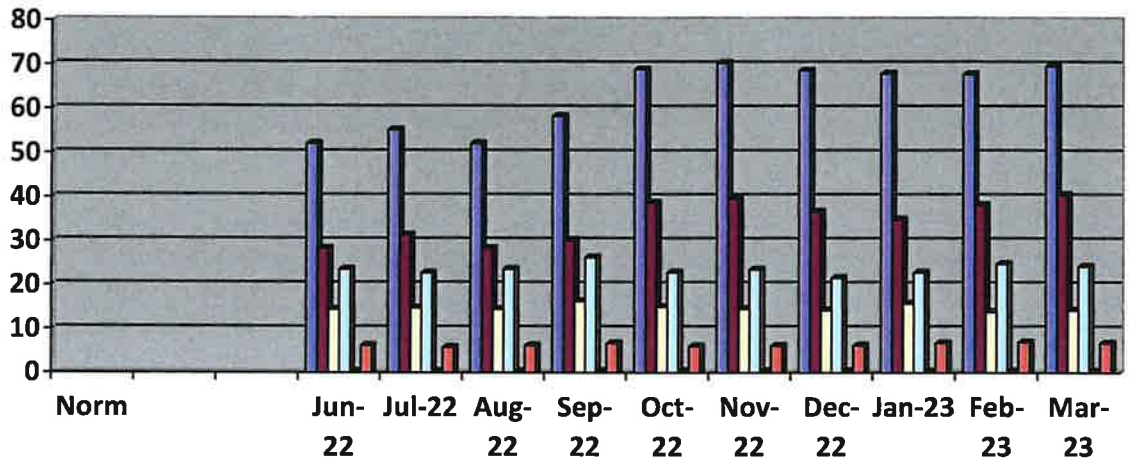
Parameter	Norm	Apr22	May22	Jun22	Jul22	Aug22	Sept.22	Oct22	Nov22	Dec22	Jan23	Feb23	Mar23
PM10	100µg/m3	62.35	59.60	60.70	58.9	60.70	61.8	69.56	68.89	68.98	70.34	69.7	71
PM2.5	60 µg/m3	32.56	31.70	32.5	31.8	32.5	31.90	38.87	37.82	39.7	37.9	38.9	40.8
SO2	80 µg/m3	14.86	12.5	13.3	14.8	13.3	14.60	15.67	13.7	14.8	13.7	13	14
NOx	80 µg/m3	23.69	20.80	24.2	22.8	24.2	25.3	22.78	18.67	22.78	21.7	22.8	25
CO	4000 µg/m3	0.35	0.32	0.36	0.39	0.36	0.44	0.32	0.35	0.38	0.36	0.35	0.45
O3	100 µg/m3	6.38	5.8	5.9	5.4	5.9	6.9	7.56	6.0	6.8	6.8	6	7



BHUSHAN POWER & STEEL LIMITED
Annual Environmental Statement -2022-23

Ambient Air Quality Report-Near ETP-2022-23

Parameter	Norm			Jun22	Jul22	Aug22	Sept.22	Oct22	Nov22	Dec22	Jan23	Feb23	Mar23
PM10	100µg/m3			52.10	55.2	52.10	58.3	68.90	70.30	68.60	67.90	67.8	69.6
PM2.5	60 µg/m3			28.30	31.4	28.3	30.20	38.7	39.7	36.7	34.90	38.2	40.5
SO2	80 µg/m3			14.4	14.8	14.4	16.30	15	14.5	14.2	15.80	13.9	14.2
NOx	80 µg/m3			23.6	22.7	23.6	26.3	22.8	23.50	21.6	22.8	24.8	24.2
CO	4000 µg/m3			0.33	0.34	0.33	0.38	0.37	0.38	0.39	0.35	0.41	0.39
O3	100 µg/m3			6.2	5.8	6.2	6.7	6	6.1	6.2	6.8	7	6.8



PART-D

HAZARDOUS WASTE

BHUSHAN POWER & STEEL LIMITED
Annual Environmental Statement -2022-23

Hazardous Waste

		During the Financial Year 2022-23
a) From Process	Used Oil	105.46 MT
	Waste /residue containing Oil	125.19 MT
	Oil & Grease Skimming Residue	177.87 MT
	Zinc Dross/Flux/Ash/Skimming	183.82 MT
	Discarded Containers/Barrels	14052 Nos
	Spent ion exchange resin	0.14 MT
	Tar Storage Tank Residue	51 MT
	Waste Pickled liquor	41440
(b) From Pollution Control Facilities	ETP Sludge	92.92 MT

B. Method of Disposal of Hazardous Wastes:

Hazardous waste			Method of handling
From Process	Waste category	Waste generated	
Used oil/ Spent Oil	5.1	105.46 MT	Stored in MS drum over concrete floor under shed and sale to authorized recycler /reprocessor having valid authorization from SPCB,Odisha.
Wastes/Residues Containing Oil	5.2	125.19 MT	Stored in the Hazardous waste container under shed and sale to authorized recycler, reprocessor or disposed through authorized Hazardous waste incinerator /CHWTSDF authorised by SPCB,Odisha.
Oil and Grease Skimming Residue from ETP	5.1	177.87 MT	Disposed through Authorized Hazardous waste incinerator/Common Hazardous Waste Treatment Storage Disposal facility (CHWTSDF) authorized by SPCB,Odisha.

BHUSHAN POWER & STEEL LIMITED*Annual Environmental Statement -2022-23*

Zinc Dross/Flux/Ash/Skimming	6.2	183.82 MT	Storage in impervious pit/containers under covered shed and sale to authorized recycler/reprocessor.
Empty barrel/Containers/Liners contaminated with hazardous chemicals/wastes	33.1	14052 Nos	Bye back through Supplier/Actual user or disposed through authorized recycler.
Spent Ion exchange resin	35.2	0.14 MT	Disposed through Authorized Hazardous waste incinerator/Common Hazardous Waste Treatment Storage Disposal facility (CHWTSDF) authorized by SPCB,Odisha.
Tar Storage Tank Residue	13.5	51 MT	In house recycling within plant
Waste Pickled liquor	13.1	41440	Inhouse recycling through ARP
Chemical Sludge from waste water treatment plant-	35.3	92.92 MT	Disposed through Authorized Hazardous waste incinerator/Common Hazardous Waste Treatment Storage Disposal facility (CHWTSDF) authorized by SPCB,Odisha.

PART-E

SOLID WASTE

BHUSHAN POWER & STEEL LIMITED
Annual Environmental Statement -2022-23

Generation and Utilization of Solid Waste

Types of Solid Waste		Total quantity (MT)		Mode of Utilization
		During the Previous Financial Year 2021-22	During the Current Financial Year 2022-23	
(a) From Process	Coal fines from crushing and screening plant area	-	2684	Reused within plant
	Process dust from Dedusting ESP	-	118602	Reused in CPP
	Kiln Accretion	17063 MT	12295	Land filling
	Char	256156 MT	200074	Used in CPP
	Dust from ESP hopper of WHRB		228591	
	Fly Ash from CPP	1010516 MT	944790	Utilized in Bricks plant, Quarry filling, Embankment raising, Land filling and road making
	Bottom ash CPP	268885MT	237539	
	SMS Slag	770943 MT	685939	SMS slag metallic part reuse in sinter plant and SMS and residue used in land filling
	Sinter plant ESP dust	14243 MT	12069	Recycled in Sinter / Pellet plant
	Granulated Slag of BF	900000 MT	918224	Sold to cement Plant
	Dust from GCP of Blast furnace	-	22166	Reused
	Mill scale from CSP	-	28071	Used in Sinter plant
(b) From Pollution Control Facilities	Sludge From STP	25 MT	108	Mixed with soil & used as manure in Horticulture application inside plant premises.
	FES Dust from EAF/LF	38038 MT	32588	Recycle through pellet/sinter plant
(c) Quantity recycled or reutilized within the Unit	Char	257499 MT	245063	Used in CPP
	Fly Ash	1010516 MT	944790	Utilized in Bricks plant, Quarry filling, Embankment raising, Land filling and road making
	Bottom Ash	268885MT	237539	
	Sludge from STP	25 MT	108	Mixed with soil & used as manure in Horticulture application inside plant premises.

BHUSHAN POWER & STEEL LIMITED
Annual Environmental Statement -2022-23

	FES Dust from EAF/LRF	38038 M	32588	Recycled in Sinter / Pellet plant
	Sinter plant ESP Dust	14243 MT	12069	Recycled in Sinter / Pellet Plant
	Granulated slag of Blast Furnace	842099 MT	918224	Sold to cement plant

PART-F

CHARACTERISTIC OF SOLID WASTE

BHUSHAN POWER & STEEL LIMITED
Annual Environmental Statement -2022-23

Type of waste	Char	Accretion	Wet scrapper	Dedusting dust	Slag		Mill scale		
Source	DRI	DRI	DRI	DRI	BF Granulated slag	SMS	CSP	WRM	Pipe & Tube Mill
Fe(T)							73.94	72.03	
SiO ₂	47.21	49.96	40.15	37.35	35.18	14.10	2.68	1.36	2.06
Al ₂ O ₃	27.58	22.13	21.75	20.54	20.02	9.22	0.611	0.75	1.53
CaO	7.01	1.21	4.56	1.80	34.10	34.19	4.96	0.92	1.41
MgO	4.51	0.86	1.1	1.01	7.44	9.87		0.25	0.67
MnO					0.8		0.191	0.637	0.164
TiO ₂	1.25			1.47	0.51	0.87			
S			0.5						
P									
C			22.71						

Type of waste	Fly Ash	Bottom Ash	WHRB Ash	Lime dust	Sludge			Flue dust	
Source	CPP	CPP	DRI		ETP	BF	WRM	BF	Sinter plant
Fe(T)					43.64	39.12	63.35		
SiO ₂	55.30	49.67		4.72	5.01	6.09	3.44	11.3	6.33
Al ₂ O ₃	32.10	24.83		0.86	1.04	3.93	1.28	7.22	4.85
CaO	2.14	1.76		62.45	13.83	3.35	2.10	6.68	9.99
MgO	1.21			1.92	1.25	0.58	0.39	2.23	2.10
MnO	0.052				0.054	0.48			0.264
TiO ₂	1.162	0.958		0.12		0.069			0.048
S			0.51				0.135	0.14	
P									
C			14.49				8.39		

PART- G

IMPACT OF THE POLLUTION ABATEMENT

&

MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES

BHUSHAN POWER & STEEL LIMITED

Annual Environmental Statement -2022-23

Smooth operation of Pollution abatement measures has resulted in following impact in conservation of natural resources and the cost of production.

Water Environment:

- BPSL receives water from Back water of Hirakud reservoir and stored in two nos of reservoir inside the plant.
- BPSL has installed 03 number of Wastewater treatment plant for complete recycle of entire wastewater, which is generated from surface runoff and storm water, blowdown water from cooling tower. After treatment in the wastewater treatment plants, the water is used for makeup water for DRI, Pellet plant, CPP ash quenching, SMS slag quenching, firefighting, sprinkling on haul roads to control fugitive emissions and for plantation purpose.
- BPSL has installed one ETP for CRM effluent one BETP for Coke Oven -2 and 03nos. of STP for Sewage of township.
- Installation of RO system of Capacity 510 m³/hr. The permeate water generated of 350m³/hr are being utilized as DM water plant feed and cooling tower make up water.
- Following action taken for reduction in Raw water consumption and achieve zero liquid discharge
 - a) Production of RO water as per design of the plant.
 - b) Running of Cooling towers on High cycle of concentration (COC 5.0 to 6.0) and reducing of water losses through blow down.
 - c) Acidic/Alkaline wastewater generated from DM plant is neutralized in neutralization pit and reused for ash conditioning.
 - d) Cooling tower blow down water of CPP 3x 130 MW is completely reused for ash quenching in silos.
 - e) Using treated effluent of ETP for dust suppression inside plant premises.
 - f) Recycling backwash water from Sand filters to Wastewater Treatment plant.
 - g) Increase OBR of Ion-exchangers beds in DM plant to reduce effluent generation by modifying flow-measuring instruments and RO water feed.
 - h) Reduction of water loss due to leakages.
 - i) Installation of best available technology
 - j) Reduce the blowdown of cooling tower for reduce the consumption of water.

Air Environment:

- Reduction of greenhouse gases by use of by product gases for power generation.
 - a) The hot gas generated from coke oven is being utilized in the power generation passing through waste heat recovery boilers (WHRB) feeding to two numbers of turbo generators which generates 16 MW power.
 - b) The hot gas generated from all DRI kilns is used for power generation through waste heat recovery boilers (WHRB).
 - c) Installation of PCI in BF -2 to reduce carbon footprint.
 - d) Reduce CO2 emission pneumatic air leakage prevented, and 4 nos of running compressor stopped.
- Blast furnace gas after treatment in Gas Cleaning Plant utilized in tunnel furnace of CSP, Sinter Plant, Lime Plant, Electric Arc furnace, Cold Rolling Mill, Wire Rod Mill and Pellet plant.
- Concreting of all internal roads work under progress to reduce the fugitive dust emissions inside plant premises.
- Mobile water sprinkling tankers are being engaged for regular water sprinkling on haul roads and in construction areas for control of fugitive dust emissions.
- Five numbers of truck mounted vacuum road sweepers are being engaged for continuous cleaning of concrete roads inside the plant premises to control fugitive dust.
- Fixed water sprinklers have been installed the potential areas of DRI units, Raw material handling and stacking areas for suppression of fugitive dust emissions.
- Installation of two nos. of wheel washing system to clean the wheel of heavy vehicle and control fugitive dust carrying outside.
- More Four nos. of Wheel washing system installation work is in progress..
- Installation of Mercury (Hg) analyser has been completed in all the stacks of CPP and connected to OSPCB /CPCB server
- For compliance and effective monitoring by installation of CEMS, CAAQMS and CEEQMS.
- For proper maintenance of all the online monitoring system a dedicated AMC team engaged and for transmission of data to OSPCB /CPCB server a dedicated AMC team has been engage

PART – H

**ADDITIONAL MEASURES/INVESTMENT PROPOSAL FOR
ENVIRONMENTAL PROTECTION**

BHUSHAN POWER & STEEL LIMITED

Annual Environmental Statement -2022-23

Efficient measures for abatement of pollution were implemented under the project these are working satisfactorily. However, following additional measures have been taken for overall environmental improvement.

Water Pollution:

- Installation of ZLD/RO plant of capacity 500 m³/hr.
- Upgradation of CRM Effluent Treatment plant work is under progress.
- Coke oven ZLD proposal is in ordering phase.
- APCAP water recycle work completed.
- WWTP-3 water feeding into the RO plant ensure 100% productivity of the RO plant.

Air Pollution:

- Individual Fume treatment Plant (FTP) attached to EAF-1, EAF-2, EAF-3 and EAF-4 has been provided for control of Primary as well as secondary emission from SMS-1.
- High-pressure mist beam sprinkler has been installed at raw material stacking yard for control of fugitive dust.
- Revamping of ESP of CPP.
- Conveyor junction house inspection and modification to reduce the fugitive dust
- Charging emission also reduce by strengthening the operation performance of SUPERCO
- Bags replace in baghouse of BF-1&2 Cast house ,LCP and DRI dedusting bag filter.
- Application of digitization for better monitoring and control
- Installation of 04 nos. of PM analyzer in all the LCP .
- Installation of 79 nos. of rubbish Chute in junction houses to reduce dust generation at sources.
- New 4 nos. of dry fog system installed at wagon tippler area to control fugitive dust.
- 8 nos. of dedusting bag filter is under installation at coke oven-2

Waste Disposal:

- Disposal of E-waste as per the rule to the authorized E-waste dismantler and recycler .
- Bio medical waste has been disposed of through Medi aid marketing services at common facility of Medi aid Marketing services at Sundargarh.
- Installation of organic waste converter of capacity 500 kg /day (composting facility).

BHUSHAN POWER & STEEL LIMITED*Annual Environmental Statement -2022-23*

- Installation of vermicomposting facility of capacity 250TPY
- The total quantity of BF granulated slag sold to Cement Manufacture.
- All the hazardous waste stored under Covered Hazardous storage Shed and disposed as per the rules.

Others:

- Continuous development of flora by tree plantation and green belt development. In the year 2022-23, 91468 numbers of saplings planted in and around the plant.
- 06 nos. of IP camera installed and connected to OSPCB server.
- Adequate capacity silencer has been installed in drain and vent lines of turbine of blower house of Blast Furnace to reduce Noise Pollution while rolling of Turbine & stopping of Turbine.
- Performance evaluation of pollution control and monitoring system carried out by NIT Rourkela and report submitted at OSPCB.
- Installation of 04 nos. of PM analyzer in all the LCP

Investment made in Pollution Control System during the financial year 2022-23

Sl. No	Description	Investment during 2022-23
1	Water pollution control system	85 cr.
2	Air pollution control system	129 cr.
3	Solid waste Management	57.2 cr.
4	Hazardous waste management	2.0 cr.
5	Biomedical waste management	0.1cr

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

BHUSHAN POWER & STEEL LIMITED

Annual Environmental Statement -2022-23

The possible areas of resource conservation and the source of pollutants are identified, assessed and subsequently proper arrangements for their control are incorporated. Some actions taken in direction to improve the quality of Environment at Bhushan Power & Steel Limited are:

A-Key performance Indicators (KPI)

The key environmental performance parameters for Iron & Steel Industry is being measured for benchmarking with best practices in the industry. Though there are no regulatory norms, these parameters provide guide for overall improvements. We are monitoring the below mention parameter on monthly basis.

SI No	Key performance indicator
01	Sp.CO2 Emission(tCO2/tcs)
02	Sp.Energy Consumption Gcal/tcs
03	Sp. water consumption (M3/tcs)
04	PM Emission(kg/tcs)
05	SO ₂ Emission (kg/tcs)
06	NOx Emission(kg/tcs)
07	Sp. Solid waste generation
08	% Solid waste utilization

B-Implementation of ISO System:

- Accredited ISO-14001:2015 [Environmental Management System] and ISO 9001:2015 [Quality Management System for operations of Integrated Steel Plant.
- Accredited OHSAS 18001:2007(Occupational Health and Safety Management System) for operation of Integrated Steel Plant.

C- Implementation of 5S System throughout the plant.

D- Implementation of TPM System in the plant is under progress.

E- World Environment Day 2022 Observed on 5th June 2022 with drive of mass plantation through out the plant.

F- Regular inspection carried out through out the plant to address the non-compliances.

G-Awareness and training imparted through out the plant on Environment training modules like ,Legal compliance, Air pollution ,Water pollution and conservation, Solid waste management, Hazardous waste management.

H- Weekly Environment awareness series also circulated among all mail recipient of the plant to develop on awareness on Environment

Photographs of Few Activity for the year 2022-23

New Environment Lab Setup



Installation of HDIP Camera at Outlet (Near Plaza gate)



Regular Cleaning of Concrete Road through mechanized road sweeper



Dust suppression and Cleaning of road through Multiutility Vehicle



Plantation & Greenbelt Development Within Plant



Plantation at Solid waste Disposal Site (Derba)



Celebration of World Environment Day -5th June 2022



Quiz Competition



Drawing Competition