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

JSWBPSL/ENV/24-25/052
21st September2024.

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 March2024 for M/s Bhushan Power & Steel Limited ,Vill-Thelkoloi,Po-Lapanga, Tehsil -Rengali, District-Sambalpur, Pin-768212.

Reference-Consent Order No.4429/IND-I-CON-4650 dated-22/03/2023

Respected Sir,
Inviting your kind reference on the subject cited 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 2023-24.

This is for your kind information and necessary record please.

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

Akul Senapati
HOD-Environment.

Encl-As Stated above.

CC to-1-Regional Officer, Odisha State Pollution Control Board, Sambalpur-
2-Deputy Director General of MoEF&CC, Integrated Regional Office (EZ), A/3, Chandrasekhar, Bhubaneswar, Pin-751023.

[FORM-V]
(See rule 14 of The Environment Protection Act,1986)
Environment Statement for the financial year ending 31st March2024.

PART-A
GENERAL INFORMATION

	Name of the Company	**M/s Bhushan Power & Steel Limited**
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-Thelkoloi, Po-Lapanga, Tehsil-Rengali District- Sambalpur, Odisha, Pin-768212
1.a	Authorized person for the occupier	**Shri Akul Senapati** DGM-Environment & Sustainability M/s. Bhushan Power & Steel Limited Village-Thelkoloi, Po-Lapanga, Tehsil-Rengali District- Sambalpur, Odisha, Pin-768212
2	Industry category	Red Category
3.a	Production capacity	As per below plants configurations:
3.b	Units	

S.N	Plant Units	Configuration as per CTO of FY 23-24
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)	(2×90T) + (2 ×100T)
	Ladle Furnace	(2×90T) + (2 ×100T)
	Billet Caster	(1×2) + (1×4) Strand
	Single continuous thin slab caster	(2×1) Strand
04	Steel Melting Shop-II	
	Electric Arc Furnace (EAF)	(1×70T)
	Ladle Furnace	(1×70 T)
	Billet Caster	1×5 Strand
05	Captive Power Plants (CPP)	1×40 MW 1×60 MW 3×130 MW 2X8 MW
06	Blast Furnace-I	1×1008 m^3
07	Blast Furnace-II	1×2015 m^3
08	Sinter Plant - 1	1×105 m^2
09	Sinter Plant-2	1×450 m^2
10	Coke Oven – 1	1×0.45 MTPA

			(Non recovery Type)	
		11	Coke Oven –2 (Recovery Type)	1×1.0 MTPA
		12	Oxygen Plant	1×400TPD +1x660 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	19th September 2023.		

PART-B
WATER AND RAWMATERIAL CONSUMPTION

I-Water consumption M3/d:

Type of water	**Water Consumption in m3/d**	
	During the previous financial year (22-23)	During the current financial year (23-24)
Industrial	58233	60486
Domestic	4346	4017

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 22-23	During the current Financial Year 23-24
Crude Steel	2.76 M3/TCS	2.71 M3/TCS

ii) Raw Material Consumption -2023-24

Sl No	Raw Material	Quantity FY-23-24 (MT)	Consumption of raw material per unit of product (MT/tcs)
1	PCI Coal	439136	0.138
2	Thermal Coal	1792233	0.563
3	DRI Coal	1433879	0.450
4	Anthracite Coal	141695	0.044
5	Coking Coal	1616907	0.508
6	Iron ore fines	6510718	2.047
7	Pellet	3563460	1.120
8	Limestone	987062	0.310
9	Dolomite	114517	0.036

PART-C
POLLUTION DISCHARGED TO ENVIRONMENT/UNIT OFOUTPUT

Water-

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

Parameter	Concentration of pollutants discharge(mg/l)
pH	6.93
TSS	24.60
Oil & Grease	1.59
COD	64.29
BOD	15.57

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	6.92	21.93	<1.0	33.3	13.53
WWTP-2	6.86	11.50	<1.0	28.81	10.84
WWTP-3	7.04	18.48	<1.0	29.81	11.10
ETP	6.84	17.32	<1.0	68.72	17.07

BETP	7.03	53.81	3.99	160.83	25.33

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 2023-24

1.Near Township

2.Near railway gate

3. Behind CRM

4.Near ETP

Ambient Air Result-Near Town Ship

	Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	O_3	CO
Month	Standard	100 (µg/m³)	60 (µg/m³)	80 (µg/m³)	80 (µg/m³)	100(µg/m³)	2000 (µg/m³)
April-23		73.60	38.80	19.67	28.6	7.9	0.48
May-23		72.80	40.80	20.70	26.9	8.4	0.58
June-23		45.57	21.30	16.50	22.10	9.40	0.57
July-23		92.60	50.30	20.50	35.6	7.8	0.54
August-23		81.80	38.20	18.40	37.6	7.3	0.47
September-23		70.06	39.10	17.50	35.5	5.9	0.44
October-23		57.90	42.80	21.50	42.4	6.5	0.94
November-23		54.40	37.20	21.80	37.3	8.2	0.45
December-23		58.50	40.80	22.70	38.8	9.50	0.48
January-24		63.60	38.60	21.10	27	5	0.37
February-24		56.20	42.70	29.00	35.3	5.8	0.47
March-24		62.40	37.50	28.40	32.5	6.4	0.52

Ambient Air Result-Near Railway Gate

	Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	O_3	CO
Month	Standard	100 (µg/m³)	60 (µg/m³	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	2000 (µg/m³)
April-23		79.60	37.60	21.80	42.80	8.50	0.42
May-23		78.80	38.89	23.80	38.90	9.20	0.41

June-23		85.00	41.60	27.50	39.70	13.20	0.67
July-23		86.50	42.10	27.80	48.10	8.90	0.42
August-23		84.30	37.80	24.80	45.50	7.90	0.31
September-23		63.80	31.80	21.50	40.40	7.10	0.45
October-23		62.20	40.50	24.50	42.10	7.90	0.51
November-23		60.40	41.10	19.38	34.90	7.40	0.41
December-23		60.10	35.80	21.30	32.40	6.80	0.37
January-24		58.50	37.20	23.80	32.80	6.20	0.36
February-24		57.70	41.70	27.80	31.70	4.70	0.35
March-24		56.00	42.40	24.60	33.60	4.50	0.39

Ambient Air Quality Result-Behind CRM

	Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	O_3	CO
Month	Standard	100 (µg/m³)	60 (µg/m³)	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	2000 (µg/m³)
April-23		79.80	39.50	18.90	33.4	8.2	0.41
May-23		80.78	40.67	19.8	32.8	8.45	0.36
June-23		85.40	43.7	21.6	36.1	16.8	0.71
July-23		77.40	34	24.5	40.1	7.6	0.34
August-23		79.20	33.8	23.1	38.6	7.9	0.29
September-23		89.60	45.80	25.10	41.5	6.9	0.25
October-23		58.60	46.50	27.10	40.1	5.5	0.2
November-23		60.30	42.8	25.4	36.6	6.2	0.34
December-23		58.80	42.8	25.4	36.6	6.2	0.34
January-24		58.70	50.2	29.4	25.1	5.3	0.34
February-24		59.20	53	25.7	23.2	4.9	0.38
March-24		60.80	48.4	24.60	28.7	5.9	0.42

Ambient Air Quality Result-Near ETP

	Pollutant	PM_{10}	$PM_{2.5}$	SO_2	NO_X	O_3	CO
Month	Standard	100 (µg/m³)	60 (µg/m³)	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	2000 (µg/m³)
April-23		78.60	41	16.2	24.8	8	0.4
May-23		76.70	39.8	15.5	25.4	10.5	0.45
June-23		77.00	38	18.6	29.2	12.7	0.58
July-23		71.20	38.2	21.6	45.8	8.6	0.26
August-23		70.5	33.9	23.7	43.6	8.1	0.29
September-23		67.8	33.3	21.5	41.2	7.7	0.41
October-23		60.80	40.8	24.2	44.1	6.9	0.51

November-23		56.50	36.7	22.5	41.3	5.4	0.63
December-23		62.50	36.7	25.5	41.3	5.4	0.63
January-24		60.00	38.1	25.5	28.9	5.7	0.55
February-24		53.9	43.8	20.9	25.3	5.6	0.51
March-24		62	37.2	23.7	27.1	5.9	0.56

Stack Emission

Sl.No	Unit	Stack Name	Average in mg/Nm3	% age of Variation from Prescribed Standard
				In % age (referring CTO)
1	DRI	DRI/WHRB-1	19.64	(-) 61%
2		DRI/WHRB-2	19.58	(-) 61%
3		DRI/WHRB-3	23.07	(-) 54%
4		DRI/WHRB-4	20.64	(-) 59%
5		DRI/WHRB-5	25.66	(-) 49%
6		DRI/WHRB-6	16.17	(-)68%
7		DRI/WHRB-7	22.93	(-) 54%
8		DRI/WHRB-8	21.88	(-) 56%
9		DRI/WHRB-9	19.43	(-)61%
10		DRI/WHRB-10	23.45	(-)53%
11		DRI/WHRB-11&12	24.17	(-) 52%
12		DRI De-dusting 1&2	20.91	(-) 58%
13		DRI De-dusting 3&4	29.61	(-) 41%
14		DRI De-dusting 5& 6	24.85	(-) 50%
15		DRI De-dusting 7&8	24.75	(-)50%
16		DRI De-dusting 9&10	24.78	(-)50%
17		DRI De-Dusting 11&12	32.52	(-)35%
18	CPP	CPP 3X130 MW Unit 1	30.36	(-)39 %
19		CPP 3X130 MW Unit 2	34.35	(-) 31%
20		CPP 3X130 MWUnit-3 CFBC 5	27.70	(-)45%
21		CPP3X130 MW Unit-3 CFBC 6	30.20	(-)40%
22		CPP 60 MW	23.25	(-) 54%
23		CPP40 MW	23.17	(-)54%
24	SMS-1	Fumes Treatment Plant-1 Stack	16.15	(-)68%
25		Fumes Treatment Plant-2 Stack	19.84	(-) 60%
26		Fumes Treatment Plant-3 Stack	20.56	(-) 59%
27		Fumes Treatment Plant-4 Stack	22.84	(-) 54%
28	SMS-2	Fumes Treatment Plant Stack	20.23	(-)60%
29	Pellet Plant	Pellet Plant Process Stack	41.30	(-)17%
30		Pellet plant dedusting stack	32.08	(-)36%
31	Coke Oven-1	Coke Oven-1-WHRB-1&2	22.61	(-)55%
32		Coke Oven-1 WHRB-3&4	33.39	(-)33%

33	Coke Oven-2	Coke Oven-2 Process Stack	27.73	(-045%
34		Coke_Oven_2_Dedusting	13.92	(-)72%
35	Blast Furnace -2	BF-2 Cast House	24.76	(-)50%
36	Blast Furnace-1	BF-1-Cast_House	23.65	(-)53%
37		BF-1-GCP Stack	18.82	(-)62%
38	Sinter Plant-1	Charging Stack	26.16	(-) 48%
39		Discharging Stack	26.23	(-)48%
40	Sinter Plant-2	Charging stack	34.89	(-)30%
41		Discharging Stack	36.32	(-)27.36
42	Lime Plant	Lime Calcination Plant-1	45.97	(-)8%
43		Lime Calcination Plant-2	43.99	(-)12%
44		Lime Calcination Plant-3	42.98	(-)14%
45		Lime Calcination Plant-4	41.01	(-)18%

PART-D
HAZARDOUS WASTE

Hazardous Waste Generation

	Hazardous Waste	During the Financial Year 2023-24
a) From Process	Used Oil	101.31 MT
	Waste /residue containing Oil	209.36 MT
	Oil & Grease Skimming Residue	61.61 MT
	Zinc Dross/Flux/Ash/Skimming	637.67 MT
	Discarded Containers/Barrels	3.36 MT
	Spent ion exchange resin	0 MT
	Tar Storage Tank Residue	0 MT
	Waste Pickled liquor	44200
(b) From Pollution Control facilities	ETP Sludge	128.66 MT

B. Method of Disposal of Hazardous Wastes:

Hazardous waste			Method of handling
From Process	**Waste category**	**Disposed Quantity**	
Used oil/ Spent Oil	5.1	113.54 MT	Stored in MS drum over concrete floor under shed and sale to authorized recycler /reprocesser having valid authorization from SPCB, Odisha.

Wastes/Residues Containing Oil	5.2	276.36 MT	Stored in the Hazardous waste container under shed and sale to authorized recycler, preprocessor or disposed through authorized Hazardous waste incinerator /CHWTSDF authorized by SPCB, Odisha.
Oil and Grease Skimming Residue from ETP	5.1	88.60 MT	Disposed through Authorized Hazardous waste incinerator/Common Hazardous Waste Treatment Storage Disposal facility (CHWTSDF) authorized by SPCB, Odisha.
Zinc Dross/Flux/Ash/Skimming	6.2	629.67 MT	Storage in impervious pit/containers under covered shed and sale to authorized recycler/reprocessor.
Emptybarrel/Containers/Liners contaminated with hazardous chemicals/wastes	33.1	2.86 MT	Bye back through Supplier/Actual user or disposed through authorized recycler.
Spent Ion exchange resin	35.2	0 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	0 MT	In house recycling within plant
Waste Pickled liquor	13.1	44200	Inhouse recycling through ARP
Chemical Sludge from wastewater treatment plant-	35.3	126.66 MT	Disposed through Authorized Hazardous waste incinerator/Common Hazardous Waste Treatment Storage Disposal facility (CHWTSDF) authorized by SPCB,Odisha.

PART-E

Solid Waste

Generation and Utilization of Solid Waste

		During the Year 2022-23	**During the Year 2023-24**	**Mode of Utilization**
(a) From Process	Coal fines from crushing and screening plant area	2684	1894	Reused within plant

	Process dust from Dedusting ESP	118602	147335	Reused in CPP
	Kiln Accretion	12295	17785	Land filling
	Char	200074	306915	Used in CPP
	Dust from ESP hopper of WHRB	228591	222461	Utilized in CPP
	Fly Ash from CPP	944790	10,12,693	Utilized in Bricks plant, Quarry filling, Embankment raising, Land filling and road making
	Bottom ash CPP	237539	2,53,173	
	SMS Slag	685939	904049	SMS slag metallic part reuse in sinter plant and SMS and residue used in land filling
	Sinter plant ESP dust	12069	11456	Recycled in Sinter / Pellet plant
	Granulated Slag of BF	918224	1013721	Sold to cement Plant
	Dust from GCP of Blast furnace	22166	18426	Reused
	Mill scale from CSP	28071	28435	Used in Sinter plant
(b) From Pollution Control Facilities	Sludge From STP	108	80	Mixed with soil & used as manure in Horticulture application inside plant premises.
	FES Dust from EAF/LF	32588	39609	Recycle through pellet/sinter plant
(c) Quantity recycled or reutilized within the Unit	Char	245063	306915	Used in CPP
	Fly Ash	944790	10,12,693	Utilized in Bricks plant, Quarry filling, Embankment raising, Land filling and road making
	Bottom Ash	237539	2,53,173	
	Sludge from STP	35	40	Mixed with soil & used as manure in Horticulture application inside plant premises.
	FES Dust from EAF/LRF	32588	39609	Recycled in Sinter / Pellet plant
	Sinter plant ESP Dust	12069	11456	Recycled in Sinter / Pellet Plant
	Granulated slag of Blast Furnace	918224	1013721	Sold to cement plant

PART-F

Characteristic of Solid waste

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	
SiO2	47.21	49.96	40.15	37.35	35.18	14.10	2.68	1.36	2.06

Al2O3	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
TiO2	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		
SiO2	55.30	49.67		4.72	5.01	6.09	3.44	11.3	6.33
Al2O3	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
TiO2	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

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) Using treated effluent of ETP for dust suppression inside plant premises.
  d) Recycling backwash water from Sand filters to Wastewater Treatment plant.
  e) Increase OBR of Ion-exchangers beds in DM plant to reduce effluent generation by modifying flow-measuring instruments and RO water feed.
  f) Reduction of water loss due to leakages.
  g) Installation of best available technology
  h) 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 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.
- Eight 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 05 nos. of wheel washing system to clean the wheel of heavy vehicle and control fugitive dust carrying outside.
- 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.

- Deployment of Multi utility vehicles for dust suppression.
- 154 nos. of rubbish chute installation in conveyor junction house to reduce dust emission .

PART – H

ADDITIONAL MEASURES/INVESTMENT PROPOSAL FOR ENVIRONMENTAL PROTECTION

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 510 m3/hr.
- Upgradation of CRM Effluent Treatment plant work has completed and Under operation
- Coke oven ZLD proposal order has given to the vendor and it will completed by 31st March2025
- WWTP-3 water feeding into the RO plant ensure100% 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 154 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.
- 7 nos. of dedusting bag filter has been installation at coke oven-2 Coal Circuit

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.
- Plastic barrel disposed through authorized vendor by OSPCB
- Used oil sold to authorized recyclers.
- Waste residue containing oil, Oil skimming residue & ETP sludge disposed through authorized vendor M/S Re sustainability.
- 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 2023-24 54211 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.
- Noise Study has been completed in and around the plant .
- 3 seasons Biodiversity study is under progress.
- CBAM calculation is being done and data is being provided to EU.
- LCA study of the different products completed.

Investment made in Pollution Control System during the financial year 2023-24.

Sl. No	Description	Expenditure in Crores during 2023-24
1	Water Pollution Control	17.28

2	Air Pollution Control	71.70
3	Solid Waste Management	52.91
4	Hazardous waste management	2.50
5	Biomedical Waste Management	0.14
	Total	**144.53**

PART-I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

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.

Sl 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 ISO 45001:2018 (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- Word Environment Day 2023 Observed on 5th June 2023 with drive of mass plantation through out the plant.

F-World Ozone Day 2023 also observed on 16th Septemebr2023 in association with OSPCB Regional office team.

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

H-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.

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

J- Award received: Best ESG initiatives: Environmental Responsibility from CEE.

K- New Environment management Laboratory commissioned.

SNAP SHOTS OF ENVIRONMENT IMPROVEMENT INITIATIVES:

ENVIRONMENT LABORATORY

NEW TYRE WASHING SYSYEM

MULTIUTILITY VEHICLE

MECHANISDE ROAD SWEEPER


ଉତ୍କଳ ମେଲ୍ ପୃଷ୍ଠା-୮

ଜେଏସଡବ୍ଲୁପିସିଏସଏଲ ପକ୍ଷରୁ ବିଶ୍ୱ ପରିବେଶ ଦିବସ ପାଳିତ

CELEBRATION OF WED2023


CELEBRATION OF WOD2023



INAGURATION OF AUTOMATIC CLOTH BAG VENDING MACHINE

PLANTATION & GREENBELT

AWARD RECEIVED