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VL/OPCB/002/2025 - 254
September 22, 2025

o/c

The Member Secretary,
State Pollution Control Board, Odisha,
Parivesh Bhawan, A/118,
Nilakantha Nagar, Unit-VIII,
Bhubaneswar – 751012

Sub: Submission of Environment Statement for 2024-25 of Smelter & CPP of Vedanta Limited, Jharsuguda

Ref: Rule 14 of the Environment (Protection) Rules, 1986

Dear Sir,

This has reference to the captioned subject and the cited reference. Please find enclosed the Environment Statement of Smelter & CPP of Vedanta Limited, Jharsuguda for 2024-25 duly filled in Form-V.

Thanking You,

Yours Faithfully,

Dr. Amit Kumar Tyagi
Head - Environment

Enclosed: Environment Statement in Form-V

CC: The Regional Officer, State Pollution Control Board, Odisha, Jharsuguda

VEDANTA LIMITED ,JHARSUGUDA
Vill- Bhurkamunda, P.O- Kalimandir, Dist- Jharsuguda (Odisha)- 768202
T +91-664 566 6000 F +91-664 566 6267 www.vedantalimited.com

REGISTERED OFFICE : Vedanta Limited 1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai 400093, Maharashtra, India.
CIN: L13209MH1965PLC291394

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Head - Environment

STATE POLLUTION CONTROL BOARD, ODISHA
REGIONAL OFFICE, SMELTER
RECEIVED
25/09/25
JHARSUGUDA

Enclosed: Environment Statement in Form-V

CC: The Regional Officer, State Pollution Control Board, Odisha, Jharsuguda

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ENVIRONMENTAL STATEMENTS

FORM-V

(See Rule 14)

The Ministry of Environment & Forest vide its notification dated March 1992 directed all industries which need to have consent under Water (Prevention & Control of Pollution) 1974 and Air (Prevention &Control of Pollution) 1981 to file the Environmental statement every year. This is to be filed for the period ending March by September every year. The format for the same is as follows:

Environmental Statement for the financial year ending the 31st March 2025.

PART-A

(i)	Name and address of the owner / occupier of the industry operation or process	:	Mr. Arun Misra, Executive Director, Vedanta Limited, Smelter & CPP, Burkhamunda, Jharsuguda - 768202
(ii)	Industry category Primary – (STC code) Secondary – (SIC Code)	:	Red A Aluminium Smelter
(iii)	Production capacity – Units	:	18.5 LTPA Aluminium Smelter Plant 1215 MW (9 X 135MW) Captive Power Plant
(iv)	Year of establishment	:	2008
(v)	Date of the last environmental statement submitted	:	25th September 2024

PART-B Water and Raw Material Consumption

(i) Water consumption m^3/d

Process : 1137.096

Cooling : 57584.904

Domestic : 1051.754

Name of Product	Process water consumption per unit of product output	
	During the previous financial year	During the current financial year
Aluminium Smelter Plant (Aluminium Ingots/Slabs/Billets/Wire Rods/Hot Metal)	0.063 m^3/MT *	0.049 m^3/MT *
Power Plant (9 X 135 MW)	2.021 m^3/MWh	2.121 m^3/MWh

* In Aluminium Smelter, water is being used only for cooling purpose.

(ii) Raw material consumption

Name of raw material	Name of products	Consumption of raw material per unit of output	
		During the previous financial year	During the current financial year
Alumina	Aluminium Smelter Plant (Aluminium Ingots/Slabs/Billets/Wire Rods/Hot Metal)	1.934 MT/MT Al.	1.939 MT/MT Al.
Calcined Petroleum Coke		0.350 MT/MT Al.	0.368 MT/MT Al.
Coal Tar Pitch		0.077 MT/MT Al.	0.081 MT/MT Al.
Aluminium Fluoride		0.015 MT/MT Al.	0.017 MT/MT Al.
Cryolite#		0.000 KL/MT Al.	0.000 KL/MT Al.
Coal	Power Plant (9 X 135 MW)	0.824 MT/MW (at GCV 2961 Kcal/Kg)	0.781 MT/MW (at GCV 3125 Kcal/Kg)
LDO		0.000123 KL/MW	0.000102 KL/MW

Includes cryolite for starting of up pots

Polluting Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw material used.

PART-C

Discharged to environment / unit of output specified if the consent issued.

Pollutants	Quantity of pollutants	Concentration of pollutions in	Percentage of variation from

			discharged (mass/day)	discharges (mass / volume)	prescribed standards with
(a)	Water		Nil (ZLD)	Nil (ZLD)	Nil (ZLD)
(b)	Air				
	UOM		kg/day	mg/Nm^3	
	Pot room FTP-1	PM	267.999	5.008	
		Total Fluoride	34.183	0.639	
	Pot room FTP-2	PM	275.692	5.167	
		Total Fluoride	30.101	0.564	
	Pot room FTP-3	PM	284.414	5.283	
		Total Fluoride	32.664	0.608	
	Pot room FTP-4	PM	285.816	5.158	Within the prescribed limits
		Total Fluoride	33.190	0.600	
	Pot room FTP-5	PM	135.696	2.817	
		Total Fluoride	32.184	0.667	
	Pot room FTP-6	PM	149.672	3.125	
		Total Fluoride	28.108	0.586	
	Pot room FTP-7	PM	139.945	2.900	
		Total Fluoride	31.654	0.659	
	Pot room FTP-8	PM	131.715	2.750	
		Total Fluoride	31.437	0.660	

	Pot room FTP-9	PM	148.928	3.150	
		Total Fluoride	33.141	0.697	
	Pot room FTP-10	PM	139.572	2.867	
		Total Fluoride	29.776	0.612	
	Pot room FTP-11	PM	149.828	3.092	
		Total Fluoride	33.254	0.687	
	Pot room FTP-12	PM	136.904	2.917	
		Total Fluoride	29.546	0.631	
	Bake oven FTP-1	PM	37.980	5.308	
		Total Fluoride	19.193	2.679	
	Bake oven FTP-2	PM	38.345	5.183	
		Total Fluoride	20.244	2.741	
	Bake oven FTP-3	PM	25.383	5.325	
		Total Fluoride	14.554	3.028	
	Bake oven FTP-4	PM	25.400	5.150	
		Total Fluoride	14.723	2.985	
	Bake oven FTP-5	PM	25.090	5.233	
		Total Fluoride	14.981	3.119	
	CPP Unit - 1	PM	747.474	46.056	
		SO_2	22150.145	1364.500	

		NO_x	5588.144	344.250	
	CPP Unit - 2	PM	724.453	45.249	
		SO_2	21990.941	1374.083	
		NO_x	5592.965	349.500	
	CPP Unit - 3	PM	730.366	46.286	
		SO_2	20775.330	1372.417	
		NO_x	5614.153	355.500	
	CPP Unit - 4	PM	717.699	44.536	
		SO_2	21568.661	1316.083	
		NO_x	5600.232	347.583	
	CPP Unit - 5	PM	720.735	44.321	
		SO_2	21730.384	1338.500	
		NO_x	5468.806	336.000	
	CPP Unit - 6	PM	732.369	44.759	
		SO_2	21882.237	1336.583	
		NO_x	5628.155	343.583	
	CPP Unit - 7	PM	724.966	44.537	
		SO_2	21428.288	1317.167	
		NO_x	5578.260	342.500	
	CPP Unit - 8	PM	718.572	44.321	
		SO_2	22036.530	1358.583	
		NO_x	5544.375	342.250	
	CPP Unit - 9	PM	739.370	45.758	
		SO_2	21344.052	1319.583	
		NO_x	5526.767	342.500	

PART-D

HAZARDOUS WASTAGES

(As specified under Hazardous Wastes / Management and handling Rules, 1989)

Hazardous Waste		Total Quantity (Kg)	
		During the previous financial year	During the current financial year
(a) From process			
1	Used/Spent Oil	75654	33730
2	Wastes Residue containing oil	33355	28916
3	Cathode Residues including pot lining wastes	16254000	17117520
4	Silicon Carbide Refractory Bricks from Pot Lining Waste (Cathode Residue Refractory)	541800	371280
5	Spent Pot Lining (Mixed Fines)- (Cathode Residues including pot lining wastes)	10294200	10651200
6	Tar containing Wastes	8555	53140
7	Flue Gas dust & other particulates	Nil	0
8	Aluminium Dross (drosses and waste from treatment of salt sludge)	28939862	27332265
9	House Keeping waste	4126651	3911769
10	Rejected AlF3 Bags	29885	16320
11	Asbestos waste (Ladle cleaning and other Units)	Nil	0
12	Coke dust	1990456	1976800
13	Spent ion exchange Resin containing toxic metal	732	846
14	Green Anode Ridge waste	Nil	0
15	Green anode cooling Decantation Tank Sludge	Nil	0
16	Shot blasting dust	6781218	6461000
17	Drain Cleaning sludge	619100	164080
18	Ladle cleaning residues	24014340	26067280

19	Used Anode Butt with Fines	187270862	189725125
20	Discarded Containers /Barrels /Liners/ Contaminated with Hazardous waste/Chemicals	Nil	0
21	Insulated copper wire scrap or copper with PVC sheathing including ISRI-code material namely "Druid"	NA	27720
22	Rubber Wastes	NA	0
23	Wastes pairings & Scrap of rubber		
24	Waste Pneumatic and other tyres excluding those which do not lead to resource recover, recycling, reclamation but not for direct use		
(b) From pollution control facilities			
1	ETP sludge (Chemical Sludge from waste-water stream)	21280	354000
2	Rejected filter bags (FTP)	38410	23996
3	Ash from Incinerator	19060	27980

PART-E

Solid Waste

		Total Quantity	
		During the previous financial year	During the current financial year
(a)	From process	Nil	Nil
(b)	From pollution control facility		
	Ash (Fly ash + Bottom ash)	33,99,934.642 MT	32,95,056.356 MT
(c)	(1) Quantity recycled or re-utilized within the unit		
	Ash (Fly ash + Bottom ash)	Nil	Nil

	(2) Sold	Nil	Nil
	(3) Disposed		
	Ash (Fly ash + Bottom ash)	38,43,929.634 MT (In Sustainable Avenues)	36,30,291.097 MT (In Sustainable Avenues)

PART-F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both the categories of wastes.

Characterization & Disposal Practice of Hazardous Wastes

Sl. No.	Category of Hazardous Waste as per the Schedules I, II and III of these Rules	Waste Description	Composition	Quantum (T/A)	Disposal Practice
1	Schedule – I Stream - 5.1	Used or Spent Oil	As per HW Rules, 2016 (Schedule V) Polychlorinated biphenyls (PCBs): < 2 ppm Lead: 100 ppm Arsenic: 5 ppm Cadmium + Chromium + Nickel: 500 ppm Polyaromatic hydrocarbons (PAH): 6 %	570	Disposal through Actual Users authorized by SPCB, Odisha
2	Schedule – I (Stream - 5.2 & 33.2)	Wastes or Residues Containing Oil	Silica as SiO_2: 23.93 % Alumina as Al_2O_3: 17.35 % Iron as Fe_2O_3: 21.94 % Calcium as CaO: 8.47 % Magnesium as MgO: 3.61 % Sodium as Na_2O: 4.11 % Potassium as K_2O : 8.05 % Titanium as TiO_2: 1.14 %	40	Captive Incineration
3	Schedule – I Stream - 11.2	Cathode Residues including pot lining wastes	Silica as SiO_2: 2.28 % Alumina as Al_2O_3: 93.28 % Iron as Fe_2O_3: 0.32 % Calcium as CaO: 0.34 % Magnesium as MgO: 0.11 % Sodium as Na_2O: 1.41 % Potassium as K_2O : 0.04 %	20,000	Disposal of carbon portion through actual users authorized by SPCB, Odisha and Refractory portion and mixed fines

			Boron: 1.44 %		through actual users authorized by SPCB, Odisha including Co-processing in Cement Kilns authorized by SPCB, Odisha / disposal in CHWTSDF.
4	Schedule – I Stream - 11.2	Silicon Carbide Refractory Bricks from Pot Lining Waste (Cathode Residue Refractory)	Carbon: 5.50 % Silica as SiO_2: 74.25 % Alumina as Al_2O_3: 15.75 % Iron as Fe: 0.60 % Magnesium as Mg: 0.13 % Phosphorus as P: 0.22 % Potassium as K: 0.95 % Sodium as Na: 1.23 % Titanium as Ti: 0.38 % Fe_2O_3: 8.58 % Volatile Matter: 0.88 % Fixed Carbon 0.44 %	2000	Disposal through actual users authorized by SPCB, Odisha
5	Schedule – I Stream - 11.2	Spent Pot Lining (Mixed Fines) – (Cathode Residues including pot lining wastes)	Carbon: 60-75% SiO2: 1-2 % Fe_2O_3: 1-2% Sodium: 7-11% Fluoride: 4-7% Al_2O_3: 7 – 8% Cyanide: 100-250 ppm	25,000	Co-processing in Cement Kilns authorized by SPCB, Odisha / disposal in CHWTSDF
6	Schedule – I Stream - 11.3	Tar containing wastes	-	225	In-house Recycling
7	Schedule – I Stream - 11.4	Flue gas dust and other particulates	-	130	In-house Recycling
8	Schedule – I Stream - 35.3	ETP Sludge (Chemical sludge from waste-water stream)	Silica as SiO_2: 3.73 % Alumina as Al_2O_3: 56.42 % Iron as Fe_2O_3: 15.41 % Calcium as CaO: 1.42 % Magnesium as MgO: 0.54% Sodium as Na_2O: 0.54 % Potassium as K_2O : 1.49 %	7,000	Disposal in CHWTSDF

9	Schedule – I Stream - 11.5	Aluminium Dross (drosses and waste from treatment of salt sludge)	Silica as SiO_2: 2.28 % Alumina as Al_2O_3: 93.28 % Iron as Fe_2O_3: 0.32 % Calcium as CaO: 0.34 % Magnesium as MgO: 0.11 % Sodium as Na_2O: 1.41 % Potassium as K_2O : 0.04 % Boron: 1.44 %	55,000	In-house Dross Processing through Stage 1 & 2 followed by further processing at M/s Runaya Refining LLP for production of Aluminium Oxide Briquette and Calcium Aluminate (Synthetic Slag)
10	Schedule – II Stream - A-72	House Keeping waste	Silica as SiO_2: 26.32 % Alumina as Al_2O_3: 34.72 % Iron as Fe_2O_3: 10.23 % Calcium as CaO: 4.72 % Magnesium as MgO: 0.45 % Sodium as Na_2O: 19.66 % Potassium as K_2O : 0.5 % Boron: 1.44 %	5,000	Disposal in CHWTSDF
11	Schedule – II Stream - A-72	Rejected filer bags (FTP)	Silica as SiO_2: 1.15 % Alumina as Al_2O_3: 55.5 % Iron as Fe_2O_3: 0.72 % Calcium as CaO: 12.61 % Magnesium as MgO: 6.5 % Sodium as Na_2O: 14.72 % Potassium as K_2O : 1.33 %	250	Incineration in pots/ disposal in Captive Hazardous Waste Incinerator
12	Schedule – II Stream - A-72	Rejected AlF3 bags	Silica as SiO_2: 22.56 % Alumina as Al_2O_3: 11.88 % Iron as Fe_2O_3: 0.3 % Calcium as CaO: 52.25 % Magnesium as MgO: 0.31 % Sodium as Na_2O: 1.27 % Potassium as K_2O : 0.05 %	250	Incineration in pots/ disposal in Captive Hazardous Waste Incinerator
13	Schedule – II Stream - A-72	Asbestos waste (Ladle cleaning and other units)	-	45	Disposal in CHWTSDF
14	Schedule – II Stream - A-72	Coke Dust	-	2,025	In-house recycling
15	Schedule – I Stream – 35.2	Spent ion exchange resin containing toxic metal	Silica as SiO_2: 11.22 % Alumina as Al_2O_3: 21.29 % Iron as Fe_2O_3: 4.84 % Calcium as CaO: 13.59 % Magnesium as MgO: 5.53 %	60	Co-incineration in CPP for energy recovery/ disposal in Captive

			Sodium as Na_2O: 17.39 % Potassium as K_2O : 2.07 % Zinc as ZnO: 1.88 %		Hazardous Waste Incinerator
16	Schedule – II Stream A-72	Green Anode Ridge Waste	-	70	In-house recycling
17	Schedule – II Stream A-72	Green Anode cooling decantation tank sludge	-	10	In-house recycling
18	Schedule – II Stream A-72	Shot Blasting Dust	Silica as SiO_2: 43.15 % Alumina as Al_2O_3: 17.1 % Iron as Fe_2O_3: 5.09 % Calcium as CaO: 1.81 % Magnesium as MgO: 0.08 % Sodium as Na_2O: 9.92 % Potassium as K_2O : 0.02 % Boron as B: 0.77 %	9,000	Disposal in CHWTSDF
19	Schedule – II Stream A-72	Drain Cleaning Sludge	Silica as SiO_2: 20.7 % Alumina as Al_2O_3: 41.14 % Iron as Fe_2O_3: 0.83 % Calcium as CaO: 2.01 % Magnesium as MgO: 0.14 % Sodium as Na_2O: 29.83 % Potassium as K_2O : 0.13 %	2,000	Disposal in CHWTSDF
20	Schedule – II Stream A-72	Ladle Cleaning Residues	-	27,000	Recycle in the pot
21	Schedule – I Stream -11.6	Used Anode Butt with fines	Silica as SiO_2: 16.51 % Alumina as Al_2O_3: 21.25 % Iron as Fe_2O_3: 26.52 % Calcium as CaO: 5.12 % Magnesium as MgO: 0.91 % Sodium as Na_2O: 7.60 % Potassium as K_2O : 1.14 % Manganese as MnO: 0.34 % Zinc as ZnO: 1.03 %	3,50,000	In-house recycling/disposal through Actual Users authorized by SPCB
22	Schedule – I Stream -33.1	Discarded containers / barrels / Liners contaminated with Hazardous	-	100	Captive reuse/disposal through original supplier/Actual users authorized by SPCB, Odisha

		Wastes / Chemicals			
23	Schedule – I Stream -37.2	Ash from Incinerator	-	40	Disposal in CHWTSDF
24	Schedule - IV Sl. No. - 7	Insulated Copper Wire Scrap or Copper with PVC sheathing including ISRI-code material namely "Druid"	-	100	Disposal through Actual Users authorized by SPCB, Odisha
25	Schedule - III Stream - B3040	Rubber Wastes	-	200	Disposal through Actual Users authorized by SPCB, Odisha and registered under EPR portal of CPCB for Waste Tyre
26	Schedule - III Stream - B3080	Wastes Parings and Scrap of Rubber	-		
27	Schedule - III Stream - B3140	Waste Pneumatic and other Tyres, excluding those which do not lead to resource recover, recycling, reclamation but not for direct use	-		

Characterization & Disposal Practice of Solid waste:

Sl. No.	Waste Description	Composition	Quantum (Tons/Month)	Disposal Practice
1	Ash	Silicon dioxide ($Si0_2$): 61.60 - 62.03 % Aluminium Oxide (Al_2O_3) + Iron Oxide (Fe_2O_3): 32.24 - 33.66 %	4,20,000	Utilization as per fly Ash notification. 31st December. 2021

		Magnesium Oxide (MgO): 1.01 - 1.21 %		amended thereof. Rest to be disposed in High concentration slurry disposal to Katikela ash pond (Lagoon -1 & 3). Kurebaga Ash Pond (Pond3) & Siriapali ash pond & other designated sites allowed by SPC Board.

PART-G

In respect of the pollution abatement measures taken up on conservation of natural resources and on the cost of production.

(A) Water Conservation Programs

- Automation in reserve water tank water circulation to avoid water overflow or spillage in Bake Oven.
- Specific Water reduction In Smelter 1 plant through following projects:

  i. Increasing effluent recycle rate (using of storm water in ETP).

  ii. COC improvement of Cooling Tower through Softener Revamping.

  iii. Fireline above ground in Smelter-1.

  iv. Process water pipeline overgrounding in carbon area.

- One Rooftop Rainwater Harvesting Structures has been installed and harvested water is being utilized in the process.
- Major firewater line leakage in CPP has been arrested by doing. Connections are provided from new overground fire hydrant line to BOP and Main plant, CPP.
- Scaleban installed in U#5 for maximum recycling of CT blowdown water in CPP.

(B) Energy Conservation Initiatives

- Reduction in HFO consumption by doing best operational practices in Bake oven.
- Fixing of heaters in existing furnace of Cast House to reduce LDO consumption.
- Reduction in the Specific Energy Consumption of smelter.
- Usage of EV forklift in Smelter area for reduction in Diesel Consumption and GHG Emission.

- Air Pre Heater (APH) air leakage reduction and APH basket jet cleaning yielded in reduction of Unit #1,2,5 & 7 Induced Draft (ID) and Primary Air (PA) fans consumption.
- Unit #1,2,5 & 7, Fabric Filter Differential Pressure (FFDP) correction by fabric filter bags replacement yielded in energy saving.
- Mill roller and liner replacement yielding in mill power consumption reduction.
- Condenser bullet cleaning of condenser for Unit #1, 2,5 and 7 for improving cleanliness factor and reducing vacuum losses in CPP yielded in thermal saving in turn resulting in reduction of coal consumption.
- Unit 1,2,5 & 7 penthouse flexible sealing correction & U#5 & 7 boiler bottom hopper revamping to reduce the SH/RH spray flow for heat rate improvement
- U#1,2,5 & 7 Flue gas duct repair & below replacement to reduce the ID fan consumption reduction.
- Revamping of cooling tower for Unit #5 to increase unit's efficiency in CPP yielded in thermal saving in turn resulting in reduction of coal consumption.
- Scale ban installation in #Unit-5 to reduce blowdown losses in cooling tower thereby reducing specific raw water consumption.

(C) Hazardous Waste Management

- Reduction in specific shot blast dust generation by implementing operational discipline in spent anode cleaning & optimizing shot blast machine shot blasting time.

(D) Solid Waste Management:

- Achieved more than 100 % ash utilization in various sustainable avenues such as cement plants, brick manufacturing, construction of roads/flyover embankments etc.

PART-H

Additional measures/investment proposal for environment protection including abatement of pollution prevention of pollution.

(A) Additional Measures:

Air Pollution Control:

- In Smelter 1 Carbon area, Manual handling has been eliminated by provision of Pneumatic Dust Conveying System (PDCS) to ensure closed conveying of raw material. Further, additional sheets have been provided in and around the transfer point area.
- To control the fugitive emission in potline, magnetic tap doors have been installed in all the pots to control any leakages. Pot Hooding efficiency improvement by replacement of web plates with modified design and operational discipline.

- Slot cleaner hood (Box) modification to improve suction efficiency in dedusting units and eliminate dust emission in all Grouping and Ungrouping area.
- In Bake Oven, FTP 1 Filter bag, FTP-3 & 4 Duct has been replaced
- Installation of gate valve in ferrous discharge chute in bath plant to regulate the flow and thereby reducing the emissions during discharge in Rodding.
- In Rodding plant, Bag filter was replaced in bath plant to maintain bag filter efficiency.
- As per Ozone Depleting Substances phase out plan, we have replaced Refrigerant Gas from R-22 To R-410, and it will be continued.
- Installation of Vent Bag filter at GAP3 to reduce the emission.

Water Conservation:

- Increasing effluent recycle rate and COC improvement of CT by Softener revamping in Smelter 2.
- Scaleban Filter installation in CPP
- Fire Line Above Ground in Smelter-1.
- Above grounding of Process & Firefighting water pipeline in progress to reduce the line leakages of the plant.

Water pollution Control:

- Regular preventive maintenance of Effluent Treatment Plants to achieve desired norms. Treated water is being reused in the process.

Energy Conservation Projects:

- In Bake Oven, FTP 2 bag chamber pulsing airline bend pipe replaced to eliminate draft loss for reduction of power consumption.
- Reduction of Bath Plant Specific power consumption in Smelter 1.
- VFD motor installation in furnace-6 cooling ramps to reduce energy consumption in Smelter 2 Bake Oven.
- Interconnection of HP and LP Blower line in Bake Oven FTP.

Solid Waste Management:

- Achieved more than 100 % ash utilization in various sustainable avenues such as cement plants, brick manufacturing, construction of roads/flyover embankments etc.

(B) Investment Proposals:

- Installation of additional sprinkler at CHP area to reduce fugitive emission.
- In Potline, FTP #2 & FTP #3 refurbishment initiated for efficiency improvement.
- Air Pre Heater (APH) basket replacement in #Unit 6 & 9 to reduce flue gas exit temperature.
- Mill Power Consumption Reduction by mill roller and liner replacement.
- For Units 4,9,6 & 8 APH seal replacement to reduce Induced Draft (ID) fan power consumption.

- Unit 4,9,6 & 8 Fabric filter replacement to reduce Induced draft fan power consumption and emission control.
- Unit #6, High-pressure (HP) turbine carrier refining planned to improve cylinder efficiency thus Thermal savings in turn resulting in reduction of coal consumption.
- Cooling tower fills replacement will yield the increase cooling tower efficiency, increase in vacuum & reduce the specific coal consumption.

PART-I

Any other particular for improving the quality of the environment.

- We have taken up a mass plantation drive outside plant premises in an area of approx. 50 acres with 1 lakh saplings under MoEF&CC drive-Ek Ped Maa Ke Naam.
- Implemented Integrated Management System (IMS) across Smelter & CPP Plant for better quality, pollution control and improve health of people working in the plant.
- All important Environmental Days Celebrated to build up Environmental awareness among employees and community:
- Regular Awareness Session, TBTs & various training conducted for awareness and rally campaign in Vedanta Jharsuguda complex towards Environment protection, climate change and Biodiversity conservation.