

VAML/OSPCB/002/2026-100

September 22, 2026

o/c

To,

The Member Secretary. ✓

State Pollution Control Board, Odisha,

Parivesh Bhawan, A/118,

Nilakantha Nagar, Unit-VIII,

Bhubaneswar – 751012

Sub: Submission of Environment Statement for 2025-26 of Smelter & CPP of M/s. Vedanta Aluminium Metal Limited, Jharsuguda

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

Respected Sir,

This has reference to the captioned subject and the cited reference. Please find enclosed the Environment Statement of Smelter & CPP of M/s. Vedanta Aluminium Metal Limited, Jharsuguda for 2025-26 duly filled in Form-V.

Thanking You,

Yours Faithfully,

For M/s. Vedanta Aluminium Metal Limited, Jharsuguda


Dr. Amit Kumar Tyagi
Head - Environment

Enclosures: Environment Statement in Form-V



Copy to: The Regional Officer, State Pollution Control Board, Odisha, Jharsuguda

Vedanta Aluminium Metal Limited

Vill.: Bhurkamunda, P.O.: Kalimandir, Dist.: Jharsuguda, Odisha, India, 768202

T: +91-664 566 6000 | F: +91-664 566 6267 | Website: www.vedantaaluminium.com

REGISTERED OFFICE: Vedanta Aluminium Metal Limited, C-103, Atul Projects, Corporate Avenue New Link, Chakala MIDC, Mumbai, Maharashtra, India, 400093

CIN: U24202MH2023PLC411663 | Email: vaml.sect@vedanta.co.in

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WASHINGTON, D.C.

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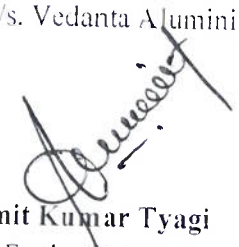
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ENVIRONMENTAL STATEMENTS

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 2026.

PART-A

(i)	Name and address of the owner / occupier of the industry operation or process	:	C Chandru, CEO, M/s. Vedanta Aluminium Metal 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	:	22nd September 2025

PART-B Water and Raw Material Consumption

- (i) Water consumption m³/d
Process: 1256.222
Cooling: 52894
Domestic: 1050.222

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)	0.049 m ³ /MT *	0.038 m ³ /MT *
Power Plant (9 X 135 MW)	2.121 m ³ /MWh	1.956 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)	1.939 MT/MT Al.	1.948 MT/MT Al.
Calcined Petroleum Coke		0.368 MT/MT Al.	0.375 MT/MT Al.
Coal Tar Pitch		0.081 MT/MT Al.	0.080 MT/MT Al.
Aluminium Fluoride		0.017 MT/MT Al.	0.019 MT/MT Al.
Cryolite#		0.000 KL/MT Al.	0.000 KL/MT Al.
Coal	Power Plant (9 X 135 MW)	0.781 MT/MW (at GCV 3125 Kcal/Kg)	0.763 MT/MW (at GCV 3195 Kcal/Kg)
LDO		0.000102 KL/MW	0.000082 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
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			discharged (mass/day)	discharges (mass / volume)	prescribed standards with
(a)	Water		Nil (ZLD)	Nil (ZLD)	Nil (ZLD)
(b)	Air				Within the prescribed limits
	UOM		kg/day	mg/Nm ³	
	Pot room FTP-1	PM	278.591	5.233	
		Total Fluoride	28.653	0.537	
	Pot room FTP-2	PM	290.003	5.354	
		Total Fluoride	27.852	0.514	
	Pot room FTP-3	PM	288.356	5.265	
		Total Fluoride	30.081	0.549	
	Pot room FTP-4	PM	278.402	5.102	
		Total Fluoride	32.528	0.595	
	Pot room FTP-5	PM	131.876	2.692	
		Total Fluoride	31.042	0.634	
	Pot room FTP-6	PM	153.881	3.217	
		Total Fluoride	32.669	0.683	
	Pot room FTP-7	PM	149.472	3.192	
		Total Fluoride	30.246	0.644	
	Pot room FTP-8	PM	153.900	3.171	
		Total Fluoride	31.492	0.650	

	Pot room FTP-9	PM	151.252	3.223
		Total Fluoride	31.858	0.677
	Pot room FTP-10	PM	150.916	3.056
		Total Fluoride	33.108	0.671
	Pot room FTP-11	PM	162.951	3.258
		Total Fluoride	34.488	0.689
	Pot room FTP-12	PM	161.926	3.283
		Total Fluoride	33.691	0.683
	Bake oven FTP-1	PM	36.148	5.438
		Total Fluoride	19.767	2.986
	Bake oven FTP-2	PM	35.235	5.221
		Total Fluoride	19.627	2.918
	Bake oven FTP-3	PM	31.449	5.742
		Total Fluoride	16.167	2.968
	Bake oven FTP-4	PM	30.129	5.444
		Total Fluoride	15.529	2.799
	Bake oven FTP-5	PM	30.000	5.389
		Total Fluoride	16.554	2.988
	CPP Unit - 1	PM	701.233	43.074
		SO ₂	22066.847	1354.278

		NO _x	5575.271	342.007
	CPP Unit - 2	PM	731.121	45.078
		SO ₂	21488.000	1331.333
		NO _x	5286.790	326.981
	CPP Unit - 3	PM	753.885	46.236
		SO ₂	21700.624	1333.667
		NO _x	5741.228	352.910
	CPP Unit - 4	PM	721.632	45.129
		SO ₂	21651.824	1332.306
		NO _x	5644.481	352.364
	CPP Unit - 5	PM	754.910	45.762
		SO ₂	22341.871	1350.583
		NO _x	5509.964	332.136
	CPP Unit - 6	PM	734.195	45.472
		SO ₂	21776.807	1350.521
		NO _x	5461.374	339.000
	CPP Unit - 7	PM	704.381	45.051
		SO ₂	21213.357	1348.153
		NO _x	5422.111	343.944
	CPP Unit - 8	PM	716.050	43.503
		SO ₂	21967.005	1342.625
		NO _x	5452.222	332.214
	CPP Unit - 9	PM	716.065	45.526
		SO ₂	21399.658	1357.917
		NO _x	5640.870	358.933

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	33730	90340
2	Wastes Residue containing oil	28916	19526
3	Cathode Residues including pot lining wastes	17117520	26310920
4	Spent Pot Lining (Mixed Fines)- (Cathode Residues including pot lining wastes)	10651200	
5	Silicon Carbide Refractory Bricks from Pot Lining Waste (Cathode Residue Refractory)	371280	569080
6	Tar containing Wastes	53140	37260
7	Flue Gas dust & other particulates	0	0
8	Aluminium Dross (drosses and waste from treatment of salt sludge)	27332265	28825358
9	House Keeping waste	3911769	4393900
10	Rejected AlF3 Bags	16320	21470
11	Asbestos waste (Ladle cleaning and other Units)	0	0
12	Coke dust	1976800	931020
13	Spent ion exchange Resin containing toxic metal	846	216
14	Green Anode Ridge waste	0	0
15	Green anode cooling Decantation Tank Sludge	0	0
16	Shot blasting dust	6461000	6374000
17	Drain Cleaning sludge	164080	476260
18	Ladle cleaning residues	26067280	26240180

19	Used Anode Butt with Fines	189725125	203082403
20	Discarded Containers /Barrels /Liners/ Contaminated with Hazardous waste/Chemicals	0	0
21	"Production and/or industrial use of paints (Process wastes, residues and sludges)"	-	0
22	Insulated copper wire scrap or copper with PVC sheathing including ISRI-code material namely "Druid"	27720	12960
23	Rubber Wastes	0	331080
24	Wastes pairings & Scrap of rubber		
25	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)	354000	661740
2	Rejected filter bags (FTP)	23996	19590
3	Ash from Incinerator	27980	28100

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)	32,95,056.356 MT	3168889.205 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)	36,30,291.097 MT (In Sustainable Avenues)	3564952.232 MT (In Sustainable Avenues) (Additional 396063.027 MT utilized from Operational Ash Pond/Dyke)

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 ₂ O ₃ : 17.35 % Iron as Fe ₂ O ₃ : 21.94 % Calcium as CaO: 8.47 % Magnesium as MgO: 3.61 % Sodium as Na ₂ O: 4.11 %	40	Captive Incineration

			Potassium as K ₂ O: 8.05 % Titanium as TiO ₂ : 1.14 %		
3	Schedule – I Stream - 11.2	Cathode Residues including pot lining wastes	Silica as SiO ₂ : 2.28 % Alumina as Al ₂ O ₃ : 93.28 % Iron as Fe ₂ O ₃ : 0.32 % Calcium as CaO: 0.34 % Magnesium as MgO: 0.11 % Sodium as Na ₂ O: 1.41 % Potassium as K ₂ O: 0.04 % Boron: 1.44 %	20,000	Disposal of carbon portion through actual users authorized by SPCB, Odisha and Refractory portion and mixed fines 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 ₂ O 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 ₂ O 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% SiO ₂ : 1-2 % Fe ₂ O ₃ : 1-2% Sodium: 7-11% Fluoride: 4-7% Al ₂ O 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 ₂ O ₃ : 56.42 % Iron as Fe ₂ O ₃ : 15.41 % Calcium as CaO: 1.42 % Magnesium as MgO: 0.54 % Sodium as Na ₂ O: 0.54 % Potassium as K ₂ O: 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 ₂ O ₃ : 93.28 % Iron as Fe ₂ O ₃ : 0.32 % Calcium as CaO: 0.34 % Magnesium as MgO: 0.11 % Sodium as Na ₂ O: 1.41 % Potassium as K ₂ O: 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 ₂ O ₃ : 34.72 % Iron as Fe ₂ O ₃ : 10.23 % Calcium as CaO: 4.72 % Magnesium as MgO: 0.45 % Sodium as Na ₂ O: 19.66 % Potassium as K ₂ O: 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 ₂ O ₃ : 55.5 % Iron as Fe ₂ O ₃ : 0.72 % Calcium as CaO: 12.61 % Magnesium as MgO: 6.5 % Sodium as Na ₂ O: 14.72 % Potassium as K ₂ O: 1.33 %	250	Incineration in pots/ disposal in Captive Hazardous Waste Incinerator
12	Schedule – II Stream - A-72	Rejected AlF ₃ bags	Silica as SiO ₂ : 22.56 % Alumina as Al ₂ O ₃ : 11.88 % Iron as Fe ₂ O ₃ : 0.3 % Calcium as CaO: 52.25 % Magnesium as MgO: 0.31 % Sodium as Na ₂ O: 1.27 % Potassium as K ₂ O: 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 ₂ O ₃ : 21.29 % Iron as Fe ₂ O ₃ : 4.84 % Calcium as CaO: 13.59 % Magnesium as MgO: 5.53 % Sodium as Na ₂ O: 17.39 % Potassium as K ₂ O: 2.07 % Zinc as ZnO: 1.88 %	60	Co-incineration in CPP for energy recovery/ disposal in Captive 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 ₂ O ₃ : 17.1 % Iron as Fe ₂ O ₃ : 5.09 % Calcium as CaO: 1.81 % Magnesium as MgO: 0.08 % Sodium as Na ₂ O: 9.92 % Potassium as K ₂ O: 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 ₂ O ₃ : 41.14 % Iron as Fe ₂ O ₃ : 0.83 % Calcium as CaO: 2.01 % Magnesium as MgO: 0.14 % Sodium as Na ₂ O: 29.83 % Potassium as K ₂ O: 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 ₂ O ₃ : 21.25 % Iron as Fe ₂ O ₃ : 26.52 % Calcium as CaO: 5.12 % Magnesium as MgO: 0.91 % Sodium as Na ₂ O: 7.60 %	3,50,000	In-house recycling/disposal through Actual Users authorized by SPCB

			Potassium as K ₂ O: 1.14 % Manganese as MnO: 0.34 % Zinc as ZnO: 1.03 %		
22	Schedule – I Stream -33.1	Discarded containers / barrels / Liners contaminated with Hazardous Wastes / Chemicals	-	100	Captive reuse/disposal through original supplier/Actual users authorized by SPCB, Odisha
23	Schedule – I Stream -37.2	Ash from Incinerator	-	40	Disposal in CHWTSDF
24	Schedule – I Stream -21.1	Production and/or industrial use of paints (Process wastes, residues and sludges)	-	10	Disposal through Actual Users authorized by SPCB, Odisha
25	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
26	Schedule - III Stream - B3040	Rubber Wastes	-	600	Disposal through Actual Users authorized by SPCB, Odisha and registered under EPR portal of CPCB for Waste Tyre
27	Schedule - III Stream - B3080	Wastes Parings and Scrap of Rubber	-		
28	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			
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Characterization & Disposal Practice of Solid waste:

Sl. No.	Waste Description	Composition	Quantum (Tons/Month)	Disposal Practice
1	Ash	Silicon dioxide (SiO_2): 61.60 - 62.03 % Aluminium Oxide (Al_2O_3) + Iron Oxide (Fe_2O_3): 32.24 - 33.66 % Magnesium Oxide (MgO): 1.01 - 1.21 %	4,20,000	Utilization as per fly Ash notification. 31 st December. 2021 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

- Fireline has been overgrounded to reduce Water leakage in Smelters.
- Projects like CT overhauling for COC improvement have been taken to reduce specific freshwater consumption.
- Installation and commissioning of 100- 120 m³/hr Scale ban filtration system at the Unit #5 Cooling Tower has enhanced the utilization of ETP-treated water, reducing raw water consumption.

- Major fire and process water leakages have been controlled across CPP, ensuring improved water conservation through continuous monitoring.
- ETP inspection tank cleaning completed since inception for improved ETP outlet quality.

(B) Energy Conservation Initiatives

- Installation of FCN (Forced cooling network) for Potline-5, Smelter-2 resulting reduction in auxiliary power reduction by 15 kWhr/MT.
- ID Fan operation optimization, resulting in auxiliary reduction of 35 kWhr/MT in Smelter-2 Potline
- In Smelter -1 Potline, Replacement of all belt conveyor motors with energy efficient IE3 motors that results in reduction of specific auxiliary power consumption by 0.3 kWh/MT.
- Optimization of ID fan power consumption by rectification of feedback issues in ID fan inlet actuators and current transducers in Smelter-1 Potline
- In Smelter -1, bake oven Reduction of Hydraulic oil in by 10% in FY26 and 28% compared to FY25.
- Air Pre Heater (APH) air leakage reduction and APH basket jet cleaning yielded in reduction of Unit #6, 9 Induced Draft (ID) and Primary Air (PA) fans consumption.
- Unit #4, 9, 8, 6 Fabric Filter Differential Pressure (FFDP) correction by fabric filter bags replacement yielded in energy saving.
- 6 Nos. of mill roller and liner replacement yielded in mill power consumption reduction.
- Condenser bullet cleaning of condenser for Unit #4, 9, 8 and 6 for improving cleanliness factor and reducing vacuum losses in CPP yielded in thermal saving in turn resulting in reduction of coal consumption.
- Unit #4, 9, 8 and 6 penthouse cleaning and U#8 & 9 boiler bottom hopper revamping to reduce the SH/RH spray flow for heat rate improvement
- U#4, 9, 8 & 6 Flue gas duct repair & below replacement to reduce the ID fan consumption reduction.
- Boiler feed pump cartridge, recirculation valve & motor have been replacement in U#6 BFP A, resulting in 520.8 kwh power saving.
- Cooling tower fills replacement done in U#4 and 7, vacuum improvement of 1.5 Kpa respectively.

(C) 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 2 Carbon area at Newly built GAP, Pneumatic Dust Conveying System (PDCCS) has been installed to ensure closed conveying of raw material
- To control the fugitive emission in potline of both Smelter, 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.
- Procurement of 3 Modular bag filters to mitigate the dust emission at transfer points of Anode Rodding shop, Smelter-1
- Dedusting unit suction duct replacement for increasing suction at coke silo bag filter of GAP area, Smelter-1
- Vent type bag filter installed at TP2 and GAP3 5th floor to reduce dust emission at GAP area, Smelter-2
- Installation of DP based pulsing system at FTPs to optimize compressed air. consumption & enhancement bag life up to 15% as per the current operational condition In Potline area of Smelter-2
- Vacuum dust conveying system installation in GAP to maximize the usage of dust in GAP and reduce the emissions of both the smelter.
- De dusting line modification for reducing dusting during packing coke transfer in GAP area of both the smelter.
- Coke area feeder hopper modification for reducing dust emission during charging in GAP area of both the smelter.
- 3 nos. New Silo Bag filter replacement done for reducing fugitive emissions from silo top.

Water Conservation:

- 400 metre process water line over ground to minimise the water leakage and loss in GAP Smelter-1.
- 150 metre Hydrant line over ground to minimise the water leakage and loss in GAP, Smelter-2
- Fire Line above Grounding in Smelter-1.
- Above grounding of Process & Firefighting water pipeline in progress to reduce the line leakages of the plant.
- Revamping of the 240 KLD CPP Sewage Treatment Plant (STP), ensuring improved operational performance and sustainable water management.
- Replaced Effluent Treatment Plant (ETP) Lamella Fills, for improved quality and sustainability.
- Regular preventive maintenance of Effluent Treatment Plants to achieve desired norms. Treated water is being reused in the process.

Energy Conservation Projects:

- HTM system overhauling by replacing with new oil into the system which reduced Specific power consumption from previous year 101.13 to 99.57 in FY 25-26 at GAP area of smelter 2.
- Efficiency improvement of HP Compressors project has been taken to improve HP Compressors efficiency from specific power consumption. Specific Power Consumption has been achieved 0.182kW/CFM against the baseline 0.190kW/CFM, which will yield benefits of Rs 60.17 Lacs/Annum at Utility area of both Smelter.

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:

- Revamping of cooling tower cell installation for 3 more units to increase unit's efficiency in CPP in FY'27.
- Boiler bottom hopper replacement for Unit 1 and 2 in FY 27.
- Air Pre Heater (APH) basket replacement in Unit 1 & 7 to reduce flue gas exit temperature.
- 9 Nos. Mill Power Consumption Reduction by mill roller and liner replacement.
- For Units 1, 2, 5 & 7 APH seal replacement to reduce Induced Draft (ID) fan power consumption.
- Unit 1, 2, 5 & 7 Fabric filter replacement to reduce Induced draft fan power consumption and emission control.
- Unit 7, HIP rotor replacement is planned, resulting in reduction of specific coal consumption.
- 3 Nos. units, Cooling tower fills are to be replaced which yielded in increasing of cooling tower efficiency thereby increase in vacuum & reduce the specific coal consumption.
- Installation of additional sprinkler at CHP area to reduce fugitive emission.

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.