vedanta
transforming for good

HINDUSTAN ZINC
Zinc & Silver of India

Ref: HZL/Kayad/ENV/2025-26/ 72

Date: 20/09/2025

Member Secretary
Raj. Pollution Control Board
4, Institutional Area
Jhalana Doongari
JAIPUR

Sub: Environmental Statement for Kayad Mine for year 2024-25.

Ref: Env clearance vide No. : J-l10115 14712012-IA.ll (M) dated 5th Feb, 2018.

Ref: CTO Granted vide File No. F(Mines)/Ajmer(Ajmer)/303(1)/2017-2018/5559-5563 dated 06.01.2023.

Sir/madam,

Please find enclosed herewith the environmental statement for financial year ending on 31ST March 2025.

Thanking you

Yours truly

Nirmalendu Kumar

Director SBU(Kayad Mine)

: for kind information please

Cc to: Regional officer
Raj. State Pollution control board
SPL-II, RIICO Industrial Area, Phase-v,
Kishangarh, Dist. Ajmer

The Deputy Director(s)/ Scientist-C
Ministry of Environment, Forest and Climate Changes,
Integrated regional Officer, A-209 & 218, Aranya Bhawan,
Jhalana Institutional Area Jaipur-302004

O/C Env.

FORM-V

(Rule-14)

ENVIROMENTAL STATEMENT FOR FINANCIAL YEAR ENDING

ON 31ST MARCH 2025

PART-A

i.	Name and Adress of the owner/ Occupier of the industry/ operation or process.	Sh. Arun Mishra Chief Executive Officer & Whole time Director Hindustan Zinc Limited Yashad Bhawan Udaipur 313001
ii.	Name and address of Unit Head :	Sh. Nirmalendu Kumar Director- SBU Kayad Mine Hindustan Zinc Limited PO& Village: Kayad, Dist. Ajmer- 305023, Rajasthan
iii.	Industry Category : Primary (STC Code) Secondary (STC Code)	Red 1031-98 (Lead Zinc Ore)
iv.	Production Capacity- Units :	1.2 million Tons per Annum of Lead Zinc Ore and Associated Minerals
v.	Year of Establishment :	June 2011
vi.	Date of last Environmental Statement Submitted :	14 September 2024

PART-B

Water and Raw Material Consumption

1. **Water Consumption (m3/day)**

	Cum/day
Process	133.16
Cooling/Services	–
Domestic	7.8

Name of product	Process of Water consumption (fresh water) per unit of product output (ore treatment)	
	During the previous financial year 2023-24	During the current financial year 2024-25
Lead Zinc Ore	0.44 m/MT	0.56m/MT

2. **Raw Material Consumption**

Name of the raw material*	Name of the product	Consumption of raw material per unit of output	
		2023-24	2024-25
Nil	Lead Zinc Ore	Nil	Nil

***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

POLLUTION DISCHARGED TO ENVIROMENT/UNIT OF OUTPUT

(Parameters ae specified in the consent issue)

Sr.no	Pollutants	Quantity of pollutants discharged (mass/volume)	Concentration of pollutants in discharge (mass/volume)	Percentage of variation prescribed standards and reason
a.	Water	Zero Discharge being maintained		
b.	Air	Annexure-A		

PART-D

HAZARDOUS WASTE

[Specified under Hazardous waste Management and Handling) Rules, 2016]

Hazardous Waste	Total Quantity (kg)	
	During the previous financial year 2023-24	During the current financial year 2024-25
a. From process		
1. Decontaminated drums	462 Nos	514 Nos
2. Used oil	83.17 KL	92.52 KL
3. Oil contaminated waste	2.19MT	0.0
b. From Pollution Control Facility	Nil	Nil

PART-E

SOLID WASTE

Sr. No		Total Quantity	
		During the previous financial year 2023-24	During the current financial year 2024-25
a	From Process	265625 MT	264076.0 MT
b	From Pollution control facility	Nil	Nil
c	Quantity recycled or utilized	100% used for backfilling of stopped voids	100% used for backfilling of stopped voids
	Solid	Nil	Nil
	Disposed	Nil	Nil

PART-F

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

Hazardous waste:

Sr.no	Type of Hazardous waste	Category		Hazardous waste disposal
		Schedule	Code	
1.	Used Oil	1	5.1	Sold to registered recycler
2.	Waste/residues containing oil	1	5.2	Approved Incinerator
3.	Discarded containers/ barrels contaminated with hazardous waste	1	33.3	Reused of filling of used oil

Solid Waste:

The composition of waste rock generated from development activities mainly consists of Amphibolite's Calc-Silicate, Quartz which are being used for backfilling in voids developed by stopes.

PART-G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of productions:

The following are the abatement measures taken on conservation of natural resources.

Air Management

- Wet drilling
- Ore transportation by covered trucks
- Regular maintenance of Heavy machinery
- Backfilling of waste in voids developed by stopping
- Regular sprinkling of water on haul roads.
- Plantation around acquired area.

Water Management

- Reuse of vehicle wash water
- STP treated water used for Horticulture.
- Rainwater Harvesting for roof top, greenbelt and open area developed.
- Zero discharge maintained.

Noise Management

- The mining equipment are designed with low noise level.
- All vehicles are undergoing periodic maintenance.
- Mine ventilation fan are designed with sound attenuation system and installed underground.
- Vehicle with the acquired area will have low volume horns.
- All person in mines are provided with ear protection PPE's.
- A green belt around the acquired area for attenuate noise level.
- Diesel generator is provided with acoustic enclosure and silencers.

Green Belt Development

- 58000 Nos. of plantation done in and around mine area and along the mind boundary.
- Mass plantation more then 800000. Nos done in the nearby community.
- Nursery developed and maintained for Native Species.
- Medicinal plants developed within the mine premises.
- Gardens developed within the mine area.
- Overall total 40% of Acquired area covered with green belt.

PART-H

Additional measure/investments proposal for environmental protection including abatement of pollution, prevention of pollutants.

- The following works are completed to improve the working environment.
- Haul road dust suppression by use of dust suppression chemical along with water, to reduce the water consumption and air born dust.
- Cleaning of industrial road and yards by Electric Road Sweeper. Saving up to 6000kg Co2 emissions.
- Regular Plantation in and around acquired area , periphery etc.

PART-I

Any other particulars for improving the quality of environment

Air Pollution Control

- Road sweeper is being operate on industrial road to control the dust.
- Haul road fugitive emission controlled by regular water sprinkling with dust suppression chemicals.
- Fortnightly monitoring of ambient air quality at 6 locations.
- Continuous Ambient Air Quality Monitoring systems installed and monitored.

Water Pollution Control

- Water quality of mine water, workshop and STP water is regularly monitored.
- Water quality of Ground water (Piezometers) is monitored on Quarterly basis.
- Drip irrigation for plantation and pop-up systems for gardens are implemented.

Noise and vibration control

- Cabins of HEMM equipment are air conditioned.
- Sound level of mining equipment are monitored regularly.
- Ground vibrations are regularly monitored.

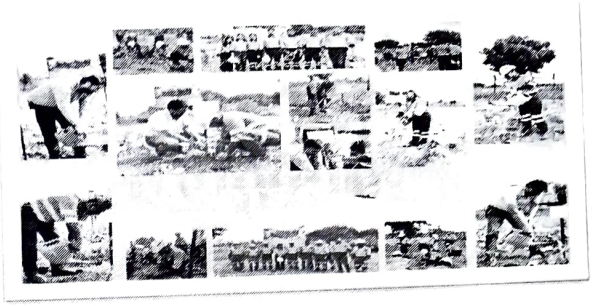
Plantation

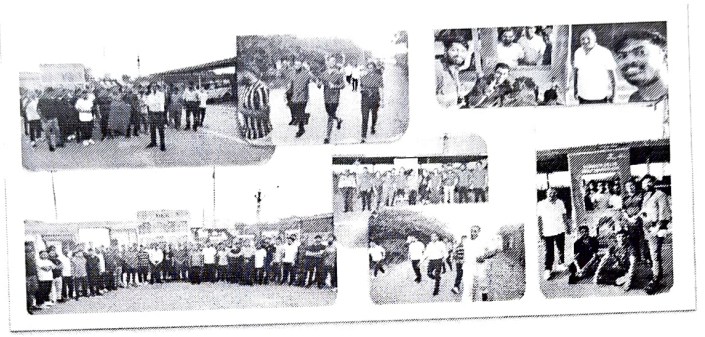
- Till March 2025, 58,000 Plants in 19.6 Hectares Are planted.
- Plantation are also carried out in vicinity 58000, Vishramsthali and in schools and residential area.
- Road side Plantation from highway to Vishramsthali.

Environmental Awareness:

- Hosted 35th Mine environment Mineral conservation week along with IBM Ajmer.
- Celebration of World Env. Day on 5th June, A Skit on "Ending Plastic Pollution " was arranged to spread awareness about environmental protection and sustainable living.
- A Plantation drive was organized under the "Haryalo Rajasthan" campaign during which 2000 saplings were planted to enhance green cover and support ecological balance.
- Celebrated World Water day on 22nd March promoting sustainable water conservation practices.
- Celebrated World Ozone day on 16th September 2025.

- Celebration of No Vehicle day under the BBE campaign





1. **Water Conservations Measures:**
   - Drip Irrigation System for Plantation implemented
   - Auto pop-up system for garden maintained to reduce water consumption.
   - Efficient operation of 50 KLD Sewage Treatment Plant(STP) at Mine to reuse the Treated water.
   - Use of Evaporation Retardant Chemical on the surface during summer.

2. **Awards:**
   - Received the prestigious '5 Star Rated Mines' award by Indian Bureau of Mines for exemplary sustainable mining practices.
   - Honored with prestigious Bhamashah 'Shiksha Bhushan' award by Government of India.

Kayad Mine certified by ISO 14001:2015, ISO 9001:2015, ISO 45001:2018 and ISO 50001:2018.

RINA

IQNET

CERTIFICATE No. EMS-6233/ANS

HINDUSTAN ZINC LIMITED

ISO 14001:2015

RINA Services S.p.A.

ANAB IAF CISQ

RINA

IQNET

CERTIFICATE No. 33533/16/ANS

HINDUSTAN ZINC LIMITED

ISO 9001:2015

RINA Services S.p.A.

ANAB IAF CISQ

RINA

IQNET

CERTIFICATE No. OHS-2632

HINDUSTAN ZINC LIMITED

ISO 45001:2018

RINA Services S.p.A.

ANAB IAF CISQ

RINA

IQNET

CERTIFICATE No. EnergyMS-302

HINDUSTAN ZINC LIMITED

ISO 50001:2018

RINA Services S.p.A.

CISQ

Annexure-A

Pollution discharged to environment /unit of output (Parameters as specified in the consent issued)
Period: April 2024 - March 2025

Location		Concentration of pollutants in discharge (mass/volume)		Percentage of variation form Prescribed standards And reason
	Pollutants	Max(µg/m3)	Min(µg/m3)	
Mine Area Near SSB	SPM	177.05	92.67	No variation is observed during the periods all parameters within limits
	PM10	88.52	25.14	
	PM 2.5	59.76	16.75	
	SO2	7.62	6.03	
	Nox	15.70	10.70	
	CO	510.00	160.00	
Mine area (CRF)	SPM	157.52	85.81	No variation is observed during the periods all parameters within limits
	PM10	82.46	43.73	
	PM 2.5	38.92	18.68	
	SO2	7.46	6.03	
	Nox	15.13	11.33	
	CO	520.00	190.00	
Mine Area (ANFO)	SPM	160.76	87.45	No variation is observed during the periods all parameters within limits
	PM10	84.25	41.29	
	PM 2.5	39.90	19.75	
	SO2	7.06	6.04	
	Nox	15.40	14.05	
	CO	480.00	210.00	
Kayad Village	SPM	153.20	72.10	No variation is observed during the periods all parameters within limits
	PM10	74.29	26.88	
	PM 2.5	34.04	17.26	
	SO2	6.99	5.16	
	Nox	15.21	10.55	
	CO	420.00	150.00	
Lohagal Village	SPM	152.16	67.54	No variation is observed during the periods all parameters within limits
	PM10	75.88	1.37	
	PM 2.5	42.70	17.24	
	SO2	6.90	5.11	
	Nox	14.03	10.00	
	CO	410.00	180.00	
Gagwana Village	SPM	159.59	71.50	No variation is observed during the periods all parameters within limits
	PM10	77.52	33.49	
	PM 2.5	33.31	14.69	
	SO2	7.88	5.28	
	Nox	14.74	12.75	
	CO	380.00	170.00	