

HZL/CLZS/2025/53/2025-26

29.09.2025

To,
The Member Secretary,
Rajasthan State Pollution Control Board,
4th Jhalana Institutional Area, Jaipur - 302004

Subject: Submission of Environmental Statement for the year 2024-25 for Chanderiya Lead Zinc Smelter, Chittorgarh (Rajasthan)

Reference: Consent Letters:

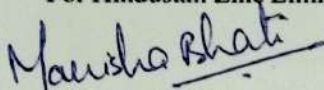
1. **Pyro Plant-** F(HDF)/Chittorgarh(Gangrar)/1(1)/2019-2020/1091-1093 dated 08.06.2020
2. **Ausmelt Lead Plant-** F(HSW)/Chittorgarh(Gangrar)/7068(1)/2024-2025/1355-1357 dated 05.08.2024
3. **Hydro Phase I & II-** F(HDF)/Chittorgarh(Gangrar)/8(1)/2024-2025/1382-1384 dated 05.08.2024
4. **CPP-154 MW & 100 MW-** F(HDF)/Chittorgarh(Gangrar)/9(1)/2024-2025/635-637 dated 30.05.2024
5. **CPP-36 MW [Expansion]-** F(HDF)/Chittorgarh(Gangrar)/10(1)/2024-2025/955-957 dated 27.06.2024
6. **Fumer Plant-** F(HDF)/Chittorgarh(Gangrar)/1(1)/2019-2020/252-254 dated 08.05.2020

Respected Sir,

Please find enclosed the Environmental Statement for the year 2024-25 for Chanderiya Lead Zinc Smelter Unit, Chittorgarh, Rajasthan.

Thanking you,

Yours faithfully,
For Hindustan Zinc Limited


[Manisha Bhati]

Associate General Manager - Environment
Chanderiya Lead Zinc Smelter

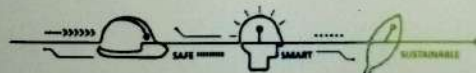
Cc:

- The Regional Officer, Rajasthan State Pollution Control Board,
Near FCI Godawn, Chanderiya, Chittorgarh – 312001
- The Deputy Director(S)/Scientist-C, Ministry of Environment Forest & Climate
Change, Integrated Regional Office, A-209 & 218, Aranya Bhawan, Jhalana
Institutional Area, Jaipur - 302004

Hindustan Zinc Limited

Registered Office
Yashad Bhawan, Udaipur-313 004, Rajasthan, INDIA.
T. +91 294-6604000-02 | www.hzindia.com
CIN: L27204RJ1966PLC001208

Chanderiya Lead Zinc Smelter
P.O. Putholi, Chittorgarh-312021,
Rajasthan, INDIA.





HINDUSTAN ZINC
Zinc & Silver of India

Environmental Statement **of**



**Chanderiya Lead Zinc Smelter,
M/s Hindustan Zinc Limited,
Village – Putholi, District- Chittorgarh- 312021,
Rajasthan**

For the period: April-2024 to March-2025

September - 2025

FORM – V**ENVIRONMENT STATEMENT****FOR THE FINANCIAL YEAR ENDING 31st MARCH 2025****PART – A**

(1)	Name and address of the owner/occupier of the industry, operation and process	Sh. Arun Misra Chief Executive Officer M/s. Hindustan Zinc Limited, Udaipur, Rajasthan - 313004	
(2)	Industry Category	Red/Large [Category A]	
	Primary (STC)	F.LRJ-17425 SL NO.20120 of Industrial (Development & Regulation Act 1951) IDR 157(91)15.07.1991	
	Secondary (SIC)	--	
(3)	Production capacity	PYRO PLANT	AUSMELT PLANT
	A. Zinc	105,000 MTPA	-----
	B. Lead	35,000 MTPA	60,000 MTPA
	C. Silver	74 MTPA	94.71 MTPA
	D. Copper Sulphate	2100 MTPA	7920 MTPA
	E. Sulphuric Acid	1,76,000 MTPA	5050 MTPA
	F. Cadmium	375 MTPA	-----
	G. Zinc Rich Dust	-----	6600 MTPA
		HYDRO PHASE- I & II	FUMER
	A. Zinc	504,000 MTPA	-----
	B. Sulphuric Acid	615,548 MTPA	-----
	C. Cadmium Sponge	1360 MTPA	-----
	D. Copper Cement	1020 MTPA	-----
	E. Low grade Lead Conc.	30,000 MTPA	-----
	F. Lead Silver Cake	16,000 MTPA	16,000 MTPA
	G. Calomel	40 MTPA	-----
	H. Sodium Chloride	500 MTPA	-----
	I. Sodium Sulphate	1250 MTPA	-----
	J. Copper Speiss	700 MTPA	700 MTPA
	K. Slag	-----	150,000 MTPA
	L. Electric Power	-----	21 MWH
		CPP UNIT- I, II & III	
	A. Electric Power	290 MW	
	B. BPTG	6 MW	
(4)	Year of establishment	PYRO	1990-91
		HYDRO I	2003-04
		AUSMELT	2004-05
		HYDRO II	2006-07
		FUMER	2024-25
(5)	Date of last Environment Statement submitted	28.09.2024	

PART – B**Water and Raw Material consumption****1. Water consumption m³/d for entire location for 2024-2025 (including colony)**

Process, cooling & domestic (factory) = 27022 m³/day

Domestic (Zinc Colony) = 403 m³/day

Total = 27424 m³/day

• Pyro & Ausmelt Plant – Water Consumption

Name of product	Process Water consumption per unit of product output, M ³ /MT	
	2023-2024	2024-2025
Furnace metal	10.63	9.90

• Hydro Plant Phase I- Water consumption

Name of product	Process Water consumption per unit of product, M ³ /MT	
	2023-2024	2024-2025
Zn Ingots	4.18	3.28

• Hydro Plant Phase II - Water consumption

Name of product	Process Water consumption per unit of product, M ³ /MT	
	2023-2024	2024-2025
Zn Ingots	9.47	9.66

• Captive Power Plant –Water Consumption

Name of product	Process Water consumption per unit of product, M ³ /MWH	
	2023-2024	2024-2025
Power (Electricity)	2.31	2.31

2. Raw material consumption**• Raw material consumption –Pyro + Ausmelt Plant**

Name of raw material	Name of Product	Consumption of Raw material per unit of output During 2023-24	Consumption of Raw material per unit of output During 2024-25
Zinc concentrate	Zinc	2.10	1.90
Lead concentrate	Lead	1.84	1.67

• Raw material consumption -Hydro I

Name of raw material	Name of Product	Consumption of Raw material per unit of output (excluding Calcine)	
		2023-2024	2024-2025
Zinc concentrate	Zinc	1.43	1.34

• **Raw material consumption -Hydro II**

Name of raw material	Name of Product	Consumption of Raw material per unit of output - (excluding Calcine)	
		2023-24	2024-25
Zinc concentrate	Zinc	1.30	1.32

PART – C

Discharge to environment /unit of output
(Specified if the consent issued)

Pollutants	Concentration of pollutants in discharge (mass/volume)	Percentage of variation from prescribed standards with
Water	Zero discharge is maintained. ETP & STP treated water analysis report is attached as Annexure I & II	No Variation from the prescribed norms
Air (Stack Emission)	Report is attached as per annexure III	No Variation from the prescribed norms except CPP SO ₂

- **Annexure I** – ETP treated water analysis, year **2024-2025**
- **Annexure II** – STP treated water analysis, year **2024-2025**
- **Annexure III** - Stack Emissions (PM, SO₂, NO_x), year **2024-2025**
- **Annexure IV** - Ambient Air Emission inside Plant, year **2024-2025**
- **Annexure V** - Ambient Air Emission nearby Villages, year **2024-2025**
- **Annexure VI**- Ambient Noise Emission – Plant, year **2024-2025**
- **Annexure VII** - Form No. 4, year **2024-2025**
- **Annexure VIII** - HW Authorization for entire location

PART – D

HAZARDOUS WASTES

(As specified under Hazardous Waste Management & Handling and Transboundary and other waste rules, 2016)
(UNIT–MTA)

1. From Process-

S. No	Type of Hazardous Waste	Category		Generation/ Sale/Disposal	2023- 2024	2024- 2025
		Sch	Code		MTA	MTA
1	Spent Catalyst	I	17.2	Generation	24.24	20.04
				Sale	0	0
				Disposal/Reuse	24.24	20.04
2	Empty barrels/containers contaminated with hazardous chemical/waste	I	33.1	Generation	1103	102
				Sale	0	0
				Disposal/Reuse	1103	102

3	Used or spent oil	I	5.1	Generation	55.72	64.54
				Sale	54.28	60.03
				Disposal/Reuse	0.99	3.44
4	Waste Oil	I	5.2	Generation	0	0
				Sale	0	0
				Disposal/Reuse	0	0
5	Anode Mud	I	7.2	Generation	93.184	156.43
				Sale	76.125	76.51
				Disposal/Reuse	17.06	79.92
6	Antimony Dross	I	7.2	Generation	915	--
				Sale	860.61	--
				Disposal/Reuse	64.00	--
7	Cobalt Cake	I	7.2	Generation	0	0
				Sale	0	0
				Disposal/Reuse	0	0
8	Cooler Cake	I	7.2	Generation	5811.61	5896.48
				Sale	0	0
				Disposal/Reuse	5811.61	5896.48
9	Copper Bearing lead residue/process residue	I	7.2	Generation	10783.245	16068.06
				Sale	3967.048	16068.06
				Disposal/Reuse	6816.2	0
10	Enrichment Cake	I	7.2	Generation	2901	--
				Sale	883.08	--
				Disposal/Reuse	1989.27	--
11	HGP Dust	I	7.2	Generation	2445.03	2967.04
				Sale	870.16	430.48
				Disposal/Reuse	1550.21	1982.2
12	Purification Cake	I	7.2	Generation	3618.63	6057.42
				Sale	1743.52	5868.24
				Disposal/Reuse	1871.36	0
13	Mercury and mercury compounds	II	A6	Generation	0	--
				Sale	0	--
				Disposal/Reuse	0	--
14	Filter contaminated with oil	I	5.2	Generation	--	0
				Sale	--	0
				Disposal/Reuse	--	0
15	Oil soaked Material	I	5.2	Generation	--	7.46
				Sale	--	0
				Disposal/Reuse	--	7.46
16	Process residues (ISF Dross)	I	7.2	Generation	--	7305.95
				Sale	--	7305.95
				Disposal/Reuse	--	0
17	Process residues (De-Fluorination cake)	I	7.2	Generation	--	0
				Sale	--	0

				Disposal/Reuse	--	0
18	Process residue (Lead Dross/ Lead bearing residues/Lead Scrap)	I	7.2	Generation	--	5506.38
				Sale	--	5323.23
				Disposal/Reuse	--	152
19	Process residue (Zinc Dross)	I	7.2	Generation	--	0
				Sale	--	0
				Disposal/Reuse	--	0
20	Process Residues and Wastes (Geothite Cake)	I	7.2	Generation	--	7095.4
				Sale	--	0
				Disposal/Reuse	--	7095.4

2. From pollution Control facilities

S. No	Type of Hazardous Waste	Category		Generation/ Sale/Disposal	2023- 2024	2024- 2025
		Sch	Code		MTA	MTA
1	Non-Ferrous Sludge from ETP and scrubbers (ETP Sludge)	I	7.4	Generation	12973.09	14869.54
				Sale	302.89	0
				Disposal/Reuse	12670.20	14869.54
2	Water Purification Resin	I	34.2	Generation	0	0
				Sale	0	0
				Disposal/Reuse	0	0
3	Exhaust Air or Gas cleaning residue	I	35.1	Generation	0	0
				Sale	0	0
				Disposal/Reuse	0	0
4	Spent ion exchange resin containing toxic metals	I	35.2	Generation	0	0
				Sale	0	0
				Disposal/Reuse	0	0
5	Ash from incinerator and flue gas cleaning residues (bag filters)	I	37.2	Generation	1.50	1.53
				Sale	0	0
				Disposal/Reuse	1.50	1.53
6	MEE Salt	I	37.3	Generation	--	1897.33
				Sale	--	0
				Disposal/Reuse	--	1897.33

PART – E

SOLID WASTE

S.No	Type of Non- Hazardous Waste	Category	Generation/ Sale/Disposal	2023-2024	2024-2025
				MTA	MTA
1	Jarofix	Non- Hazardous	Generation	390213	397072
			Sale (in Highway)	80417	282580

2	ISF Slag	Sale (JS in Cement)	24564	25939
		Disposal/Reuse	390213	397072
		Generation	71976.03	93558.50
		Sale	21296.32	84891.88
3	Ausmelt Slag	Disposal/Reuse	4163.00	5267.76
		Generation	28361.94	30855.90
		Sale	2702.16	49488.33
		Disposal/Reuse	43983.33	38558.28
4	Fly Ash	Generation	201208.75	260080.09
		Sale	201208.75	260080.09
		Disposal/Reuse	0.00	0.00
		Generation	75468.56	69349.77
5	Bottom Ash	Sale	75468.56	53809.96
		Disposal/Reuse	0.00	0.00

PART – F

(Please specify the characteristics, in terms of composition and quantum of Hazardous waste and solid waste and indicate disposal practice for both of these categories of wastes)

• Hazardous waste:

S. No.	Type of Hazardous waste	Chemical characteristics	Category		Hazardous Waste
			Sch	Code	Disposal Practice
1	Spent catalyst	V ₂ O ₅ - 3-4%	I	17.2	SLF/Sold to registered recycler
2	Anode Mud	Zn – 0.3 - 1 % Pb – 2.5 -5 % Mg – 42-45 %	I	7.2	SLF/Sold to registered recycler
3	Antimony Dross	—	I	7.2	SLF/Sold to registered recycler
4	Cobalt cake	Zn-30-35% Pb-0.2-0.3%	I	7.2	SLF/Sold to registered recycler
5	Cooler cake	Zn-0.5-0.6% Pb-0.05-0.06 %	I	7.2	SLF/Sold to registered recycler
6	Copper bearing lead residue/process residue	—	I	7.2	SLF/Sold to registered recycler
7	Enrichment cake	Zn-20-25 % Cd-35-50% Cu-5-10%	I	7.2	SLF/Sold to registered recycler
8	HGP Dust	—	I	7.2	SLF/Sold to registered recycler

9	Purification Cake	Zn-20-25 % Cd-35-50% Cu-5-10%	I	7.2	SLF/Sold to registered recycler
10	Non-Ferrous Sludge from ETP and scrubbers	—	I	7.4	SLF/Sold to registered recycler
11	Mercury and Mercury compounds	—	II	A6	SLF/Sold to registered recycler
12	Zinc Dross/Zinc Ash/Zinc Skimming/Zinc Scrap/Zinc Residue	—	IV	...	Used as raw material
13	Empty barrels/containers contaminated with hazardous chemicals/wastes	—	I	33.1	SLF/Sold to registered recycler
14	Water Purification Resin	—	I	34.2	SLF/Sold to registered recycler
15	Exhaust Air or Gas cleaning residue	—	I	35.1	Approved Incinerator
16	Spent ion exchange resin containing Toxic metals	—	I	35.2	SLF/Sold to registered recycler
17	Ash from incinerator and flue gas cleaning residues	—	I	37.2	SLF/Sold to registered recycler
18	Used or spent oil	—	I	5.1	Sold To registered recycler
19	Waste Oil	—	I	5.2	Sold To registered recycler

• Solid waste:

S. No.	Type of Non- Hazardous Waste	Chemical characteristics	Disposal Practice
1	Jarofix	Zn-3-5 % Pb- 1-2 % Fe- 22-28 %	Utilization in cement industries and highways project/Disposed off to Jarofix yard landfill
2	ISF Slag	SiO ₂ - 18.08 % Fe ₂ O ₃ - 34.28 % Al ₂ O ₃ - 8.17 %	Utilization in cement industries and highways project/Reuse in process
3	Ausmelt Slag	—	Reuse in process
4	Fly Ash	—	Utilization in cement industries
5	Bottom Ash	—	Utilization in cement industries/Brick manufacturing industries

Part –G

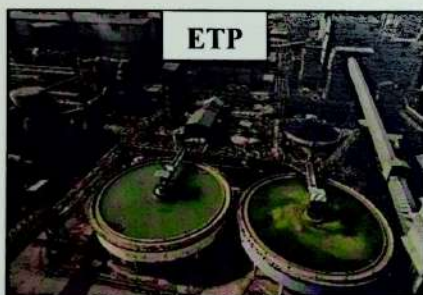
Impact of the pollution abetment measures taken on conservation of Natural resources and on the cost of production

1. Water Conservation

- Reduced freshwater usage through recycling (ETP, RO, MVR).
- Zero Liquid Discharge ensures no water pollution.
- STP reuse supports sustainable gardening.
- Leak prevention & monitoring conserves water effectively.
- Utilization of Chittorgarh STP treated water in CPP significantly reduces freshwater consumption in power generation processes, promoting sustainable resource use.

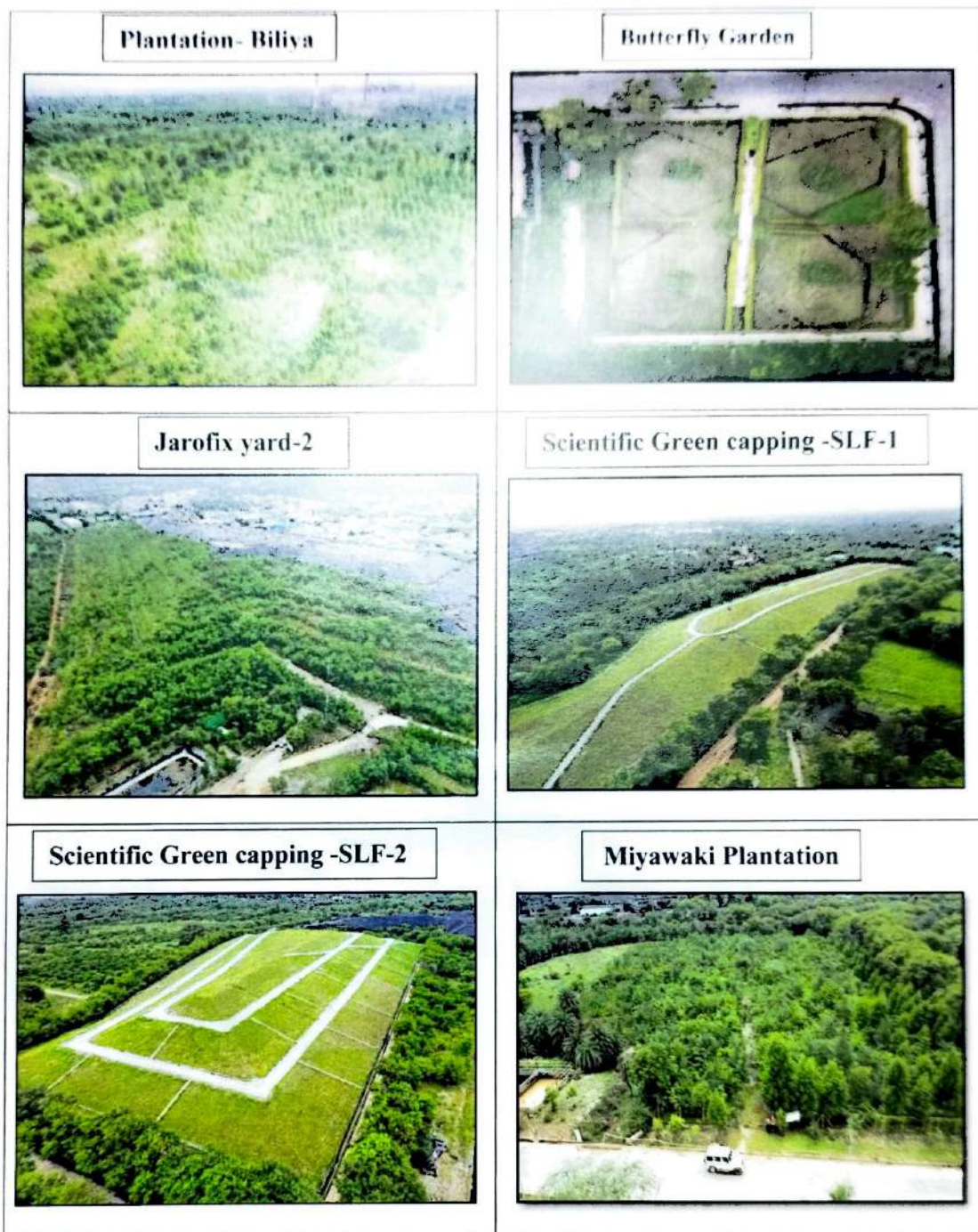
Impact on Cost of Production

- Lower water procurement costs due to reuse.
- Reduced maintenance and repair costs via preventive actions.
- Avoidance of regulatory penalties through compliance.
- Improved efficiency with real-time water quality monitoring.



2. To Maintain Ecological Balance

- **Green Cover:** Over 37% green cover maintained across CLZS plant and newly acquired land.
- **Green Belt Development:** Initiatives include Jarofix Yard-2 and scientific green capping of secured landfills.
- **Maintenance:** Dedicated team ensures upkeep of greenery and biodiversity.
- **Awareness Programs:** Conducted for employees and families on International Biodiversity Day and World Environment Day.
- **Habitat Preservation:** Dense greenery and preservation of trees/shrubs support local fauna.



3. Air Quality Management

A. Control of Fugitive Emissions

- Regular sprinkling of water across dust-prone areas.
- Deployment of heavy-duty vacuum cleaners to minimize airborne particulate matter.

B. Green Belt Development

- Avenue plantation along roads and open areas to reduce dust emissions from vehicular movement and improve microclimate.

C. Emission Monitoring & Control

- Installation of online analyzers for continuous monitoring of SO_x, NO_x, and PM.
- These analyzers are connected to the Pollution Control Board (PCB) server for real-time data sharing.

- Interlock systems are in place for Pollution Control Devices (PCDs) to ensure automatic shutdown in case of malfunction.

D. Efficient Operation of Pollution Control Equipment

- Use of Bag Filters, Electrostatic Precipitators (ESPs), and Venturi Scrubbers to capture and neutralize pollutants.
- All equipment is maintained and operated efficiently to ensure compliance with emission norms.

E. Ambient Air Quality Monitoring

- Continuous Ambient Air Quality Monitoring Stations (CAAQMS) are installed on-site.
- These stations provide real-time data on ambient air quality, supporting proactive environmental management.

Tail Gas Treatment Plant**Double Conversion Double Absorption Acid (DCDA)****Road Sweeping by Vacuum Road Sweeper**

CAAQMS



PART – H

Additional measures/investment for environmental protection including abatement of pollution**1. Organic Waste Management**

- Organic Waste Converter (OWC) is regularly operated at the CLZS plant.
- Kitchen waste is processed to produce nutrient-rich manure, promoting circular waste utilization.

2. Industrial Waste Utilization

- Jarosite and Slag are supplied to cement industries for use as raw materials.
- Jarofix and Slag are gainfully utilized in highway construction projects, contributing to sustainable infrastructure development.

PART – I

Any other information on Environmental Protection and Pollution Control

- **Sustainability Governance:** ESG Committee formed to drive HZL Sustainability Goals 2025.
- **Awareness & Engagement:** Mass plantation drive conducted on World Environment Day at CLZS site.
Interaction with school students to promote environmental awareness.
Fort cleaning activity to preserve heritage and promote cleanliness.
- **Global Commitment:** Achieved ICMM membership, reinforcing commitment to responsible mining and sustainability.

Mass Plantation on World Environment Day



Mass Plantation on World Environment Day



Bird house painting competition



Bird house painting competition



Fort Cleaning Activity



Mission Hariyalo Rajasthan



Poster Making Competition



Awareness Session on Biodiversity Day



ICMM Panel visit



Plantation by CEO in Hydro-1 Garden



Plantation in Govt. Polytechnic college



Awareness Session on Ozone Day



ANNEXURE -I

TREATED WATER from ETP OUTLET Sample					Quarterly Monitoring - Apr'2024 to Jun'2024						
Name of Institute	MoEF Approved	Report No.	Date of Collection	Date of Test	Point of Collection	S.No.	Parameters/ Unit	Observed Value [Pyro ETP Outlet]	Observed Value [Hydro ETP Outlet]	Testing Protocol	Limits as per ENV. Protection Rules.1986
EKO PRO ENG	YES	EKO/E-539/290624-A EKO/E-540/290624-A	26/06/2024	06/07/2024	ETP Outlet	1	Total Suspended Solids [mg/l]	54	57	IS 3025 (Part 47), 2019	100
						2	Ammonical Nitrogen [mg/l]	< 1.0	< 1.0	IS 3025 (Part 24), 2019	50
						3	BOD [mg/l]	22.00	20.00	IS 3025 (Part 49), 2019	30
						4	Chloride [mg/l]	82.4	83.7	IS 3025 (Part 16), 2017	1000
						5	COD [mg/l]	128.6	118.9	IS 3025 (Part 41), 2019	250
						6	Cyanide [mg/l]	Absent	Absent	IS 3025 (Part 27), 2019	0.2
						7	Fluoride [mg/l]	0.71	0.84	APHA 2017 : 4500-F-D	2
						8	pH	7.29	7.35	IS 3025 (Part 11), 2017	5.5 - 9.0
						9	Phosphate (total) [mg/l]	0.74	0.82	IS 3025 (Part 31), 2019	5
						10	Sulphate [mg/l]	148.20	140.50	IS 3025 (Part 24), 2019	1000
						11	Cadmium [mg/l]	< 0.001	< 0.001	IS 3025 (Part 41), 2019	2
						12	Chromium Total [mg/l]	< 0.005	< 0.005	IS 3025 (Part 52), 2019	2
						13	Copper [mg/l]	0.052	0.053	IS 3025 (Part 42), 2019	1
						14	Iron [mg/l]	0.25	0.41	IS 3025 (Part 53), 2019	1
						15	Lead [mg/l]	< 0.005	< 0.005	IS 3025 (Part 47), 2019	0.1
						16	Nickel [mg/l]	< 0.01	< 0.01	IS 3025 (Part 54), 2019	3
						17	Zinc [mg/l]	0.42	0.57	IS 3025 (Part 49), 2019	1
						18	Oil and Grease [mg/l]	< 4.0	< 4.0	IS 3025 (Part 21), 2019	10
						19	Total Residual Chlorine [mg/l]	0.3	0.4	IS 3025 (Part 32), 2019	1
						20	Hexavalent Chromium	< 0.05	< 0.05	IS 3025 (Part 52), 2019	0.1
						21	Nitrate [mg/l]	4.92	4.92	IS 3025 (Part 34), 2019	10

TREATED WATER from ETP OUTLET Sample					Quarterly Monitoring - Jul'2024 to Sep'2024						
Name of Institute	MoEF Approved	Report No.	Date of Collection	Date of Test	Point of Collection	S.No.	Parameters/ Unit	Observed Value [Pyro ETP Outlet]	Observed Value [Hydro ETP Outlet]	Testing Protocol	Limits as per ENV. Protection Rules.1986
EKO PRO ENG	YES	EKO/E-552/130824-A EKO/E-553/130824-A	10/09/2024	16/09/2024	ETP Outlet	1	Total Suspended Solids [mg/l]	56	59	IS.3025 (Part 47), 2019	100
						2	Ammonical Nitrogen [mg/l]	< 1.0	< 1.0	IS.3025 (Part 24), 2019	50
						3	BOD [mg/l]	21.00	19.00	IS.3025 (Part 49), 2019	30
						4	Chloride [mg/l]	85.5	80.2	IS.3025 (Part 16), 2017	1000
						5	COD [mg/l]	125.5	115.5	IS.3025 (Part 41), 2019	250
						6	Cyanide [mg/l]	Absent	Absent	IS.3025 (Part 27), 2019	0.2
						7	Fluoride [mg/l]	0.75	0.81	APHA 2017 : 4500-F-D	2
						8	pH	7.23	7.32	IS.3025 (Part 11), 2017	5.5 - 9.0
						9	Phosphate (total) [mg/l]	0.78	0.85	IS.3025 (Part 31), 2019	5
						10	Sulphate [mg/l]	151.20	145.50	IS.3025 (Part 24), 2019	1000
						11	Cadmium [mg/l]	< 0.001	< 0.001	IS.3025 (Part 41), 2019	2
						12	Chromium Total [mg/l]	< 0.005	< 0.005	IS.3025 (Part 52), 2019	2
						13	Copper [mg/l]	0.056	0.056	IS.3025 (Part 42), 2019	1
						14	Iron [mg/l]	0.26	0.49	IS.3025 (Part 53), 2019	1
						15	Lead [mg/l]	< 0.005	< 0.005	IS.3025 (Part 47), 2019	0.1
						16	Nickel [mg/l]	< 0.01	< 0.01	IS.3025 (Part 54), 2019	3
						17	Zinc [mg/l]	0.45	0.61	IS.3025 (Part 49), 2019	1
						18	Oil and Grease [mg/l]	< 4.0	< 4.0	IS.3025 (Part 21), 2019	10
						19	Total Residual Chlorine [mg/l]	0.4	0.5	IS.3025 (Part 32), 2019	1
						20	Hexavalent Chromium [mg/l]	< 0.05	< 0.05	IS.3025 (Part 52), 2019	0.1
						21	Nitrate [mg/l]	5.06	5.03	IS.3025 (Part 34), 2019	10

TREATED WATER from ETP OUTLET Sample					Quarterly Monitoring - Oct'2024 to Dec'2024						
Name of Institute	MoEF Approved	Report No.	Date of Collection	Date of Test	Point of Collection	S.No.	Parameters/ Unit	Observed Value [Pyro ETP Outlet]	Observed Value [Hydro ETP Outlet]	Testing Protocol	Limits as per ENV. Protection Rules.1986
EKO PRO ENG	YES	EKO/E-592/191224-A EKO/E-591/191224-A	18/12/2024	23/12/2024	ETP Outlet	1	Total Suspended Solids [mg/l]	58	57	IS 3025 (Part 47), 2019	100
						2	Ammonical Nitrogen [mg/l]	< 1.0	< 1.0	IS 3025 (Part 24), 2019	50
						3	BOD [mg/l]	20.00	21.00	IS 3025 (Part 49), 2019	30
						4	Chloride [mg/l]	82.6	78.5	IS 3025 (Part 16), 2017	1000
						5	COD [mg/l]	122.6	120.5	IS 3025 (Part 41), 2019	250
						6	Cyanide [mg/l]	Absent	Absent	IS 3025 (Part 27), 2019	0.2
						7	Fluoride [mg/l]	0.73	0.85	APHA 2017 : 4500-F-D	2
						8	pH	7.36	7.29	IS 3025 (Part 11), 2017	5.5 - 9.0
						9	Phosphate (total) [mg/l]	0.75	0.82	IS 3025 (Part 31), 2019	5
						10	Sulphate [mg/l]	156.50	140.20	IS 3025 (Part 24), 2019	1000
						11	Cadmium [mg/l]	< 0.001	< 0.001	IS 3025 (Part 41), 2019	2
						12	Chromium Total [mg/l]	< 0.005	< 0.005	IS 3025 (Part 52), 2019	2
						13	Copper [mg/l]	0.052	0.062	IS 3025 (Part 42), 2019	1
						14	Iron [mg/l]	0.31	0.51	IS 3025 (Part 53), 2019	1
						15	Lead [mg/l]	< 0.005	< 0.005	IS 3025 (Part 47), 2019	0.1
						16	Nickel [mg/l]	< 0.01	< 0.01	IS 3025 (Part 54), 2019	3
						17	Zinc [mg/l]	0.51	0.68	IS 3025 (Part 49), 2019	1
						18	Oil and Grease [mg/l]	< 4.0	< 4.0	IS 3025 (Part 21), 2019	10
						19	Total Residual Chlorine [mg/l]	0.4	0.5	IS 3025 (Part 32), 2019	1
						20	Hexavalent Chromium [mg/l]	< 0.05	< 0.05	IS 3025 (Part 52), 2019	0.1
						21	Nitrate [mg/l]	4.96	4.95	IS 3025 (Part 34), 2019	10

TREATED WATER from ETP OUTLET Sample					Quarterly Monitoring - Jan'2025 to Mar'2025						
Name of Institute	MoEF Approved	Report No.	Date of Collection	Date of Test	Point of Collection	S.No.	Parameters/ Unit	Observed Value [Pyro ETP Outlet]	Observed Value [Hydro ETP Outlet]	Testing Protocol	Limits as per ENV. Protection Rules.1986
SCS ENVIRO SER	YES	SCS/HZL-CLZS/WW/20220920/56 SCS/HZL-CLZS/WW/20220920/57	19/03/2025	31/03/2025	ETP Outlet	1	Total Suspended Solids [mg/l]	15	10	APHA (24 Edition) 2540 D	100
						2	Ammonical Nitrogen [mg/l]	6.2	5.4	APHA (24 Edition) 2500 NH3B	50
						3	BOD [mg/l]	9.00	6.00	IS:3025 (Part 44), 2019	30
						4	Chloride [mg/l]	173.9	313.9	APHA (24 Edition) 4500 CL B	1000
						5	COD [mg/l]	40	20	APHA (24 Edition) 5220 B	250
						6	Cyanide [mg/l]	< 0.02	< 0.02	APHA (24 Edition) 4500CN-C&E	0.2
						7	Fluoride [mg/l]	0.8	0.57	APHA (24 Edition) 4500 F D	2
						8	pH	7.92	7.93	APHA (24 Edition) 4500 H	6.5 - 8.5
						9	Phosphate (total) [mg/l]	< 0.50	< 0.50	APHA (24 Edition) 4500 P C	5
						10	Sulphate [mg/l]	496.70	562.30	APHA (24 Edition) 4500 E	1000
						11	Cadmium [mg/l]	< 0.01	< 0.01	APHA (24 Edition) 3111 B	2
						12	Chromium Total [mg/l]	< 0.01	< 0.01	APHA (24 Edition) 3111 B	2
						13	Copper [mg/l]	< 0.01	< 0.01	APHA (24 Edition) 3111 B	1
						14	Iron [mg/l]	< 0.01	< 0.01	APHA (24 Edition) 3111 B	1
						15	Lead [mg/l]	< 0.01	< 0.01	APHA (24 Edition) 3111 B	0.1
						16	Nickel [mg/l]	< 0.01	< 0.01	APHA (24 Edition) 3111 B	3
						17	Zinc [mg/l]	0.35	0.42	APHA (24 Edition) 3111 B	1
						18	Oil and Grease [mg/l]	< 5.0	< 5.0	APHA (24 Edition) 5520 B	10
						19	Total Residual Chlorine [mg/l]	< 0.2	< 0.2	APHA (24 Edition) 4500 B	0.5
						20	Hexavalent Chromium [mg/l]	< 0.01	< 0.01	APHA (24 Edition) 3500 B	0.1
						21	Nitrate [mg/l]	7.4	6.3	APHA (24 Edition) 4500 B	50
						22	Total Coliform	Absent	Absent	IS 15185	Not More than 10 ⁶ per 100 ml

ANNEXURE-II

TREATED WATER from STP OUTLET Sample					Quarterly Monitoring - Apr'24 to Jun'24						
Name of Institute	MoEF Approved	Report No.	Date of Collection	Date of Test	Point of Collection	S.No.	Parameters/ Unit	Observed Value (Plant STP)	Observed Value (Colony STP)	Testing Protocol	Limits as per ENV. Protection Rules.1986
EKO PRO ENG.	YES	EKO/E-537/290624 EKO/E-538/290624	26/06/2024	06/07/2024	STP Outlet	1	Total Suspended Solids [mg/l]	18	17	IS:3025 (Part 17), 2019	20
						2	Ammonical Nitrogen [mg/l]	< 1.0	< 1.0	APHA 4500 NH3 C	5
						3	BOD [mg/l]	9.20	8.90	IS:3025 (Part 44), 2019	10
						4	Chloride [mg/l]	63.2	50.2	IS:3025 (Part 32), 2017	1000
						5	COD [mg/l]	45.2	39.6	IS:3025 (Part 58), 2019	50
						6	Fluoride [mg/l]	0.58	0.54	APHA, 2017 4500-F-D	2
						7	pH	7.19	7.25	IS:3025 (Part 11), 2017	6.5 - 9.0
						8	Phosphate (total) [mg/l]	0.84	0.75	IS:3025 (Part 31), 2019	5
						9	Sulphate [mg/l]	115.80	115.80	IS:3025 (Part 24), 2019	1000
						10	Sulphides [mg/l]	< 1.0	< 1.0	IS:3025 (Part 29), 2019	2
						11	Oil and Grease [mg/l]	< 4.0	< 4.0	IS:3025 (Part 39), 2019	10
						12	Total Residual Chlorine [mg/l]	< 1.0	< 1.0	IS:3025 (Part 26), 2019	1
						13	Nitrate [mg/l]	2.61	2.14	IS:3025 (Part 34), 2019	50
						14	Total Nitrogen	5.65	4.64	IS:3025 (Part 34), 2019	10
						15	Fecal Coliform (MPN Per 100ml)	80	70	APHA 9221(E)	100

TREATED WATER from STP OUTLET Sample					Quarterly Monitoring - Jul'24 to Sep'24						
Name of Institute	MoEF Approved	Report No.	Date of Collection	Date of Test	Point of Collection	S.No.	Parameters/ Unit	Observed Value (Plant STP)	Observed Value (Colony STP)	Testing Protocol	Limits as per ENV. Protection Rules.1986
EKO PRO ENG.	YES	EKO/E-554/130924 EKO/E-538/060924	10/09/2024	16/09/2024	STP Outlet	1	Total Suspended Solids [mg/l]	17	18	IS 3025 (Part 17), 2019	20
						2	Ammonical Nitrogen [mg/l]	< 1.0	< 1.0	APHA 4500 NH3 C	5
						3	BOD [mg/l]	8.90	9.10	IS 3025 (Part 44), 2019	10
						4	Chloride [mg/l]	61.4	52.5	IS 3025 (Part 32), 2017	1000
						5	COD [mg/l]	42.6	41.5	IS 3025 (Part 58), 2019	50
						6	Fluoride [mg/l]	0.53	0.56	APHA 2017 : 4500-F-D	2
						7	pH	7.23	7.31	IS 3025 (Part 11), 2017	6.5 - 9.0
						8	Phosphate (total) [mg/l]	0.82	0.71	IS 3025 (Part 31), 2019	5
						9	Sulphate [mg/l]	118.50	118.90	IS 3025 (Part 24), 2019	1000
						10	Sulphides [mg/l]	< 1.0	< 1.0	IS 3025 (Part 29), 2019	2
						11	Oil and Grease [mg/l]	< 4.0	< 4.0	IS 3025 (Part 39), 2019	10
						12	Total Residual Chlorine [mg/l]	< 1.0	< 1.0	IS 3025 (Part 26), 2019	1
						13	Nitrate [mg/l]	2.65	2.56	IS 3025 (Part 34), 2019	50
						14	Total Nitrogen [mg/l]	5.61	4.59	IS 3025 (Part 34), 2019	10
						15	Fecal Coliform (MPN Per 100ml)	70	80	APHA 9221(E)	100

TREATED WATER from STP OUTLET Sample					Quarterly Monitoring - Oct'24 to Dec'24						
Name of Institute	MoEF Approved	Report No.	Date of Collection	Date of Test	Point of Collection	S.No.	Parameters/ Unit	Observed Value (Plant STP)	Observed Value (Colony STP)	Testing Protocol	Limits as per ENV. Protection Rules,1986
EKO PRO ENG.	YES	EKO/E-589/191224 EKO/E-590/191224	18/12/2024	23/12/2024	STP Outlet	1	Total Suspended Solids [mg/l]	18	16	IS:3025 (Part 17), 2019	20
						2	Ammonical Nitrogen [mg/l]	< 1.0	< 1.0	APHA 4500 NH3 C	5
						3	BOD [mg/l]	9.20	9.30	IS:3025 (Part 44), 2019	10
						4	Chloride [mg/l]	60	50	IS:3025 (Part 32), 2017	1000
						5	COD [mg/l]	42.5	38.5	IS:3025 (Part 58), 2019	50
						6	Fluoride [mg/l]	0.48	0.56	APHA 2017 : 4500-F-D	2
						7	pH	7.19	7.22	IS:3025 (Part 11), 2017	6.5 - 9.0
						8	Phosphate (total) [mg/l]	0.7	0.79	IS:3025 (Part 31), 2019	5
						9	Sulphate [mg/l]	115.00	112.50	IS:3025 (Part 24), 2019	1000
						10	Sulphides [mg/l]	< 1.0	< 1.0	IS:3025 (Part 29), 2019	2
						11	Oil and Grease [mg/l]	< 4.0	< 4.0	IS:3025 (Part 39), 2019	10
						12	Total Residual Chlorine [mg/l]	< 1.0	< 1.0	IS:3025 (Part 26), 2019	1
						13	Nitrate [mg/l]	2.56	2.15	IS:3025 (Part 34), 2019	50
						14	Total Nitrogen	5.52	4.23	IS:3025 (Part 34), 2019	10
						15	Fecal Coliform (MPN Per 100ml)	80	70	APHA 9221(E)	100

TREATED WATER from STP OUTLET Sample					Quarterly Monitoring - Jan'25 to Mar'25						
Name of Institute	MoEF Approved	Report No.	Date of Collection	Date of Test	Point of Collection	S.No.	Parameters/ Unit	Observed Value (Plant STP)	Observed Value (Colony STP)	Testing Protocol	Limits as per ENV. Protection Rules.1986
SCS ENVIRO SER	YES	SCS/CLZS/WWW/2025 0301/15 SCS/CLZS/WWW/2025 0301/16	01/03/2025	12/03/2025	STP Outlet	1	Total Suspended Solids [mg/l]	24	7	APHA (24 Edition) 2540 D	20
						2	Ammonical Nitrogen [mg/l]	< 5.0	< 5.0	APHA (24 Edition) 4500 NH3B	5
						3	BOD [mg/l]	18.00	14.00	IS.3025 (Part 44), 2019	10
						4	Chloride [mg/l]	113.9	131.9	APHA (24 Edition) 4500 CL B	1000
						5	COD [mg/l]	140	60	APHA (24 Edition) 5220 B	50
						6	Fluoride [mg/l]	0.49	0.55	APHA (24 Edition) 4500 F D	2
						7	pH	7.48	7.71	APHA (24 Edition) 4500 H	6.5 - 9.0
						8	Phosphate (total) [mg/l]	0.6	0.7	APHA (24 Edition) 4500 P D	5
						9	Sulphate [mg/l]	41.70	66.30	APHA (24 Edition) 4500 E	1000
						10	Sulphides [mg/l]	< 0.50	< 0.50	APHA (24 Edition) 4500 S 2 F	2
						11	Oil and Grease [mg/l]	< 5.0	< 5.0	APHA (24 Edition) 5520 B	10
						12	Total Residual Chlorine [mg/l]	< 0.1	< 0.1	APHA (24 Edition) 4500 CL- B	1
						13	Nitrate [mg/l]	6.3	6.8	APHA (24 Edition) 4500 B	50
						14	Total Nitrogen	6.9	7.2	APHA (24 Edition) 4500 NH3B	10
						15	Fecal Coliform (MPN Per 100ml)	Absent	Absent	IS 15185	100

7	YES	EKO/E-643/240624	22/06/2024	06/07/2024	Crusher Venturi	Particular Matter (PM)	IS 11255 (Part-1)2019	37.4	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.08	mg/Nm ³	10 (Max.)
8	YES	Plant under Shut down			CRP Milling	Particular Matter (PM)	IS 11255 (Part-1)2019	NA	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988		mg/Nm ³	10 (Max.)
9	YES	Plant under Shut down			ZRP Main	Particular Matter (PM)	IS 11255 (Part-1)2019	NA	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988		mg/Nm ³	-
10	YES	Plant under Shut down			ZRP Fume	Particular Matter (PM)	IS 11255 (Part-1)2019	NA	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988		mg/Nm ³	-

AUSMELT (PM & Pb) Stock Report			Stack Emission Level				Quarterly Monitoring Apr'2024 to Jun'2024				
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-522/290624	27/06/2024	06/07/2024	RMH	Particular Matter (PM)	IS 11255 (Part-1)2019	29.3	mg/Nm ³	50 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.16	mg/Nm ³	10 (Max.)
2		YES	EKO/E-523/290624	27/06/2024	06/07/2024	Hygiene	Particular Matter (PM)	IS 11255 (Part-1)2019	27.3	mg/Nm ³	50 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.24	mg/Nm ³	10 (Max.)

HYDRO - 1 (PM) Stock Report			Stack Emission Level				Quarterly Monitoring Apr'2024 to Jun'2024				
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-530/290624	25/06/2024	06/07/2024	Zinc Melting & Casting - 1	Particular Matter (PM)	IS 11255 (Part-1)2019	21.4	mg/Nm ³	30 (Max.)
2		YES	EKO/E-531/290624	25/06/2024	06/07/2024	Zinc Melting & Casting - 2	Particular Matter (PM)	IS 11255 (Part-1)2019	21.9	mg/Nm ³	30 (Max.)
3		YES	EKO/E-532/290624	25/06/2024	06/07/2024	Zinc Dross	Particular Matter (PM)	IS 11255 (Part-1)2019	18.7	mg/Nm ³	30 (Max.)
4		YES	EKO/E-533/290624	25/06/2024	06/07/2024	Zinc Dust	Particular Matter (PM)	IS 11255 (Part-1)2019	20.60	mg/Nm ³	30 (Max.)
5		YES	EKO/E-644/240624	20/06/2024	06/07/2024	Preheater Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	19.8	mg/Nm ³	30 (Max.)
6		YES	EKO/E-645/240624	20/06/2024	06/07/2024	Roaster start up stack	Particular Matter (PM)	IS 11255 (Part-1)2019	18.9	mg/Nm ³	30 (Max.)

HYDRO - 2 (PM) Stack Report			Stack Emission Level					Quarterly Monitoring Apr'2024 to Jun'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-646/240624	21/06/2024	06/07/2024	Zinc Melting & Casting - 1	Particular Matter (PM)	IS 11255 (Part-1)2019	20.6	mg/Nm ³	30 (Max.)
2		YES	EKO/E-647/240624	21/06/2024	06/07/2024	Zinc Melting & Casting - 2	Particular Matter (PM)	IS 11255 (Part-1)2019	18.8	mg/Nm ³	30 (Max.)
3		YES	EKO/E-648/240624	21/06/2024	06/07/2024	Zinc Dross	Particular Matter (PM)	IS 11255 (Part-1)2019	22.3	mg/Nm ³	30 (Max.)
4		YES	EKO/E-649/240624	21/06/2024	06/07/2024	Zinc Dust	Particular Matter (PM)	IS 11255 (Part-1)2019	19.2	mg/Nm ³	30 (Max.)
5		YES	EKO/E-650/240624	21/06/2024	06/07/2024	Preheater Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	20.9	mg/Nm ³	30 (Max.)
6		YES	EKO/E-651/240624	21/06/2024	06/07/2024	Roaster start up stack	Particular Matter (PM)	IS 11255 (Part-1)2019	19.3	mg/Nm ³	30 (Max.)

CPP Stack Report			Stack Emission Level					Quarterly Monitoring Apr'2024 to Jun'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-534/290624-A	28/06/2024	06/07/2024	CPP Unit - 1 & 2	Particular Matter (PM)	IS 11255 (Part-1)2019	37.10	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	349.8	mg/Nm ³	450
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	930.8	mg/Nm ³	600
							Mercury	US EPA Method - 29:2017	<0.01	mg/Nm ³	0.03
2		YES	EKO/E-535/290624-A	28/06/2024	06/07/2024	CPP Unit - 3	Particular Matter (PM)	IS 11255 (Part-1)2019	29.30	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	360.8	mg/Nm ³	450
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	970.4	mg/Nm ³	600
							Mercury	US EPA Method - 29:2017	<0.01	mg/Nm ³	0.03
3		YES	EKO/E-536/290624	28/06/2024	06/07/2024	Coal Crusher Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	26.90	mg/Nm ³	50 (Max.)

Acid Plant Stack report (All Units)			Stack Emission Level					Quarterly Monitoring Jul'2024 to Sep'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-573/090924	06/09/2024	16/09/2024	PYRO Acid plant (TGT) Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	79.60	ppm	224 (Max.) (2 kg/ton)
2		YES	EKO/E-529/060924	02/09/2024	16/09/2024	Ausmelt Cansolve Acid Stack	Acid Mist	USEPA Method 8 2017	18.5	mg/Nm ³	50
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	89.3	ppm	111 (Max.) (1 kg/ton)
							Acid Mist	USEPA Method 8 2017	20.5	mg/Nm ³	30
3		YES	EKO/E-577/090924	06/09/2024	16/09/2024	Hydro - 1 Acid Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	75.2	ppm	135 (Max.) (1 kg/ton)
							Acid Mist	USEPA Method 8 2017	16.9	mg/Nm ³	30
4		YES	EKO/E-578/090924	06/09/2024	16/09/2024	Hydro - 2 Acid Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	68.5	ppm	135 (Max.) (1 kg/ton)
							Acid Mist	USEPA Method 8 2017	12.3	mg/Nm ³	30

PYRO (PM & Pb) Stack Report			Stack Emission Level					Quarterly Monitoring Jul'2024 to Sep'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-526/060924	03/09/2024	16/09/2024	ISF Slagging	Particular Matter (PM)	IS 11255 (Part-1)2019	32.5	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.06	mg/Nm ³	10 (Max.)
2		YES	EKO/E-527/060924	03/09/2024	16/09/2024	LRP Copper Drossing	Particular Matter (PM)	IS 11255 (Part-1)2019	35.2	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.26	mg/Nm ³	10 (Max.)
3		YES	EKO/E-528/060924	03/09/2024	16/09/2024	LRP Main	Particular Matter (PM)	IS 11255 (Part-1)2019	37.6	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	1.55	mg/Nm ³	10 (Max.)
4		YES	EKO/E-522/060924	04/09/2024	16/09/2024	Sinter Main	Particular Matter (PM)	IS 11255 (Part-1)2019	34.2	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.26	mg/Nm ³	10 (Max.)
5		YES	EKO/E-523/060924	04/09/2024	16/09/2024	Sinter Venturi	Particular Matter (PM)	IS 11255 (Part-1)2019	35.9	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.84	mg/Nm ³	10 (Max.)
6		YES	EKO/E-524/060924	04/09/2024	16/09/2024	Crusher Main	Particular Matter (PM)	IS 11255 (Part-1)2019	36.10	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.98	mg/Nm ³	10 (Max.)

7	YES	EKO/E-525/060924	04/09/2024	16/09/2024	Crusher Venturi	Particular Matter (PM)	IS 11255 (Part-1)2019	36.5	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988	1.98	mg/Nm ³	10 (Max.)
8	YES	Plant under Shut down			CRP Milling	Particular Matter (PM)	IS 11255 (Part-1)2019	NA	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988		mg/Nm ³	10 (Max.)
9	YES	Plant under Shut down			ZRP Main	Particular Matter (PM)	IS 11255 (Part-1)2019	NA	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988		mg/Nm ³	-
10	YES	Plant under Shut down			ZRP Fume	Particular Matter (PM)	IS 11255 (Part-1)2019	NA	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988		mg/Nm ³	-

AUSMELT (PM & Pb) Stack Report			Stack Emission Level				Quarterly Monitoring Jul'2024 to Sep'2024				
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-530/060924	02/09/2024	16/09/2024	RMH	Particular Matter (PM)	IS 11255 (Part-1)2019	28.3	mg/Nm ³	30 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.13	mg/Nm ³	10 (Max.)
2		YES	EKO/E-531/060924	02/09/2024	16/09/2024	Hygiene	Particular Matter (PM)	IS 11255 (Part-1)2019	28.5	mg/Nm ³	30 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.32	mg/Nm ³	10 (Max.)

HYDRO - 1 (PM) Stack Report			Stack Emission Level				Quarterly Monitoring Jul'2024 to Sep'2024				
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-533/060924	04/09/2024	16/09/2024	Zinc Melting & Casting - 1	Particular Matter (PM)	IS 11255 (Part-1)2019	20.7	mg/Nm ³	30 (Max.)
2		YES	EKO/E-534/060924	04/09/2024	16/09/2024	Zinc Melting & Casting - 2	Particular Matter (PM)	IS 11255 (Part-1)2019	20.4	mg/Nm ³	30 (Max.)
3		YES	EKO/E-535/060924	04/09/2024	16/09/2024	Zinc Dross	Particular Matter (PM)	IS 11255 (Part-1)2019	17.6	mg/Nm ³	30 (Max.)
4		YES	EKO/E-536/060924	04/09/2024	16/09/2024	Zinc Dust	Particular Matter (PM)	IS 11255 (Part-1)2019	19.90	mg/Nm ³	30 (Max.)
5		YES	EKO/E-574/090924	06/09/2024	16/09/2024	Preheater Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	18.2	mg/Nm ³	30 (Max.)
6		YES	EKO/E-537/060924	04/09/2024	16/09/2024	Roaster start up stack	Particular Matter (PM)	IS 11255 (Part-1)2019	19.3	mg/Nm ³	30 (Max.)

HYDRO - 2 (PM) Stack Report				Stack Emission Level				Quarterly Monitoring Jul'2024 to Sep'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-548/130924	10/09/2024	16/09/2024	Zinc Melting & Casting - 1	Particular Matter (PM)	IS 11255 (Part-1)2019	19.8	mg/Nm ³	30 (Max.)
2		YES	EKO/E-549/130924	10/09/2024	16/09/2024	Zinc Melting & Casting - 2	Particular Matter (PM)	IS 11255 (Part-1)2019	19.2	mg/Nm ³	30 (Max.)
3		YES	EKO/E-550/130924	10/09/2024	16/09/2024	Zinc Dross	Particular Matter (PM)	IS 11255 (Part-1)2019	21.3	mg/Nm ³	30 (Max.)
4		YES	EKO/E-551/130924	10/09/2024	16/09/2024	Zinc Dust	Particular Matter (PM)	IS 11255 (Part-1)2019	18.6	mg/Nm ³	30 (Max.)
5		YES	EKO/E-575/090924	06/09/2024	16/09/2024	Preheater Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	19.6	mg/Nm ³	30 (Max.)
6		YES	EKO/E-576/090924	06/09/2024	16/09/2024	Roaster start up stack	Particular Matter (PM)	IS 11255 (Part-1)2019	18.8	mg/Nm ³	30 (Max.)

CPP Stack Report				Stack Emission Level				Quarterly Monitoring Jul'2024 to Sep'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-579/090924-A	06/09/2024	16/09/2024	CPP Unit - 1 & 2	Particular Matter (PM)	IS 11255 (Part-1)2019	36.20	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	342.5	mg/Nm ³	450
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	925.6	mg/Nm ³	600
2		YES	EKO/E-580/090924-A	06/09/2024	16/09/2024	CPP Unit - 3	Mercury	US EPA Method - 29:2017	<0.01	mg/Nm ³	0.03
							Particular Matter (PM)	IS 11255 (Part-1)2019	31.20	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	365.2	mg/Nm ³	450
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	975.5	mg/Nm ³	600
3		YES	EKO/E-581/090924	06/09/2024	16/09/2024	Coal Crusher Stack	Mercury	US EPA Method - 29:2017	<0.01	mg/Nm ³	0.03
							Particular Matter (PM)	IS 11255 (Part-1)2019	25.30	mg/Nm ³	50 (Max.)

Acid Plant Stack report (All Units)			Stack Emission Level					Quarterly Monitoring Oct'2024 to Dec'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-569/121224	10/12/2024	23/12/2024	PYRO Acid plant (TGT) Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	78.30	ppm	224 (Max.) (2 kg/ton)
2		YES	EKO/E-570/121224	11/12/2024	23/12/2024		Acid Mist	USEPA Method 8 2017	19.5	mg/Nm ³	50
3		YES	EKO/E-707/161224	13/12/2024	23/12/2024	Ausmelt Cansolve Acid Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	87.2	ppm	111 (Max.) (1 kg/ton)
4		YES	EKO/E-714/161224	14/12/2024	23/12/2024		Acid Mist	USEPA Method 8 2017	19.3	mg/Nm ³	30
						Hydro - 1 Acid Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	73.9	ppm	135 (Max.) (1 kg/ton)
							Acid Mist	USEPA Method 8 2017	15.5	mg/Nm ³	30
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	67.3	ppm	135 (Max.) (1 kg/ton)
						Hydro - 2 Acid Stack	Acid Mist	USEPA Method 8 2017	11.9	mg/Nm ³	30

PYRO (PM & Pb) Stack Report			Stack Emission Level					Quarterly Monitoring Oct'2024 to Dec'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-562/121224	09/12/2024	23/12/2024	ISF Slagging	Particular Matter (PM)	IS 11255 (Part-1)2019	33.9	mg/Nm ³	150 (Max.)
2		YES	EKO/E-566/121224	10/12/2024	23/12/2024		Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.15	mg/Nm ³	10 (Max.)
3		YES	EKO/E-565/121224	10/12/2024	23/12/2024	LRP Copper Drossing	Particular Matter (PM)	IS 11255 (Part-1)2019	36.9	mg/Nm ³	150 (Max.)
4		YES	EKO/E-558/121224	09/12/2024	23/12/2024		Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.21	mg/Nm ³	10 (Max.)
5		YES	EKO/E-559/121224	09/12/2024	23/12/2024	LRP Main	Particular Matter (PM)	IS 11255 (Part-1)2019	35.8	mg/Nm ³	150 (Max.)
6		YES	EKO/E-560/121224	09/12/2024	23/12/2024		Lead (as Pb)	Method of Air Sampling & Analysis:1988	1.69	mg/Nm ³	10 (Max.)
						Sinter Main	Particular Matter (PM)	IS 11255 (Part-1)2019	36.2	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.32	mg/Nm ³	10 (Max.)
						Sinter Venturi	Particular Matter (PM)	IS 11255 (Part-1)2019	34.9	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.78	mg/Nm ³	10 (Max.)
						Crusher Main	Particular Matter (PM)	IS 11255 (Part-1)2019	34.20	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	3.02	mg/Nm ³	10 (Max.)

7	YES	EKO/E-561/121224	09/12/2024	23/12/2024	Crusher Venturi	Particular Matter (PM)	IS 11255 (Part-1)2019	37.2	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.03	mg/Nm ³	10 (Max.)
8	YES	Plant under Shut down			CRP Milling	Particular Matter (PM)	IS 11255 (Part-1)2019	NA	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988		mg/Nm ³	10 (Max.)
9	YES	EKO/E-563/121224	10/12/2024	23/12/2024	ZRP Main	Particular Matter (PM)	IS 11255 (Part-1)2019	36.2	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988	<1.0	mg/Nm ³	-
10	YES	EKO/E-564/121224	10/12/2024	23/12/2024	ZRP Fume	Particular Matter (PM)	IS 11255 (Part-1)2019	39.3	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988	<1.0	mg/Nm ³	-

AUSMELT (PM & Pb) Stack Report			Stack Emission Level					Quarterly Monitoring Oct'2024 to Dec'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-571/121224	11/12/2024	23/12/2024	RMH	Particular Matter (PM)	IS 11255 (Part-1)2019	27.3	mg/Nm ³	30 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.06	mg/Nm ³	10 (Max.)
2		YES	EKO/E-572/121224	11/12/2024	23/12/2024	Hygiene	Particular Matter (PM)	IS 11255 (Part-1)2019	28.6	mg/Nm ³	30 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.41	mg/Nm ³	10 (Max.)

HYDRO - 1 (PM) Stack Report			Stack Emission Level					Quarterly Monitoring Oct'2024 to Dec'2024			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-703/161224	13/12/2024	23/12/2024	Zinc Melting & Casting - 1	Particular Matter (PM)	IS 11255 (Part-1)2019	21.3	mg/Nm ³	30 (Max.)
2		YES	EKO/E-704/161224	13/12/2024	23/12/2024	Zinc Melting & Casting - 2	Particular Matter (PM)	IS 11255 (Part-1)2019	22.5	mg/Nm ³	30 (Max.)
3		YES	EKO/E-705/161224	13/12/2024	23/12/2024	Zinc Dross	Particular Matter (PM)	IS 11255 (Part-1)2019	18.2	mg/Nm ³	30 (Max.)
4		YES	EKO/E-706/161224	13/12/2024	23/12/2024	Zinc Dust	Particular Matter (PM)	IS 11255 (Part-1)2019	20.30	mg/Nm ³	30 (Max.)
5		YES	EKO/E-708/161224	13/12/2024	23/12/2024	Preheater Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	17.6	mg/Nm ³	30 (Max.)
6		YES	EKO/E-709/161224	13/12/2024	23/12/2024	Roaster start up stack	Particular Matter (PM)	IS 11255 (Part-1)2019	20.3	mg/Nm ³	30 (Max.)

HYDRO - 2 (PM) Stack Report			Stack Emission Level				Quarterly Monitoring Oct'2024 to Dec'2024				
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-710/161224	16/12/2024	23/12/2024	Zinc Melting & Casting - 1	Particular Matter (PM)	IS 11255 (Part-1)2019	21.6	mg/Nm ³	30 (Max.)
2		YES	EKO/E-711/161224	16/12/2024	23/12/2024	Zinc Melting & Casting - 2	Particular Matter (PM)	IS 11255 (Part-1)2019	18.9	mg/Nm ³	30 (Max.)
3		YES	EKO/E-712/161224	16/12/2024	23/12/2024	Zinc Dross	Particular Matter (PM)	IS 11255 (Part-1)2019	20.6	mg/Nm ³	30 (Max.)
4		YES	EKO/E-713/161224	16/12/2024	23/12/2024	Zinc Dust	Particular Matter (PM)	IS 11255 (Part-1)2019	19.3	mg/Nm ³	30 (Max.)
5		YES	EKO/E-715/161224	14/12/2024	23/12/2024	Preheater Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	20.5	mg/Nm ³	30 (Max.)
6		YES	EKO/E-716/161224	14/12/2024	23/12/2024	Roaster start up stack	Particular Matter (PM)	IS 11255 (Part-1)2019	20.6	mg/Nm ³	30 (Max.)

CPP Stack Report			Stack Emission Level				Quarterly Monitoring Oct'2024 to Dec'2024				
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-700/161224-A	12/12/2024	23/12/2024	CPP Unit - 1 & 2	Particular Matter (PM)	IS 11255 (Part-1)2019	35.60	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	340.9	mg/Nm ³	450
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	920.4	mg/Nm ³	600
							Mercury	US EPA Method - 29:2017	<0.01	mg/Nm ³	0.03
2		YES	EKO/E-701/161224-A	12/12/2024	23/12/2024	CPP Unit - 3	Particular Matter (PM)	IS 11255 (Part-1)2019	33.20	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	360.2	mg/Nm ³	450
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	970.5	mg/Nm ³	600
							Mercury	US EPA Method - 29:2017	<0.01	mg/Nm ³	0.03
3		YES	EKO/E-702/161224	12/12/2024	23/12/2024	Coal Crusher Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	24.50	mg/Nm ³	50 (Max.)

Fumer Stack Report			Stack Emission Level					Test Method			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-717/161224	12/12/2024	23/12/2024	Off Gases (TGP)	Particular Matter (PM)	IS 11255 (Part-1)2019	28.6	mg/Nm ³	50 (Max.)
2		YES	EKO/E-718/161224	12/12/2024	23/12/2024	Fuming Furnace	Particular Matter (PM)	IS 11255 (Part-1)2019	27.60	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	126	mg/Nm ³	300
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	178	mg/Nm ³	600

Acid Plant Stack report (All Units)			Stack Emission Level					Quarterly Monitoring Jan'2025 to Mar'2025			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/AWL/SE/202503 15/13	29/03/2025	31/03/2025	PYRO Acid plant (TGT) Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	109.00	ppm	224 (Max.) (2 kg/ton)
							Acid Mist	USEPA Method 8 2017	12.5	mg/Nm ³	50
2		YES	SCS/AWL/SE/202503 15/14	19/03/2025	31/03/2025	Ausmelt Consolve Acid Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	74.2	ppm	111 (Max.) (1 kg/ton)
							Acid Mist	USEPA Method 8 2017	7.6	mg/Nm ³	30
3		YES	SCS/AWL/SE/202503 15/15	15/03/2025	31/03/2025	Hydro - 1 Acid Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	105.7	ppm	135 (Max.) (1 kg/ton)
							Acid Mist	USEPA Method 8 2017	18.2	mg/Nm ³	30
4		YES	SCS/AWL/SE/202503 15/16	22/03/2025	31/03/2025	Hydro - 2 Acid Stack	Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	113.4	ppm	135 (Max.) (1 kg/ton)
							Acid Mist	USEPA Method 8 2017	15.1	mg/Nm ³	30

PYRO (PM & Pb) Stack Report			Stack Emission Level					Quarterly Monitoring Jan'2025 to Mar'2025			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/AWL/SE/202503 15/17	27/03/2025	31/03/2025	ISF Slagging	Particular Matter (PM)	IS 11255 (Part-1)2019	27.9	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	1.40	mg/Nm ³	10 (Max.)
2		YES	SCS/AWL/SE/202503 15/18	27/03/2025	31/03/2025	LRP Copper Drossing	Particular Matter (PM)	IS 11255 (Part-1)2019	22.4	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	0.37	mg/Nm ³	10 (Max.)
3		YES	SCS/AWL/SE/202503 15/19	27/03/2025	31/03/2025	LRP Main	Particular Matter (PM)	IS 11255 (Part-1)2019	24.5	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	0.53	mg/Nm ³	10 (Max.)
4		YES	SCS/AWL/SE/202503 15/20	18/03/2025	31/03/2025	Sinter Main	Particular Matter (PM)	IS 11255 (Part-1)2019	28.4	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	0.75	mg/Nm ³	10 (Max.)
5		YES	SCS/AWL/SE/202503 15/21	18/03/2025	31/03/2025	Sinter Venturi	Particular Matter (PM)	IS 11255 (Part-1)2019	29.2	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	0.33	mg/Nm ³	10 (Max.)
6		YES	SCS/AWL/SE/202503 15/22	18/03/2025	31/03/2025	Crusher Main	Particular Matter (PM)	IS 11255 (Part-1)2019	30.20	mg/Nm ³	150 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	2.40	mg/Nm ³	10 (Max.)

7	YES	SCS/AWL/SE/202503 15/23	18/03/2025	31/03/2025	Crusher Venturi	Particular Matter (PM)	IS 11255 (Part-1)2019	17.7	mg/Nm ³	150 (Max.)
8	YES	Plant under Shut down			CRP Milling	Lead (as Pb)	Method of Air Sampling & Analysis:1988	1.50	mg/Nm ³	10 (Max.)
9	YES	SCS/AWL/SE/202503 15/24	27/03/2025	31/03/2025	ZRP Main	Particular Matter (PM)	IS 11255 (Part-1)2019	16.2	mg/Nm ³	150 (Max.)
10	YES	SCS/AWL/SE/202503 15/25	27/03/2025	31/03/2025	ZRP Fume	Lead (as Pb)	Method of Air Sampling & Analysis:1988	0.38	mg/Nm ³	-
						Particular Matter (PM)	IS 11255 (Part-1)2019	22	mg/Nm ³	150 (Max.)
						Lead (as Pb)	Method of Air Sampling & Analysis:1988	0.59	mg/Nm ³	-

AUSMELT (PM & Pb) Stock Report			Stack Emission Level					Quarterly Monitoring Jan'2025 to Mar'2025			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/AWL/SE/202503 15/26	19/03/2025	31/03/2025	RMH	Particular Matter (PM)	IS 11255 (Part-1)2019	15.1	mg/Nm ³	30 (Max.)
2		YES	SCS/AWL/SE/202503 15/27	19/03/2025	31/03/2025	Hygiene	Lead (as Pb)	Method of Air Sampling & Analysis:1988	0.25	mg/Nm ³	10 (Max.)
							Particular Matter (PM)	IS 11255 (Part-1)2019	8.5	mg/Nm ³	30 (Max.)
							Lead (as Pb)	Method of Air Sampling & Analysis:1988	<0.05	mg/Nm ³	10 (Max.)

HYDRO - 1 (PM) Stock Report			Stack Emission Level					Quarterly Monitoring Jan'2025 to Mar'2025			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/AWL/SE/202503 15/28	20/03/2025	31/03/2025	Zinc Melting & Casting - 1	Particular Matter (PM)	IS 11255 (Part-1)2019	17.6	mg/Nm ³	30 (Max.)
2		YES	SCS/AWL/SE/202503 15/29	20/03/2025	31/03/2025	Zinc Melting & Casting - 2	Particular Matter (PM)	IS 11255 (Part-1)2019	12	mg/Nm ³	30 (Max.)
3		YES	SCS/AWL/SE/202503 15/30	20/03/2025	31/03/2025	Zinc Dross	Particular Matter (PM)	IS 11255 (Part-1)2019	13.4	mg/Nm ³	30 (Max.)
4		YES	SCS/AWL/SE/202503 15/31	20/03/2025	31/03/2025	Zinc Dust	Particular Matter (PM)	IS 11255 (Part-1)2019	12.80	mg/Nm ³	30 (Max.)
5		YES	SCS/AWL/SE/202503 15/32	15/03/2025	31/03/2025	Preheater Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	19.3	mg/Nm ³	30 (Max.)
6		YES	SCS/AWL/SE/202503 15/33	15/03/2025	31/03/2025	Roaster start up stack	Particular Matter (PM)	IS 11255 (Part-1)2019	17.4	mg/Nm ³	30 (Max.)

HYDRO - 2 (PM) Stack Report			Stack Emission Level					Quarterly Monitoring Jan'2025 to Mar'2025			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/AWL/SE/202503 15/34	21/03/2025	31/03/2025	Zinc Melting & Casting - 1	Particular Matter (PM)	IS 11255 (Part-1)2019	10.8	mg/Nm ³	30 (Max.)
2		YES	SCS/AWL/SE/202503 15/35	21/03/2025	31/03/2025	Zinc Melting & Casting - 2	Particular Matter (PM)	IS 11255 (Part-1)2019	14.8	mg/Nm ³	30 (Max.)
3		YES	SCS/AWL/SE/202503 15/36	21/03/2025	31/03/2025	Zinc Dross	Particular Matter (PM)	IS 11255 (Part-1)2019	15.9	mg/Nm ³	30 (Max.)
4		YES	SCS/AWL/SE/202503 15/37	21/03/2025	31/03/2025	Zinc Dust	Particular Matter (PM)	IS 11255 (Part-1)2019	14.8	mg/Nm ³	30 (Max.)
5		YES	SCS/AWL/SE/202503 15/38	22/03/2025	31/03/2025	Preheater Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	13.3	mg/Nm ³	30 (Max.)
6		YES	SCS/AWL/SE/202503 15/39	22/03/2025	31/03/2025	Roaster start up stack	Particular Matter (PM)	IS 11255 (Part-1)2019	12	mg/Nm ³	30 (Max.)

CPP Stack Report			Stack Emission Level					Quarterly Monitoring Jan'2025 to Mar'2025			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/AWL/SE/202503 15/40	28/03/2025	31/03/2025	CPP Unit - 1 & 2	Particular Matter (PM)	IS 11255 (Part-1)2019	41.50	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	419.8	mg/Nm ³	450
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	1250	mg/Nm ³	600
							Mercury	US EPA Method - 29:2017	0.02	mg/Nm ³	0.03
2		YES	SCS/AWL/SE/202503 15/41	28/03/2025	31/03/2025	CPP Unit - 3	Particular Matter (PM)	IS 11255 (Part-1)2019	39.40	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	299	mg/Nm ³	450
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	983	mg/Nm ³	600
							Mercury	US EPA Method - 29:2017	0.02	mg/Nm ³	0.03
3			YES	SCS/AWL/SE/202503 15/42	28/03/2025	31/03/2025	Coal Crusher Stack	Particular Matter (PM)	IS 11255 (Part-1)2019	29.60	mg/Nm ³

Fumer Stack Report			Stack Emission Level					Test Method			
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Reporting Date	Sampling Location	Parameters	Test Method	Results	Unit	Limit as per CTO
1	SCS ENVIRO SER	YES	SCS/AWL/SE/202503 15/43	26/03/2025	31/03/2025	Off Gases (TGP)	Particular Matter (PM)	IS 11255 (Part-1)2019	11.9	mg/Nm ³	50 (Max.)
2		YES	SCS/AWL/SE/202503 15/44	28/03/2025	31/03/2025	Fuming Furnace	Particular Matter (PM)	IS 11255 (Part-1)2019	28.30	mg/Nm ³	50
							Oxides Of Nitrogen (Nox)	IS 11255 (Part-7)2017	78.7	mg/Nm ³	300
							Sulphur Dioxide (SO ₂)	IS 11255 (Part-2)2019	65.2	mg/Nm ³	600

ANNEXURE-IV

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Apr'2024 to June'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-627/240624-1	20/06/2024	29/06/2024	Near LOCO Shed C2	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	13.70	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	33.40	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	55.3	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	84.9	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.19	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.19	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	5
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Apr'2024 to June'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
2	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-628/240624-1	20/06/2024	29/06/2024	Near Slag Gate	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	11.90	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	34.6	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	56.2	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	87.4	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.29	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.17	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	5
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Apr'2024 to June'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
3	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-629/240624-1	20/06/2024	29/06/2024	Near DM Plant	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	11.50	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	34.7	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	54.8	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	91.7	µg/m ³	100
							Ozone (O ₃)	IS:5182 (Part - 9) :2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS: 5182 (Part - 22) :2019	0.21	µg/m ³	1
							Carbon monoxide (as CO)	IS:5182 (Part 10) : 2019	1.19	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS:5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS:5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS:5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS:5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Apr'2024 to June'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
4	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-626/240624-1	18/06/2024	26/06/2024	Near CISF Colony C1	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.70	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	30.8	µg/m ³	80
							Particulate Matter (PM 2.5)	IS:5182 (Part 24) : 2019	56.9	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	84.6	µg/m ³	100
							Ozone (O ₃)	IS:5182 (Part - 9) :2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS: 5182 (Part - 22) :2019	0.19	µg/m ³	1
							Carbon monoxide (as CO)	IS:5182 (Part 10) : 2019	1.14	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS:5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS:5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS:5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS:5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-564/090924-1	06/09/2024	13/09/2024	Near LOCO Shed C2	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.60	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	31.20	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	54.7	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	88.5	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.21	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.16	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	5
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
2	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-565/090924-1	06/09/2024	13/09/2024	Near Slag Gate	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.60	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	31.2	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	58.4	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	90.3	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.25	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.21	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	5
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
3	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-566/090924-1	06/09/2024	13/09/2024	Near DM Plant	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	13.40	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) :2018	32.1	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	55.8	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	86.3	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) :2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) 2019	0.23	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.22	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20							

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
4	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-563/090924-1	06/09/2024	13/09/2024	Near CISF Colony C1	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	11.30	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	32.5	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	57.4	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	88.3	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) 2019	0.18	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.23	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-576/121224-1	09/12/2024	17/12/2024	Near LOCO Shed C2	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	11.90	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	32.40	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	54.6	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	85.9	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.17	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	0.92	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
2	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-577/121224-1	09/12/2024	17/12/2024	Near Slag Gate	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	13.10	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	30.6	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	57.4	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	90.8	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.98	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	0.82	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
3	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-578/121224-1	10/12/2024	17/12/2024	Near DM Plant	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.40	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) :2018	32.6	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	50.2	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	84.6	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) :2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) :2019	0.14	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	0.92	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
4	EKO PRO ENGINEERS Pvt. Ltd	YES	EKO/E-579/121224-1	10/12/2024	17/12/2024	Near CISF Colony C1	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	11.80	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) :2018	28.6	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	52.7	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	84.5	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) 2019	0.19	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.12	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
1	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/09(1/2)	18/03/2025	31/03/2025	Near LOCO Shed C2	Sulphur Dioxide (SO ₂)	IS-5182 (Pt-2) : 2017	15.00	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) :2018	25.00	µg/m ³	80
							Particulate Matter (PM 2.5)	IS-5182 (Part 24) : 2019	52	µg/m ³	60
							Particulate Matter (PM 10)	IS-5182 (Pt 23)- 2017	85.5	µg/m ³	100
							Ozone (O ₃)	IS-5182 (Part - 9) 2019	40.2	µg/m ³	100
							Lead (as Pb)	IS-5182 (Part - 22) 2019	0.37	µg/m ³	1
							Carbon monoxide (as CO)	IS-5182 (Part 10) : 2019	1374	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	30	µg/m ³	400
							Benzene (C ₆ H ₆)	IS-5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS-5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS-5182 (Part 22) : 2019	<5.5	ng/m ³	6
							Nickel (as Ni)	IS-5182 (Part 26) : 2020	4.700	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
2	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/10(1/2)	18/03/2025	31/03/2025	Near Slag Gate	Sulphur Dioxide (SO ₂)	IS-5182 (Pt-2) : 2017	15.90	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS-5182 (Pt-6) :2018	28.4	µg/m ³	80
							Particulate Matter (PM 2.5)	IS-5182 (Part 24) : 2019	53	µg/m ³	60
							Particulate Matter (PM 10)	IS-5182 (Pt 23)- 2017	88.6	µg/m ³	100
							Ozone (O ₃)	IS-5182 (Part - 9) 2019	42	µg/m ³	100
							Lead (as Pb)	IS-5182 (Part - 22) 2019	0.45	µg/m ³	1
							Carbon monoxide (as CO)	IS-5182 (Part 10) : 2019	1145	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	34.5	µg/m ³	400
							Benzene (C ₆ H ₆)	IS-5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS-5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS-5182 (Part 22) : 2019	<5.5	ng/m ³	6
							Nickel (as Ni)	IS-5182 (Part 26) : 2020	3.90	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
3	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/11(1/2)	18/03/2025	31/03/2025	Near DM Plant	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	10.20	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	17.6	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	42	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	71.6	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	38	µg/m ³	100
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.36	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1031	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	36	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.5	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	2.57	ng/m ³	20

Ambient Air Quality Monitoring (Four Plant Station)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
4	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/12(1/2)	18/03/2025	31/03/2025	Near CJSF Colony C1	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	9.60	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	16.5	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	38.4	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	66.2	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	36	µg/m ³	100
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.2	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	916	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	28	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.5	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	0.96	ng/m ³	20

ANNEXURE - V

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Apr'2024 to Jun'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-639/240624-1	20/06/2024	29/06/2024	Billiya	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	11.20	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	26.4	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	52.6	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	85.3	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.13	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Apr'2024 to Jun'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
2	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-638/240624-1	20/06/2024	29/06/2024	Nagari	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	13.50	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	34.1	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	56.2	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	94.8	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.19	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Apr'2024 to Jun'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
3	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-640/240624-1	20/06/2024	29/06/2024	Anwalhera	Sulphur Dioxide (SO ₂)	IS:5182 (Pt-2) : 2017	11.90	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS:5182 (Pt-6) :2018	27.3	µg/m ³	80
							Particulate Matter (PM 2.5)	IS:5182 (Part 24) : 2019	55.7	µg/m ³	60
							Particulate Matter (PM 10)	IS:5182 (Pt 23)- 2017	89.4	µg/m ³	100
							Ozone (O ₃)	IS:5182 (Part - 9) 2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS:5182 (Part - 22) 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS:5182 (Part 10) : 2019	1.16	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS:5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS:5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS:5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS:5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Apr'2024 to Jun'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
4	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-636/240624-1	19/06/2024	29/06/2024	Munga Ka Khara	Sulphur Dioxide (SO ₂)	IS:5182 (Pt-2) : 2017	13.40	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS:5182 (Pt-6) :2018	25.3	µg/m ³	80
							Particulate Matter (PM 2.5)	IS:5182 (Part 24) : 2019	53.8	µg/m ³	60
							Particulate Matter (PM 10)	IS:5182 (Pt 23)- 2017	86.7	µg/m ³	100
							Ozone (O ₃)	IS:5182 (Part - 9) :2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS:5182 (Part - 22) :2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS:5182 (Part 10) : 2019	1.23	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS:5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS:5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS:5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS:5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Apr'2024 to Jun'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
5	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-637/240624-1	19/06/2024	29/06/2024	Ajolija Ka Khara	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.70	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS:5182 (Pt-6) :2018	27.3	µg/m ³	80
							Particulate Matter (PM 2.5)	IS:5182 (Part 24) : 2019	56.4	µg/m ³	60
							Particulate Matter (PM 10)	IS:5182 (Pt 23)- 2017	82.9	µg/m ³	100
							Ozone (O ₃)	IS:5182 (Part - 9) :2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS:5182 (Part - 22) :2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS:5182 (Part 10) : 2019	1.18	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS:5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS:5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS:5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS:5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Apr'2024 to Jun'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
6	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-635/240624-1	18/06/2024	29/06/2024	Putholi	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	11.70	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) :2018	29.4	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	54.7	µg/m ³	80
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	88.6	µg/m ³	100
							Ozone (O ₃)	IS:5182 (Part - 9) :2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS:5182 (Part - 22) :2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS:5182 (Part 10) : 2019	1.22	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS:5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS:5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS:5182 (Part 22) : 2019	<5.0	ng/m ³	8
							Nickel (as Ni)	IS:5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Apr'2024 to Jun'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
7	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-634/240624-1	18/06/2024	29/06/2024	Zinc Nagar	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	13.50	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	29.4	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	56.7	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	91.9	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<10.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.21	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	5
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-518/060924-1	01/09/2024	10/09/2024	Biliya	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.60	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	28.9	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	54.1	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	88.3	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.16	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
2	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-517/060924-1	01/09/2024	10/09/2024	Nagari	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.60	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	32.1	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	57.4	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	98.5	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.22	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
3	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-520/060924-1	01/09/2024	10/09/2024	Anwalthera	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.40	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	29.5	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	56.3	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	91.5	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.24	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
4	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-572/090924-1	08/09/2024	13/09/2024	Munga Ka Khara	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.60	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	28.4	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	58.4	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	95.3	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.21	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
5	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-519/060924-1	31/08/2024	10/09/2024	Ajoliya Ka Khara	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	11.60	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	25.8	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	59.1	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	87.2	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.23	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
6	EKO PRO ENGINEERS Pvt. Ltd	YES	EKO/E-571/090924-1	08/09/2024	13/09/2024	Putholi	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.50	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) :2018	33.6	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	57.8	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	90.5	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) :2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.18	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jul'2024 to Sep'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
7	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-521/060924-1	31/08/2024	10/09/2024	Zinc Nagar	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.40	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	30.2	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	58.4	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	95.6	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.19	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	5
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
1	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-597/101224-1	05/12/2024	16/12/2024	Billiya	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	13.40	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	28.2	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	52.8	µg/m ³	80
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	88	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.18	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	5
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
2	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-598/101224-1	05/12/2024	16/12/2024	Nagari	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	11.20	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	28.6	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	54	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	88	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	0.98	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	5
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
3	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-599/101224-1	06/12/2024	16/12/2024	Anwaihera	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	10.80	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	24.8	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	55.2	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	78	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.18	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
4	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-600/101224-1	07/12/2024	16/12/2024	Munga Ka Khara	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	13.20	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	28.4	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	46.9	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	82	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.18	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
5	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-601/101224-1	06/12/2024	16/12/2024	Ajoliya Ka Khara	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	12.20	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	28	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	56	µg/m ³	60
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	85	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22):2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS:5182 (Part 10) : 2019	1.08	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS:5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS:5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS:5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
6	EKO PRO ENGINEERS Pvt. Ltd.	YES	EKO/E-602/101224-1	07/12/2024	16/12/2024	Putholi	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	10.80	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	27.2	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	56.8	µg/m ³	80
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	82	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.05	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Oct'2024 to Dec'2024					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
7	EKO PRO ENGINEERS Pvt. Ltd	YES	EKO/E-603/101224-1	08/12/2024	16/12/2024	Zinc Nagar	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	13.80	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	30.1	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	52	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	88	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) 2019	<20.0	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1.22	mg/m ³	4
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<0.1	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<0.1	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.0	ng/m ³	8
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	<15.0	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
1	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/05(1/2)	15/03/2025	31/03/2025	Billiya	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	7.00	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	12	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	41.7	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	68	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) 2019	30.5	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	916	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	25.8	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.5	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	0.790	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
2	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/04(1/2)	15/03/2025	31/03/2025	Nagari	Sulphur Dioxide (SO ₂)	IS:5182 (Pt-2) : 2017	7.40	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS:5182 (Pt-6) :2018	11.8	µg/m ³	80
							Particulate Matter (PM 2.5)	IS:5182 (Part 24) : 2019	37.4	µg/m ³	50
							Particulate Matter (PM 10)	IS:5182 (Pt 23)- 2017	63	µg/m ³	100
							Ozone (O ₃)	IS:5182 (Part - 9) :2019	28	µg/m ³	180
							Lead (as Pb)	IS:5182 (Part - 22) :2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS:5182 (Part 10) : 2019	802	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	24	µg/m ³	400
							Benzene (C ₆ H ₆)	IS:5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS:5182 (Part 12) :2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS:5182 (Part 22) : 2019	<5.5	ng/m ³	6
							Nickel (as Ni)	IS:5182 (Part 26) : 2020	0.520	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
3	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/08(1/2)	17/03/2025	31/03/2025	Anwalhera	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	7.30	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	11.4	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	33.5	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	57.2	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<19.6	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	687	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.5	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	0.600	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
4	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/03(1/2)	15/03/2025	31/03/2025	Munga Ka Khara	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	7.80	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	13.1	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	34	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	57.3	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	25.6	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<1.0	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	687	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.5	ng/m ³	6
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	0.480	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
5	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/07(1/2)	17/03/2025	31/03/2025	Ajoliya Ka Khara	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	6.90	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	10.7	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	30.8	µg/m ³	80
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	61.3	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	<19.6	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	<0.1	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	802	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	<20.0	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.5	ng/m ³	8
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	0.470	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
6	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/HZL-CLZS/AAQ/20250315/02(1/2)	15/03/2025	31/03/2025	Putholi	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	7.40	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	12	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	39.3	µg/m ³	80
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	66.5	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	46	µg/m ³	100
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.15	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	918	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	37	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.5	ng/m ³	8
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	0.680	ng/m ³	20

Ambient Air Quality Monitoring (Nearby Village)						Quarterly Monitoring - Jan'2025 to Mar'2025					
S.No.	Name of Institute	MoEF Approved	Report No.	Date of Sampling	Date of Test	Sampling Location	Parameters	Method of Test	Results	Unit	NAAQS*
7	SCS ENVIRO SERVICES PVT. LTD.	YES	SCS/MZL-CLZS/AAQ/20250315/06(1/2)	17/03/2025	31/03/2025	Zinc Nagar	Sulphur Dioxide (SO ₂)	IS 5182 (Pt-2) : 2017	9.40	µg/m ³	80
							Nitrogen Dioxide (NO ₂)	IS 5182 (Pt-6) : 2018	16.7	µg/m ³	80
							Particulate Matter (PM 2.5)	IS 5182 (Part 24) : 2019	44	µg/m ³	50
							Particulate Matter (PM 10)	IS 5182 (Pt 23)- 2017	74.5	µg/m ³	100
							Ozone (O ₃)	IS 5182 (Part - 9) : 2019	39	µg/m ³	180
							Lead (as Pb)	IS 5182 (Part - 22) : 2019	0.19	µg/m ³	1
							Carbon monoxide (as CO)	IS 5182 (Part 10) : 2019	1031	µg/m ³	2000
							Ammonia (NH ₃)	Method of air sampling & Analysis (3rd edition) 1988	35	µg/m ³	400
							Benzene (C ₆ H ₆)	IS 5182 (Part 11) : 2017	<1.0	µg/m ³	5
							Benzo (a) Pyrene	IS 5182 (Part 12) : 2019	<1.0	ng/m ³	1
							Arsenic (as As)	IS 5182 (Part 22) : 2019	<5.5	ng/m ³	8
							Nickel (as Ni)	IS 5182 (Part 26) : 2020	1.560	ng/m ³	20

ANNEXURE - VI

Location :- Near CISF Colony, C1			Ambient Noise Level Monitoring			Quarterly Monitoring - Apr'2024 to Jun'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
EKO/E-630/240624	18/06/2024	25/06/2024	Leq Day	IS-9989:2014	dB(A)	70.9	Industrial Area	Commercial Area	Residential Area	Silence Zone
			Leq Night			55.2	75	65	55	50
							70	55	45	40

Location :- Near Loco Shed, C2			Ambient Noise Level Monitoring			Quarterly Monitoring - Apr'2024 to Jun'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
EKO/E-631/240624	20/06/2024	25/06/2024	Leq Day	IS-9989:2014	dB(A)	70.1	Industrial Area	Commercial Area	Residential Area	Silence Zone
			Leq Night			56.8	75	65	55	50
							70	55	45	40

Location :- Near Slag Gate			Ambient Noise Level Monitoring			Quarterly Monitoring - Apr'2024 to Jun'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
EKO/E-632/240624	20/06/2024	25/06/2024	Leq Day	IS-9989:2014	dB(A)	69.9	Industrial Area	Commercial Area	Residential Area	Silence Zone
			Leq Night			52.4	75	65	55	50
							70	55	45	40

Location :- Near CPP DM Plant			Ambient Noise Level Monitoring			Quarterly Monitoring - Apr'2024 to Jun'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
EKO/E-633/240624	20/06/2024	25/06/2024	Leq Day	IS-9989:2014	dB(A)	69.8	Industrial Area	Commercial Area	Residential Area	Silence Zone
			Leq Night			56.2	75	65	55	50
							70	55	45	40

Location :- Near CISF Colony, C1			Ambient Noise Level Monitoring			Quarterly Monitoring - Jul'2024 to Sep'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
EKO/E-567/090924	06/09/2024	10/09/2024	Leq Day	IS-9989:2014	dB(A)	70.1	75	65	55	50
			Leq Night			56.9	70	55	45	40

Location :- Near Loco Shed, C2			Ambient Noise Level Monitoring			Quarterly Monitoring - Jul'2024 to Sep'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
EKO/E-568/090924	06/09/2024	10/09/2024	Leq Day	IS-9989:2014	dB(A)	69.9	75	65	55	50
			Leq Night			57.8	70	55	45	40

Location :- Near Slag Gate			Ambient Noise Level Monitoring			Quarterly Monitoring - Jul'2024 to Sep'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
EKO/E-569/090924	06/09/2024	10/09/2024	Leq Day	IS-9989:2014	dB(A)	69.3	75	65	55	50
			Leq Night			51.9	70	55	45	40

Location :- Near CPP DM Plant			Ambient Noise Level Monitoring			Quarterly Monitoring - Jul'2024 to Sep'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
EKO/E-570/090924	06/09/2024	10/09/2024	Leq Day	IS-9989:2014	dB(A)	68.5	75	65	55	50
			Leq Night			55.9	70	55	45	40

Location :- Near CISF Colony, C1			Ambient Noise Level Monitoring			Quarterly Monitoring - Oct'2024 to Dec'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
EKO/E-580/121224	10/12/2024	13/12/2024	Leq Day	IS-9989:2014	dB(A)	69.8	75	65	55	50
			Leq Night			57.2	70	55	45	40

Location :- Near Loco Shed, C2			Ambient Noise Level Monitoring			Quarterly Monitoring - Oct'2024 to Dec'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
EKO/E-581/121224	09/12/2024	13/12/2024	Leq Day	IS-9989:2014	dB(A)	71.3	75	65	55	50
			Leq Night			56.8	70	55	45	40

Location :- Near Slag Gate			Ambient Noise Level Monitoring			Quarterly Monitoring - Oct'2024 to Dec'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
EKO/E-582/121224	09/12/2024	13/12/2024	Leq Day	IS-9989:2014	dB(A)	70.9	75	65	55	50
			Leq Night			52.6	70	55	45	40

Location :- Near CPP DM Plant			Ambient Noise Level Monitoring			Quarterly Monitoring - Oct'2024 to Dec'2024				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
EKO/E-583/121224	10/12/2024	13/12/2024	Leq Day	IS-9989:2014	dB(A)	68.7	75	65	55	50
			Leq Night			56.3	70	55	45	40

Location :- Near CISF Colony, C1			Ambient Noise Level Monitoring			Quarterly Monitoring - Jan'2025 to Mar'2025				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
SCS/HZL-CLZS/AN/20250315/52	18/03/2025	31/03/2025	Leq Day	IS-9989:2014	dB(A)	58.4	75	65	55	50
			Leq Night			46.9	70	55	45	40

Location :- Near Loco Shed, C2			Ambient Noise Level Monitoring			Quarterly Monitoring - Jan'2025 to Mar'2025				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
SCS/HZL-CLZS/AN/20250315/53	18/03/2025	31/03/2025	Leq Day	IS-9989:2014	dB(A)	68.6	75	65	55	50
			Leq Night			55	70	55	45	40

Location :- Near Slag Gate			Ambient Noise Level Monitoring			Quarterly Monitoring - Jan'2025 to Mar'2025				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
SCS/HZL-CLZS/AN/20250315/54	18/03/2025	31/03/2025	Leq Day	IS-9989:2014	dB(A)	64.7	75	65	55	50
			Leq Night			53.2	70	55	45	40

Location :- Near CPP DM Plant			Ambient Noise Level Monitoring			Quarterly Monitoring - Jan'2025 to Mar'2025				
Report No.	Date of Sample	Date of Test	Parameter	Method of Test	Unit	Result	CPCB Standard as per Noise Pollution Rules 2000 (Day- 6:00am to 10:00pm, Night- 10:00pm to 6:00am)			
							Industrial Area	Commercial Area	Residential Area	Silence Zone
SCS/HZL-CLZS/AN/20250315/55	18/03/2025	31/03/2025	Leq Day	IS-9989:2014	dB(A)	72.5	75	65	55	50
			Leq Night			68	70	55	45	40



vedanta

transforming for good



ANNEXURE-VII

HINDUSTAN ZINC

Zinc & Silver of India

HZL/CLZS/ENV/HAZ/46

Date-27.06.2025

To

Member Secretary,
Rajasthan State Pollution Control Board
4, Institutional Area
Jhalan Doongri, JAIPUR-302004

25885

Sub- Hazardous Waste Annual Statement (Form 4)

Dear Sir,

Please find enclosed herewith a copy of Hazardous Waste Annual Statement (Form 4) for the Year 2024-25 as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. This is for your kind information and record please.

Thanking you

Yours faithfully

Manisha Bhati
Manisha Bhati

Associate General Manager – Environment

Hindustan Zinc Limited

Registered Office

Yashad Bhawan, Udaipur-313 004, Rajasthan, INDIA.

T. +91 294-6604000-02 | www.hzlindia.com

CIN: L27204RJ1966PLC001208

Chanderiya Lead Zinc Smelter

P.O. Putholi, Chittorgarh-312021,

Rajasthan, INDIA.



FORM 4

[See rules 6(5), 13(8), 16(6) and 20 (2)]

FORM FOR FILING ANNUAL RETURNS

[To be submitted to State Pollution Control Board by 30th day of June of every year for the preceding period April to March]

1. Name and address of facility:

Chanderiya Lead Zinc Smelter
Hindustan Zinc Limited
P.O. Putholi -312021
Chittorgarh (Rajasthan)

2. Authorisation No. and Date of issue:

F(HSW)/Chittorgarh (Gangrar)/7066(1)/2024-2025/583-585 issued dated 27.05.2024

3. Name of the authorised person and full address with telephone, fax number and e-mail:

Manisha Bhati
Associate General Manager-Environment
Chanderiya Lead Zinc Smelter, Hindustan Zinc Limited
Chittorgarh (Raj)
01472-254412
Email – manisha.bhati@vedanta.co.in

4. Production during the year (product wise), wherever applicable

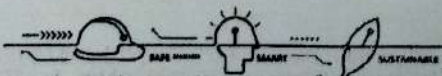
CLZS - Total Metal (Zinc Lead) - 616238 MT

Part A. To be filled by hazardous waste generators**1. Total quantity of waste generated category wise -**

Total Generation – 67913.59 MT & 102 Nos (For details refer Annexure 1)

2. Quantity dispatched

- (i) to disposal facility – Disposed: 29787.78 MT & 102 Nos
- (ii) to recycler or co-processors or pre-processor – To Recycler: 35132.50 MT
- (iii) others

3. Quantity utilised in-house, if any – 2217.56 MT**4. Quantity in storage at the end of the year – 1443.433 MT**

4. Quantity in storage at the end of the year – 1443.433 MT

Part B. To be filled by Treatment, storage and disposal facility operators

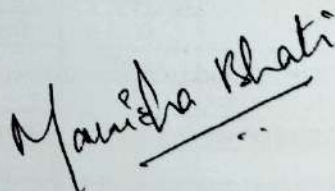
1. Total quantity received – 29787.78 MT & 102 Nos
2. Quantity in stock at the beginning of the year - NA
3. Quantity treated – 29787.78 MT & 102 Nos
4. Quantity disposed in landfills as such and after treatment – 29787.78 MT & 102 Nos
5. Quantity incinerated (if applicable) - NA
6. Quantity processed other than specified above - NA
7. Quantity in storage at the end of the year - NA

Part C. To be filled by recyclers or co-processors or other users

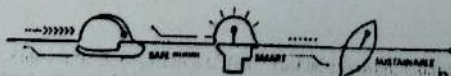
1. Quantity of waste received during the year –
(i) domestic sources – 79.918 MT
(ii) imported (if applicable) - NA
2. Quantity in stock at the beginning of the year - 0
3. Quantity recycled or co-processed or used – 79.918 MT
4. Quantity of products dispatched (wherever applicable) – NA
5. Quantity of waste generated - NA
6. Quantity of waste disposed - NA
7. Quantity re-exported (wherever applicable)- NA
8. Quantity in storage at the end of the year - NA

Date - 27 June 2025

Chittorgarh



Manisha Bhati
Associate General Manager
Environment



ANNEXURE 1

S.No	Type of Hazardous Waste	Category		MTA	FY 2024-25
		Sch	Code		
1	Spent catalyst	I	17.2	Generation	20.04
				Sale	0.00
				Disposal/Reuse	20.04 Disposed to SLF
2	Empty barrels/containers contaminated with hazardous chemicals/wastes	I	33.1	Generation	102.00
				Sale	0.00
				Disposal/Reuse	102.00 Disposed to SLF
3	Water Purification Resin	I	34.2	Generation	0.00
				Sale	0.00
				Disposal/Reuse	0.00
4	Exhaust Air or Gas cleaning residue	I	35.1	Generation	0.00
				Sale	0.00
				Disposal/Reuse	0.00
5	Spent ion exchange resin containing Toxic metals	I	35.2	Generation	0.00
				Sale	0.00
				Disposal/Reuse	0.00
6	Ash from incinerator and flue gas cleaning residues	I	37.2	Generation	1.53
				Sale	0.00
				Disposal/Reuse	1.53 Disposed to SLF
7	MEE Salt	I	37.3	Generation	1897.33
				Sale	0.00
				Disposal/Reuse	1897.33 Disposed to SLF
8	Used or spent oil	I	5.1	Generation	64.54
				Sale	60.03 Sold to Registred Recycler
				Disposal/Reuse	3.44 Reuse/Recycle in Process
9	Filter contaminated with oil	I	5.2	Generation	0.00
				Sale	0.00
				Disposal/Reuse	0.0
10	Oil soaked Material	I	5.2	Generation	7.46
				Sale	0.00
				Disposal/Reuse	7.46 Disposed to SLF
11	Waste Oil	I	5.2	Generation	0.00
				Sale	0.00
				Disposal/Reuse	0.00
12	Anode Mud	I	7.2	Generation	156.43
				Sale	76.51 Sold to Registred Recycler
				Disposal/Reuse	79.92 Reuse/Recycle in Process
13	Cobalt cake	I	7.2	Generation	0.00
				Sale	0.00
				Disposal/Reuse	0.00
14	Cooler cake	I	7.2	Generation	5896.48
				Sale	0.00
				Disposal/Reuse	5896.48 Disposed to SLF
15	Copper bearing lead residue/process residue	I	7.2	Generation	16068.06
				Sale	16068.06 Sold to Registred Recycler
				Disposal/Reuse	0.00
16	HGP Dust	I	7.2	Generation	2967.04
				Sale	430.48 Sold to Registred Recycler
				Disposal/Reuse	1982.20 Reuse/Recycle in Process

17	Process residues(ISF Dross)	I	7.2	Generation	7305.95	
				Sale	7305.95	Sold to Registered Recycler
				Disposal/Reuse	0.00	
18	Process residues(De-Fluorination cake)	I	7.2	Generation	0.00	
				Sale	0.00	
				Disposal/Reuse	0.00	
19	Process residue (Lead Dross/Lead bearing residues/Lead Scrap)	I	7.2	Generation	5506.38	
				Sale	5323.23	Sold to Registered Recycler
				Disposal/Reuse	152.00	Reuse/Recycle in Process
20	Process residue (Zinc Dross)	I	7.2	Generation	0.00	
				Sale	0.00	
				Disposal/Reuse	0.00	
21	Process Residues and Wastes (Geothite Cake)	I	7.2	Generation	7095.40	
				Sale	0.00	
				Disposal/Reuse	7095.40	Disposed to SLF
22	Purification Cake (Enrichment cake)	I	7.2	Generation	6057.42	
				Sale	5868.24	Sold to Registered Recycler
				Disposal/Reuse	0.00	
23	Non-Ferrous Sludge from ETP and scrubbers	I	7.4	Generation	14869.54	
				Sale	0.00	
				Disposal/Reuse	14869.54	Disposed to SLF

S.No	Type of Non- Hazardous Waste	Category		MTA	
1	Jarosite Cake	Non Hazardous	Generation	397072	
			Sale	25939	Jarosite to Cement
				282580	Jarofix to Highway
			Disposal/Reuse	397072	Disposed off to Jarofix Yard Landfill
2	ISF Slag	Non Hazardous	Generation	93558.50	
			Sale	84891.88	Cement
			Disposal/Reuse	5267.76	Reuse /Recycle
3	Ausmelt Slag	Non Hazardous	Generation	30355.90	
			Sale	49488.33	Sale
			Disposal/Reuse	38558.28	Reuse /Recycle
4	Fly Ash	Non Hazardous	Generation	260080.09	
			Sale	260080.09	Cement
			Disposal/Reuse	0.00	
5	Bottom Ash	Non Hazardous	Generation	69349.77	
			Sale	53809.96	Cement/Bricks
			Disposal/Reuse	0.00	

Manisha Bhati

Associate General Manager- Environment



Registered

File No: F(HSW)/Chittorgarh(Gangrar)/7066(1)/2024-2025/583-585

Date:- 27/05/2024

Unit Id : 263

M/s Hindustan Zinc Ltd.

Chandaria Lead Zinc Smelter, P.O. Putholi , Tehsil:Gangrar

District:CHITTORGARH

Sub:- Authorization for operating a facility for Collection, Disposal, Disposal at landfill, Generation, Reception, Recycler, Recycling, Reuse, Storage, Transport, Treatment of Hazardous Wastes Under Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.

Ref:- Your application received on 27/02/2024 and subsequent correspondence.

Sir

1 Number of authorization RPCB/HWM/2024-2025/HDF/HSW/12.

2 Application Number : 364338 dated : 27/02/2024 .

3 **FACTORY MANAGER of M/s Hindustan Zinc Ltd. is hereby granted an authorization based on the enclosed signed inspection report for Collection, Disposal, Disposal at landfill, Generation, Reception, Recycler, Recycling, Reuse, Storage, Transport, Treatment of Hazardous waste on the premises situated at Chandaria Lead Zinc Smelter, PO Putholi Tehsil: Gangrar District: Chittorgarh.**

Details of Authorization

SNo	Type of Hazardous waste	Category		Quantity/ Unit	Hazardous Waste Disposal Practice
		Sch	Code		
1	Spent catalyst*	I	17.2	60.00 KLA	SLF/Sold to registered recycler
2	Empty barrels/containers contaminated with hazardous chemicals/wastes	I	33.1	2400.00 NOS. PER YEAR	SLF/Sold to registered recycler
3	Water Purification Resin	I	34.2	2.00 TPA	SLF/Sold to registered recycler
4	Exhaust Air or Gas cleaning residue	I	35.1	100.00 KG/YEAR	Approved Incinerator
5	Spent ion exchange resin containing Toxic metals	I	35.2	1.00 TPA	SLF/Sold to registered recycler





Registered

File No: F(HSW)/Chittorgarh(Gangrar)/7066(1)/2024-2025/583-585

Date:- 27/05/2024

Unit Id : 263

6	Ash from incinerator and flue gas cleaning residues	I	37.2	2.00 TPA	SLF/Sold to registered recycler
7	MEE Salt	I	37.3	8000.00 TPA	SLF/Sold to registered recycler/recycle in the process
8	Used or spent oil	I	5.1	171.00 KLA	Reuse/ Sales to Registered Recycler
9	Filters contaminated with oil	I	5.2	100.00 TPA	SLF/Coprocessing/In cineration/Sales to registered recyclers
10	Oil soaked Material	I	5.2	10.00 TPA	SLF/Coprocessing/In cineration/Sales to registered recyclers
11	Waste Oil	I	5.2	270.00 KLA	Reuse/ Sales to Registered Recycler
12	Anode Mud	I	7.2	2200.00 TPA	SLF/Sold to registered recycler/recycle in the process
13	Cobalt cake	I	7.2	1000.00 TPA	SLF/Sold to registered recycler/recycle in the process
14	cooler cake	I	7.2	6000.00 TPA	SLF/Sold to registered recycler/recycle in the process
15	Copper Bearing lead residue/process residue	I	7.2	11000.00 TPA	SLF/Sold to registered recycler
16	HGP Dust	I	7.2	7500.00 TPA	SLF/Sold to registered recycler





RAJASTHAN STATE POLLUTION CONTROL BOARD
4, Institutional Area, Jhalana Doongari, Jaipur-302 004
Phone: 0141-5159600,5159695 Fax: 0141-5159697

Registered

File No: F(HSW)/Chittorgarh(Gangrar)/7066(1)/2024-2025/583-585

Date:- 27/05/2024

Unit Id : 263

17	Process residues ((ISF Dross)	I	7.2	10000.00 TPA	SLF/Sold to registered recycler/recycle in the process
18	Process residues (De-Fluorination cake)	I	7.2	2000.00 TPA	SLF/Coprocessing
19	Process residues (Lead Dross/Lead bearing residues/ Lead Scrap)	I	7.2	18000.00 TPA	SLF/Sold to registered recycler/recycle in the process
20	Process residues (Zinc Dross)	I	7.2	12000.00 TPA	Sold to registered recycler/recycle in the Process
21	Process residues and waste (Geothite cake)	I	7.2	11471.00 TPA	SLF/Coprocessing/Incineration/Sales to registered recyclers
22	Purification Cake	I	7.2	12520.00 TPA	SLF/Sold to registered recycler/recycle in the process
23	Non-Ferrous Sludge from ETP and scrubbers	I	7.4	30000.00 TPA	SLF/Coprocessing/Incineration/Sales to registered recyclers
24	Jerosite cake	III	OW	387000.00 TPA	Utilization in Cement Plant/Manufacturing of Road/used in fumer plant
25	Zinc Dross/Zinc Ash/Zinc Skimming/Zinc Scrap/Zinc Residue	IV	...	25000.00 TPA	Used as raw material

4 The authorization shall be in force for period from 09/02/2024 to 31/01/2029 .





RAJASTHAN STATE POLLUTION CONTROL BOARD
4, Institutional Area, Jhalana Doongari, Jaipur-302 004
Phone: 0141-5159600,5159695 Fax: 0141-5159697

Registered

File No: F(HSW)/Chittorgarh(Gangrar)/7066(1)/2024-2025/583-585

Date:- 27/05/2024

Unit Id : 263

The authorization is subject to the following general and specific conditions :

A. General conditions of Authorization

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
Signature Not Verified
Digitally signed by _____
Date: 2024.05.28 11:28:07
Reason: I am a signer
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed





RAJASTHAN STATE POLLUTION CONTROL BOARD
4, Institutional Area, Jhalana Doongari, Jaipur-302 004
Phone: 0141-5159600,5159695 Fax: 0141-5159697

Registered

File No: F(HSW)/Chittorgarh(Gangrar)/7066(1)/2024-2025/583-585

Date:- 27/05/2024

Unit Id : 263

of as per specific conditions of authorisation.

11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorisation shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

Signature Not Verified
Digitally signed by _____
DN: cn=_____, o=_____, ou=_____, email=_____
Date: 2024.05.27 11:21:07
Reason: Signature not verified

B. Specific Conditions

- 5 That this authorization shall cease to be valid & shall be liable to be revoked without any further notice in case of refusal/expiry of consent to operate under the provisions of Water(Prevention and Control of Pollution) Act,1974 and Air(Prevention and Control of Pollution)Act,1981 by the State Board.
- 6 That no recycling/re-processing of the hazardous waste covered under schedule IV shall be carried out without prior authorisation from Rajasthan State Pollution Control Board as recycler/ re-processor of hazardous waste under the rule 6 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- 7 That no other hazardous waste shall be utilized for co-processing as a supplementary resource or for energy recovery, or after processing without prior & valid approval of Central Pollution Control Board under the rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- 8 That in case of any expansion or change in process or product or change in mode / practice of disposal of hazardous waste or its quantity, industry shall obtain fresh authorization.
- 9 That the industry will sell hazardous wastes to units which are having valid authorization under HWM Rules, 2016 from concerning State Pollution Control Boards or similar competent authority for co-processing in cement kiln or recycling of hazardous waste.





RAJASTHAN STATE POLLUTION CONTROL BOARD
4, Institutional Area, Jhalana Doongari, Jaipur-302 004
Phone: 0141-5159600,5159695 Fax: 0141-5159697

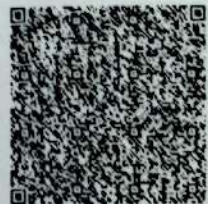
Registered

File No: F(HSW)/Chittorgarh(Gangrar)/7066(1)/2024-2025/583-585

Date:- 27/05/2024

Unit Id : 263

- 10 That the arrangements for transportation of the hazardous waste for disposal shall be done by the authorized/dedicated vehicles only after obtaining authorisation and any environmental damages during Transportation shall be borne by sender/receiver whoever arrange the transportation.
- 11 That unit will develop plantation for gap filling.
- 12 That the unit shall give more focus on plantation to cover 33% area under plantation. The species like Tamarind /Imli(Tamarindus Indica), Palas(Butea Monosperma), Ber (Zizipus Mauritiana), Bael (Aegle Marmelos), Mousari(Mimusops Elengi), Siris(Albizia Lebbeck), Kacchnar(Bauhinia Variegata), Sunflower(Helianthus annuus), Mustard(Brassica Nigra) should be planted for better control of noise and air pollution.
- 13 That unit shall operate and maintain truck mounted vacuum operated road sweepers for housekeeping in the premises.
- 14 That unit shall maintain and operate water spraying system for raw material handling in storage yard.
- 15 That unit shall provide and maintain cemented internal roads so as to avoid dust emission due to movement of vehicles.
- 16 That in case of any expansion or change in process or product or change in mode/ practice of disposal of hazardous waste or its quantity, fresh authorization shall be obtained.
- 17 That unit will renew their membership of UCCI Udaipur within one month.
- 18 That unit will strictly comply the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016 and comply the guidelines of CPCB for Jarofix.
- 19 That this authorization is being issued in suppression of earlier authorizations issued vide order no-876-878 & 5969-5972 dated 03/06/2020 & 27/01/2022 respectively.
- 20 The authorization is subject to the conditions stated at Annexure "A" enclosed with the authorization letter and the such conditions as may be specified in the Rules for the time being forced under the Environmental (Protection) Act, 1986.
- 21 The unit has to display and maintain the data online outside the factory main gate in Hindi & English both on a 6'X 4' display board in the manner & format prescribed at Annexure "B" and the report of the Compliance along with photograph shall be submitted to this office & Regional Office, time to time.





Registered

File No: F(HSW)/Chittorgarh(Gangrar)/7066(1)/2024-2025/583-585

Date:- 27/05/2024

Unit Id : 263

- 22 That the annual reports/returns in the form prescribed under the Rules shall be submitted to the Board by 30th June of every year and records of hazardous waste Generation, handling & management shall be maintained according to the provisions of the Hazardous Waste (Management and Transboundary Movement) Rules, 2016 and shown & submitted to the Board as and when asked for.
- 23 The hazardous waste should not be stored for a period beyond 90 days, failing which the authorization shall deemed to be revoked.
- 24 It shall be ensured that the Hazardous waste is handled, managed & disposed of strictly in accordance with the Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016. Non compliance Signature Not Verified of the Rules or any of the conditions contained in the authorization shall be tantamount to automatic cancellation/revocation of the authorization.
- 25 The operator of the facility shall liable to comply any other conditions as per the guidelines issued by the MoEF or CPCB or State Board related to collection, disposal, reception, storage & treatment of hazardous waste.
- 26 That this Authorization is being issued under the provisions of Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016 from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with conditions laid down in all other rules for the time-being in force, rests with the industry/unit/project proponent.
- 27 That this Authorization shall not, in any way, adversely affect or jeopardize the legal proceeding, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.





RAJASTHAN STATE POLLUTION CONTROL BOARD
4, Institutional Area, Jhalana Doongari, Jaipur-302 004
Phone: 0141-5159600,5159695 Fax: 0141-5159697

Registered

File No: F(HSW)/Chittorgarh(Gangrar)/7066(1)/2024-2025/583-585

Date:- 27/05/2024

Unit Id : 263

This bears the approval of the competent authority.

Yours sincerely,

Group Incharge

Copy To:-

- 1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board Chittorgarh to ensure the compliance
- 2 Master File

Group Incharge

