

Vide Letter No.: HZLP/SRP/23-24/H-II

Date: 25/05/2024

To,
The Regional Officer (North Central Zone),
Ministry of Environment, Forests & Climate Change,
25, Subhash Road, Dehradun, Uttarakhand-248001

Subject: Submission of Environment Clearance compliance report for Pantnagar Silver Refinery Plant (Refined Silver production 800TPA) of M/s Hindustan Zinc Limited, Plot No 2 & 3, Sector 14, IIE, SIDCUL, Pantnagar, Dist. U.S. Nagar for the period October-2023 to March-2024.

Ref; Letter No:- E.C. No.- 10-9(10)/2018 dated 08-02-2019 from SEIAA, Dehradun.

Dear Sir,

With reference to the aforesaid subject, we have obtained Environment Clearance from State Environment Impact Assessment Authority, Dehradun for Pantnagar Silver Refinery Plant (Refined Silver production 800TPA) on dated 08.02.2019.

Please find enclosed herewith the Compliance report of Environment Clearance for Pantnagar Silver Refinery Plant of M/s Hindustan Zinc Limited, Plot No 2 & 3, Sector 14, IIE, SIDCUL, Pantnagar, Dist. U.S. Nagar for the period of October-2023 to March-2024.

In case any additional information / documents / clarifications are required, the same may kindly be informed to us.

Thanking you.



(Anamika Jha)

SBU Director
Pantnagar Silver Refinery Plant
Hindustan Zinc Limited

Hindustan Zinc Limited
Pantnagar Metal Plant
Plot No.2&3, Sector 14, IIE, SIDCUL,
Rudrapur - 263153, Uttarakhand.

CC:

1. Member Secretary, SEIAA, Dehradun
2. MS office, UEPPCB, Dehradun
3. Regional Officer, UEPPCB, Kashipur
4. Office copy, HZL



Compliance Report of Environment Clearance (October-2023 to March-2024)

Name of the Project: M/s Hindustan Zinc Limited
Pantnagar Silver Refinery Plant

Location of the Project: Plot No.- 2 & 3, Sector 14, IIE, SIDCUL,
Pantnagar, District - Udham Singh Nagar,
Uttarakhand - 263153

(Letter No: E.C. No.- 10-9(10)/2018 dated 08-02-2019)

| S. N. | Specifications | Status |
|-------|---|---|
| | <u>Pre Operation-</u> | |
| 1 | The project proponent should advertise with basic details at least in two widely circulated local newspapers, within seven (7) days of the receipt of the clearance letter informing that the project has been accorded environmental clearance which is available with the State Environment Impact Assessment Authority, Dehradun and a copy of the same is being sent to the Regional Office of Ministry of Environment and Forest, Government of India located at 25 Subhash road Dehradun. | Complied. Silver 800 TPA Environment Clearance letter was received on 08.02.2019. It was advertised in two local newspapers i.e. Amar Ujala & Dainik Jagran on date 10.02.2019. Advertisement copy was submitted to SEIAA, Dehradun and RO, MOEF office Dehradun along with compliance report vide letter no HZL/PMP/18-19/H-II dated 03.04.2019. |
| 2 | A copy of the Environmental Clearance letter shall be sent by the proponent to the concerned Panchyat, if any from whom suggestion/representation, if any, were received while processing the proposal. | Complied. Copy of Environment Clearance letter submitted to the Zila Panchyat office Udham Singh Nagar (Rudrapur) on date 11.02.2019. Receiving copy was submitted along with compliance report vide letter no HZL/PMP/18-19/H-II dated 03.04.2019. |
| 3 | Consent to Establish/Consent to Operate shall be obtained from Uttarakhand Environment Protection and Pollution Control Board under relevant provisions of Central Air Act and Central Water Act before starting up of any construction activity at the site. | Complied. Consent to Establish and Consent to Operate obtained from Uttarakhand Environment Protection and Pollution Control Board under relevant provisions of Central Air Act and Central Water Act on 28.02.2019 & 29.03.2019 respectively. Present CCA renewal valid till 31.03.2025 having consent number-UKPCB/HO/Con-H-71/2021/1628. |
| 4 | There shall be no felling of trees at the construction site and further no damage to the local vegetation shall be done. The installation of equipments/machineries shall be done within the vacant space available in the plant premises. | Complied as no tree felling and no damage to local vegetation done at construction site. The new equipments/machineries being installed within the vacant space available in the plant premises. |
| | <u>During Operation Phase-</u> | |
| 1 | The Environmental Clearance is being granted for Refined Silver production from 600 TPA to 800 TPA (monthly 85 tonnes per month with overall 800 tons per annum). Apart from 800 TPA Refined Silver | Noted and Being complied. |

Hindustan Zinc Limited
Pantnagar Metal Plant
Plot No. 2 & 3, Sector 14, IIE, SIDCUL,
Rudrapur - 263153, Uttarakhand

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| | (powder/ingot etc.) product, Antimony Concentrate(precipitate/salt mix)- 1800TPA, Bismuth Concentrate(precipitate/salt mix)-360TPA, Copper Matte- 140TPA, and Oxidation Slag- 1250TPA, Silver Nitrate- 25TPA, Silver anode slime/Silver sand- 10TPA, Lead slag- 450TPA, VRF zinc- 650TPA, VRF zinc dross- 100TPA will also be produced as a by-products. Major raw materials are Anode Slime/Dore Silver/HGM (high grade metal) - 4680TPA which will be procured from HZL's smelters and from open market. Other consumables are Coke- 87 TPA, Soda Ash- 250 TPA, Salt peter (Potassium Nitrate)- 89 TPA, Nitric acid- 150 TPA, Ethyne- 10 TPA, Charcoal- 20 TPA, Sodium Chloride- 15 TPA, Borax- 15 TPA, LDO/HSD/LNG/LHSH/PNG/LPG- 4500 TPA, Calcium Fluoride- 40 TPA, Sulphuric Acid- 5 TPA and Lime 5 TPA. | |
| 2 | Consent to Establish/Consent to Operate shall be obtained from Uttarakhand Environment Protection and Pollution Control Board under relevant provisions of Central Air Act and Central Water Act before starting up of any construction activity at the site. | Complied. Consent to Establish and Consent to Operate obtained from Uttarakhand Environment Protection and Pollution Control Board under relevant provisions of Central Air Act and Central Water Act on 28.02.2019 & 29.03.2019 respectively. Present CCA renewal valid till 31.03.2025 having consent number- UKPCB/HO/Con-H-71/2021/1628. |
| 3 | A copy of the Environmental Clearance letter shall be sent by the proponent to the concerned Panchyat, if any from whom suggestion/representation, if any, were received while processing the proposal. | Complied. Copy of Environment Clearance letter submitted to the Zila Panchyat office Udham Singh Nagar (Rudrapur) on date 11.02.2019. Receiving copy was submitted along with compliance report vide letter no HZL/PMP/18-19/H-II dated 03.04.2019. |
| 4 | The soil and groundwater samples shall be tested from accredited labs and it shall be ensured that test results comply with CPCB standards so as to ensure that there is no threat to groundwater quality by leaching of heavy metals and toxic contaminants. | The soil and groundwater samples are being tested regularly by NABL accredited lab (M/s Eko Pro Engineers, Ghaziabad) and all test results are being complied with CPCB standard. Zero effluents generated from the plant so there is no threat to groundwater quality by leaching of heavy metals and toxic contaminants. Test reports are being attached herewith as Annexure 1(a). |
| 5 | No waste water shall be discharged outside the plant boundary and 'Zero Discharge' shall be strictly adhered to permissible standards. | 'Zero Liquid discharge' maintained and is being ensured. |
| 6 | The gaseous emissions (SOx, NOx, CO) and particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. | Gaseous emissions of SOx, NOx, CO and Particulate matter being monitored periodically by NABL authorized third party (external agency). Emission levels are being ensured as per the stipulations. Test reports are being attached herewith as Annexure 1(b). During failure of pollution control system, will ensure the compliance. |

Hindustan Zinc Limited
 Pan Nagar Metal Plant
 Plot No.2&3, Sector 14, IIE, SIDCUL
 Rudrapur - 263153, Uttarakhand

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| | | In addition, online PM analysers in all process stacks, SO _x , NO _x & PM analysers in DG stacks installed for effective monitoring & control the emissions. Photos of the analysers are attached as Annexure 2. |
| 7 | Fugitive emissions in the work zone environment, product and raw materials storage areas shall be regularly monitored. The emissions shall conform to the limits imposed by the UEPPCB/Central Pollution Control Board. | Hygiene ventilation systems have been installed to arrest fugitive emissions. Work zone monitoring is being done monthly, In the Raw material handling, process and finished good area and emission maintained below the limit. Fugitive emission levels are being ensured as per the stipulations. Test reports are being attached herewith as Annexure 1(c). |
| 8 | The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storages and Import of Hazardous Chemicals Rules, 1989, as amended from time to time. Authorization from the UEPPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes. | Appropriate storage facilities have been installed for storing Hazardous chemicals/wastes. Authorization of Hazardous waste under Hazardous Waste Rules 2008 has been granted by UKPCB along with CCA and present CCA renewal valid till 31.03.2025 having consent number- UKPCB/HO/Con-H-71/2021/1628 . Photos of the HW storage site are attached as Annexure 3. |
| 9 | Installed furnace should meet the air pollution discharge norms of CPCB/ UEPPCB. | Installed furnaces have equipped with adequate and efficient bag filter to ensure the air pollution discharge norms as per CPCB/UEPPCB. |
| 10 | The ambient air quality and noise levels as per CPCB norms shall be ensured through a monitoring system. Dust Suppression during construction activity shall be ensured. Acoustic enclosures shall be provided with DG sets on site complying with Noise Levels of CPCB standards. | The ambient air quality and noise levels as per CPCB norms are being ensured through monthly monitoring through NABL certified lab. Acoustic enclosures provided with DG sets on site complying with Noise Levels of CPCB standards. Test reports are being attached herewith as Annexure 1(d). |
| 11 | The vehicles used at the factory site should comply with emission norms and noise level standards of CPCB. | Being complied. All the vehicles engaged in transportation of product and raw materials are regularly checked for "Pollution Under Control" certificates. No overloading is allowed. Integrated Transport Management System (ITMS) is being used for effective control of vehicular traffic. Emission and Noise level being complied, and results are attached as Annexure 1(a) & 1(d). |
| 12 | All necessary efforts shall be made to ensure safety and hygiene of workforce. First Aid facility shall be established and trained manpower to deal with emergency cases shall be engaged. The labour force engaged on site shall be screened for health from time to time. | Being complied. First Aid facility equipped with trained staff already provided in plant premises. IME for new manpower and PME for regular manpower being ensured as per statutory requirements. |
| 13 | Adequate drinking water and sanitation facility shall be | Being complied. Adequate drinking water and |

Hindustan Zinc Limited
Panipat Metal Plant
Sector 14, IIE, SIDCUL,
Rudrapur - 263153, Uttarakhand.

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| | provided on site for the workforce. | sanitation facility already provided within plant premises. |
| 14 | Training shall be imparted to all employees on safety and health aspects. Pre- employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. | Being complied. Trainings to all employees on Safety and health aspects are being provided on regular interval. Pre-employment & periodic medical examination are being carried out for the relevant occupational hazards at a regular frequency, as per statutory requirements. |
| 15 | The project authority shall also comply with all the environment protection measures and safeguards proposed in the EIA/EMP report. All the recommendations made in respect of environmental management and risk mitigation measures relating to the project shall be implemented. | Environment protection measures and safeguards recommended in the EIA/EMP report being implemented. |
| 16 | A separate Environmental Management Cell shall be set up to carry out the Environmental Management functions. | Separate Environment Management cell is already in place for all Environment Management functions. Environmental monitoring being ensured through Authorized third party (external agency) regularly. |
| 17 | The fire safety arrangements and emergency exit plan should be as per the norms of the concerned regulatory authority/agency. | Fire safety arrangements equipped with dedicated Fire tender, and team already provided in plant premises. Fire hydrants are in auto mode. Onsite Emergency response plan already in place. |
| 18 | Rainwater harvesting for surface run off shall be ensured. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and other particles. | Complied. Presently We have four rainwater harvesting pond for rainwater collection having capacity approx. 2542, 1500, 841 and 750 cu.m and collected rainwater is being utilized into the process. In FY 2023-24, we have reused around 14,950 Cu.m rainwater in the process for conserving the fresh water. Photograph of the same is attached herewith as Annexure-4. |
| 19 | Energy conservation measures to be adopted for reducing the energy consumption. | Being complied. Various energy conservations measures being adopted in plant for reducing the energy consumption. |
| 20 | At no time the emissions shall exceed the prescribed limits in the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved. | Being complied. All the emissions are being maintained within prescribed limit. Interlocked pollution control system are in place and functioning. |
| 21 | The locations of ambient air quality monitoring stations shall be reviewed in consultation with UEPPCB, if required, in the downwind direction as well as where maximum ground level concentrations are anticipated. | Complied. Four Ambient air quality monitoring location already finalized in the downwind direction of the plant in consultation with RO, UEPPCB. CAAQMS installed at plant premises. |
| 22 | The stacks of appropriate height as per the central pollution board guidelines shall be provided to control the emissions. | Complied. Adequate stack height is provided as per CPCB guidelines: <ul style="list-style-type: none"> • 40 m stack height for furnace off gases • 30 m stack height with NOx scrubber provided in electrolyte section |

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Plot No.2&3, Sector 14, NE, SIDCUL,
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| | | Photo of stack is attached herewith as Annexure 5. |
| 23 | The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standard prescribed under Environment (Protection) Act, 1986 rules, 1989 viz. 75 dB(A) (day time) and 70dB(A) (Night time). | Being complied. Various noise reduction measures are adopted, to ensure compliance to Ambient noise standards, at the design stage of the projects as: Acoustic enclosure provided for DG set and all the necessary provision made in compressor area. Noise level monitoring is being done and ensured within limit reports are attached herewith as Annexure 1(d). |
| 24 | One third of the total project site area shall be converted into green belt. The green belt shall not include kitchen garden, flower pots and grasses/herbs in the area. It shall comprise of tree stand of aesthetic/fruit/timber value. Quality planting material shall be used during plantation as per standards of State Forest Department. The species selection should include criterion of fruit bearing and fast growing tall trees. The concerned official of State Forest Department shall ensure the compliance. | Complied. The greenbelt more than 33 per cent area has been covered by selection of plant species as per CPCB guideline and in consultation with DFO. However, gap filling plantation is being carried out to maintain the survival rate of the plants. |
| 25 | The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated E.C conditions including results of monitored data in soft copy to this Authority and regional office of MoEF, Govt. of India at Dehradun. | Being Complied. Last six-monthly compliance report was submitted to SEIAA, Dehradun and RO, MOEF office Dehradun vide letter no HZLP/SRP/23-24/H-1 dated 25.11.2023. Six-monthly compliance reports are being uploaded on company website. Link of website uploading EC compliance of April'2023 to September'2023 is https://www.hzllndia.com/wp-content/uploads/Pantnagar-Metal-Plant-EC-Compliance-Report-Silver-plant_H1_2023-24.pdf |
| | <u>Entire Life-</u> | |
| 1 | The vehicles used at the factory site should comply with emission norms and noise level standards of CPCB. | Being complied. All the vehicles engaged in transportation of product and raw materials are regularly checked for "Pollution Under Control" certificates. No overloading is allowed. Integrated Transport Management System (ITMS) is being used for effective control of vehicular traffic. Emission and Noise level being complied and results are attached as Annexure 1(a) & 1(d). |
| 2 | All necessary efforts shall be made to ensure safety and hygiene of workforce. First Aid facility shall be established and trained manpower to deal with emergency cases shall be engaged. The labour force engaged on site shall be screened for health from time to time. | Being complied. First Aid facility equipped with trained staff already provided in plant premises. IME for new manpower and PME for regular manpower being ensured as per statutory requirements. |

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| 3 | Adequate drinking water and sanitation facility shall be provided on site for the workforce. | Being complied. Adequate drinking water and sanitation facility already provided within plant premises. |
| 4 | Training shall be imparted to all employees on safety and health aspects. Pre- employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. | Being complied. Trainings to all employees on Safety and health aspects are being provided on regular interval. Pre-employment & periodic medical examination are being carried out for the relevant occupational hazards at a regular frequency, as per statutory requirements. |
| 5 | The project authority shall also comply with the entire environment protection measures and safeguards proposed in the EIA/EMP report. All the recommendations made in respect of environmental management and risk mitigation measures relating to the project shall be implemented. | Environment protection measures and safeguards recommended in the EIA/EMP report being implemented. |
| 6 | The fire safety arrangements and emergency exit plan should be as per the norms of the concerned regulatory authority/agency. | Fire safety arrangements equipped with dedicated Fire tender, and team already provided in plant premises. Fire hydrants are in auto mode. Onsite Emergency response plan already in place. |
| 7 | Rainwater harvesting for surface run off shall be ensured. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and other particles. | Complied. Presently We have four rainwater harvesting pond for rainwater collection having capacity approx. 2542, 1500, 841 and 750 cu.m and collected rainwater is being utilized into the process. In FY 2023-24, we have reused around 14,950 Cu.m rainwater in the process for conserving the fresh water. Photograph of the same is attached herewith as Annexure-4. |
| 8 | The project proponent shall ensure compliance to provisions of the all Acts, Rules, Regulations and Guidelines, for the time being in force, as applicable to the project. | Noted and being complied. |
| 9 | The above environmental safeguards shall be implemented in letter and spirit. The project proponent shall establish Environment Monitoring Cell and also submit six monthly compliance reports to this Authority and regional office of MoEF, Govt. of India at Dehradun. | Separate Environment Management cell is already in place for all Environment Management functions. Environmental monitoring being ensured through Authorized third party (external agency) regularly. |
| 10 | The SEIAA reserves the right to include additional safeguard measures if found necessary and also to take action including revoking of the EC granted under provision of EIA Notification 2006. This EC is being granted subject to compliance of Hon'ble Court Orders issued from time to time. | Noted. |
| 11 | The SEIAA Uttarakhand reserves the right to withdraw the Environmental Clearance or add additional conditions. | Noted. |
| 12 | If this Environmental Clearance is transferred, then fresh | Noted. |

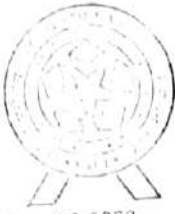
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Pantnagar Metal Plant
Plot No.2&3, Sector 14, IIE, SIDCUL,
Rudrapur – 263153, Uttarakhand.

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| | Environment Clearance is to be obtained under EIA notification dated 14.09.2006. However, no activity shall be undertaken till the Environment Clearance is transferred in his name and he is lawfully bound to Comply with the conditions of the Environmental Clearance. | |
| 13 | Corporate Environment Responsibility be followed as proposed. | Continuous Corporate Environment Responsibility is being carried out through various projects planned in the financial year 2023-24 along with CSR program. CER & CSR projects details are attached herewith as Annexure 6. Report has been submitted on CER activities along with CSR on 31.01.2020. |

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TEST REPORT

Water Sample Analysis

Test Report No. : EKO/E-549/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2 Sec-14
IIE, Sidcul Panthnagar
Rudrapur - Uttarakhand

Sample Description : Ground Water
Sample Drawn on : 22/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : From Borewell
Sampling Plan & Procedure : SOP-W/66
Sample Quantity : 3.0 Litre
Environmental Conditions : Normal
Analysis Duration : 26/03/2024 To 30/03/2024
Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per IS: 10500-2012 (Amd.No.3 Feb-2021) | |
|--------|---|-------------------|-----------|-------|--|---------------|
| | | | | | Acceptable | Permissible |
| 1 | Colour | IS: 3025 (P-4) | <1.0 | Hazen | 5.0 | 15.0 |
| 2 | Odour | IS: 3025 (P-5) | Agreeable | - | Agreeable | Agreeable |
| 3 | Taste | IS: 3025 (P-7) | Agreeable | - | Agreeable | Agreeable |
| 4 | Turbidity | IS: 3025 (P-10) | <1.0 | NTU | 1.0 | 5.0 |
| 5 | pH | IS: 3025 (P-11) | 7.22 | - | 6.5-8.5 | No relaxation |
| 6 | Total Hardness (as CaCO ₃) | IS: 3025 (P-21) | 188.0 | mg/L | 200.0 | 600.0 |
| 7 | Calcium (as Ca) | IS: 3025 (P-40) | 45.30 | mg/L | 75.0 | 200.0 |
| 8 | Ammonia (as Total Ammonia-N) | IS: 3025 (P-34) | <0.5 | mg/L | 0.5 | No relaxation |
| 9 | Chloride (as Cl) | IS: 3025 (P-32) | 30.9 | mg/L | 250.0 | 1000.0 |
| 10 | Potassium (as K) | IS 3025 (Part-45) | <1.0 | mg/L | - | - |
| 11 | Sodium (as Na) | IS 3025 (Part-45) | 11.30 | mg/L | - | - |
| 12 | Fluoride (as F) | IS: 3025 (P-60) | <1.0 | mg/L | 1.0 | 1.5 |
| 13 | Total Dissolved Solids | IS: 3025 (P-16) | 395.0 | mg/L | 500.0 | 2000.0 |
| 14 | Magnesium (as Mg) | IS: 3025 (P-46) | 18.20 | mg/L | 30.0 | 100.0 |
| 15 | Copper (as Cu) | APHA 3125 B | <0.005 | mg/L | 0.05 | 1.5 |
| 16 | Sulphide (as H ₂ S) | IS: 3025 (P-29) | <0.05 | mg/L | 0.05 | No relaxation |
| 17 | Sulphate (as SO ₄) | IS: 3025 (P-24) | 16.9 | mg/L | 200.0 | 400.0 |
| 18 | Nitrate (as NO ₃) | IS: 3025 (P-34) | 1.25 | mg/L | 45.0 | No relaxation |
| 19 | Phenolic Compounds(as C ₆ H ₅ OH) | IS: 3025 (P-43) | <0.001 | mg/L | 0.001 | 0.002 |
| 20 | Mercury (as Hg) | APHA 3125 B | <0.001 | mg/L | 0.001 | No relaxation |
| 21 | Selenium (as Se) | APHA 3125 B | <0.005 | mg/L | 0.01 | No relaxation |
| 22 | Arsenic (as As) | APHA 3125 B | <0.005 | mg/L | 0.01 | No relaxation |
| 23 | Cyanide (as CN) | APHA 4500 CN-K | Absent | mg/L | 0.05 | No relaxation |
| 24 | Lead (as Pb) | APHA 3125 B | <0.005 | mg/L | 0.01 | No relaxation |
| 25 | Zinc (as Zn) | APHA 3125 B | <0.01 | mg/L | 5.0 | 15.0 |



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Issue Date : 30/03/2024

| | | | | | | |
|----|--|-----------------|--------------|-----------|--------|---------------|
| 26 | Total Chromium (as Cr) | APHA 3125 B | <0.005 | mg/L | 0.05 | No relaxation |
| 27 | Total Alkalinity (as CaCO ₃) | IS: 3025 (P-23) | 139.0 | mg/L | 200.0 | 600.0 |
| 28 | Aluminium (as Al) | APHA 3125 B | <0.005 | mg/L | 0.03 | 0.2 |
| 29 | Boron (as B) | IS: 3025 (P-57) | <0.25 | mg/L | 0.5 | 2.4 |
| 30 | Cadmium (as Cd) | APHA 3125 B | <0.001 | mg/L | 0.003 | No relaxation |
| 31 | Anionic Detergents (as MBAS) | APHA 5540 | <0.1 | mg/L | 0.2 | 1.0 |
| 32 | Total Coliform | IS: 15185 | Not Detected | Per 100mL | Absent | No relaxation |
| 33 | E.coli | IS: 15185 | Not Detected | Per 100mL | Absent | No relaxation |

Remark:- Standard Applicable only for Drinking Water.

Notes:

- The results given above are related to the tested sample, as received & mentioned parameters.
The customer asked for the above tests only.
- This test report will not be generated again, either wholly or in part, without prior written permission of the Laboratory.
- The test samples will be disposed off after 15 days from the date of issue of test report, unless until specified by the customer. Sample received for biological tests will be destroyed after 7 days from the date of issue of test report.
- Responsibility of the Laboratory is limited to the invoiced amount only.

****End of Report****





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Contact No : 9711159210, 9810240837, 9810240678 E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in

TEST REPORT

Soil Sample Analysis

Test Report No. : EKO/E-553/301023

Issue Date : 03/11/2023

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2 Sector -14
IIE, Sidcul Pantnagar
Rudrapur - (Uttarakhand)

Sample Description : Soil Sample
Sample Drawn on : 28/10/2023
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 30/10/2023
Sampling Location : From Plot No.1 (old Plot)
Sampling Plan & Procedure : SOP-S/50
Sample Quantity : 500 gm
Environmental Condition : Normal
Analysis Duration : 30/10/2023 To 03/11/2023
Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units |
|--------|----------------------------|-------------------|---------|-------|
| 1 | pH (1:2.5 Suspension) | IS: 2720 (P-26) | 7.62 | - |
| 2 | Conductivity (1:5 Susp.) | IS: 2720 (P-21) | 546.3 | µs/cm |
| 3 | Sodium Available (as Na) | EKO/CHEM/SOP/S-04 | 285.5 | mg/kg |
| 4 | Potassium Available (as K) | EKO/CHEM/SOP/S-02 | 330.2 | mg/kg |
| 5 | Bulk Density | EKO/CHEM/SOP/S-12 | 1.59 | gm/cc |
| 6 | Chloride (as Cl) | EKO/CHEM/SOP/S-01 | 147.5 | mg/kg |
| 7 | Phosphorus (as P) | EKO/CHEM/SOP/S-03 | 78.5 | mg/kg |
| 8 | Total Kjeldahl Nitrogen | EKO/CHEM/SOP/S-07 | 1462.3 | mg/kg |
| 9 | Zinc (as Zn) | USEPA-SW 846 7130 | 18.5 | mg/kg |
| 10 | Lead (as Pb) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 11 | Cadmium (as Cd) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 12 | Copper (as Cu) | USEPA-SW 846 7130 | <0.5 | mg/kg |
| 13 | Arsenic (as As) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 14 | Nickel (as Ni) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 15 | Organic Carbon | IS: 2720 (P-22) | 0.64 | % |
| 16 | Antimony (as Sb) | USEPA-SW 846 | <1.0 | mg/kg |
| 17 | Bismuth (as Bi) | USEPA-SW 846 | <1.0 | mg/kg |
| 18 | Salinity | SOP-S/92/37 | 348.0 | mg/kg |

Notes :

- The results given above are related to the tested sample, as received & mentioned parameters.
The customer asked for the above tests only.
- This test report will not be generated again, either wholly or in part, without prior written permission of the Laboratory.
- The test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after 15 days from the date of issue of test report, unless until specified by the customer. Sample received for biological tests will be destroyed after 7 days from the date of issue of test report.
- Responsibility of the Laboratory is limited to the invoiced amount only.

****End of Report****

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Contact No. : 9711159210, 9810240837, 9810240678 E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in

TEST REPORT
Soil Sample Analysis

Test Report No. : EKO/E-551/301023

Issue Date : 03/11/2023

Issued To : HINDUSTAN ZINC LIMITED
Plot No. 2 Sector -14
WE, Sidcul Pantnagar
Rudrapur - (Uttarakhand)

Sample Description : Soil Sample
Sample Drawn on : 28/10/2023
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 30/10/2023
Sampling Location : Back Side of Training Centre Near Logistic Office
Sampling Plan & Procedure : SOP-S/50
Sample Quantity : 500 gm
Environmental Condition : Normal
Analysis Duration : 30/10/2023 To 03/11/2023
Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units |
|--------|----------------------------|-------------------|---------|-------|
| 1 | pH (1:2.5 Suspension) | IS: 2720 (P-26) | 7.42 | - |
| 2 | Conductivity (1:5 Susp.) | IS: 2720 (P-21) | 588.6 | µs/cm |
| 3 | Sodium Available (as Na) | EKO/CHEM/SOP/S-04 | 312.4 | mg/kg |
| 4 | Potassium Available (as K) | EKO/CHEM/SOP/S-02 | 425.5 | mg/kg |
| 5 | Bulk Density | EKO/CHEM/SOP/S-12 | 1.22 | gm/cc |
| 6 | Chloride (as Cl) | EKO/CHEM/SOP/S-01 | 195.6 | mg/kg |
| 7 | Phosphorus (as P) | EKO/CHEM/SOP/S-03 | 82.5 | mg/kg |
| 8 | Total Kjeldahl Nitrogen | EKO/CHEM/SOP/S-07 | 1540.2 | mg/kg |
| 9 | Zinc (as Zn) | USEPA-SW 846 7130 | 18.9 | mg/kg |
| 10 | Lead (as Pb) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 11 | Cadmium (as Cd) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 12 | Copper (as Cu) | USEPA-SW 846 7130 | <0.5 | mg/kg |
| 13 | Arsenic (as As) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 14 | Nickel (as Ni) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 15 | Organic Carbon | IS: 2720 (P-22) | 0.65 | % |
| 16 | Antimony (as Sb) | USEPA-SW 846 | <1.0 | mg/kg |
| 17 | Bismuth (as Bi) | USEPA-SW 846 | <1.0 | mg/kg |
| 18 | Salinity | SOP-S/92/37 | 280.0 | mg/kg |

Notes :

- The results given above are related to the tested sample, as received & mentioned parameters.
The customer asked for the above tests only.
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- The test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after 15 days from the date of issue of test report, unless until specified by the customer. Sample received for biological tests will be destroyed after 7 days from the date of issue of test report.
- Responsibility of the Laboratory is limited to the invoiced amount only.

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Analytical Services : Polluter & Environment, Food and Agricultural Products, Food packaging material, All types of Aqueous medicines and its raw material, Air, Soil, Drinking water, Environmental Monitoring, Wastewater, Effluents, Air, Noise, Product, Uncontaminated, Sanitary, Medical Devices, Accessories & Surgical products, Nutraceuticals & Functional Foods, Residue Analysis in food and water, Toy & Material, RoHS, REACH, ISO 14001, ISO 9001, ISO 45001, ISO 27001, ISO 50001, ISO 26262, ISO 26264, ISO 26265, ISO 26266, ISO 26267, ISO 26268, ISO 26269, ISO 26270, ISO 26271, ISO 26272, ISO 26273, ISO 26274, ISO 26275, ISO 26276, ISO 26277, ISO 26278, ISO 26279, ISO 26280, ISO 26281, ISO 26282, ISO 26283, ISO 26284, ISO 26285, ISO 26286, ISO 26287, ISO 26288, ISO 26289, ISO 26290, ISO 26291, ISO 26292, ISO 26293, ISO 26294, ISO 26295, ISO 26296, ISO 26297, ISO 26298, ISO 26299, ISO 26300, ISO 26301, ISO 26302, ISO 26303, ISO 26304, ISO 26305, ISO 26306, ISO 26307, ISO 26308, ISO 26309, 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Contact No : 9711159210, 9810240837, 9810240678 E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in

TEST REPORT
Soil Sample Analysis

Test Report No. : EKO/E-552/301023

Issue Date : 03/11/2023

Issued To : HINDUSTAN ZINC LIMITED
Plot No. 2 Sector -14
IIE, Sidcul Pantnagar
Rudrapur - (Uttarakhand)

Sample Description : Soil Sample
Sample Drawn on : 28/10/2023
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 30/10/2023
Sampling Location : Front Side of Contractor Canteen
Sampling Plan & Procedure : SOP-S/50
Sample Quantity : 500 gm
Environmental Condition : Normal
Analysis Duration : 30/10/2023 To 03/11/2023
Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units |
|--------|----------------------------|-------------------|---------|-------|
| 1 | pH (1:2.5 Suspension) | IS: 2720 (P-26) | 7.19 | - |
| 2 | Conductivity (1:5 Susp.) | IS: 2720 (P-21) | 556.8 | µs/cm |
| 3 | Sodium Available (as Na) | EKO/CHEM/SOP/S-04 | 265.4 | mg/kg |
| 4 | Potassium Available (as K) | EKO/CHEM/SOP/S-02 | 312.8 | mg/kg |
| 5 | Bulk Density | EKO/CHEM/SOP/S-12 | 1.62 | g/c3 |
| 6 | Chloride (as Cl) | EKO/CHEM/SOP/S-01 | 185.6 | mg/kg |
| 7 | Phosphorus (as P) | EKO/CHEM/SOP/S-03 | 82.2 | mg/kg |
| 8 | Total Kjeldhal Nitrogen | EKO/CHEM/SOP/S-07 | 1540.2 | mg/kg |
| 9 | Zinc (as Zn) | USEPA-SW 846 7130 | 18.5 | mg/kg |
| 10 | Lead (as Pb) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 11 | Cadmium (as Cd) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 12 | Copper (as Cu) | USEPA-SW 846 7130 | <0.5 | mg/kg |
| 13 | Arsenic(as As) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 14 | Nickel (as Ni) | USEPA-SW 846 7130 | <1.0 | mg/kg |
| 15 | Organic Carbon | IS: 2720 (P-22) | 0.54 | % |
| 16 | Antimony (as Sb) | USEPA-SW 846 | <1.0 | mg/kg |
| 17 | Bismuth (as Bi) | USEPA-SW 846 | <1.0 | mg/kg |
| 18 | Salinity | SOP-S/92/37 | 330.0 | mg/kg |

Notes :

- The results given above are related to the tested sample, as received & mentioned parameters.
The customer asked for the above tests only.
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- The test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after 15 days from the date of issue of test report, unless until specified by the customer. Sample received for biological tests will be destroyed after 7 days from the date of issue of test report.
- Responsibility of the Laboratory is limited to the invoiced amount only.

****End of Report****

For EKO PRO ENGINEERS PVT. LTD.

TECHNICAL MANAGER

(APPROVED SIGNATURE)

Analytical Services - Pollution & Environment, Food and Agricultural Products, Food packaging material, All types of Ayush medicines and its raw material, AYUSH, Herbal, Ayurvedic, Homeopathic, Allopathic Products, Pharmaceuticals, Medical Devices, Accessories & Surgical products, Nutraceuticals & Functional Foods, Residue Analysis in food and water, Toy & Material, Rubber, Plastic, Paint, Coatings, Adhesives, Sealants, Composites, etc.
Consulting Services - EIA, SIA, EC Compliances, Consultancy for NOC of Ground Water, Hydrogeological Studies, Environmental Audit, Impact Assessment, etc.

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Page 1 of 1



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TC-5063

EKO TESTING LABS®

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Competence | Quality | Service

TEST REPORT

Stack Emission Analysis

Issue Date : 30/03/2024

Test Report No. : EKO/E-524/260324-A

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2, Sec - 14
JIE, Sidcul Pantnagar
Rudrapur - Uttarakhand

| | |
|---|---|
| Sample Description | : Stack Emission |
| Sample Drawn on | : 23/03/2024 |
| Sample Drawn by | : EPEPL (Mr. Chandan Sharma) |
| Sample Received on | : 26/03/2024 |
| Time of Sampling (minutes) | : 30.0 |
| Sampling Location | : NA |
| Sampling Plan & Procedure | : SOP-SE/09 |
| Analysis Duration | : 26/03/2024 To 30/03/2024 |
| Source of Emission | : Stack Attached To Furnace |
| Capacity | : 20.8 MT/Day Total |
| Operating Load | : 2.5 MT |
| Normal Operation Schedule | : Batch Wise (3 Shift) |
| Type of Stack | : Metallic With Refractory Lining |
| Diameter of Stack (meter) | : 1.6 at top |
| Height of Stack from Ground Level (meter) | : 40.0 |
| Height of Stack from Roof Level (meter) | : NA |
| Height of Sampling Location (meter) | : 23.3 From Ground Level |
| Type of Fuel Used | : Electricity/PNG |
| Fuel Consumed per hour | : - |
| Ambient Temperature (°C) | : 29.0 |
| Stack Temperature (°C) | : 178.0 |
| Average Velocity of Flue Emission (m/sec) | : 6.3 |
| Average Flow Rate (lpm) | : 19.9 |
| Control Measures (if any) | : Nil |
| Remark (if any) | : Sampling Instrument Used-Stack Monitoring kit APM-610 |

RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per CPCB Guidelines |
|--------|---|-----------------|---------|--------------------|-------------------------------|
| 1 | Particulate Matter (as PM) | IS: 11255 (P-1) | 32.1 | mg/Nm ³ | 150.0 |
| 2 | Sulphur Dioxide (as SO ₂) | IS: 11255 (P-2) | 11.4 | mg/Nm ³ | Not Specified |
| 3 | Oxide of Nitrogen (as NO _x) | IS: 11255 (P-7) | 50.6 | mg/Nm ³ | Not Specified |
| 4 | Carbon Monoxide (as CO) | IS: 13270 | <0.2 | % V/V | 1.0 |
| 5 | Lead (as Pb) | USEPA (P-12) | <1.0 | mg/Nm ³ | 10.0 |

Notes :

- The results given above are related to the tested sample, for various parameters, as observed at the time of Sampling. The customer asked for the above tests only.
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- The test samples will be disposed off after 15 days from the date of issue of test report, unless until specified by the customer.
- Responsibility of the Laboratory is limited to the invoiced amount only.

** End of Report **

For EKO PRO ENGINEERS PVT. LTD.
PURNIMA CHAUHAN
TECHNICAL MANAGER
Authorised Signatory
SAVE THE ENVIRONMENT



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TEST REPORT

Stack Emission Analysis

Test Report No. : EKO/E-524/260324-B

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2, Sec - 14
IIE, Sidcul Panthnagar
Rudrapur - Uttarakhand

| | |
|---|---|
| Sample Description | : Stack Emission |
| Sample Drawn on | : 23/03/2024 |
| Sample Drawn by | : EPEPL (Mr. Chandan Sharma) |
| Sample Received on | : 26/03/2024 |
| Time of Sampling (minutes) | : 30.0 |
| Sampling Location | : NA |
| Sampling Plan & Procedure | : SOP-SE/09 |
| Analysis Duration | : 26/03/2024 To 30/03/2024 |
| Source of Emission | : Stack Attached To Furnace |
| Capacity | : 20.8 MT/Day Total |
| Operating Load | : 2.5 MT |
| Normal Operation Schedule | : Batch Wise (3 Shift) |
| Type of Stack | : Metallic With Refractory Lining |
| Diameter of Stack (meter) | : 1.6 at top |
| Height of Stack from Ground Level (meter) | : 40.0 |
| Height of Stack from Roof Level (meter) | : NA |
| Height of Sampling Location (meter) | : 23.3 From Ground Level |
| Type of Fuel Used | : Electricity/PNG |
| Fuel Consumed per hour | : - |
| Ambient Temperature (°C) | : 29.0 |
| Stack Temperature (°C) | : 178.0 |
| Average Velocity of Flue Emission (m/sec) | : 6.3 |
| Average Flow Rate (lpm) | : 19.9 |
| Control Measures (if any) | : Nil |
| Remark (if any) | : Sampling Instrument Used-Stack Monitoring kit APM-610 |

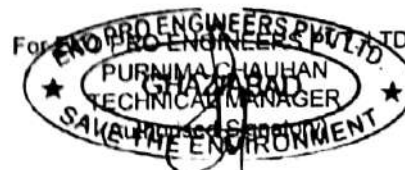
RESULTS

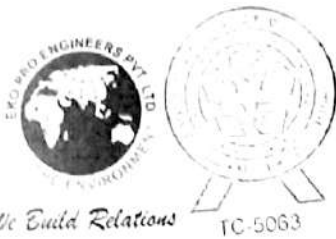
| S. No. | Parameters | Test Methods | Results | Units | Limits as per CPCB Guidelines |
|--------|---------------------------|-----------------|---------|--------------------|-------------------------------|
| 1 | Total Hydrocarbon (as HC) | IS: 5182 (P-17) | ND | mg/Nm ³ | Not Specified |
| 2 | Total VOC | IS: 5182 (P-11) | ND | mg/Nm ³ | Not Specified |

Notes :

1. The results given above are related to the tested sample, for various parameters, as observed at the time of Sampling. The customer asked for the above tests only.
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3. The test samples will be disposed off after 15 days from the date of issue of test report, unless until specified by the customer.
4. Responsibility of the Laboratory is limited to the invoiced amount only.

** End of Report **





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TEST REPORT

Stack Emission Analysis

Test Report No. : EKO/E-525/260324-A

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2, Sec - 14
IIE, Sidcul Panthnagar
Rudrapur - Uttarakhand

| | |
|---|---|
| Sample Description | : Stack Emission |
| Sample Drawn on | : 23/03/2024 |
| Sample Drawn by | : EPEPL (Mr. Chandan Sharma) |
| Sample Received on | : 26/03/2024 |
| Time of Sampling (minutes) | : 30.0 |
| Sampling Location | : NA |
| Sampling Plan & Procedure | : SOP-SE/09 |
| Analysis Duration | : 26/03/2024 To 30/03/2024 |
| Source of Emission | : Stack Attached To Nox Scrubber |
| Capacity | : - |
| Operating Load | : Normal |
| Normal Operation Schedule | : Batch Wise (3 Shift) |
| Type of Stack | : Metallic & PP Lining |
| Diameter of Stack (meter) | : 1.1 at top |
| Height of Stack from Ground Level (meter) | : 30.0 |
| Height of Stack from Roof Level (meter) | : 21.8 |
| Height of Sampling Location (meter) | : 22.9 From Ground Level |
| Type of Fuel Used | : - |
| Fuel Consumed per hour | : - |
| Ambient Temperature (°C) | : 29.0 |
| Stack Temperature (°C) | : 78.0 |
| Average Velocity of Flue Emission (m/sec) | : 6.5 |
| Average Flow Rate (lpm) | : 21.2 |
| Control Measures (if any) | : Nox Scrubber |
| Remark (if any) | : Sampling Instrument Used-Stack Monitoring kit APM-610 |

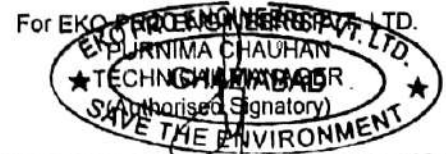
RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per CPCB Guidelines |
|--------|---|-----------------|---------|--------------------|-------------------------------|
| 1 | Particulate Matter (as PM) | IS: 11255 (P-1) | 33.7 | mg/Nm ³ | 150.0 |
| 2 | Sulphur Dioxide (as SO ₂) | IS: 11255 (P-2) | 12.8 | mg/Nm ³ | Not Specified |
| 3 | Oxide of Nitrogen (as NO _x) | IS: 11255 (P-7) | 51.6 | mg/Nm ³ | Not Specified |
| 4 | Carbon Monoxide (as CO) | IS: 13270 | <0.2 | % V/V | 1.0 |
| 5 | Lead (as Pb) | USEPA (P-12) | <1.0 | mg/Nm ³ | 10.0 |

Notes :

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**** End of Report ****





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TEST REPORT

Stack Emission Analysis

Test Report No. : EKO/E-525/260324-B

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2, Sec - 14
IIE, Sidcul Pantnagar
Rudrapur - Uttarakhand

| | |
|---|---|
| Sample Description | : Stack Emission |
| Sample Drawn on | : 23/03/2024 |
| Sample Drawn by | : EPEPL (Mr. Chandan Sharma) |
| Sample Received on | : 26/03/2024 |
| Time of Sampling (minutes) | : 30.0 |
| Sampling Location | : NA |
| Sampling Plan & Procedure | : SOP-SE/09 |
| Analysis Duration | : 26/03/2024 To 30/03/2024 |
| Source of Emission | : Stack Attached To Nox Scrubber |
| Capacity | : - |
| Operating Load | : Normal |
| Normal Operation Schedule | : Batch Wise (3 Shift) |
| Type of Stack | : Metallic & PP Lining |
| Diameter of Stack (meter) | : 1.1 at top |
| Height of Stack from Ground Level (meter) | : 30.0 |
| Height of Stack from Roof Level (meter) | : 21.8 |
| Height of Sampling Location (meter) | : 22.9 From Ground Level |
| Type of Fuel Used | : - |
| Fuel Consumed per hour | : - |
| Ambient Temperature (°C) | : 29.0 |
| Stack Temperature (°C) | : 78.0 |
| Average Velocity of Flue Emission (m/sec) | : 6.5 |
| Average Flow Rate (lpm) | : 21.2 |
| Control Measures (if any) | : Nox Scrubber |
| Remark (if any) | : Sampling Instrument Used-Stack Monitoring kit APM-610 |

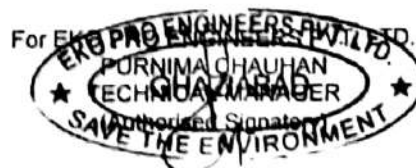
RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per CPCB Guidelines |
|--------|---------------------------|-----------------|---------|--------------------|-------------------------------|
| 1 | Total Hydrocarbon (as HC) | IS: 5182 (P-17) | ND | mg/Nm ³ | Not Specified |
| 2 | Total VOC | IS: 5182 (P-11) | ND | mg/Nm ³ | Not Specified |

Notes :

1. The results given above are related to the tested sample, for various parameters, as observed at the time of Sampling. The customer asked for the above tests only.
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**** End of Report ****





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TEST REPORT

Workzone Air Quality Monitoring

Test Report No. : EKO/E-532/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2 Sec-14
IIE, Sidcul Panthnagar
Rudrapur - Uttarakhand

Sample Description : Workzone Air
Sample Drawn on : 23/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : Bag Filter Area Silver Plant
Sampling Plan & Procedure : SOP-AAQ/15
Analysis Duration : 26/03/2024 To 30/03/2024
Sampling Time : 08 Hrs.
Ambient Temperature (°C) : 27.0
Average Flow Rate of SPM (m³/min) : 1.75
Average Flow Rate of Gases (lpm) : 1.75
Weather Condition : Clear
Remark (if any) : NA

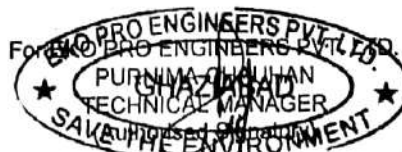
RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Permissible Limits |
|--------|--|---------------------|---------|-------------------|---------------------------------|
| 1 | SPM | IS: 5182 (P-4) | 0.518 | mg/m ³ | 15.0 as per OSHA |
| 2 | Sulphur Dioxide (as SO ₂) | IS: 5182 (P-2) | 0.010 | mg/m ³ | 5.0 as per Factories Act, 1948 |
| 3 | Nitrogen Dioxide (as NO ₂) | IS: 5182 (P-6) | 0.021 | mg/m ³ | 6.0 as per Factories Act, 1948 |
| 4 | Lead (as Pb) | IS: 5182 (P-22) | < 0.1 | mg/m ³ | 0.15 as per Factories Act, 1948 |
| 5 | Zinc (as Zn) | EKO/CHEM/SOP/AAQ-02 | < 0.1 | mg/m ³ | - |

Notes :

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The customer asked for the above tests only.
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- The test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after 15 days from the date of issue of test report, unless until specified by the customer. Sample received for biological tests will be destroyed after 7 days from the date of issue of test report.
- Responsibility of the Laboratory is limited to the invoiced amount only.

End of Report



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TEST REPORT

Workzone Air Quality Monitoring

Test Report No. : EKO/E-531/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2 Sec-14
IIE, Sidcul Panthnagar
Rudrapur - Uttarakhand

Sample Description : Workzone Air
Sample Drawn on : 23/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : Furnace Area In Sliver Floor
Sampling Plan & Procedure : SOP-AAQ/15
Analysis Duration : 26/03/2024 To 30/03/2024
Sampling Time : 08 Hrs.
Ambient Temperature (°C) : 27.0
Average Flow Rate of SPM (m³/min) : 1.60
Average Flow Rate of Gases (lpm) : 1.60
Weather Condition : Clear
Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Permissible Limits |
|--------|--|---------------------|---------|-------------------|---------------------------------|
| 1 | SPM | IS: 5182 (P-4) | 0.647 | mg/m ³ | 15.0 as per OSHA |
| 2 | Sulphur Dioxide (as SO ₂) | IS: 5182 (P-2) | 0.008 | mg/m ³ | 5.0 as per Factories Act, 1948 |
| 3 | Nitrogen Dioxide (as NO ₂) | IS: 5182 (P-6) | 0.019 | mg/m ³ | 6.0 as per Factories Act, 1948 |
| 4 | Lead (as Pb) | IS: 5182 (P-22) | < 0.1 | mg/m ³ | 0.15 as per Factories Act, 1948 |
| 5 | Zinc (as Zn) | EKO/CHEM/SOP/AAQ-02 | < 0.1 | mg/m ³ | - |

Notes :

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****End of Report****



Page 1 of 1



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Competence | Quality | Service

Contact : +91 9810243870

TEST REPORT

Workzone Air Quality Monitoring

Test Report No. : EKO/E-533/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2 Sec-14
IIE, Sidcul Pantnagar
Rudrapur - Uttarakhand

Sample Description : Workzone Air
Sample Drawn on : 23/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : Silver Plant Hydro Top Floor
Sampling Plan & Procedure : SOP-AAQ/15
Analysis Duration : 26/03/2024 To 30/03/2024
Sampling Time : 08 Hrs.
Ambient Temperature (°C) : 27.0
Average Flow Rate of SPM (m³/min) : 1.80
Average Flow Rate of Gases (lpm) : 1.80
Weather Condition : Clear
Remark (if any) : NA

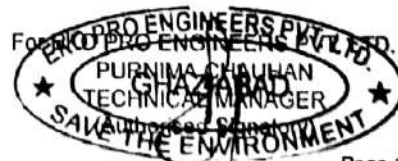
RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Permissible Limits |
|--------|--|---------------------|---------|-------------------|---------------------------------|
| 1 | SPM | IS: 5182 (P-4) | 0.565 | mg/m ³ | 15.0 as per OSHA |
| 2 | Sulphur Dioxide (as SO ₂) | IS: 5182 (P-2) | 0.008 | mg/m ³ | 5.0 as per Factories Act, 1948 |
| 3 | Nitrogen Dioxide (as NO ₂) | IS: 5182 (P-6) | 0.019 | mg/m ³ | 6.0 as per Factories Act, 1948 |
| 4 | Lead (as Pb) | IS: 5182 (P-22) | < 0.1 | mg/m ³ | 0.15 as per Factories Act, 1948 |
| 5 | Zinc (as Zn) | EKO/CHEM/SOP/AAQ-02 | < 0.1 | mg/m ³ | - |

Notes :

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****End of Report****



Page 1 of 1



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Eko Pro Engineers Pvt. Ltd.

Competence | Quality | Service

TEST REPORT

Ambient Air Quality Monitoring

Test Report No. : EKO/E-518/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2, Sec - 14
IIE, Sidcul Pantnagar
Rudrapur - Uttarakhand

Sample Description : Ambient Air
Sample Drawn on : 22/03/2024 To 23/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : Back Side of DG Area
Sampling Time : 24.0 Hrs.
Sampling Plan & Procedure : SOP-AAQ/15
Analysis Duration : 26/03/2024 To 30/03/2024
Ambient Temperature (°C) : 27.0
Average Flow Rate of SPM (m³/min.) : 1.1
Average Flow Rate of Gases (lpm) : 1.0
Weather Conditions : Clear
Remark (if any) : NA

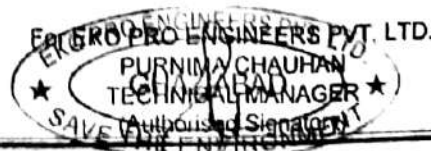
RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per CPCB Notification, 18th Nov 2009 |
|--------|---|---------------------|---------|-------------------|--|
| 1 | Particulate Matter (PM10) | IS: 5182 (P-23) | 92.3 | µg/m ³ | 100.0 |
| 2 | Particulate Matter (PM2.5) | IS: 5182 (P-24) | 56.4 | µg/m ³ | 60.0 |
| 3 | Sulphur Dioxide (as SO ₂) | IS: 5182 (P-2) | 12.7 | µg/m ³ | 80.0 |
| 4 | Nitrogen Dioxide (as NO ₂) | IS: 5182 (P-6) | 29.6 | µg/m ³ | 80.0 |
| 5 | Carbon Monoxide (as CO) | IS: 5182 (P-10) | 0.91 | mg/m ³ | 4.0 |
| 6 | Lead (as Pb) | IS: 5182 (P-22) | <0.1 | µg/m ³ | 1.0 |
| 7 | Nickel (as Ni) | IS: 5182 (P-26) | <15.0 | ng/m ³ | 20.0 |
| 8 | Arsenic (as As) | EKO/CHEM/SOP/AAQ-02 | <5.0 | ng/m ³ | 6.0 |
| 9 | Ozone (as O ₃) | IS: 5182 (P-9) | <10.0 | µg/m ³ | 180.0 |
| 10 | Ammonia (as NH ₃) | IS: 5182 (P-25) | <20.0 | µg/m ³ | 400.0 |
| 11 | Benzene (as C ₆ H ₆) | IS: 5182 (P-11) | <1.0 | µg/m ³ | 5.0 |
| 12 | Benzo(alpha) Pyrene-Particulate Phase Only | IS: 5182 (P-12) | <1.0 | ng/m ³ | 1.0 |

Notes :

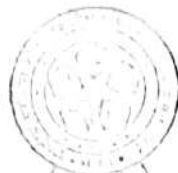
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- Responsibility of the Laboratory is limited to the invoiced amount only.

** End of Report **





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EKO TESTING LABS

Eko Pro Engineers Pvt. Ltd.

Contact : +91 - 9810243870

Competence | Quality | Service

TEST REPORT

Ambient Air Quality Monitoring

Test Report No. : EKO/E-520/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED

Plot No. 2, Sec - 14

IIE, Sidcul Pantnagar

Rudrapur - Uttarakhand

Sample Description : Ambient Air
 Sample Drawn on : 21/03/2024 To 22/03/2024
 Sample Drawn by : EPEPL (Mr. Chandan Sharma)
 Sample Received on : 26/03/2024
 Sampling Location : Near Main Gate/Security
 Sampling Time : 24.0 Hrs.
 Sampling Plan & Procedure : SOP-AAQ/15
 Analysis Duration : 26/03/2024 To 30/03/2024
 Ambient Temperature (°C) : 27.0
 Average Flow Rate of SPM (m³/min.) : 1.1
 Average Flow Rate of Gases (lpm) : 1.0
 Weather Conditions : Clear
 Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per CPCB Notification, 18th Nov 2009 |
|--------|--|---------------------|---------|-------|--|
| 1 | Particulate Matter (PM10) | IS: 5182 (P-23) | 98.2 | µg/m³ | 100.0 |
| 2 | Particulate Matter (PM2.5) | IS: 5182 (P-24) | 55.3 | µg/m³ | 60.0 |
| 3 | Sulphur Dioxide (as SO₂) | IS: 5182 (P-2) | 12.4 | µg/m³ | 80.0 |
| 4 | Nitrogen Dioxide (as NO₂) | IS: 5182 (P-6) | 29.6 | µg/m³ | 80.0 |
| 5 | Carbon Monoxide (as CO) | IS: 5182 (P-10) | 1.24 | mg/m³ | 4.0 |
| 6 | Lead (as Pb) | IS: 5182 (P-22) | <0.1 | µg/m³ | 1.0 |
| 7 | Nickel (as Ni) | IS: 5182 (P-26) | <15.0 | ng/m³ | 20.0 |
| 8 | Arsenic (as As) | EKO/CHEM/SOP/AAQ-02 | <5.0 | ng/m³ | 6.0 |
| 9 | Ozone (as O₃) | IS: 5182 (P-9) | <10.0 | µg/m³ | 180.0 |
| 10 | Ammonia (as NH₃) | IS: 5182 (P-25) | <20.0 | µg/m³ | 400.0 |
| 11 | Benzene (as C₆H₆) | IS: 5182 (P-11) | <1.0 | µg/m³ | 5.0 |
| 12 | Benzo(alpha) Pyrene-Particulate Phase Only | IS: 5182 (P-12) | <1.0 | ng/m³ | 1.0 |

Notes :

- The results given above are related to the tested sample, for various parameters, as observed at the time of at the time of Sampling. The customer asked for the above tests only.
- This test report will not be generated again, either wholly or in part, without prior written permission of the Laboratory.
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- Responsibility of the Laboratory is limited to the invoiced amount only.

**** End of Report ****

For EKO PRO ENGINEERS PVT. LTD.
 ★ PURNIMA ZHABIN
 TECHNICAL MANAGER
 (Authorized Signature)

Office & Laboratory : 32/41, South Side of GT Road, UPSIDC Industrial Area, Ghaziabad (Delhi-NCR) - 201009
 Contact No : 9/111159210, 9810240837, 9810240678 E-mail : email@ekopro.in, ekoproengineers@gmail.com Website : www.ekoproengineers.com Page 1 of 1

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TEST REPORT

Ambient Air Quality Monitoring

Test Report No. : EKO/E-521/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2, Sec - 14
ME, Sidcul Pantnagar
Rudrapur - Uttarakhand

Sample Description : Ambient Air
Sample Drawn on : 21/03/2024 To 22/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : Canteen East Side In New Plant
Sampling Time : 24.0 Hrs.
Sampling Plan & Procedure : SOP-AAQ/15
Analysis Duration : 26/03/2024 To 30/03/2024
Ambient Temperature (°C) : 27.0
Average Flow Rate of SPM (m³/min.) : 1.1
Average Flow Rate of Gases (lpm) : 1.0
Weather Conditions : Clear
Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per CPCB Notification, 18th Nov 2009 |
|--------|--|---------------------|---------|-------|--|
| 1 | Particulate Matter (PM10) | IS: 5182 (P-23) | 79.6 | µg/m³ | 100.0 |
| 2 | Particulate Matter (PM2.5) | IS: 5182 (P-24) | 50.2 | µg/m³ | 60.0 |
| 3 | Sulphur Dioxide (as SO₂) | IS: 5182 (P-2) | 11.3 | µg/m³ | 80.0 |
| 4 | Nitrogen Dioxide (as NO₂) | IS: 5182 (P-6) | 28.5 | µg/m³ | 80.0 |
| 5 | Carbon Monoxide (as CO) | IS: 5182 (P-10) | 1.16 | mg/m³ | 4.0 |
| 6 | Lead (as Pb) | IS: 5182 (P-22) | <0.1 | µg/m³ | 1.0 |
| 7 | Nickel (as Ni) | IS: 5182 (P-26) | <15.0 | ng/m³ | 20.0 |
| 8 | Arsenic (as As) | EKO/CHEM/SOP/AAQ-02 | <5.0 | ng/m³ | 6.0 |
| 9 | Ozone (as O₃) | IS: 5182 (P-9) | <10.0 | µg/m³ | 180.0 |
| 10 | Ammonia (as NH₃) | IS: 5182 (P-25) | <20.0 | µg/m³ | 400.0 |
| 11 | Benzene (as C₆H₆) | IS: 5182 (P-11) | <1.0 | µg/m³ | 5.0 |
| 12 | Benzo(alpha) Pyrene-Particulate Phase Only | IS: 5182 (P-12) | <1.0 | ng/m³ | 1.0 |

Notes :

- The results given above are related to the tested sample, for various parameters, as observed at the time of at the time of Sampling. The customer asked for the above tests only.
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**** End of Report ****

For EKO PRO ENGINEERS PVT. LTD.
★ PURNIMA BHAN
★ TECHNICAL MANAGER
(Authorized Signatory)



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TEST REPORT

Ambient Air Quality Monitoring

Test Report No. : EKO/E-519/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED

Plot No. 2, Sec - 14

IIE, Sidcul Pantnagar

Rudrapur - Uttarakhand

Sample Description : Ambient Air
Sample Drawn on : 22/03/2024 To 23/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : SE Corner of Lead Plant
Sampling Time : 24.0 Hrs.
Sampling Plan & Procedure : SOP-AAQ/15
Analysis Duration : 26/03/2024 To 30/03/2024
Ambient Temperature (°C) : 27.0
Average Flow Rate of SPM (m³/min.) : 1.1
Average Flow Rate of Gases (lpm) : 1.0
Weather Conditions : Clear
Remark (if any) : NA

RESULTS

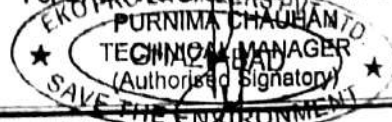
| S. No. | Parameters | Test Methods | Results | Units | Limits as per CPCB Notification, 18th Nov 2009 |
|--------|---|---------------------|---------|-------------------|--|
| 1 | Particulate Matter (PM10) | IS: 5182 (P-23) | 83.6 | µg/m ³ | 100.0 |
| 2 | Particulate Matter (PM2.5) | IS: 5182 (P-24) | 54.1 | µg/m ³ | 60.0 |
| 3 | Sulphur Dioxide (as SO ₂) | IS: 5182 (P-2) | 12.30 | µg/m ³ | 80.0 |
| 4 | Nitrogen Dioxide (as NO ₂) | IS: 5182 (P-6) | 29.6 | µg/m ³ | 80.0 |
| 5 | Carbon Monoxide (as CO) | IS: 5182 (P-10) | 1.05 | mg/m ³ | 4.0 |
| 6 | Lead (as Pb) | IS: 5182 (P-22) | <0.1 | µg/m ³ | 1.0 |
| 7 | Nickel (as Ni) | IS: 5182 (P-26) | <15.0 | ng/m ³ | 20.0 |
| 8 | Arsenic (as As) | EKO/CHEM/SOP/AAQ-02 | <5.0 | ng/m ³ | 6.0 |
| 9 | Ozone (as O ₃) | IS: 5182 (P-9) | <10.0 | µg/m ³ | 180.0 |
| 10 | Ammonia (as NH ₃) | IS: 5182 (P-25) | <20.0 | µg/m ³ | 400.0 |
| 11 | Benzene (as C ₆ H ₆) | IS: 5182 (P-11) | <1.0 | µg/m ³ | 5.0 |
| 12 | Benzo(alpha) Pyrene-Particulate Phase Only | IS: 5182 (P-12) | <1.0 | ng/m ³ | 1.0 |

Notes :

- The results given above are related to the tested sample, for various parameters, as observed at the time of at the time of Sampling. The customer asked for the above tests only.
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**** End of Report ****

For EKO PRO ENGINEERS PVT. LTD.



Office & Laboratory : 32/41, South Side of GT Road, UPSIDC Industrial Area, Ghaziabad (Delhi-NCR) - 201001
Contact No: 97111159210, 9810240837, 9810240678 E-mail: email@ekopro.in, ekoproengineers@gmail.com, Website: www.ekoproengineers.com Page 1 of 1

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TEST REPORT

Noise Monitoring

Test Report No. : EKO/E-539/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED

Plot No. 2 Sector-14

IIE, Sidcul Panthagar

Rudrapur - (Uttarakhand)

Sample Description : Ambient Noise
Sample Drawn on : 22/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : Near Main Gate
Sampling Plan & Procedure : SOP-N/01
Weather Condition : Normal
Analysis Duration : 26/03/2024 To 27/03/2024
Remark (if any) : NA

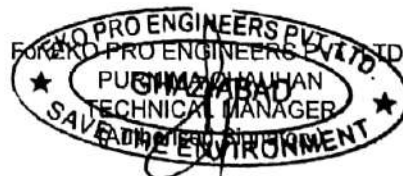
RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per "The Noise Pollution (Regulation & Control) Rules, 2000" |
|--------|------------------|--------------|---------|--------|--|
| 1 | Leq (Day Time) | IS : 9989 | 68.2 | dB (A) | 75.0 |
| 2 | Leq (Night Time) | | 61.3 | dB (A) | 70.0 |

Notes :

- The results given above are related to the tested sample, as received & mentioned parameters.
The customer asked for the above tests only.
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- Responsibility of the Laboratory is limited to the invoiced amount only.

****End of Report****





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TEST REPORT

Noise Monitoring

Test Report No. : EKO/E-537/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED

Plot No. 2 Sector-14

IIE, Sidcul Pantnagar

Rudrapur - (Uttarakhand)

Sample Description : Ambient Noise
Sample Drawn on : 22/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : Near Compressor Area
Sampling Plan & Procedure : SOP-N/01
Weather Condition : Normal
Analysis Duration : 26/03/2024 To 27/03/2024
Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per "The Noise Pollution (Regulation & Control) Rules, 2000" |
|--------|------------------|--------------|---------|--------|--|
| 1 | Leq (Day Time) | IS : 9989 | 73.1 | dB (A) | 75.0 |
| 2 | Leq (Night Time) | | 66.5 | dB (A) | 70.0 |

Notes :

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The customer asked for the above tests only.
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****End of Report****





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TEST REPORT

Noise Monitoring

Test Report No. : EKO/E-540/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED
Plot No. 2 Sector-14
IIE, Sidcul Pantnagar
Rudrapur - (Uttarakhand)

Sample Description : Ambient Noise
Sample Drawn on : 22/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : East Side of Canteen In New Plant
Sampling Plan & Procedure : SOP-N/01
Weather Condition : Normal
Analysis Duration : 26/03/2024 To 27/03/2024
Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per "The Noise Pollution (Regulation & Control) Rules, 2000" |
|--------|------------------|--------------|---------|--------|--|
| 1 | Leq (Day Time) | IS : 9989 | 67.1 | dB (A) | 75.0 |
| 2 | Leq (Night Time) | | 55.9 | dB (A) | 70.0 |

Notes :

- The results given above are related to the tested sample, as received & mentioned parameters.
The customer asked for the above tests only.
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- Responsibility of the Laboratory is limited to the Invoiced amount only.

****End of Report****





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TEST REPORT

Noise Monitoring

Test Report No. : EKO/E-538/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED

Plot No. 2 Sector-14

IIE, Sidcul Pantnagar

Rudrapur - (Uttarakhand)

Sample Description : Ambient Noise
Sample Drawn on : 22/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : Back Side of DG Area
Sampling Plan & Procedure : SOP-N/01
Weather Condition : Normal
Analysis Duration : 26/03/2024 To 27/03/2024
Remark (if any) : NA

RESULTS

| S. No. | Parameters | Test Methods | Results | Units | Limits as per "The Noise Pollution (Regulation & Control) Rules, 2000" |
|--------|------------------|--------------|---------|--------|--|
| 1 | Leq (Day Time) | IS : 9989 | 71.3 | dB (A) | 75.0 |
| 2 | Leq (Night Time) | | 65.8 | dB (A) | 70.0 |

Notes :

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- Responsibility of the Laboratory is limited to the invoiced amount only.

****End of Report****





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TEST REPORT

Effluent Sample Analysis

Test Report No. : EKO/E-544/260324

Issue Date : 30/03/2024

Issued To

: HINDUSTAN ZINC LIMITED

Plot No. 2 Sec-14

IIE, Sidcul Pantnagar

Rudrapur - Uttarakhand

Sample Description : STP Outlet (Final Exit Point)
Sample Drawn on : 22/03/2024
Sample Drawn by : EPEPL (Mr. Chandan Sharma)
Sample Received on : 26/03/2024
Sampling Location : From STP Plant
Sampling Plan & Procedure : SOP-W/66
Sample Quantity : 2.0 Litre
Environmental Condition : Normal
Analysis Duration : 26/03/2024 To 30/03/2024
Remark (if any) : NA

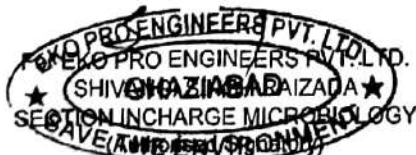
RESULTS

| S. No. | Parameters | Test Method | Results | Units | Limits as per CPCB (EPR-1986 Schedule-VI Part-A) |
|--------|---------------------------|---------------------------|---------|-----------|--|
| 1 | pH | IS : 3025 (P-11) | 7.18 | - | 5.5-9.0 |
| 2 | Total Suspended Solids | IS : 3025 (P-17) | 44.0 | mg/l | 100.0 |
| 3 | COD (as O ₂) | IS : 3025 (P-58) | 40.3 | mg/l | 250.0 |
| 4 | BOD (@27°C for 3 days) | IS : 3025 (P-44) | 14.0 | mg/l | 30.0 |
| 5 | Total Nitrogen (as N) | APHA 4500 N | 0.26 | mg/l | 100.0 |
| 6 | Phosphate (as P) | IS : 3025 (P-31) | 0.42 | mg/l | 5.0 |
| 7 | Ammonical Nitrogen (as N) | APHA 4500 NH ₃ | 1.25 | mg/l | 50.0 |
| 8 | Faecal Coliform | APHA 9221 E | 120 | MPN/100ml | 1000.0 |

Notes:

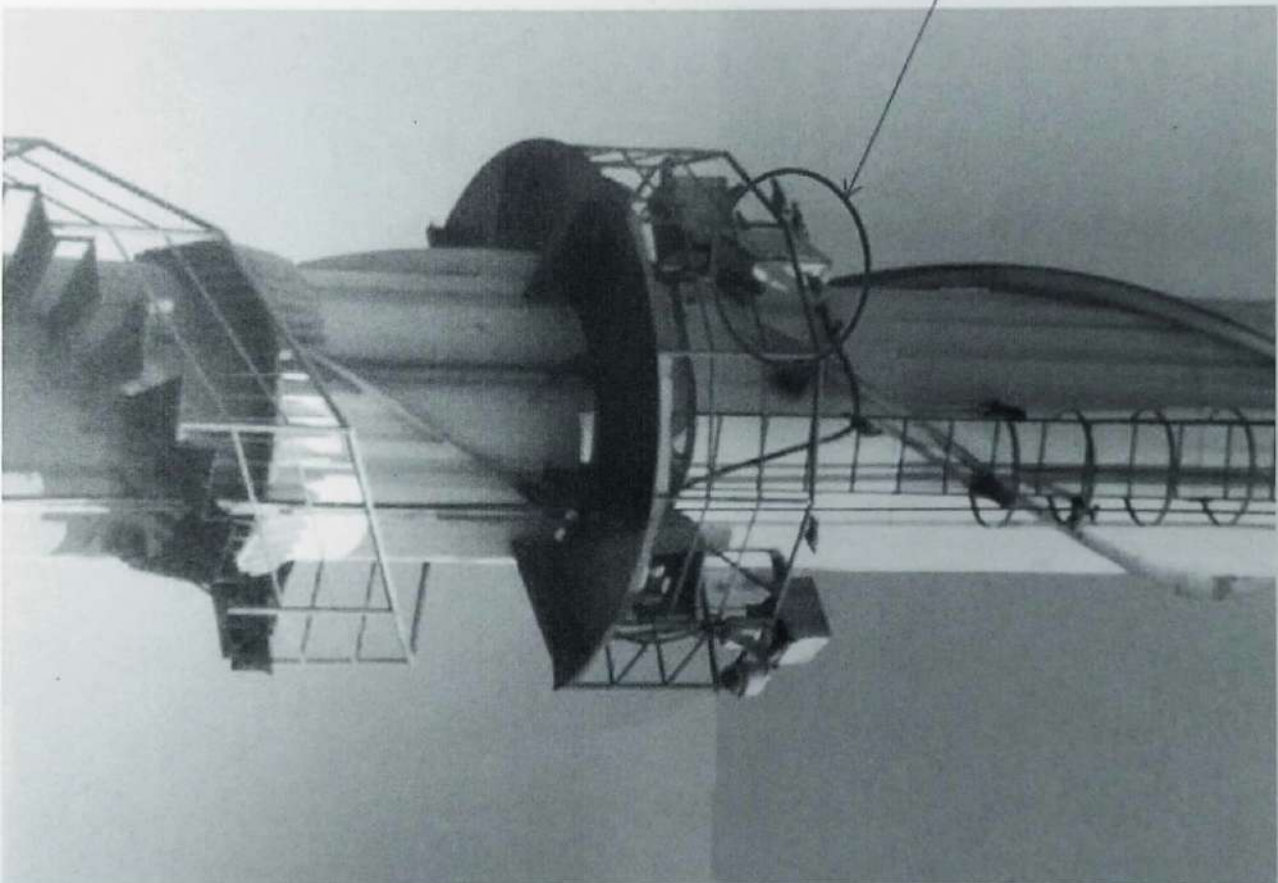
- The results given above are related to the tested sample, as received & mentioned parameters.
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****End of Report****



PM analyzer Installed at Stack

PM analyzer

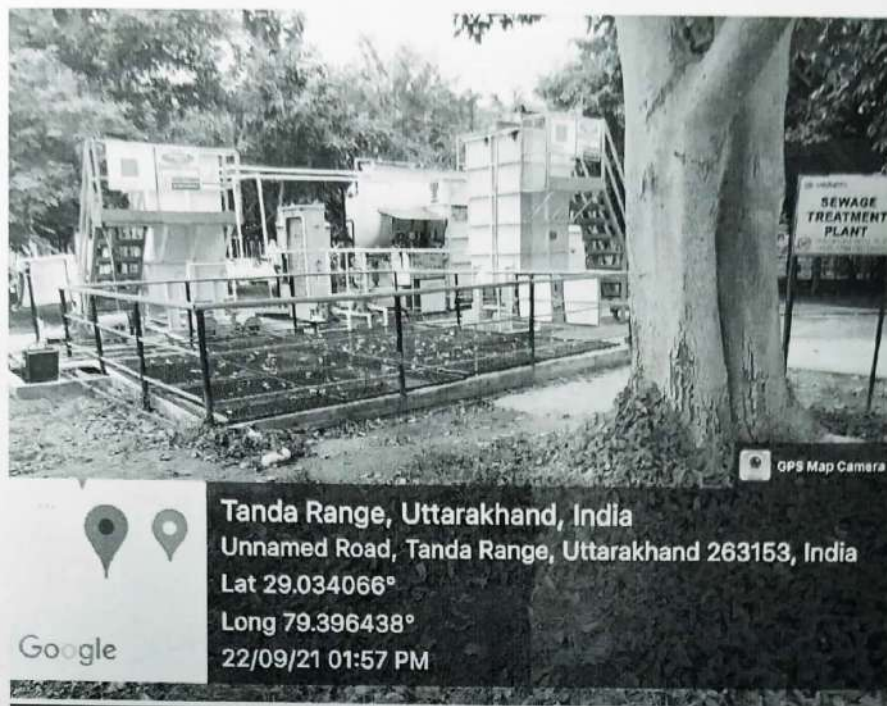


Hygiene ventilation system



Bag filters arrangement
for Hygiene ventilation




STP PLANT



ETP PLANT



PHOTOGRAPHS OF HAZARDOUS WASTE STORAGE YARD

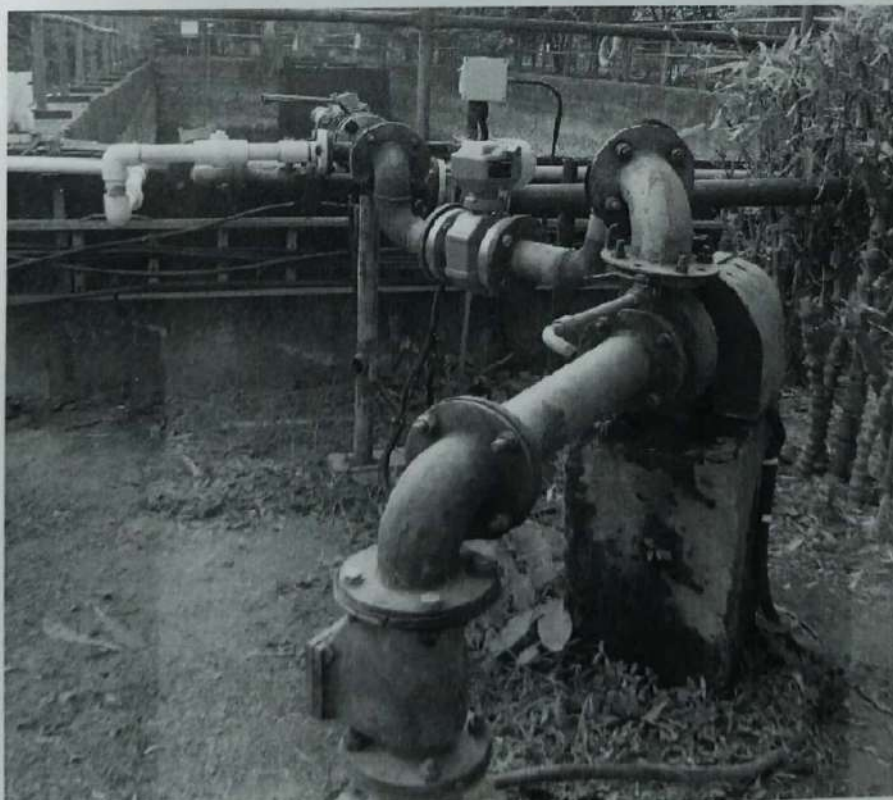
| S. No. | Name of the waste | Photographs |
|--------|-------------------------|--|
| 1. | Zinc Dross Storage Yard |  |
| 2. | Lead Dross Storage Yard |  |
| 3. | Used Oil Storage Yard |  |

ANNEXURE - 4

| Ground Water Withdrawal FY 2023-24 | | | |
|------------------------------------|-------------------------|-------------|------------------------|
| Month | Ground Water Withdrawal | UOM | Rain water utilization |
| Apr-23 | 2,584 | Cu.m | 1,945 |
| May-23 | 2,377 | Cu.m | 2,907 |
| Jun-23 | 4,449 | Cu.m | 312 |
| Jul-23 | 2,098 | Cu.m | 781 |
| Aug-23 | 1,089 | Cu.m | 2,886 |
| Sep-23 | 873 | Cu.m | 2,968 |
| Oct-23 | 1,848 | Cu.m | 2,282 |
| Nov-23 | 2,378 | Cu.m | 869 |
| Dec-23 | 3,306 | Cu.m | 0 |
| Jan-24 | 3,036 | Cu.m | 0 |
| Feb-24 | 3,432 | Cu.m | 0 |
| Mar-24 | 4,108 | Cu.m | 0 |
| Total | 31,578 | Cu.m | 14,950 |

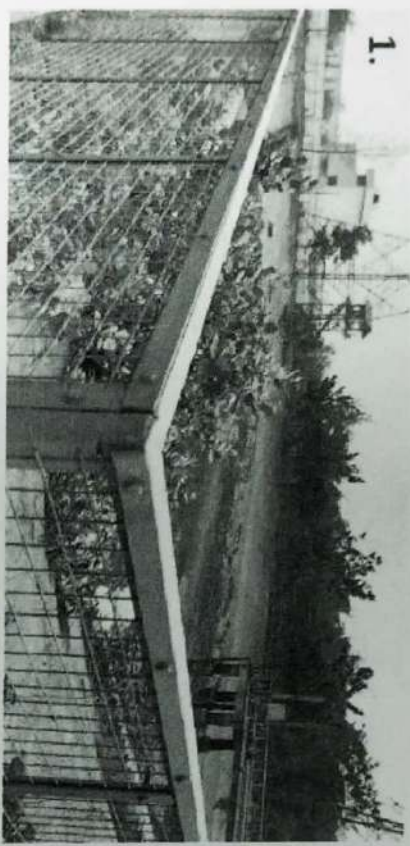
- All reading recorded in cubic meter.

Water Withdrawal Point – Borewell

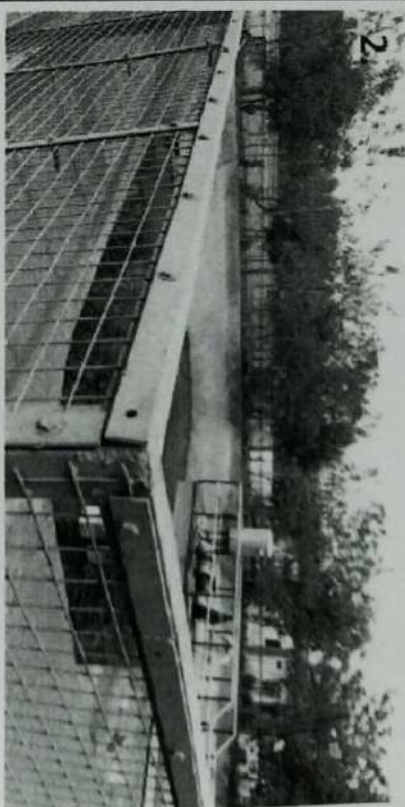


Sensitivity: Internal (C3)

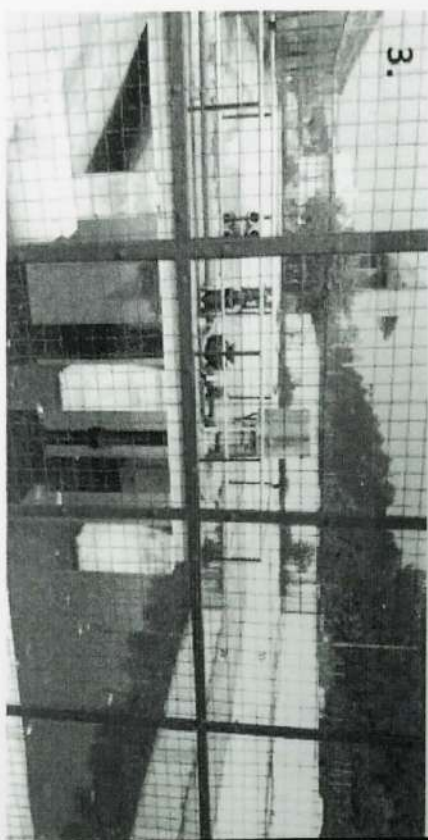
RAIN WATER STORAGE POND HZL- PANTNAGAR



Pond No-1



Pond No-2



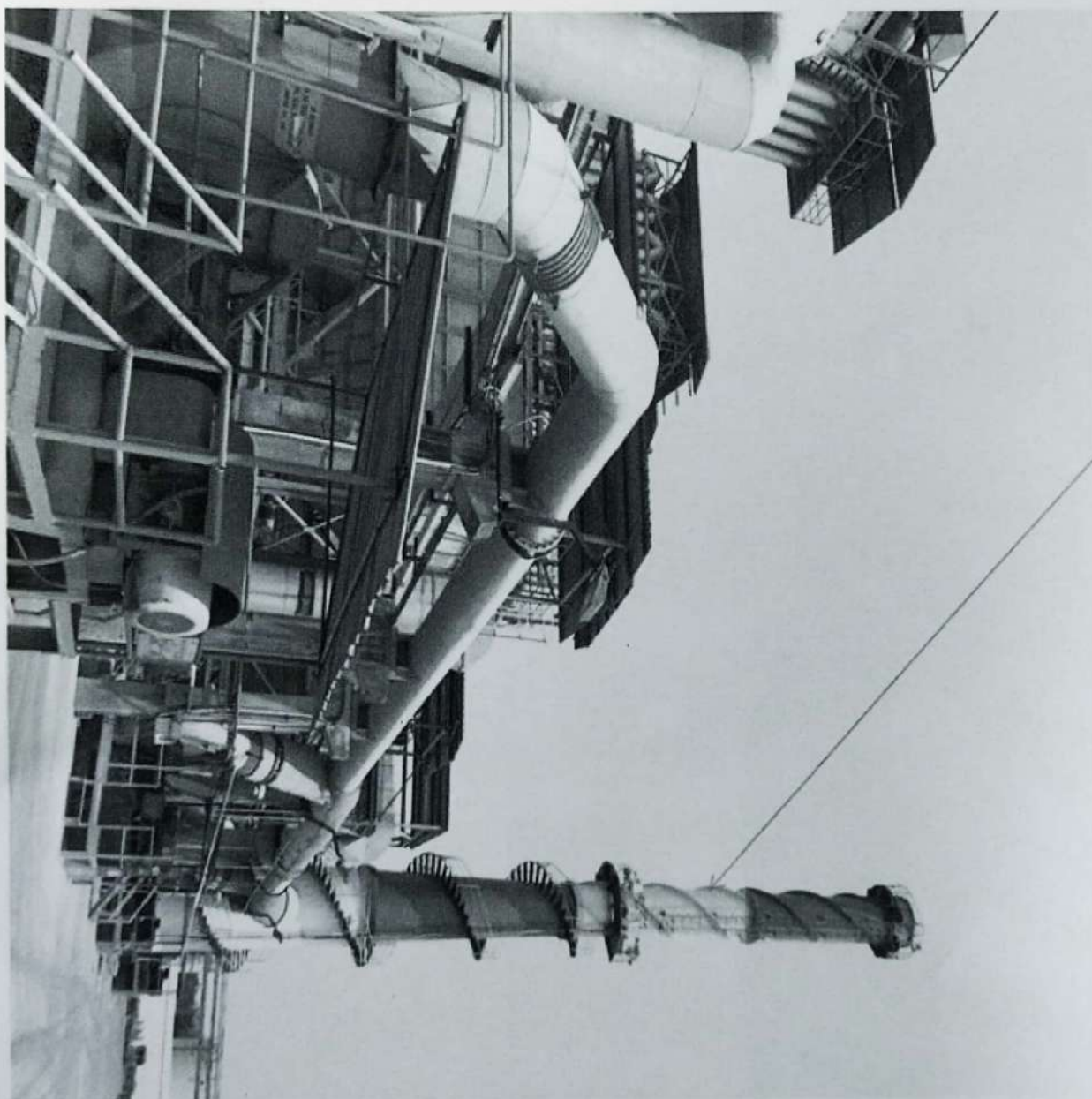
Pond No-3



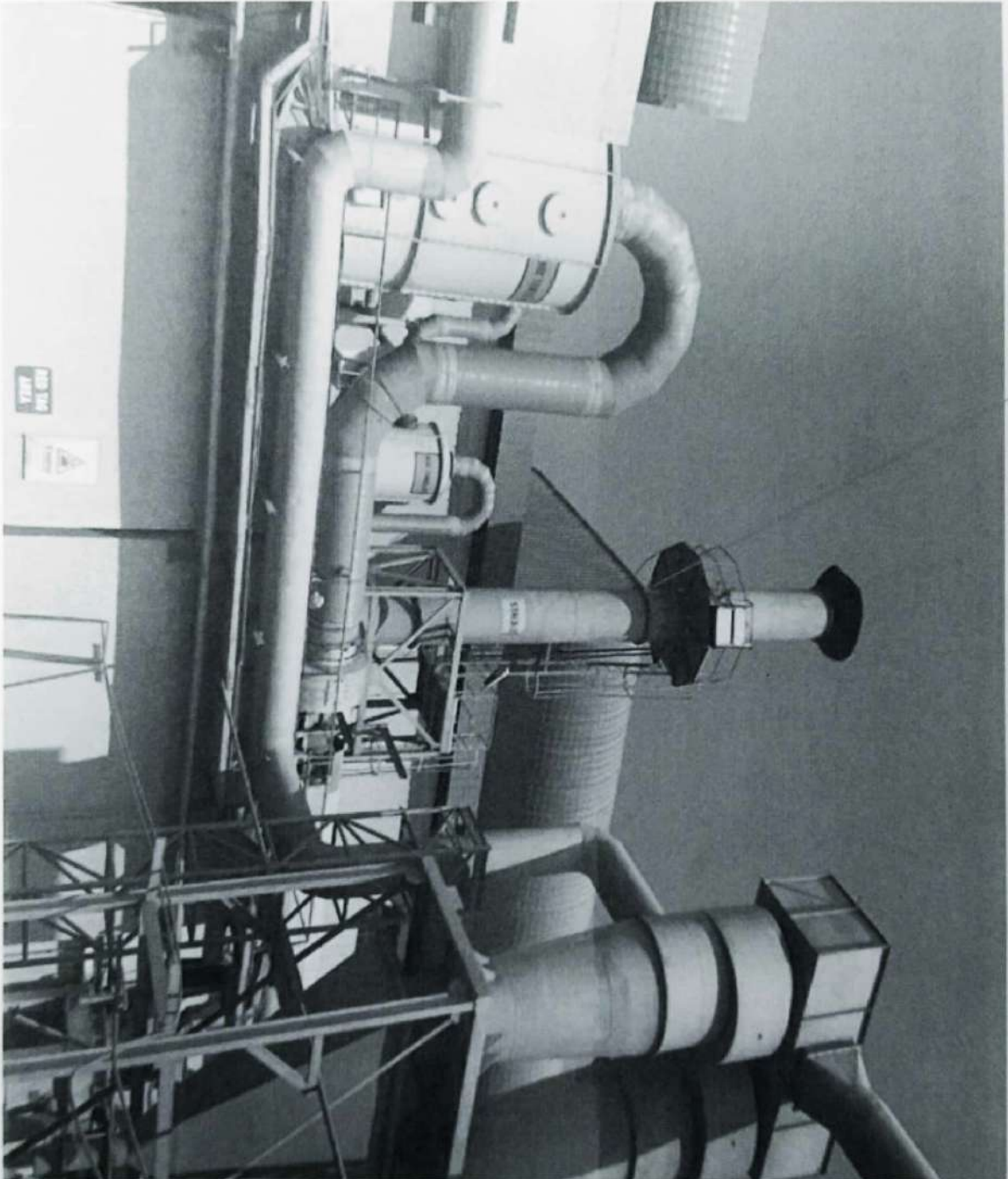
Pond No-4

ANNEXURE-5

Silver Process Stack



Silver NOx Stack



On-Going CSR Activities at PMP FY2023-24

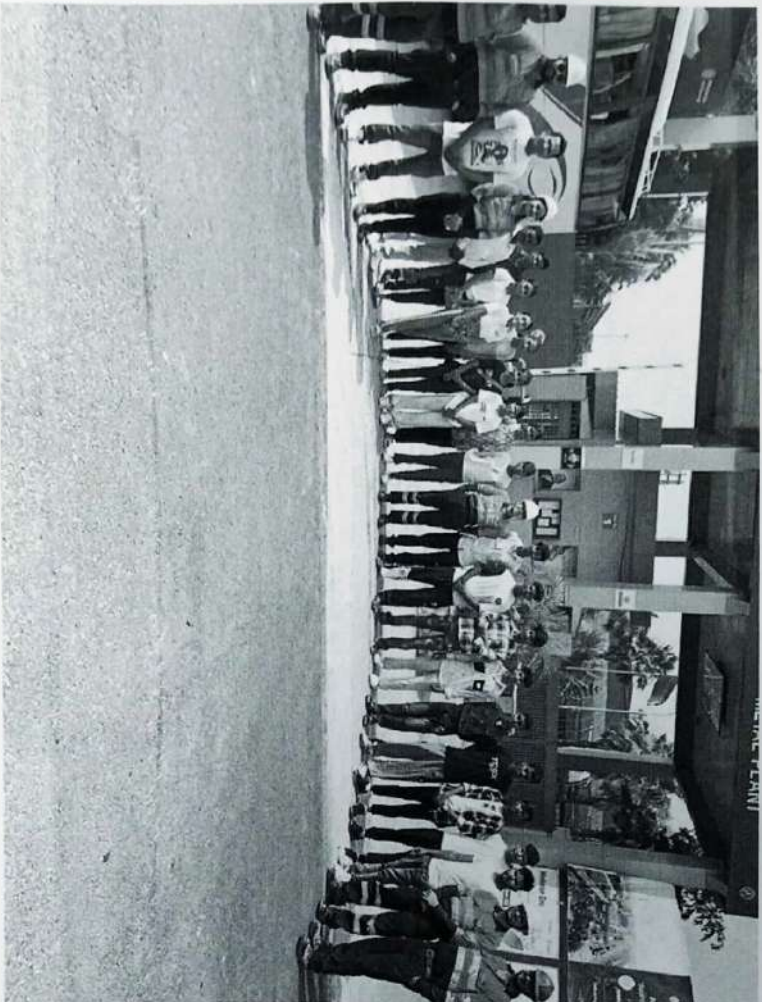
Flag Ship Projects: Continuing in FY 23-24

1. Sakhi Project – Strengthening Women Empowerment
2. ME – Providing Micro Enterprises support to SHG women for their sustainability
3. Zinc Kaushal – Providing skilling training to rural youth through Tata Motors Tata Strive Project
4. Deployment of Mobile health van for nearby community health care services

Other Activities:

- 18 Nos. unprivileged children sent to Udaipur under summer camp initiative for career path development from different school based at nearby community.
- Exco member visited to our production centre.
- HZL CHRO visited Production centre and interacted with SHG women.
- One Girl studying in Unchi Udaan project from PMP got selection in IIT Guwahati, Assam.
- Micro Enterprises Thematic champion visited PMP production centre and pickle unit.
- Blood Donation camp conducted by HR department. 100 donors donated Blood on this Occasion.
- E booklet made of Jeevan Tarang students was launched by UH.

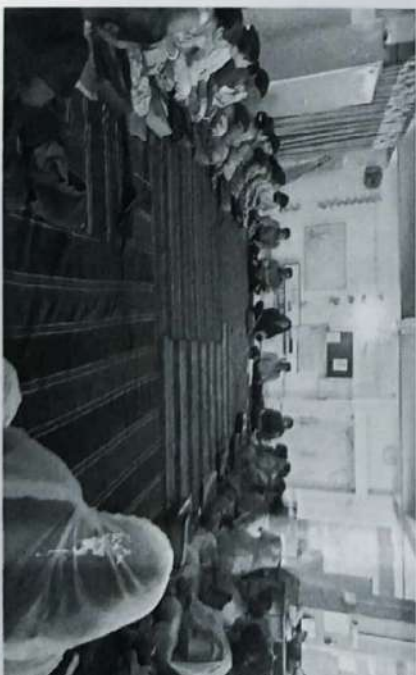
On-Going CSR Activities at PMP FY2023-24



Youth Skill Development Program- 18 Nos. unprivileged children sent to Udaipur under summer camp initiative for career path development from different school based at nearby community

Sensitivity: Internal (C3)

On-Going CSR Activities at PMP FY2023-24



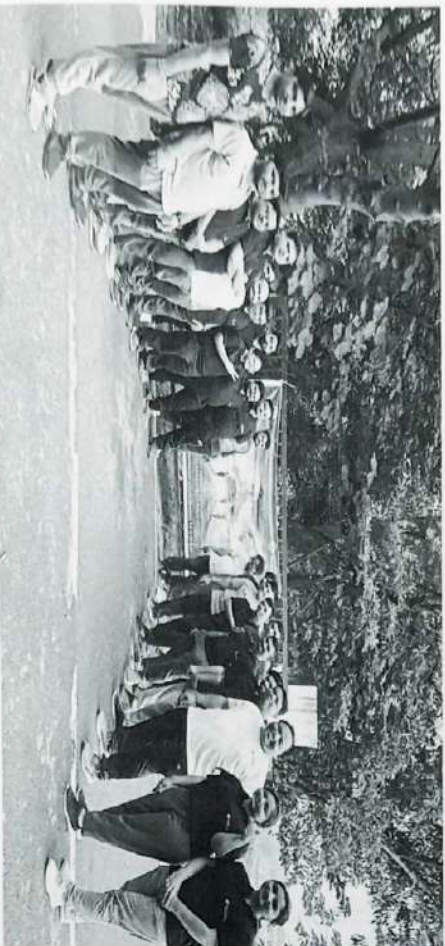
Women Empowerment- Strengthening of Self-Help Group by 33 villages and covered around 3000+ families. This project (Sakhi) was implementing through Manjari Foundation. Started in the year 2017 and continuing.

On-Going CSR Activities at PMP FY2023-24



Youth Skill Development Program- Imparting Skill training program with TATA STRIVE in field of Auto Sales, Auto technicians, Automotive Services in two, three & four wheelers for Youth from nearby community.

On-Going CSR Activities at PMP FY2023-24





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HINDUSTAN ZINC
ZINC & SILVER IN INDIA

BLOOD DONATION CAMP AT PANTNAGAR METAL PLANT

DONATING BLOOD, SAVING LIVES

Pantnagar Metal Plant organized a Blood Donation Camp, resulting in a remarkable contribution of 100 units of blood. The event was graced by Dr. Manoj Sharma, Chief Medical Officer of Udhampur District, who was moved by Hindustan Zinc's dedication towards this noble cause. These initiatives reminds us of our capacity to make a tangible impact on the lives of others.






Health & Sanitation- Deployment of Mobile health van for nearby community health care facilities, Blood Donation camp organized at location in consultation with CMO, US Nagar, Organized Run for Zero Hunger Campaign for meals to unprivileged children's